2020

Annual Report

GREAT-WEST LIFECO INC.

CORPORATE PROFILE

Great-West Lifeco is an international financial services holding company with interests in life insurance, health insurance, retirement and investment services, asset management and reinsurance businesses. We operate in Canada, the United States and Europe under the brands Canada Life, Empower Retirement, Putnam Investments and Irish Life. At the end of 2020, our companies had more than 24,500 employees, 205,000 advisor relationships, and thousands of distribution partners – all serving our more than 30 million customer relationships across these regions. Great-West Lifeco and its companies have approximately $2.0 trillion in consolidated assets under administration as at December 31, 2020, and are members of the Power Corporation group of companies. Great-West Lifeco trades on the Toronto Stock Exchange (TSX) under the ticker symbol GWO. To learn more, visit **greatwestlifeco.com**.

OUR BUSINESSES

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

CANADA

Canada Life is a leading insurer with interests in life insurance, health insurance, retirement savings, and investment management. We proudly serve nearly one in three Canadians from coast to coast to coast. Canada Life serves its customers through over 23,000 advisors, and serves group plan members through approximately 27,000 employers across the country.

U.S.

Empower Retirement serves all segments of the U.S. employer-sponsored retirement plan market and offers individual retirement accounts. Putnam is a U.S.-based global asset manager with a range of investment management strategies including fixed income, equity, environmental, social and governance (ESG), and global asset allocation and alternatives. The firm's affiliate, PanAgora provides institutional investment solutions including alternatives, risk premia and active strategies, spanning all major asset classes and risk ranges.

EUROPE

European subsidiaries of Canada Life and Irish Life provide insurance and wealth management products including pensions, home finance, payout annuities, investments and group and indivdual insurance in the U.K.; investments, and group insurance in the U.K.; investments, and group and individual insurance in the Isle of Man; pensions, critical illness, disability and life insurance in Germany; and life and health insurance, pension and investment products in Ireland.

CAPITAL AND RISK SOLUTIONS

The Capital and Risk Solutions business unit provides reinsurance covering mortality, longevity, health and lapse risks for insurers, reinsurers and pension funds and operates primarily in the U.S., Barbados, Bermuda, and Ireland. Its reinsurance business is conducted through branches and subsidiaries of Canada Life.

CONTENTS

The financial information in this report is presented in millions of Canadian dollars for the period ended December 31, 2020, unless otherwise indicated.

Readers are referred to the Cautionary Notes regarding forward-looking information and non-IFRS financial measures on page 18.

Year at a glance

30M+
Customer relationships

$39B+
Benefits paid to customers

$17.5M+
Contributed to communities

205,000+
Advisor relationships supporting our customers

24,500+
Employees supporting our customers

170+
Years of delivering on our promises

$2.943B
Net earnings

$2.669B
Base earnings*

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

*Base earnings is a non-IFRS measure.

FINANCIAL HIGHLIGHTS

SOLID PERFORMANCE ACROSS OUR BUSINESSES

Great-West Lifeco's solid financial performance is evidenced by its strong capital position and financial flexibility, backed by strategies to drive growth through innovation and disciplined capital deployment.

Earnings Per Common Share

$3.17
2020

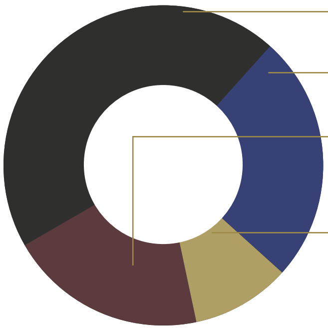
$2.67	$2.17	$3.00	$2.49
2016	2017	2018	2019

Return on Common Shareholders' Equity

14.1%
2020

13.8%	10.9%	14.0%	11.7%
2016	2017	2018	2019

DIVERSIFIED EARNINGS BY GEOGRAPHY*



45%	25%	20%	10%
Canada	Europe	Capital and Risk Solutions	United States

*Reflects 2020 base earnings – a non-IFRS measure.

DIVIDENDS PAID

We have a clear purpose to meet the diverse and changing needs of our customers and advisors. This purpose, combined with strong risk and expense discipline, is key to delivering long-term shareholder value.

Annual Dividend Yield of Common Shares

6.4%

5-Year Compound Annual Growth Rate

6.08%

2020

$1.384	$1.468	$1.556	$1.652	$1.752
2016	2017	2018	2019	2020

Total Assets Under Administration (in Trillions)

$1.976T
2020

$1.248	$1.350	$1.399	$1.630
2016	2017	2018	2019

Premiums and Deposits (in Billions)

$171.3B
2020

$117.5	$123.1	$139.3	$150.6
2016	2017	2018	2019

DIRECTORS' REPORT TO SHAREHOLDERS

Jeffrey Orr
Chair of the Board

Paul Mahon
President and Chief Executive Officer

At the heart of Great-West Lifeco's trusted market leadership are strong brands, a diversified portfolio, and strategies to meet customers' evolving needs.

Significant investments over recent years have positioned our businesses for growth and resiliency in support of increasing shareholder value. Despite the challenges stemming from the COVID-19 pandemic, 2020 was a year of significant progress as we advanced our strategies. As we look to the future, we remain confident in our ability to grow and deliver for all our stakeholders.

RESPONSE TO THE COVID-19 PANDEMIC

Our top priority during the pandemic has been the health and safety of our employees, advisors, customers, and communities. To achieve this, we quickly transitioned to 98% of our more than 24,500 employees working from home with a focus on seamless customer and advisor service and support. Further, we quickly responded to those in need and ensured our actions aligned with government policies to help support individuals, businesses, and economies.

While the past year created volatile market conditions, our diversified businesses remained stable and resilient, supported by financial strength and discipline, and underpinned by trusted customer relationships built over 170 years. We pivoted to remote operations thanks to important technology investments, supported by robust risk and expense management practices.

While the COVID-19 pandemic has created significant hardship for many, it also created opportunities to innovate and position ourselves for tomorrow.

LEVERAGING EXISTING STRENGTHS

In Canada, we've seen a marked increase in digital adoption as a majority of customers and advisors used tools like our SimpleProtect online life insurance application. Investment in technology has been key to delivering a secure, seamless advisor and customer experience.

At Empower, our U.S. retirement market leadership position was recognized by financial advisors, as their top choice of recordkeeper across five of six categories in the

Financial Advisor IQ Service Awards survey.

At Putnam Investments, our unwavering focus on generating strong, risk-adjusted investment returns through active management led to strong performance relative to peers, as evidenced by the firm's 26 four- or five-star rated funds by Morningstar at the end of December 2020.

In Ireland, the One Irish Life program delivers an integrated customer experience across products, while our U.K. transformation program continues to build out a differentiated retirement-focused wealth offering to better meet customer needs as they transition to retirement. And in Germany, we're nearing completion of our future technology system implementation to support our growth in the growing group pension savings market.

Our performance during the pandemic has deepened customer connections and aligned with our efforts to strengthen brand affinity and awareness. Canada Life's "For Life as You Know It" Canadian campaign received strong positive feedback and Empower Retirement's first consumer marketing campaign strengthened its positive, growing U.S. brand perception.

Moreover, these advances bolstered our reputation as a choice employer, strengthening our talent attraction and retention, as reflected by our best ever employee engagement scores.

CREATING VALUE THROUGH MERGERS AND ACQUISITIONS

Over the past year, we've deployed capital through targeted mergers and acquisitions to support both near- and long-term growth and value creation.

In Canada, we've elevated our wealth management strategies through the combination of GLC Asset Management with Mackenzie Investments and the establishment of our new mutual fund manager, Canada Life Investment Management Ltd. This transaction provides us with access to greater scale and more diversified investment capabilities and allows us to directly control our mutual fund product shelf. During 2020, we launched 18 new mutual funds to provide advisors and customers with more choices to meet their investment goals. In addition, our ownership stake in Northleaf Capital provides us with access to differentiated alternative asset solutions to support more competitive product and balance sheet solutions.

In the U.S., Empower Retirement's acquisition of MassMutual's retirement services business expands our reach to over 12 million Americans and is expected to be highly accretive to Lifeco's earnings. Empower also acquired Personal Capital, a hybrid wealth manager combining a vanguard digital experience with personalized advice from human advisors. Together, these transactions accelerate Empower's strategy to deliver digital retail advice and strengthen our number two position in the U.S. retirement market.

SUPPORTING SUSTAINABILITY AND DIVERSITY IN OUR COMMUNITIES

Today's decisions have lasting implications – that's why we're refining our corporate social responsibility priorities to respond to challenges and opportunities. Our goal is to deliver meaningful, positive impacts on our business, stakeholders, the environment and society.

We're committed to promoting financial, physical, and mental well-being; making positive social and environmental contributions to communities through investments, sponsorships, donations and volunteerism; fostering workplace diversity and inclusion; and supporting the transition to a paperless workplace and a low-carbon economy.

We're proud of the diversity and inclusion initiatives and strides we've taken, including Canada Life's becoming a signatory of the BlackNorth Initiative in Canada. We're also pleased our wide-ranging national and regional charitable donations and volunteerism have helped communities better navigate pandemic-related challenges.

LOOKING TO THE FUTURE

As our world transitions to a more stable post-pandemic environment, we'll continue to focus on employee and customer safety. And we'll continue to drive forward with a focused, strategic approach to growth and value creation from a strong foundation of trusted products and services, market-leading brands, and exceptional people.

THANK YOU

Thank you to our employees and advisors for their commitment to customers, and to our customers and shareholders for your continued confidence in us. We look forward to continuing to deliver on our promises.

Jeffrey Orr
Chair of the Board

Paul Mahon
President and
Chief Executive Officer

RESPONDING TO CLIENT AND COMMUNITY NEEDS IN 2020

- ✓ Extended call centre hours to handle higher call volumes.
- ✓ Extended grace periods for life insurance premiums.
- ✓ Provided mortgage payment deferrals.
- ✓ Enabled customers to connect with healthcare professionals safely, via virtual health care apps.
- ✓ Reduced employer health insurance premiums to reflect reduced usage of health and dental services due to mandated closures and business interruptions.
- ✓ Transitioned to remote valuations for equity release mortgages if traditional approach was not feasible.
- ✓ Waived fees on new U.S. retirement plan loans and hardship withdrawals.
- ✓ Purchased six oxygen concentrators for Queen Elizabeth Hospital in Barbados.
- ✓ Invested in placing community defibrillators in Dublin.
- ✓ Rebated individual health insurance premiums following temporary nationalization of private hospitals in Ireland.
- ✓ Provided apartments for Irish healthcare workers to safely isolate and supported Irish Life's medically qualified staff to temporarily return to working on the front line.
- ✓ Donated over $2M to relief efforts in communities across Canada, the U.S., the U.K., and Ireland to support food banks, frontline workers, those most vulnerable and small businesses.

ENCOURAGING SUSTAINABILITY

Great-West Lifeco is committed to incorporating environmental, social and governance (ESG) considerations into our investment, business and community initiatives. From making socially and environmentally responsible choices at work, to charitable giving and volunteering, our goal is to make a positive impact where we live and work.

SIGNATORIES TO U.N.-SUPPORTED PRINCIPLES FOR RESPONSIBLE INVESTMENT

- Irish Life Investment Managers (2010)
- Putnam Investments (2011)
- PanAgora Asset Management (2011)
- Setanta Asset Management Ltd (2020)

SUPPORTING CLIMATE-RELATED FINANCIAL DISCLOSURES

Great-West Lifeco respects the environment and takes a balanced, sustainable approach to everything we do. In 2020, we re-affirmed our commitment to these values by becoming an official supporter of the Financial Stability Board's Taskforce on Climate-related Financial Disclosures recommendations.

COMMITTED TO SUSTAINABLE REAL ESTATE INVESTMENT MANAGEMENT AND PERFORMANCE

In 2020, the Global Real Estate Sustainability Benchmark (GRESB) awarded 'Green Star' ratings to Canada Life Asset Management's (U.K.), Property ACS and IA Funds; Irish Life Investment Manager's, Irish Life Pension Fund and Irish Residential Property Fund; and, GWL Realty Advisors', GWL Canadian Real Estate Investment Fund No. 1 (CREIF) and its managed portfolio.

DEMONSTRATING LEADERSHIP IN CLIMATE-RELATED DISCLOSURES

The non-profit CDP (formerly the Carbon Disclosure Project) rates companies on their management of carbon and climate change risk. Great-West Lifeco is pleased to have ranked on their prestigious 'A-List', both as the highest rated Canadian insurance company for a sixth year running, and amongst the top five per cent of companies globally.

INVESTING IN RENEWABLE ENERGY

In 2020, our general account had over $4 billion in renewable energy investments through our private debt group. We're always exploring portfolio expansion opportunities, and our asset management affiliates continue to broaden their ESG investment capabilities and product offerings, managing assets of over $75 billion in ESG-related strategies.

BENEFITING FROM STABLE AND EFFECTIVE GOVERNANCE

EFFECTIVE GOVERNANCE KEY TO CREATING VALUE

We understand that good corporate governance is important. Effective governance is key to creating consistently strong long-term performance and for developing positive outcomes for our shareholders, policyholders, customers, employees and for the communities in which we operate. Our Board of Directors, through its decision-making and oversight of management, leads our companies. Our sincere thanks go out to our Directors for their valuable contributions. At our 2020 Annual Meeting Ms. Robin Bienfait, Chief Executive Officer of Emnovate and a Director of Putnam Investments and Empower Retirement, was elected as a Director of Great-West Lifeco.

ADVANCING FOCUS ON DIVERSITY AND INCLUSION

CANADA LIFE SIGNS ON TO NATIONAL BLACKNORTH INITIATIVE

Canada Life joined 200 major Canadian companies in pledging its support for the Canada-wide BlackNorth Initiative (BNI), led by The Canadian Council of Business Leaders Against Anti-Black Systemic Racism. As a first step, Canada Life formed a new employee resource group (ERG) for Black and Persons of Colour, alongside its ERGs for Women in Leadership, LGBTQ2+, Indigenous Peoples, Persons with Disabilities and Young Professionals. A signatory of the Winnipeg Indigenous Accord, Canada Life also continues to focus on the equity and advancement of Indigenous peoples across Canada, including through a contribution to Circles for Reconciliation.

PUTNAM HELPS FOSTER LITERACY, DIVERSITY IN FINANCIAL SERVICES

Giving back is a central tenet of Putnam's philosophy. Putnam's new community partnerships with Invest in Girls, BLK Capital and The Toigo Foundation are focused on strengthening financial literacy and diversity in financial services through donations and employee volunteerism. The partnerships span across high school to university students, along with women, people of color and those who are financially disadvantaged.

SUPPORTING OUR COMMUNITIES

EMPOWER SUPPORTS PUERTO RICO DISASTER RELIEF

According to reports, more than 1,000 earthquakes hit Puerto Rico in 2020, including a 6.4 magnitude tremor. As a demonstration of care for Empower associates and clients living in the U.S. territory, Empower pledged financial support to the American Red Cross' disaster relief efforts to help rebuild the island.

FUNDRAISER MARKS 20 YEAR MILESTONE IN GERMANY

To celebrate two decades of success, Canada Life expanded its annual #MACHSMOEGLICH ("Make it happen") fundraiser. Since 2017, the public has voted for the top winning charities based on goals for health, education and humanitarian efforts, among others. This year, the campaign raised funds for 120 initiatives.

ELEVATING THE WORKPLACE BENEFITS EXPERIENCE

Great-West Lifeco's businesses are leaders in group benefits markets in every region where we operate. Our success comes from our proactive approach to meeting customer needs and our ability to grow market share even in challenging environments. Our continued investments in new, innovative products broadens the range of customers we reach with workplace-delivered advice and solutions.

EMPOWER RETIREMENT

- **12M+** retirement plan participants
- Second largest U.S. retirement services provider

CANADA LIFE

- **Approximately 27,000** employer and association customers
- Serves over **12 million** Canadians

CANADA LIFE U.K.

- **2.9M** employees covered
- Largest U.K. group insurance provider

IRISH LIFE

- A leading Irish group pension provider
- **€1B+** in pension benefits paid over last 5 years.

Serves employees at:

- **8 of the 10** biggest Irish companies (ISEQ)
- **9 of the 10** biggest U.S. companies operating in Ireland (S&P500).

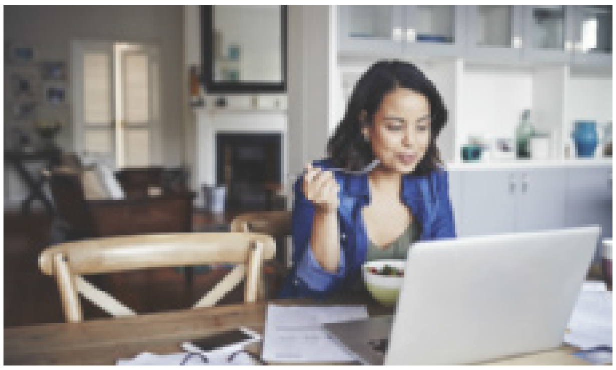
U.S. RETIREMENT BUSINESS ACQUISITIONS DRIVE U.S. GROWTH

In 2020, Empower announced it would acquire MassMutual's retirement services business. The acquisition capitalizes on both firms' retirement expertise, technological excellence and product capabilities. The move creates scale to better serve more American savers, and employers who sponsor retirement plans. MassMutual's retirement business comprises 26,000 clients with approximately 2.5 million participants and $245 million in assets.

Empower also acquired the retirement plan recordkeeping businesses of Fifth Third Bank of Cincinnati and Trust Bank in Charlotte, following decades of long-standing support for these former clients. Combined, they represent approximately $14 billion in assets held in more than 800 retirement plans on behalf of 171,000 participants.

CANADA LIFE RESP A FIRST FOR WORKPLACE BENEFITS

Canada's first fully digital employer-sponsored registered education savings plan (RESP) by Canada Life allows employers to help their employees save for children's post-secondary education. Not only do employees gain access to traditional RESP advantages like applicable Canadian government education grants and tax-sheltered earnings on contributions, they also enjoy Canada Life's low investment fees, convenient payroll deduction and ease of a fully digital experience.



CANADA LIFE PARTNERS WITH DWERK

Employees in Germany can now access Canada Life occupational pension advice and guidance through dWERK, an online consultation platform with multiple associated pension providers. Digital video consulting makes it easier for advisers to serve employees in plans of all sizes, and a virtual moderator provides legally compliant advice on occupational pensions. Employees can asses individual offers and conclude their pension contract directly online.

EMPOWER NAMED RETIREMENT LEADER OF THE YEAR

The Mutual Fund Industry Retirement Leader of the Year Award recognizes outstanding business leaders, the best creative minds and the top performers across the financial services industry. Empower was chosen for its significant public policy advocacy, as well as for making a key impact on growing retirement assets with unique retirement solutions, marketing campaigns and significant contributions to the retirement industry at large.

PERSONALIZED ADVICE TAILORED TO CUSTOMERS' NEEDS

Canada Life's new plan member guidance and solution team offers personalized guidance to help plan members navigate their benefit plans and advice in selecting personal group insurance benefits to address gaps in protection. Voluntary protection solutions include optional life, critical illness, and accidental death and dismemberment insurance and are available to individual plan members at no extra cost or administrative work for their plan sponsor. Best of all, coverage can remain in place even if they leave their group benefits plan or the plan terminates.

CLASS CUSTOMERS KNOW WECARE WITH VIRTUAL SERVICES

In 2020, Canada Life U.K. made its WeCare virtual health and well-being services permanently available to all customers on CLASS, its online group insurance platform. Whether they are insured under a policy or not, employees and their families on CLASS can access a range of support such as physician and second medical opinion consultations, and mental health, smoking, diet and fitness counseling and programs.

EQUIPPING CUSTOMERS WITH ADVICE AND WEALTH SOLUTIONS

Our purpose is clear: to meet customers and advisors' diverse, changing needs with innovative insurance and wealth solutions. By offering a broad suite of products and services available through multiple distribution channels, we provide advice and product solutions that meet our customers' needs in all stages of life.

ACQUIRING PERSONAL CAPITAL EXPANDS ADVICE, WEALTH

To better serve individual investors and retirement plan participants, Empower acquired Personal Capital, an industry-leading registered investment adviser and digital wealth manager. The June transaction combines Empower's leading retirement plan services and integrated financial tools with Personal Capital's rapidly growing, digitally oriented personal wealth management platform. Through this, Empower adds a best-in-class hybrid digital wealth management platform through a direct-to-consumer wealth management business focused on the large mass affluent market.

SUPPORTING ADVISORS' USE OF SOCIAL MEDIA

Putnam frequently incorporates research findings in practice management seminars to help their associated financial advisors build their businesses. Putnam examined financial advisors' use of social media during the 2020 pandemic to help clients weather the financial and emotional impact of the crisis. Putnam found social media outreach was critical to advisors' success, not only in communicating with prospects but in advancing client relationships.

ENHANCING ADVISORS' BUSINESS TO BETTER SERVE CANADIANS

Advisory Network is changing the way Canada Life does business, and giving advisors the expertise and resources to grow and give Canadians valuable advice. Its new Advisor Workspace platform provides Freedom and WISE advisors with easy access to digital tools to support client engagement and book management. Additionally, its centralized new financial solutions center team manages smaller client accounts, giving advisors more time to meet compliance and customer expectations.

STRENGTHENING OUR CANADIAN WEALTH STRATEGY

In 2020, Canada Life established Canada Life Investment Management Ltd., alongside its sale of subsidiary, GLC Asset Management, to affiliate, Mackenzie Investments. The transaction will provide access to the increased scale and investment capabilities of both GLC and Mackenzie combined. Canada Life will also leverage Mackenzie's administration expertise going forward.

The new Canada Life Mutual Fund shelf was also launched, featuring 18 new mutual funds and nine new global offerings added to the Canada Life Segregated Fund shelf. Across its wealth business, Canada Life has new, curated selection of competitive investment strategies across a range of managers and asset classes and styles.

OLIVIA DELIVERS PERSONALIZED AI-POWERED ADVICE

Artificial Intelligence (AI), and particularly machine learning, is a key focus to help enhance Irish Life's customer experience and efficiency. The Olivia personal financial assistant uses AI and open banking protocols to provide advice, identifying financial opportunities through customer bank transaction data. The pilot app saw a 40 per cent activation rate post-download with a 50 per cent monthly active usage and 40 per cent retention rate. Early experiments linking conversations to Irish Life product offerings like its investing app showed promise, enabling the business to better understand and engage with current and potential customers.

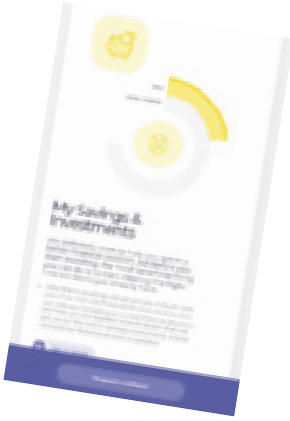
INTRODUCING EXCLUSIVE CANLIFE BREWIN DOLPHIN FUNDS

The 2020 launch of 'CanLife Brewin Dolphin' Funds, an exclusive range of 14 U.K. pension funds, is the first time a retirement provider has partnered with Brewin Dolphin's managed portfolio service outside a fund platform. The new range gives advisers flexible access to insured funds aligned to Brewin Dolphin's industry-leading managed portfolio service, including seven respective active and passive focused multi-asset options, adjusted for different risk profiles. The funds are available only in the Canada Life Retirement Account, the unique standalone pension savings and drawdown product which also offers a guaranteed income.

YOUNG CLIENTS LEARN TO "RELAX..." WITH RISK SOLUTIONS CAMPAIGN

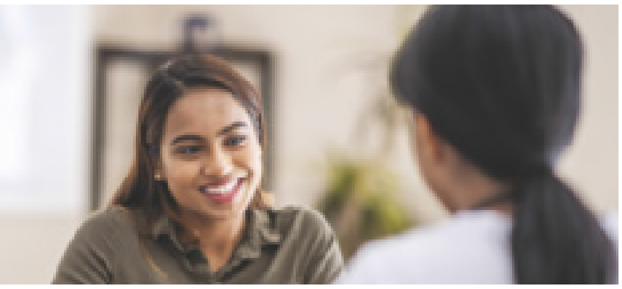
In Germany, Canada Life created a vibrant campaign to help brokers connect with young clients who may not understand the importance of income protection. This risk solution campaign helps break through the noise and clutter to capture their attention with a set of colourful and simple visuals and materials that can be personalized, and that explain the topic in a relaxed and simple manner, through items like e-cards.

BUILDING BETTER FUTURES WITH MY LIFE PLANNER



My Life Planner is Irish Life's first digital tool to help customers assess their insurance, retirement and investment needs all in one place. The interactive tool has helped thousands of customers and potential customers plan for a better financial future by identifying their needs and connecting them with financial advisors to discuss product solutions.

PROVIDING INVESTMENT AND ASSET MANAGEMENT EXPERTISE



Great-West Lifeco's strong foundation of a diverse array of investments and assets help fuel other strategic focus areas. With an aggregate of approximately $2.0 trillion in assets under administration (AUA) including approximately $952 billion in assets under management (AUM), we have a proven track record of disciplined investing for our insurance general account and third-party clients, with prudent processes designed to weather market cycles. Combined with environmental, social and governance (ESG) considerations, this purposeful approach is our blueprint for enhanced growth and revenue opportunities.

AUM BY REGION

$195B	$249B	$493B	$15B
Canada	Europe	U.S.	Capital and Risk Solutions

INCREASING OUR PRESENCE IN PRIVATE MARKETS INVESTMENT INDUSTRY

Another area of strategic focus is the growing private markets investment industry. In 2020, together with Mackenzie Financial Corporation, we closed the acquisition of an interest in Northleaf Capital Partners Ltd., an independent global private markets investments firm with $17 billion in private equity, private credit and infrastructure commitments under management.

Northleaf's portfolio includes more than 400 active investments in 35 countries, with a focus on mid-market companies and assets.

BUILDING OUT A GLOBAL REAL ESTATE PLATFORM

One strategic focus is our global real estate platform, which we are building to service investors needs for allocation and diversification into alternative assets. Combined, we are managing more than $27.4 billion in real estate globally as at December 31, 2020, with an additional $1.2 billion in developments underway.

DELIVERING STRONG PERFORMANCE

Putnam Investments continued to generate strong long-term investment performance across asset classes relative to its peers in 2020. Over 90 per cent of Putnam's fund assets performed above the Lipper median on a five- and ten-year basis. Additionally, more than 75 per cent of Putnam's fund assets performed in the Lipper top quartile over ten years. Further, 26 Putnam mutual funds were ranked four or five-stars by Morningstar, an industry research and rating company.

*As at December 31, 2020.

RESPONDING TO DEMAND: LF CANLIFE DIVERSIFIED MONTHLY INCOME FUND

In the U.K., Canada Life manages £40 billion in fixed income, equities, U.K. property and multi-asset solutions. Despite unprecedented conditions, its newest multi-asset fund, the LF Canlife Diversified Monthly Income Fund, finished the year firmly in the first quartile compared to other monthly paying funds in the IA Mixed Investment 20%–60% Shares Sector.

Built on a diversified portfolio of income-generating assets, the fund includes global company shares, international government and corporate bonds, and property. It was developed in response to rising demand for income drawdown choices as people increasingly control their retirement savings, while traditional income strategies become more challenging partly because of low interest rates.

INTRODUCING CANADA LIFE'S NEW INVESTMENT MANAGEMENT COMPANY

At over $125 billion in assets managed, Canada Life's disciplined, purposeful long-term investments support economic growth while helping Canadians reach their financial goals. In 2020, the company launched Canada Life Investment Management Ltd. Together with GWL Realty Advisors, the new firm manages a spectrum of fixed income, equity, real estate, asset-allocation and specialty investment funds.

IRISH LIFE GROUP SWEEPS 2020 IRISH PENSION AWARDS

Irish Pensions AWARDS 2020 WINNER

Irish Life was delighted to pick up several top honours at the 10th annual Irish Pension Awards. Recognizing excellence and professionalism in the pension industry, across funds, providers, advisers and pension professionals, the Irish Life Group won in four key categories:

- **Investment Manager of the Year** to Irish Life Investment Managers for the sixth time in the last eight years.
- **Excellence in Defined Contribution** to Irish Life Corporate Business for outstanding provision of DC services.
- **Equities Manager of the Year** to Setanta Asset Management for third consecutive year.
- **Pension Broker of the Year** to Invesco Wealth Management.

PanAgora

AWARD WINNING INVESTMENT PERFORMANCE

PanAgora Asset Management continues to deliver competitive investment performance across asset classes relative to its peers. PanAgora's Stock Selector Emerging Markets Equity was the winner of the 2020 Pension Bridge Institutional Asset Management award in the Emerging Markets Equity Strategy of the Year category.

OFFERING CAPITAL AND RISK SOLUTIONS

Our businesses are global market leaders with decades of expertise and scale in providing longevity and capital solutions, and a consistent record of strong earnings. Our focus remains on expanding diversification strategies in key markets and deploying capital to improve portfolio quality to advance growth.

OUR RANKINGS:

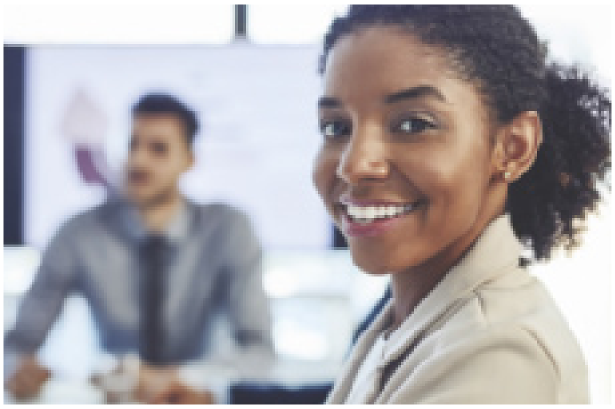
TOP 10	TOP 6	TOP 2
global reinsurer*	life reinsurer*	U.S. life structured solutions

*Based on all gross reinsurance/life-focused reinsurance premiums written per A.M. Best's 2019 Rankings: top 50 World's Largest Reinsurer Groups.

NEW CAPITAL AND RISK SOLUTIONS BUREAU OPENS IN BERMUDA

In 2020, the Canada Life International Reinsurance Corporation Ltd. was established in Bermuda to help improve efficiency for certain types of reinsurance transactions.

The Canada Life Capital and Risk Solutions business unit sells reinsurance covering mortality, longevity, health and lapse risks for insurers, reinsurers and pension funds across the U.S. and Europe, including Belgium, France, Germany, Ireland, Italy, the Netherlands, Portugal, Spain, Sweden and the U.K., as well as Barbados and now Bermuda. It continues to have a strong new business pipeline.



REINSURANCE AGREEMENTS HELP MORE THAN 90,000 IN-PAYMENT AND DEFERRED PENSIONERS

In 2020, the Capital and Risk Solutions business segment secured three major European long-term longevity reinsurance agreements with over $15 billion of in-force liabilities combined. Altogether, over 92,000 in-payment and deferred pensioners will be reinsured by Capital and Risk Solutions under these agreements. The transactions highlight Capital and Risk Solutions' strength as a partner for reinsurance longevity transactions globally.

Management's Discussion and Analysis

This Management's Discussion and Analysis (MD&A) presents management's view of the financial condition, financial performance and cash flows of Great-West Lifeco Inc. (Lifeco or the Company) for the three and twelve months ended December 31, 2020 and includes a comparison to the corresponding periods in 2019, to the three months ended September 30, 2020, and to the Company's financial condition as at December 31, 2019. This MD&A provides an overall discussion, followed by analysis of the performance of Lifeco's four major reportable segments: Canada, United States (U.S.), Europe and Capital and Risk Solutions. Effective January 1, 2020, as a result of strategic operational changes, the Company has divided the previously reported Europe segment into two separate reporting segments – Europe and Capital and Risk Solutions.

Businesses of Lifeco

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

On January 1, 2020, The Great-West Life Assurance Company (Great-West Life), London Life Insurance Company (London Life) and Canada Life and their holding companies, Canada Life Financial Corporation and London Insurance Group Inc. amalgamated into a single life insurance company, The Canada Life Assurance Company.

In Canada, Canada Life offers a broad portfolio of financial and benefit plan solutions for individuals, families, businesses and organizations through two primary business units: Individual Customer and Group Customer. Through the Individual Customer business unit, the Company provides life, disability and critical illness insurance products as well as wealth savings and income products and services to individual customers. Through the Group Customer business unit, the Company provides life, accidental death and dismemberment, critical illness, disability, health and dental protection, creditor insurance as well as retirement savings and annuity products and other specialty products to group customers in Canada. The products are distributed through a multi-channel network of brokers, advisors, managing general agencies and financial institutions including Freedom 55 Financial™ and Wealth and Insurance Solutions Enterprise.

In the U.S., Empower Retirement is a leading provider of employer-sponsored retirement savings plans in the public/non-profit and corporate sectors that offers employer-sponsored defined contribution plans, administrative and recordkeeping services, individual retirement accounts, fund management, as well as investment and advisory services. Personal Capital Corporation, acquired in 2020, is a hybrid wealth manager that combines a leading-edge digital experience with personalized advice. 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 is comprised of three distinct business units serving customers in the United Kingdom, Ireland and Germany respectively and offering protection and wealth management products, including payout annuity products. The UK and German units operate under the Canada Life brand and Irish unit operates under the Irish Life brand.

The Capital and Risk Solutions segment includes the Reinsurance business unit, which operates primarily in the U.S., Barbados, Bermuda and Ireland. Reinsurance products are provided through Canada Life and its subsidiaries. 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 enable those companies to manage their insurance risk.

Lifeco currently has no other material holdings and carries on no business or activities unrelated to its holdings in Canada Life, GWL&A, Putnam, Irish Life 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 annual consolidated financial statements for the period ended December 31, 2020.

Cautionary Note Regarding Forward-Looking Information

This MD&A may contain forward-looking information. Forward-looking information includes statements that are predictive in nature, depend upon or refer to future events or conditions, or include words such as "will", "may", "expects", "anticipates", "intends", "plans", "believes", "estimates", "objective", "target", "potential" and other similar expressions or negative versions thereof. These statements 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, anticipated global economic conditions and possible future actions by the Company, including statements made with respect to the expected cost (including deferred consideration), benefits, timing of integration activities and revenue and expense synergies of acquisitions and divestitures, including the recent acquisitions of Personal Capital Corporation (Personal Capital) and the retirement services business of Massachusetts Mutual Life Insurance Company (MassMutual), expected capital management activities and use of capital, expected dividend levels, expected cost reductions and savings, expected expenditures or investments (including but not limited to investment in technology infrastructure and digital capabilities), the impact of regulatory developments on the Company's business strategy and growth objectives, the expected impact of the current pandemic health event resulting from the novel coronavirus ("COVID-19") and related economic and market impacts on the Company's business operations, financial results and financial condition.

Forward-looking statements are based on expectations, forecasts, estimates, 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, mutual fund and retirement solutions 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. 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. Whether or not actual results differ from forward-looking information may depend on numerous factors, developments and assumptions, including, without limitation, the severity, magnitude and impact of the novel coronavirus (COVID-19) pandemic (including the effects of the COVID-19 pandemic and the effects of governments' and other businesses' responses to the COVID-19 pandemic on the economy and the Company's financial results, financial condition and operations), assumptions around sales, fee rates, asset breakdowns, lapses, plan contributions, redemptions and market returns, the ability to integrate the acquisitions of Personal Capital and the retirement services business of MassMutual, the ability to leverage Empower Retirement's, Personal Capital's and MassMutual's retirement services businesses and achieve anticipated synergies, customer behaviour (including customer response to new products), the Company's reputation, market prices for products provided, sales levels, premium income, fee income, expense levels, mortality experience, morbidity experience, policy and plan lapse rates, participant net contribution, reinsurance arrangements, liquidity requirements, capital requirements, credit ratings, taxes, inflation, interest and foreign exchange rates, investment values, hedging activities, global equity and capital markets (including continued access to equity and debt markets), industry sector and individual debt issuers' financial conditions (including developments and volatility arising from the COVID-19 pandemic, particularly in certain industries that may comprise part of the Company's investment portfolio), the United Kingdom's exit ("Brexit") from the European Union, business competition, 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, unplanned material changes to the Company's facilities, customer and employee relations or credit arrangements, levels of administrative and operational efficiencies, changes in trade organizations, and other general economic, political and market factors in North America and internationally.

The reader is cautioned that the foregoing list of assumptions and factors is not exhaustive, and there may be other factors listed in other filings with securities regulators, including factors set out in this MD&A under "Risk Management and Control Practices" and "Summary of Critical Accounting Estimates" and in the Company's annual information form dated February 10, 2021 under "Risk Factors", which, along with other filings, is available for review at www.sedar.com. The reader is also cautioned to consider these and other factors, uncertainties and potential events carefully and not to place undue reliance on forward-looking information.

Other than as specifically required by applicable law, the Company does not intend to update any forward-looking information 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, "base earnings (loss)", "base earnings (loss)(US$)", "base earnings per common share", "return on equity", "base return on equity", "core net earnings (loss)", "constant currency basis", "impact of currency movement", "premiums and deposits", "pre-tax operating margin", "sales", "assets under management" and "assets under administration". Non-IFRS financial measures are used to provide management and investors with additional measures of performance to help assess results where no comparable IFRS measure exists. However, non-IFRS financial measures do not have standard meanings prescribed by IFRS and are not directly comparable to similar measures used by other companies. Refer to the "Non-IFRS Financial Measures" section in this MD&A for the appropriate reconciliations of these non-IFRS financial measures to measures prescribed by IFRS as well as additional details on each measure.

CONSOLIDATED OPERATING RESULTS

Selected consolidated financial information

(in Canadian $ millions, except for per share amounts)	As at or for the three months ended Dec. 31 2020	Sept. 30 2020	Dec. 31 2019	For the twelve months ended Dec. 31 2020	Dec. 31 2019
Earnings					
Base earnings [1] [2]	**$ 741**	$ 679	$ 831	**$ 2,669**	$ 2,704
Net earnings – common shareholders	**$ 912**	$ 826	$ 513	**$ 2,943**	$ 2,359
Per common share					
Basic:					
Base earnings [1] [2]	**0.799**	0.732	0.895	**2.878**	2.859
Net earnings	**0.983**	0.891	0.552	**3.173**	2.494
Diluted net earnings	**0.983**	0.891	0.552	**3.172**	2.493
Dividends paid	**0.438**	0.438	0.413	**1.752**	1.652
Book value	**22.97**	22.57	21.53		
Base return on equity [1] [2] [3]	**12.8%**	13.5%	13.4%		
Return on equity [1] [3]	**14.1%**	12.4%	11.7%		
Total premiums and deposits [1] [5]	**$ 40,831**	$ 40,903	$ 39,096	**$ 171,345**	$ 150,638
Fee and other income	**1,569**	1,486	1,515	**5,902**	7,081
Net policyholder benefits, dividends and experience refunds	**9,916**	9,155	10,003	**38,159**	36,415
Total assets per financial statements	**$ 600,490**	$ 473,737	$ 451,167		
Proprietary mutual funds and institutional assets [1]	**350,943**	341,436	320,548		
Total assets under management [1]	**951,433**	815,173	771,715		
Other assets under administration [1]	**1,024,414**	845,862	857,966		
Total assets under administration [1]	**$ 1,975,847**	$ 1,661,035	$ 1,629,681		
Total equity	**$ 27,015**	$ 26,648	$ 25,543		
The Canada Life Assurance Company consolidated LICAT Ratio [4]	**129%**	131%	135%		

(1) This metric is a non-IFRS measure. Refer to the "Non-IFRS Financial Measures" section of this document for additional details.

(2) Effective the first quarter of 2020, the Company introduced an enhanced non-IFRS earnings measure. Base earnings (loss) are defined as net earnings excluding the impact of actuarial assumption changes and other management actions, direct equity and interest rate market impacts on insurance and investment contract liabilities, net of hedging, and related deferred tax liabilities, and items that management believes are not indicative of the Company's underlying business results. These items would include restructuring and integration costs, material legal settlements, material impairment charges related to goodwill and intangible assets, legislative tax changes and other tax impairments, and gains or losses related to the disposition of a business.

(3) Refer to the "Return on Equity" section of this document for additional details.

(4) The Life Insurance Capital Adequacy Test (LICAT) ratio is based on the consolidated results of The Canada Life Assurance Company (Canada Life), Lifeco's major Canadian operating subsidiary. Refer to the "Capital Management and Adequacy" section of this document for additional details.

(5) Comparative figures have been reclassified to reflect presentation adjustments.

Lifeco 2020 Highlights

Financial Performance

- The Company maintained its strong capital position as evidenced by a Life Insurance Capital Adequacy Test (LICAT) ratio at December 31, 2020 of 129% for Canada Life, Lifeco's major Canadian operating subsidiary, which exceeded the Office of the Superintendent of Financial Institutions' (OSFI) Supervisory Target Total Ratio of 100%, and Supervisory Minimum Total Ratio of 90%.
- For the twelve months ended December 31, 2020, base earnings per common share were $2.878 compared to $2.859 a year ago, an increase of 1%, reflecting resilient earnings in all segments during the COVID-19 pandemic. For the twelve months ended December 31, 2020, base earnings of $2,669 million were down $35 million or 1% compared to 2019 base earnings of $2,704 million. 2019 base earnings included the impact of the resolution of an issue with a tax authority which positively impacted Europe segment base earnings and $63 million of earnings related to the U.S. individual life insurance and annuity business prior to its disposal in the second quarter of 2019.
- For the twelve months ended December 31, 2020, net earnings attributable to common shareholders (net earnings) were $2,943 million, compared to $2,359 million for the previous year, primarily reflecting the net positive impact from a number of strategic initiatives undertaken during the year. In 2020, Lifeco's net earnings include a net gain of $94 million related to the sale of Irish Progressive Services International Limited (IPSI), a net gain of $143 million related to the sale of GLC Asset Management Group Ltd. (GLC) and transaction, restructuring and integrations costs of $145 million related to the acquisitions of Personal Capital Corporation (Personal Capital) and the retirement services business of Massachusetts Mutual Life Insurance Company (MassMutual or MassMutual transaction) as well as strategic initiatives in the Canadian segment. In addition, 2020 net earnings include the positive impact of the revaluation of a deferred tax asset of $196 million as a result of higher expected U.S. segment earnings due to 2020 acquisitions. This deferred tax asset was de-recognized in the prior year and had a negative impact of $199 million on 2019 net earnings. In 2019, net earnings were also impacted by a net charge of $199 million relating to the sale, via indemnity reinsurance, of the U.S. individual life insurance and annuity business to Protective Life Insurance Company (Protective Life), restructuring costs of $36 million at Putnam, and a gain of $8 million related to the completion of the sale of a heritage block of policies to Scottish Friendly.
- In February 2020, Lifeco's quarterly common share dividend increased 6% to $0.438 per share. On March 13, 2020, the Office of the Superintendent of Financial Institutions (OSFI) set the expectation that Canadian banks and insurers to suspend share buybacks and not to increase dividend payments. The Company does not currently intend to increase dividends or engage in share repurchases.
- The Company's financial leverage ratio at December 31, 2020 was 33.8%, compared to 27.6% the prior year. The leverage ratio was impacted by debt issuances in 2020, mainly in support of strategic acquisitions. Lifeco issued $600 million 10-year debentures in May 2020 and $500 million 30-year debentures in July 2020. Proceeds were used to redeem $500 million of debentures which matured in August 2020 as well as for general corporate purposes. Great-West Lifeco U.S. Finance 2020, LP, a subsidiary of the Company, issued $663 million (US$500 million) 5-year senior notes in August 2020 to fund the acquisition of Personal Capital. In September 2020, Empower Finance 2020, LP, a subsidiary of the Company, issued three tranches of senior notes totaling $1,973 million (US$1,500 million) to fund the MassMutual transaction.

Strategic Highlights

- Following the amalgamation of its three Canadian life insurance companies, which was effective January 1, 2020, the Canada segment has focused on leveraging the Canada Life brand, launching new digital platforms for both Group and Individual customers as well as continued focus on operational efficiencies and core strategies.

  On December 31, 2020, the Company completed the sale of GLC to Mackenzie Financial Corporation (Mackenzie), an affiliate of the Company. GLC was a wholly-owned subsidiary of Canada Life whose principal activity was the provision of investment management services to Canada Life. The Company recorded a net gain on disposal of $143 million after-tax, net of restructuring costs of $16 million after-tax. This transaction provides the Company with access to greater scale and more investment capabilities. As a result of this transaction, the Company also established its own mutual fund manager, Canada Life Investment Management Ltd. (CLIML), which assumed fund management responsibilities for the Canada Life Mutual Funds, offered by Quadrus Investment Services Ltd., a subsidiary of Canada Life, and other Canada Life branded investment funds offered in Canada.

  Also in the fourth quarter of 2020, two initiatives impacting the Canada segment operations were announced. The Company announced changes to its Canadian distribution strategy and vision for advisor based distribution, and IGM Financial, an affiliate of the Company, notified the Company of its intent to terminate its long-term technology infrastructure related sharing agreement with the Company in the first quarter of 2021. These initiatives, together with the sale of GLC will result in staff reductions, exit costs for certain facilities lease agreements and decommissioning activities related to technology and other assets. As a result, the Company has recorded a restructuring provision of $92 million, which includes the restructuring costs associated with the GLC disposition ($68 million in the shareholder account and $24 million in the participating account). The after-tax impact of the restructuring provision on net earnings is $68 million ($50 million in the shareholder account, or $34 million excluding the GLC disposition related restructuring expenses, and $18 million in the participating account). Changes relating to these initiatives are expected to be fully implemented by the end of 2022.
- In the U.S. segment, the Company completed a number of strategic acquisitions to expand and enhance its retirement and retail wealth management business, operating under the Empower Retirement brand.

  Effective December 31, 2020, the Company acquired the retirement services business of MassMutual for US$2.3 billion of ceding commission, net of adjustments for working capital, which fortified its position as the second largest retirement services provider in the U.S. based on assets under administration and number of retirement plan participants. This transaction is expected to be accretive to Lifeco's earnings.

In August of 2020, the Company completed the acquisition of Personal Capital, a hybrid wealth manager that combines a leading-edge digital experience with personalized advice delivered by human advisors. Under the terms of the agreement, the Company acquired 100% of the equity of Personal Capital for US$813 million on closing and deferred consideration subject to achievement of target growth objectives.

In the fourth quarter of 2020, the Company completed its acquisition of the retirement services business of Fifth Third Bank and subsequent to December 31, 2020, on January 6, 2021, the Company announced a definitive agreement to acquire the retirement services business of Truist Bank. Both are former private-label recordkeeping clients, and together these acquisitions bring approximately US$11 billion in assets, approximately 800 retirement plans and approximately 173,000 participants on to the Empower Retirement platform.

Empower Retirement participants of 11.9 million at December 31, 2020 grew 27% from 9.4 million participants at December 31, 2019. Assets under administration grew 42% over the year to US$958 billion on December 31, 2020. The increases include the addition of the MassMutual retirement business which contributed 2.5 million participants and US$190 billion in assets under administration.

At Putnam, restructuring activities were mostly completed in 2020 resulting in approximately US$28 million in pre-tax annual operating expense savings as it realigned its resources to better position itself for current and future opportunities. These actions included technology modernization, product consolidation, a reduction in staff and facilities reorganization and resulted in restructuring charges which reduced net earnings in 2019 by $36 million (US$28 million).

- In Europe, the Company has substantially completed the multi-year U.K. restructuring program which began in 2018 following the acquisition of Retirement Advantage. The program is enhancing the efficiency of the U.K. business operating model across all product lines and includes the modernization of its technology platforms, thereby underpinning sustainable earnings growth and supporting strategic expansion. The technology modernization is accompanied by complementary enhancement of investment, finance and risk capabilities.

  As Irish Life continues to focus on its core business, effective August 4, 2020, Irish Life completed the sale of IPSI, a wholly-owned subsidiary, whose principal activity is the provision of outsourced administration services for life assurance companies. The net gain resulting from the transaction was $94 million. In addition, Irish Life continued to build its distribution and wealth management capability through a number of acquisitions. While these business will largely remain autonomous, they have been grouped into a new division ("Intermediary Business") which will serve 3 core markets – the public sector, employee benefit consulting and wealth management. Individually these transactions are not expected to have a material impact on the Company's financial position but collectively they expand Irish Life's reach into these 3 strategically important markets.

  The U.K. and the European Union (EU) agreed on a comprehensive trade agreement in December 2020 effective January 1, 2021 to replace the transitional arrangements that were in place since the U.K. left the EU on January 31, 2020. The Company's European businesses will continue to trade as normal within their respective domestic markets.

- During 2020, in Capital and Risk Solutions, the Reinsurance business unit completed three major long-term longevity reinsurance agreements with over $15 billion of in-force liabilities combined. Over 92,000 in-payment and deferred pensioners will be reinsured by Canada Life Reinsurance under these agreements. These transactions highlight the Company's strength as a partner for reinsurance longevity transactions globally.

  The Reinsurance business unit also established a new subsidiary in Bermuda to help improve its efficiency for certain types of reinsurance transactions.

COVID-19 Pandemic Impacts

Beginning in January 2020, the outbreak of a virus known as COVID-19 and ensuing global pandemic resulted in travel and border restrictions, self-imposed quarantine periods and physical distancing, supply chain disruptions, reduced consumer demand and significant market uncertainty. This has caused material disruption to businesses globally, resulting in an economic slowdown. In the first quarter of 2020, global financial markets experienced material and rapid declines and significant volatility; however, during the remainder of 2020, the markets experienced recoveries. Governments and central banks have reacted with significant monetary and fiscal interventions designed to stabilize economic conditions. In addition, the Company has provided support to communities through financial donations across the geographic regions in which the Company operates.

While equity and fixed income markets have improved since March 31, 2020, interest rates remain low and COVID-19 challenges have begun to manifest through investment credit rating downgrades and real estate value declines, although modest in 2020. The Company experienced modest downgrades in the year, however, depending on the length of the shutdowns and recovery of the economy there could be a larger impact from downgrades in future periods. The Company's asset liability management strategy is designed to mitigate interest rate risk; however, while the Company has limited sensitivity to fluctuations in interest rates, a prolonged period of low interest rates may adversely impact the profitability of certain products the Company provides, and repricing actions have been, and will continue to be, undertaken as necessary.

Premium and investment related deferrals were limited, partially as a result of continued government support in many jurisdictions. The Company expects to see continued reduced sales opportunities for certain products given client and prospect concerns about the breadth and severity of the pandemic and its longer-term effect on businesses. Sales teams and financial advisors have been adapting to the new remote environment and are adjusting processes going forward. While the Company experienced lower sales in certain areas of its business, customer retention remained high. If lower sales persist it could adversely impact asset, premiums and fee income levels.

In March 2020, the Company announced a temporary suspension of contributions to and redemptions and transfers from its real estate segregated funds in Canada and Europe as the economic conditions caused by the COVID-19 situation led to valuation uncertainty in the real estate industry. Management determined the need to temporarily suspend withdrawals and transfers-out from the funds in order to protect the long term interest of the unitholders.

Valuation certainty is selectively returning to certain sectors and geographies of the real estate market. In the fourth quarter of 2020, the temporary suspension was lifted from the Company's U.K. real estate fund and certain Irish property funds as the material valuation uncertainty clauses that had been in effect across those funds' main asset classes were lifted by the independent third party appraisers. The Company's Irish Property Modules fund continues to operate with a 6 month redemption deferral. As of January 11, 2021, Canada has partially lifted the suspension, allowing contributions and transfers into the fund. As well, requests for redemptions and transfers out of the fund are being accepted for a limited period and will be processed, subject to available liquidity, on pre-specified dates; however, redemptions and transfers out of the fund otherwise remain suspended.

Outlook for 2021

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

- Lifeco is continuing to focus on its core strategies: delivering financial security and wellness through the workplace, providing advice-centered wealth management, delivering strong investment and asset management and leveraging risk and capital management expertise. The Company will invest strategically – both organically and through acquisitions – to drive growth and productivity, while maintaining strong risk and expense discipline, to deliver sustainable long-term value to its customers and shareholders.

  In 2021, the Company will remain focused on future regulatory changes, including preparing for the implementation of accounting changes related to IFRS 17, *Insurance Contracts*, which is effective on January 1, 2023. The Company will continue to invest in updating processes and systems throughout the implementation period.
- In Canada, the Company will continue to invest in innovative technologies, focus on strategies to enhance growth and its competitive position and identify ways to further streamline its products, marketing, operations and structure as it delivers its products. Specifically, in its Group business, Canada Life will continue to invest in innovative member service tools and coverage solutions, allowing for greater personalization of experience and to support its customers financial security and wellness in the workplace. In its Individual business, Canada Life will continue the roll-out of market-leading solutions and digital tools that improve the client and advisor experience and provide personalized wealth solutions.
- In the U.S., focus will continue on the defined contribution retirement market and building awareness for the Empower Retirement brand to help drive organic retail and business-to-business growth. The Company will focus on integrating 2020 acquisitions and realizing target synergies while enhancing the overall customer experience through innovation and service excellence. At Putnam, the focus will continue to be on driving growth and market share through strong investment performance, service excellence and digital capabilities while optimizing business economics.
- The Company intends to invest in additional system functionality and digital capability in the U.K. in both the group and individual marketplace. In Ireland, deepening and broadening the market leading retail, corporate and investment management businesses, including products to support customers' financial security and wellness, will continue to be the focus. In Germany, the Company plans to continue to expand its presence in the pension and protection markets by focusing on the introduction of innovative products and services whilst enhancing its systems capabilities.
- In Capital and Risk Solutions, through its leading market positions, the Reinsurance business unit will strategically focus on expanding into other key markets. Building on its diversified multi-niche base, Capital and Risk Solutions will deploy its capital to meet clients' evolving needs.
- The Company's financial outlook for 2021 will depend in part on the duration and intensity of the COVID-19 pandemic impacts and the availability and adoption of vaccines. Service continuity plans will continue to be in operation across the Company as the majority of employees continue to work remotely to provide service to customers and maintain operations and technology functions. The impact of the pandemic on mortality and disability and other claims experience in future periods is uncertain. Mitigating these uncertain impacts is the Company's well-diversified businesses. This diversity, combined with business strength, resilience and experience, puts the Company in a strong position to manage the current environment and leverage opportunities for the future. Lifeco's strategies are equally resilient and flexible, positioning the Company to manage through the recovery and continue to identify and pursue opportunities, including organic growth and acquisition activities, while supporting customers and employees in a new environment.

Net Earnings

Consolidated base earnings and net earnings of Lifeco include the base earnings and net earnings of Canada Life and its operating subsidiary, Irish Life; GWL&A and Putnam; together with Lifeco's Corporate operating results.

Effective January 1, 2020, as a result of strategic operational changes, the Company has divided the previously reported Europe segment into two separate reporting segments – Europe and Capital and Risk Solutions. The Company's other reportable segments – Canada, United States and Lifeco Corporate – are unchanged. Comparative figures have been reclassified to reflect the new composition of the reportable segments.

Effective the first quarter of 2020, the Company introduced an enhanced non-IFRS earnings measure to reflect management's view of the underlying business performance of the Company. The measure – base earnings (loss) – is being adopted to enhance comparability of results between reporting periods and in anticipation of the implementation of accounting changes related to IFRS 17, *Insurance Contracts,* on January 1, 2023. Refer to the "Non-IFRS Financial Measures" section in this MD&A for additional details.

Base earnings [1] and Net earnings – common shareholders

	For the three months ended			For the twelve months ended	
	Dec. 31 2020	Sept. 30 2020	Dec. 31 2019	**Dec. 31 2020**	Dec. 31 2019
Base earnings (loss) [1]					
Canada	$ **348**	$ 270	$ 274	$ **1,206**	$ 1,178
United States	**90**	83	89	**273**	350
Europe	**195**	182	317	**688**	796
Capital and Risk Solutions	**124**	156	157	**536**	401
Lifeco Corporate	**(16)**	(12)	(6)	**(34)**	(21)
Lifeco base earnings [1]	$ **741**	$ 679	$ 831	$ **2,669**	$ 2,704
Items excluded from base earnings [2]					
Actuarial assumption changes and other management actions [2]	$ **(23)**	$ 66	$ (78)	$ **113**	$ 170
Market-related impacts on liabilities [2]	**(31)**	18	(13)	**(127)**	(89)
Net gain/charge on business dispositions [2]	**143**	94	8	**237**	(191)
Transaction costs related to the acquisitions of Personal Capital and MassMutual [2]	**(47)**	(31)	–	**(78)**	–
Revaluation of a deferred tax asset [2]	**196**	–	(199)	**196**	(199)
Restructuring and integration costs [2]	**(67)**	–	(36)	**(67)**	(36)
Items excluded from Lifeco base earnings [2]	$ **171**	$ 147	$ (318)	$ **274**	$ (345)
Net earnings (loss) – common shareholders					
Canada	$ **300**	$ 266	$ 188	$ **1,070**	$ 1,051
United States	**208**	89	(121)	**380**	(61)
Europe	**253**	316	335	**913**	1,004
Capital and Risk Solutions	**167**	167	117	**614**	386
Lifeco Corporate	**(16)**	(12)	(6)	**(34)**	(21)
Lifeco net earnings – common shareholders	$ **912**	$ 826	$ 513	$ **2,943**	$ 2,359

(1) This metric is a non-IFRS measure. Refer to the "Non-IFRS Financial Measures" section of this document for additional details.
(2) Items excluded from base earnings, a non-IFRS measure. Refer to the "Non-IFRS Financial Measures" section of this document for additional information.

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.

Base earnings

Base earnings for the fourth quarter of 2020 of $741 million ($0.799 per common share) decreased by $90 million from $831 million ($0.895 per common share) a year ago. The decrease was primarily due to the positive impact of a resolution of an outstanding issue with a foreign tax authority in 2019 in the Europe segment which did not recur, unfavourable group mortality in the Europe segment as well as new business strain in the Capital and Risk Solutions segment. These items were mostly offset by favourable morbidity and mortality experience in the Canada segment.

For the twelve months ended December 31, 2020, Lifeco's base earnings were $2,669 million ($2.878 per common share) compared to $2,704 million ($2.859 per common share) a year ago. The decrease was primarily due to the resolution of an outstanding issue with a foreign tax authority in 2019 discussed for the in-quarter results as well as lower base earnings in the U.S. segment. The decrease was partially offset by business growth in the Capital and Risk Solutions segment. Base earnings for the twelve months ended December 31, 2019 included $63 million of earnings related to the U.S. individual life insurance and annuity business ("Reinsured Insurance & Annuity" business unit) prior to its sale on June 1, 2019, to Protective Life.

Net earnings

Lifeco's net earnings for the three month period ended December 31, 2020 of $912 million ($0.983 per common share) increased by $399 million or 78% compared to $513 million ($0.552 per common share) a year ago. The increase was primarily due to the positive impact of the revaluation of a deferred tax asset of $196 million in the U.S. segment and a net gain of $143 million related to the sale of GLC. The increase was partially offset by transaction, restructuring and integration costs of $114 million related to the acquisition of Personal Capital and the retirement services business of MassMutual as well as strategic initiatives in the Canadian segment. Net earnings in the fourth quarter of 2019 included the negative impact of the de-recognition of a deferred tax asset of $199 million in the U.S. segment.

For the twelve months ended December 31, 2020, Lifeco's net earnings were $2,943 million ($3.173 per common share) compared to $2,359 million ($2.494 per common share) a year ago. The increase was primarily due to the positive impact of the revaluation of a deferred tax asset and the net gain on the sale of GLC discussed for the in-quarter results as well as a net gain of $94 million related to the sale of IPSI in the third quarter of 2020. The increase was partially offset by the transaction, restructuring and integration costs incurred to date discussed for the in-quarter results and lower contributions from insurance contract liability basis changes and market-related impacts on liabilities due to significant market declines in the first quarter of 2020 driven by the COVID-19 pandemic. In addition, Lifeco's net earnings for the twelve months ended December 31, 2019 included a net charge of $199 million (US$148 million) relating to the sale, via indemnity reinsurance, of the U.S. individual life insurance and annuity business to Protective Life and the negative impact of the de-recognition of a deferred tax asset of $199 million.

Actuarial Assumption Changes and Other Management Actions

For the three months ended December 31, 2020, actuarial assumption changes and other management actions, excluding the gain on sale of GLC and the transaction costs related to the acquisition of MassMutual's retirement services business, resulted in a negative net earnings impact of $23 million compared to a negative impact of $78 million for the same quarter last year and a positive impact of $66 million for the previous quarter.

In Canada, net earnings were negatively impacted by $147 million primarily due to updated policyholder behaviour and economic and asset related assumptions, partially offset by updated life mortality assumptions. In Europe, net earnings were positively impacted by $78 million, primarily due to updated annuitant mortality assumptions, partially offset by updated economic and asset related assumptions. In Capital and Risk Solutions, net earnings were positively impacted by $43 million primarily due to updated economic and annuitant mortality assumptions, partially offset by updated expense assumptions. In the U.S., net earnings were positively impacted by $3 million, due to updated annuitant mortality assumptions.

Excluding the net gain on sale of IPSI of $94 million, the gain on sale of GLC and the negative impact of $78 million due to the transaction costs related to the acquisitions of Personal Capital and MassMutual's retirement services business, assumption changes and other management actions for the twelve months ended December 31, 2020, resulted in a positive net earnings impact of $113 million. For the twelve months ended December 31, 2019, actuarial assumption changes and other management actions resulted in a positive net earnings impact of $170 million excluding the impact of the Scottish Friendly transaction and the reinsurance transaction with Protective Life.

Market-Related Impacts

In the regions where the Company operates, average equity market levels in the fourth quarter of 2020 were higher in the U.S., remained consistent in Canada and were lower in the U.K. and broader Europe compared to the same period in 2019; however, markets ended the quarter higher for the U.S., Canada, the U.K. and broader Europe compared to September 30, 2020. For the twelve months ended December 31, 2020, average equity market levels were higher in the U.S. and lower in Canada, the U.K. and broader Europe compared to the same period in 2019.

Comparing the fourth quarter of 2020 to the fourth quarter of 2019, average equity market levels were up by less than 1% in Canada (as measured by S&P TSX), up 15% in the U.S. (as measured by S&P 500), down 15% in the U.K. (as measured by FTSE 100) and down 6% in broader Europe (as measured by Eurostoxx 50). The major equity indices finished the fourth quarter of 2020 up 8% in Canada, up 12% in the U.S., up 10% in the U.K. and up 11% in broader Europe, compared to September 30, 2020.

In countries where the Company operates, government treasury rates for the most part decreased, while credit spreads for the most part narrowed during 2020.

Market-related impacts on liabilities negatively impacted net earnings by $31 million in the fourth quarter of 2020 (negative impact of $13 million in the fourth quarter of 2019), primarily related to an unfavourable impact of changes to certain tax estimates driven by equity market recovery in the fourth quarter of 2020 as well as the valuation of insurance contract liabilities which are supported by equities and real estate driven by lower markets earlier in the year. Included in the total negative impact of $31 million in the fourth quarter of 2020 was a positive impact of $7 million related to legacy block segregated fund guarantee business.

For the twelve months ended December 31, 2020, market-related impacts on liabilities negatively impacted net earnings by $127 million (negative impact of $89 million in 2019). While equity markets rebounded during the second to fourth quarters of 2020, the year-to-date negative impact reflects the significant decline and volatility in equity markets and interest rates in the first quarter of 2020 which impacted the value of segregated fund and variable annuity guarantees, including related hedging ineffectiveness and was only partially recovered during the remainder of the year. Included in the total negative impact of $127 million in 2020 was a negative impact of $3 million related to legacy block segregated fund guarantee business.

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 changing interest rates is mostly mitigated in the current period, including the impact of changes in fair values of bonds backing insurance contract liabilities recorded through profit or loss which was mostly offset by a corresponding change in the insurance contract liabilities.

For a further description of the Company's sensitivity to equity market and interest rate fluctuations, including expanded sensitivity disclosure as a result of current market conditions, refer to "Financial Instruments Risk Management", note 8 in the Company's consolidated financial statements for the period ended December 31, 2020.

Foreign Currency

The average currency translation rate for the fourth quarter of 2020 decreased for the U.S. dollar and increased for the British pound and the euro compared to the fourth quarter of 2019. The overall impact of currency movement on the Company's net earnings for the three month period ended December 31, 2020 was an increase of $10 million (increase of $43 million year-to-date) compared to translation rates a year ago.

From September 30, 2020 to December 31, 2020, the market rate at the end of the reporting period used to translate U.S. dollar and euro assets and liabilities to the Canadian dollar decreased, while the British pound increased. The movements in end-of-period exchange rates resulted in unrealized foreign exchange losses from the translation of foreign operations, including related hedging activities, of $272 million in-quarter ($25 million net unrealized gains year-to-date) recorded in other comprehensive income.

Throughout this document a number of terms are used to highlight the impact of foreign exchange on results, such as: "constant currency basis" and "impact of currency movement". These non-

IFRS measures have been calculated using the average or period-end rates, as appropriate, in effect at the date of the comparative period. These non-IFRS measures provide useful information as they facilitate the comparability of results between periods. Refer to the "Non-IFRS Financial Measures" section of this document for additional details.

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)

	Impairment (charges) / recoveries	Changes in provisions for future credit losses (1)	Total	Impairment (charges) / recoveries	Changes in provisions for future credit losses (1)	Total
	For the three months ended December 31, 2020			For the twelve months ended December 31, 2020		
Canada	$ –	$ (2)	$ (2)	$ –	$ (7)	$ (7)
United States	–	2	2	(5)	(5)	(10)
Europe	(3)	1	(2)	(8)	(45)	(53)
Capital and Risk Solutions	–	(1)	(1)	–	(9)	(9)
Total	**$ (3)**	**$ –**	**$ (3)**	**$ (13)**	**$ (66)**	**$ (79)**
	For the three months ended December 31, 2019			For the twelve months ended December 31, 2019		
Total	$ 5	$ (13)	$ (8)	$ (14)	$ (1)	$ (15)

(1) Impact of changes in credit ratings in the Company's fixed income portfolio on provisions for future credit losses in insurance contract liabilities.

As a result of the COVID-19 pandemic, many areas of the credit markets exhibited extreme volatility in March of 2020 with spreads widening in investment grade and high yield markets. Since March 2020, credit spreads narrowed significantly and some downgrades were seen across industries from the rating agencies, particularly to issuers in sectors most affected by economic shutdowns or perceived deterioration in future business models. The Company experienced a higher impact from downgrades during 2020 compared to 2019. Depending on the length of the shutdowns and recovery of the economy there could be a larger impact from downgrades in future periods.

In the fourth quarter of 2020, the Company experienced net charges on impaired investments, including dispositions, which negatively impacted common shareholders' net earnings by $3 million ($5 million net recovery in the fourth quarter of 2019). Changes in credit ratings in the Company's fixed income portfolio had a negligible impact on common shareholders' net earnings in the quarter ($13 million negative impact in the fourth quarter of 2019).

For the twelve months ended December 31, 2020, the Company experienced net charges on impaired investments, including dispositions, which negatively impacted common shareholders' net earnings by $13 million ($14 million net charge in 2019). Net charges on impaired investments reflect net allowances for credit losses included in net investment income and the associated release of actuarial provisions for future credit losses, as applicable. Charges for the twelve months ended December 31, 2020 were primarily driven by impairment charges on mortgage loans in the U.K. Changes in credit ratings in the Company's fixed income portfolio resulted in a net increase in provisions for future credit losses in insurance contract liabilities, which negatively impacted common shareholders' net earnings by $66 million year-to-date ($1 million net negative impact in 2019), primarily due to downgrades of bonds and mortgages in the U.K.

Income Taxes

The Company's effective income tax rate is generally lower than the statutory income tax rate of 26.50% due to benefits related to non-taxable investment income and lower income tax in foreign jurisdictions.

Effective income tax rate

	For the three months ended			For the twelve months ended	
	Dec. 31 2020	Sept. 30 2020	Dec. 31 2019	**Dec. 31 2020**	Dec. 31 2019
Base earnings – Common shareholders	**13.3%**	5.7%	–%	**10.1%**	10.1%
Net earnings – Common shareholders	**(20.4)%**	4.8%	23.5%	**(0.9)%**	15.7%
Base earnings – Total Lifeco	**11.0%**	3.8%	(3.2)%	**8.7%**	7.4%
Net earnings – Total Lifeco	**(24.4)%**	2.1%	21.6%	**(2.7)%**	13.0%

In the fourth quarter of 2020, the Company had an effective income tax rate on base earnings of 11.0% up from negative 3.2% in the fourth quarter of 2019, primarily as a result of the resolution of an outstanding issue with a foreign tax authority in the fourth quarter of 2019 which decreased the 2019 effective income tax rate by 12.5 points.

In the fourth quarter of 2020, the Company had an effective income tax rate of negative 24.4%, down from 21.6% in the fourth quarter of 2019 primarily due to the revaluation of a deferred tax asset related to losses in a U.S. subsidiary. As a result of the U.S. acquisitions of the retirement services business of MassMutual and Personal Capital in 2020, management revised its estimates of future taxable profits and recognized a deferred tax asset that had previously been de-recognized in the fourth quarter of 2019. The deferred income tax asset revaluation resulted in a $196 million recovery to income tax expense in 2020 compared to a $199 million charge in 2019. This resulted in a decrease in the effective income tax rate in 2020 by 26.1 points compared to an increase to the effective income tax rate in 2019 by 30.1 points. Also, in the fourth quarter of 2020, non-taxable gains on the sale of the shares of GLC decreased the effective income tax rate by 5.6 points; while in the fourth quarter of 2019 the resolution of the outstanding issue with a foreign tax authority decreased the effective income tax rate by 15 points.

The Company had an effective income tax rate on base earnings of 8.7% for the twelve months ended December 31, 2020, which was comparable to 7.4% for the same period last year.

The Company had an effective income tax rate of negative 2.7% for the twelve months ended December 31, 2020 compared to 13.0% for the same period last year. The decrease was primarily due to the revaluation of the deferred tax asset discussed for the in-quarter results, which reduced the 2020 effective income tax rate by 6.4 points and increased the 2019 effective income tax rate by 6.9 points, as well as, the non-taxable gains on the sale of the shares of GLC and IPSI, which decreased the 2020 effective income tax rate by 2.1 points.

In the fourth quarter of 2020, the Company had an effective income tax rate on base earnings of 11.0%, up from 3.8% in the third quarter of 2020, primarily due to changes in certain tax estimates and jurisdictional mix of earnings.

In the fourth quarter of 2020, the Company had an effective income tax rate of negative 24.4%, down from 2.1% in the third quarter of 2020, primarily due to the revaluation of the deferred tax asset discussed for the in-quarter results.

The Company recognizes deferred income tax assets based on the probability that the entity will have taxable profits and/or tax planning opportunities available to allow the deferred income tax asset to be utilized. As at December 31, 2020, the Company has recognized a deferred income tax asset of $1,411 million on tax loss carryforwards. While $344 million pertains to losses with no expiry, $454 million pertains to losses expiring between 2026 and 2030, $413 million to losses expiring between 2031 and 2035 and $200 million to losses expiring between 2036 and 2040. Included in the deferred income tax asset balance is $879 million (US$692 million) from a U.S. subsidiary with a history of losses, $496 million (US$391 million) of which relates to certain restricted losses with an expiry between 2027 and 2034.

Premiums and Deposits and Sales

Premiums and deposits [1]

	For the three months ended			For the twelve months ended	
	Dec. 31 2020	Sept. 30 2020	Dec. 31 2019	**Dec. 31 2020**	Dec. 31 2019
Canada [5]	**$ 7,017**	$ 6,161	$ 7,229	**$ 25,838**	$ 27,346
United States [2]	**20,582**	24,138	19,480	**93,479**	70,475
Europe	**7,896**	6,114	7,925	**32,621**	35,351
Capital and Risk Solutions [3]	**5,336**	4,490	4,462	**19,407**	17,466
Total premiums and deposits [1] [5]	**$ 40,831**	$ 40,903	$ 39,096	**$ 171,345**	$ 150,638

Sales [1] [3]

	For the three months ended			For the twelve months ended	
	Dec. 31 2020	Sept. 30 2020	Dec. 31 2019	**Dec. 31 2020**	Dec. 31 2019
Canada	**$ 3,729**	$ 2,520	$ 3,609	**$ 12,271**	$ 13,249
United States [4]	**27,439**	27,987	31,781	**136,884**	163,087
Europe	**6,874**	5,313	6,566	**28,996**	31,976
Total sales [1]	**$ 38,042**	$ 35,820	$ 41,956	**$ 178,151**	$ 208,312

(1) This metric is a non-IFRS measure. Refer to the "Non-IFRS Financial Measures" section of this document for additional details.

(2) For the twelve months ended December 31, 2019, premiums and deposits exclude the initial ceded premium of $13,889 million related to the business transferred to Protective Life under an indemnity reinsurance agreement effective June 1, 2019.

(3) Sales is not a relevant measure for the Capital and Risk Solutions segment due to the nature of operations.

(4) For the twelve months ended December 31, 2019, sales for the United States reflect $0.4 billion related to the Reinsured Insurance & Annuity business unit.

(5) Comparative figures have been reclassified to reflect presentation adjustments.

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

Net Investment Income

Net investment income

	For the three months ended			For the twelve months ended	
	Dec. 31 2020	Sept. 30 2020	Dec. 31 2019	**Dec. 31 2020**	Dec. 31 2019
Investment income earned (net of investment properties expenses)	**$ 1,380**	$ 1,420	$ 1,388	**$ 5,664**	$ 5,965
Allowances for credit losses on loans and receivables	**(6)**	(1)	(2)	**(16)**	(50)
Net realized gains	**220**	106	119	**466**	412
Regular investment income	**1,594**	1,525	1,505	**6,114**	6,327
Investment expenses	**(34)**	(32)	(43)	**(151)**	(166)
Regular net investment income	**1,560**	1,493	1,462	**5,963**	6,161
Changes in fair value through profit or loss	**1,984**	785	(1,766)	**5,699**	6,946
Net investment income	**$ 3,544**	$ 2,278	$ (304)	**$ 11,662**	$ 13,107

Net investment income in the fourth quarter of 2020, which includes changes in fair value through profit or loss, increased by $3,848 million compared to the same quarter last year. The changes in fair value in the fourth quarter of 2020 were an increase of $1,984 million compared to a decrease of $1,766 million for the fourth quarter of 2019. In the fourth quarter of 2020, the net increase to fair values was primarily due to a decline in bond yields across all geographies and an increase in Canadian equity markets. In the fourth quarter of 2019, the net decrease to fair values was primarily due to an increase in bond yields across all geographies.

Regular net investment income in the fourth quarter of 2020 of $1,560 million, which excludes changes in fair value through profit or loss, increased by $98 million compared to the same quarter last year. The increase was primarily due to higher net realized gains related to the sale of GLC. Net realized gains include gains on available-for-sale securities of $13 million for the fourth quarter of 2020 compared to $24 million for the same quarter last year.

For the twelve months ended December 31, 2020, net investment income decreased by $1,445 million compared to the same period last year. The changes in fair value for the twelve month period in 2020 were an increase of $5,699 million compared to $6,946 million during the same period in 2019. The changes in fair value were primarily due to a smaller decline in U.K. and U.S. bond yields and a smaller increase in Canadian equity markets in 2020 compared to 2019.

Regular net investment income for the twelve months ended December 31, 2020 of $5,963 million decreased by $198 million compared to the same period last year. The decrease was primarily due to lower interest on bond and mortgage investments, primarily relating to U.S. segment assets transferred under the indemnity reinsurance agreement with Protective Life in the second quarter of 2019, partially offset by higher net realized gains. Net realized gains include gains on available-for-sale securities of $141 million for the twelve months ended December 31, 2020 compared to net realized gains of $76 million for the same period last year.

Net investment income in the fourth quarter of 2020 increased by $1,266 million compared to the previous quarter, primarily due to net increases in fair values of $1,984 million in the fourth quarter of 2020 compared to net increases in fair values of $785 million in the previous quarter. The changes in fair value were primarily due to a larger decline in U.K. bond yields in the fourth quarter of 2020, compared to the third quarter of 2020, and a larger increase in Canadian equity markets in the fourth quarter of 2020, compared to the third quarter of 2020.

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 administrative services only (ASO) contracts, under which the Company provides group benefit plan administration on a cost-plus basis.

Fee and other income

	For the three months ended			For the twelve months ended	
	Dec. 31 2020	Sept. 30 2020	Dec. 31 2019	**Dec. 31 2020**	Dec. 31 2019
Canada					
Segregated funds, mutual funds and other	**$ 407**	$ 397	$ 404	**$ 1,568**	$ 1,561
ASO contracts	**54**	48	53	**188**	205
	461	445	457	**1,756**	1,766
United States					
Segregated funds, mutual funds and other	**754**	696	679	**2,769**	2,687
Life insurance and annuity reinsurance ceding commission (1)	**–**	–	–	**–**	1,080
	754	696	679	**2,769**	3,767
Europe					
Segregated funds, mutual funds and other	**351**	342	377	**1,366**	1,539
Capital and Risk Solutions					
Reinsurance and Other	**3**	3	2	**11**	9
Total fee and other income	**$ 1,569**	$ 1,486	$ 1,515	**$ 5,902**	$ 7,081

(1) For the twelve months ended December 31, 2019, fee and other income includes a ceding commission of $1,080 million related to the Protective Life transaction.

The information in the table above is a summary of gross fee and other income for the Company. Excluding the ceding commission related to the Protective Life transaction, fee and other income for the twelve months ended December 31, 2019 was $6,001 million. Additional commentary regarding fee and other income is included in the "Segmented Operating Results" section.

Net Policyholder Benefits, Dividends and Experience Refunds

Net policyholder benefits, dividends and experience refunds

	For the three months ended			For the twelve months ended	
	Dec. 31 2020	Sept. 30 2020	Dec. 31 2019	**Dec. 31 2020**	Dec. 31 2019
Canada	**$ 2,556**	$ 2,224	$ 2,514	**$ 9,276**	$ 9,684
United States	**1,072**	1,197	1,187	**5,028**	4,412
Europe	**1,003**	1,015	1,546	**3,948**	4,277
Capital and Risk Solutions	**5,285**	4,719	4,756	**19,907**	18,042
Total	**$ 9,916**	$ 9,155	$ 10,003	**$38,159**	$ 36,415

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

For the three months ended December 31, 2020, net policyholder benefits, dividends and experience refunds were $9.9 billion, a decrease of $0.1 billion from the same period in 2019 driven by lower net policyholder benefits. The decrease in benefit payments was primarily due to lower surrender benefits in the Europe segment as a result of the sale of a heritage block of individual policies to Scottish Friendly in the fourth quarter of 2019. The decrease was partially offset by new reinsurance agreements and volume changes relating to existing business in the Capital and Risk Solutions segment.

For the twelve months ended December 31, 2020, net policyholder benefits, dividends and experience refunds were $38.2 billion, an increase of $1.7 billion from the same period in 2019 driven by higher net policyholder benefits. The increase in benefit payments was primarily due to new reinsurance agreements and volume changes relating to existing business in the Capital and Risk Solutions segment as well as higher surrender benefits, partially offset by higher ceded policyholder benefits in the U.S. segment.

Compared to the previous quarter, net policyholder benefits, dividends and experience refunds increased by $0.8 billion, driven by higher net policyholder benefits. The increase in benefit payments was primarily due to new reinsurance agreements and volume changes relating to existing business in the Capital and Risk Solutions segment as well as higher surrender benefits in the Canada segment, partially offset by lower death benefits in the U.S. segment.

Other Benefits and Expenses

Other benefits and expenses (1)

	For the three months ended			For the twelve months ended	
	Dec. 31 2020	Sept. 30 2020	Dec. 31 2019	**Dec. 31 2020**	Dec. 31 2019
Operating and administrative expenses	**$ 1,498**	$ 1,365	$ 1,298	**$ 5,492**	$ 5,231
Commissions	**657**	549	650	**2,396**	2,429
Premium taxes	**124**	119	128	**480**	506
Financing charges	**79**	71	71	**284**	285
Amortization of finite life intangible assets and impairment reversal	**63**	58	60	**238**	224
Restructuring and integration expenses	**134**	–	52	**134**	52
Total	**$ 2,555**	$ 2,162	$ 2,259	**$ 9,024**	$ 8,727

(1) For the twelve months ended December 31, 2019, operating and administrative expenses include $120 million related to the U.S. individual life and annuity business sold to Protective Life June 1, 2019. Refer to the "Segmented Operating Results – United States" section of this document for additional details.

Other benefits and expenses for the fourth quarter of 2020 of $2,555 million increased by $296 million compared to the fourth quarter of 2019, primarily due to restructuring and integration expenses in the Canada and U.S. segments, as well as higher operating and administrative expenses primarily driven by the acquisition of Personal Capital and business growth in the Capital and Risk Solutions segment.

For the twelve months ended December 31, 2020, other benefits and expenses increased by $297 million to $9,024 million compared to the same period last year, primarily due to same reasons discussed for the in-quarter results.

Other benefits and expenses for the fourth quarter of 2020 increased by $393 million compared to the previous quarter, primarily due to same reasons discussed for the in-quarter results, as well as higher commissions in the Canada and Europe segments.

Consolidated Financial Position

Assets

Assets under administration (1)

	December 31, 2020				
	Canada	United States	Europe	Capital and Risk Solutions	Total
Assets					
Invested assets	**$ 87,732**	**$ 54,522**	**$ 50,793**	**$ 5,951**	**$ 198,998**
Goodwill and intangible assets	**5,625**	**5,729**	**3,037**	**–**	**14,391**
Other assets	**3,661**	**30,347**	**10,151**	**8,910**	**53,069**
Investments on account of segregated fund policyholders	**90,680**	**117,982**	**125,370**	**–**	**334,032**
Total assets	**187,698**	**208,580**	**189,351**	**14,861**	**600,490**
Proprietary mutual funds and institutional net assets (1)	**7,311**	**284,251**	**59,381**	**–**	**350,943**
Total assets under management (1)	**195,009**	**492,831**	**248,732**	**14,861**	**951,433**
Other assets under administration (1)	**18,554**	**994,989**	**10,871**	**–**	**1,024,414**
Total assets under administration (1)	**$ 213,563**	**$ 1,487,820**	**$ 259,603**	**$ 14,861**	**$ 1,975,847**

	December 31, 2019				
	Canada	United States	Europe	Capital and Risk Solutions	Total
Assets					
Invested assets	$ 81,179	$ 32,768	$ 48,845	$ 5,995	$ 168,787
Goodwill and intangible assets	5,560	1,990	2,834	–	10,384
Other assets	3,953	19,421	8,465	9,135	40,974
Investments on account of segregated fund policyholders	85,612	31,433	113,977	–	231,022
Total assets	176,304	85,612	174,121	15,130	451,167
Proprietary mutual funds and institutional net assets (1)	6,986	257,301	56,261	–	320,548
Total assets under management (1)	183,290	342,913	230,382	15,130	771,715
Other assets under administration (1)	17,118	792,110	48,738	–	857,966
Total assets under administration (1)	$ 200,408	$ 1,135,023	$ 279,120	$ 15,130	$ 1,629,681

(1) This metric is a non-IFRS measure. Refer to the "Non-IFRS Financial Measures" section of this document for additional details.

Total assets under administration at December 31, 2020 increased by $346.2 billion to $2.0 trillion compared to December 31, 2019, primarily due to the MassMutual and Personal Capital acquisitions during 2020 as well as market movement, partially offset by the sale of IPSI in the Europe segment and currency movement. The MassMutual transaction added $115 billion of total assets, $132 billion in other assets under administration and $0.5 billion in proprietary mutual funds and institutional net assets to the U.S. segment at December 31, 2020. The acquisition of Personal Capital added $21 billion of assets to the U.S. segment's proprietary mutual funds and institutional net assets at December 31, 2020. IPSI's assets as of December 31, 2019 were approximately $44 billion and were primarily included in other assets under administration. The impact of the sale of IPSI on the Europe segment's other assets under administration was partially offset by the acquisitions of Conexim Advisors Limited and Acumen & Trust DAC during the first quarter of 2020 as well as APT Workplace Pensions Limited and APT Wealth Management Limited during the second quarter of 2020.

For additional details on assets acquired through business acquisitions, refer to "Business Acquisitions and Other Transactions", note 3 in the Company's consolidated financial statements for the period ended December 31, 2020.

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. Within the framework of the Company's policies, the Company implements strategies and reviews and adjusts them on an ongoing basis considering liability cash flows and capital market conditions. The majority of investments of the general fund are in medium-term and long-term fixed-income investments, primarily bonds and mortgages, reflecting the characteristics of the Company's liabilities.

Invested asset distribution

	December 31, 2020					
	Canada	United States	Europe	Capital and Risk Solutions	Total	
Bonds						
Government & related	$ 23,014	$ 4,006	$ 20,300	$ 2,069	$ 49,389	25%
Corporate & other	30,926	34,332	19,648	3,297	88,203	44
Sub-total bonds	53,940	38,338	39,948	5,366	137,592	69
Mortgages	16,036	5,957	5,746	64	27,803	14
Stocks	10,125	448	427	–	11,000	6
Investment properties	3,626	6	2,638	–	6,270	3
Sub-total portfolio investments	83,727	44,749	48,759	5,430	182,665	92
Cash and cash equivalents	962	4,544	2,032	408	7,946	4
Loans to policyholders	3,043	5,229	2	113	8,387	4
Total invested assets	$ 87,732	$ 54,522	$ 50,793	$ 5,951	$ 198,998	100%

	December 31, 2019					
	Canada	United States	Europe	Capital and Risk Solutions	Total	
Bonds						
Government & related	$ 22,237	$ 3,698	$ 19,482	$ 1,732	$ 47,149	28%
Corporate & other	27,797	17,808	18,871	3,403	67,879	40
Sub-total bonds	50,034	21,506	38,353	5,135	115,028	68
Mortgages	14,810	3,996	5,388	74	24,268	14
Stocks	9,675	301	399	–	10,375	6
Investment properties	3,130	6	2,751	–	5,887	4
Sub-total portfolio investments	77,649	25,809	46,891	5,209	155,558	92
Cash and cash equivalents	558	1,445	1,952	673	4,628	3
Loans to policyholders	2,972	5,514	2	113	8,601	5
Total invested assets	$ 81,179	$ 32,768	$ 48,845	$ 5,995	$ 168,787	100%

At December 31, 2020, total invested assets were $199.0 billion, an increase of $30.2 billion from December 31, 2019. The increase in invested assets was primarily related to an increase in corporate bonds from the MassMutual transaction. The overall 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 primarily investment grade bonds subject to prudent and well-defined investment policies. Modest investments in below investment grade rated securities may occur while not changing the overall discipline and conservative approach to the investment strategy. The total bond portfolio, including short-term investments, was $137.6 billion or 69% of invested assets at December 31, 2020 compared to $115.0 billion or 68% at December 31, 2019. The increase in the bond portfolio, and increase in BBB rated bonds, was primarily related to the MassMutual transaction. Bond fair values also increased due to a decline in bond yields across all geographies during the year. The overall quality of the bond portfolio remained high, with 99% of the portfolio rated investment grade and 75% rated A or higher. There was a comprehensive review and selection process to determine the assets accepted as part of the MassMutual transaction.

Bond credit ratings reflect bond rating agency activity up to December 31, 2020. Management continues to closely monitor bond rating agency activity and general market conditions as the pandemic continues.

Bond portfolio quality

	December 31, 2020		December 31, 2019	
AAA	$ 21,820	16%	$ 22,083	19%
AA	35,530	26	33,272	29
A	45,673	33	37,233	32
BBB	33,382	24	21,922	19
BB or lower	1,187	1	518	1
Total	$ 137,592	100%	$ 115,028	100%

At December 31, 2020, non-investment grade bonds were $1.2 billion or 0.9% of the bond portfolio compared to $0.5 billion or 0.5% of the bond portfolio at December 31, 2019. The increase in non-investment grade bonds was primarily due to bonds acquired through the MassMutual transaction.

Mortgage portfolio – It is the Company's practice to acquire 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. Equity release mortgages are originated in the Europe segment following well-defined lending criteria and held in both the Canada and Europe segments. Equity release mortgages are loans provided to people who want to continue living in their homes while accessing some of the underlying equity value in their homes. Loans are typically repaid when the borrower dies or moves into long-term care.

Mortgage portfolio

	December 31, 2020				December 31, 2019	
Mortgage loans by type	Insured	Non-insured	Total		Total	
Single family residential	$ 530	$ 1,533	$ 2,063	7%	$ 2,069	9%
Multi-family residential	3,255	4,098	7,353	27	7,004	29
Equity release	–	2,020	2,020	7	1,314	5
Commercial	236	16,131	16,367	59	13,881	57
Total	$ 4,021	$ 23,782	$ 27,803	100%	$ 24,268	100%

The total mortgage portfolio was $27.8 billion or 14% of invested assets at December 31, 2020, compared to $24.3 billion or 14% of invested assets at December 31, 2019. The increase in the mortgage portfolio was primarily related to mortgages acquired through the MassMutual transaction and originations of equity release mortgages. Total insured loans were $4.0 billion or 14% of the mortgage portfolio. The equity release mortgages had a weighted average loan-to-value of 26% (26% at December 31, 2019).

The current market environment has led to a small number of mortgage deferral requests during the year. Management is closely monitoring and evaluating these requests which are currently not material but may impact the Company's performance going forward.

Commercial mortgages

	December 31, 2020				
	Canada	U.S.	Europe	Capital and Risk Solutions	Total
Retail & shopping centres	$ 3,799	$ 731	$ 1,116	$ 3	$ 5,649
Office buildings	2,252	1,327	1,369	19	4,967
Industrial	2,516	1,097	774	1	4,388
Other	316	505	542	–	1,363
Total	$ 8,883	$ 3,660	$ 3,801	$ 23	$ 16,367

	December 31, 2019				
	Canada	U.S.	Europe	Capital and Risk Solutions	Total
Retail & shopping centres	$ 3,668	$ 480	$ 1,242	$ 3	$ 5,393
Office buildings	2,011	656	1,253	20	3,940
Industrial	1,816	787	777	2	3,382
Other	376	275	515	–	1,166
Total	$ 7,871	$ 2,198	$ 3,787	$ 25	$ 13,881

Equity portfolio – The total equity portfolio was $17.3 billion or 9% of invested assets at December 31, 2020 compared to $16.3 billion or 10% of invested assets at December 31, 2019. The equity portfolio consists of publicly traded stocks, privately held stocks and investment properties. The increase in publicly traded stocks of $0.4 billion and the increase in privately held stocks of $0.2 billion were primarily due to purchases. The increase in investment properties of $0.4 billion was mainly the result of property acquisitions. During the year, economic conditions caused by the COVID-19 pandemic impacted the global property market and made it difficult to value the properties with the same degree of certainty as usual. As of the fourth quarter of 2020, valuation certainty is selectively returning to certain sectors and geographies of the real estate market.

Equity portfolio

	December 31, 2020		December 31, 2019	
Equity portfolio by type				
Publicly traded stocks	$ 10,208	59%	$ 9,766	60%
Privately held stocks	792	5	609	4
Sub-total	11,000	64	10,375	64
Investment properties	6,270	36	5,887	36
Total	$ 17,270	100%	$ 16,262	100%

Investment properties (1)

	December 31, 2020				December 31, 2019			
	Canada	U.S.	Europe	Total	Canada	U.S.	Europe	Total
Office buildings	$ 1,328	$ –	$ 637	$ 1,965	$ 1,523	$ –	$ 664	$ 2,187
Industrial	861	–	812	1,673	519	–	773	1,292
Retail	198	–	814	1,012	215	–	945	1,160
Other	1,239	6	375	1,620	873	6	369	1,248
Total	$ 3,626	$ 6	$ 2,638	$ 6,270	$ 3,130	$ 6	$ 2,751	$ 5,887

(1) The Capital and Risk Solutions segment does not hold any investment properties.

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, 2020				December 31, 2019			
	Gross amount	Impairment recovery	Impairment provision	Carrying amount	Gross amount	Impairment recovery	Impairment provision	Carrying amount
Fair value through profit or loss	$ 23	$ 2	$ (5)	$ 20	$ 19	$ 2	$ –	$ 21
Available-for-sale	16	1	–	17	16	–	–	16
Loans and receivables	80	–	(57)	23	80	–	(51)	29
Total	$ 119	$ 3	$ (62)	$ 60	$ 115	$ 2	$ (51)	$ 66

The gross amount of impaired investments totaled $119 million or 0.1% of invested assets at December 31, 2020 compared to $115 million or 0.1% at December 31, 2019, a net increase of $4 million.

The impairment recovery at December 31, 2020 was $3 million, which reflects the improvement in market values of certain investments from the date at which they became impaired. The impairment provision at December 31, 2020 was $62 million compared to $51 million at December 31, 2019. The increase was primarily due to impairment charges on U.K. mortgages during the year. 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, 2020 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. The provisions reflect the current credit ratings and potential future rating migration. No provision is held for government or government related debt rated A+ or higher where the issuer is monetarily sovereign.

At December 31, 2020, the total actuarial provision for future credit losses in insurance contract liabilities was $3,368 million compared to $2,575 million at December 31, 2019, an increase of $793 million. The increase was primarily due to the acquisition of the MassMutual retirement services business.

The aggregate of impairment provisions of $62 million ($51 million at December 31, 2019) and actuarial provisions for future credit losses in insurance contract liabilities of $3,368 million ($2,575 million at December 31, 2019) represents 1.9% of bond and mortgage assets, including funds held by ceding insurers, at December 31, 2020 (1.8% at December 31, 2019).

Oil and Gas Sector Related Exposures

Holdings of Bonds, Mortgages and Investment Properties in the Oil and Gas Sector (1)

	December 31, 2020					December 31, 2019
	Canada	U.S.	Europe	Capital and Risk Solutions	Total	Total
Bonds (1) (2) (3)	$ 2,453	$ 2,822	$ 734	$ 521	$ 6,530	$ 4,407
Mortgages (4)	1,808	463	37	–	2,308	2,389
Investment properties	447	–	–	–	447	456
Total	$ 4,708	$ 3,285	$ 771	$ 521	$ 9,285	$ 7,252

(1) Oil and Gas sector bond holdings are a sub-category of certain industry sectors presented in note 8(a)(ii) in the Company's December 31, 2020 Annual consolidated financial statements.
(2) Amortized cost of these bonds is $6,047 million at December 31, 2020 and $4,133 million at December 31, 2019.
(3) Includes certain funds held by ceding insurers with a carrying value of $595 million and an amortized cost of $539 million at December 31, 2020.
(4) Includes $554 million of insured mortgages at December 31, 2020 and $615 million at December 31, 2019.

At December 31, 2020, the Company's holdings of oil and gas sector related investments, including funds held by ceding insurers, were $9.3 billion ($7.3 billion at December 31, 2019). The increase of $2.0 billion from December 31, 2019 was primarily due to bonds acquired through the MassMutual transaction and net bond purchases. Holdings include direct exposure of bond holdings of $6.5 billion ($4.4 billion at December 31, 2019), or 3.0% 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, 2019), or 1.3% of invested assets including funds held by ceding insurers.

At December 31, 2020, the Company's oil and gas sector related bond holdings were well diversified across multiple sub-sectors and were high quality with approximately 99% rated investment grade (100% at December 31, 2019). 61% of the portfolio was invested in Midstream and Refining entities and 39% in Integrated, Independent and Oil Field Services and Government Agency entities.

In addition, the Company's indirect exposure to oil and gas sector related commercial mortgages and investment properties were concentrated in certain geographic regions where the economy is more dependent upon the oil and gas sector and were well diversified across property type – Multi-family (37%), Industrial/Other (27%), Office (17%) and Retail (19%). 82% of the total 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 71% at December 31, 2020 (66% at December 31, 2019).

In March 2020, Moody's Investors Service and S&P Global Ratings revised their forecasts for crude oil downward for the remainder of 2020, due to decreased demand resulting from the COVID-19 pandemic. In June 2020, Moody's Investors Service further reduced its short and medium-term forecasts for crude oil downward due to potential longer lasting impacts to global demand for oil. 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. Increases to provisions for future credit losses as a result of ratings downgrades and impairment charges specific to energy sector holdings were negligible in the fourth quarter of 2020.

United Kingdom Property Related Exposures

Holdings of United Kingdom Mortgages and Investment Properties

	December 31, 2020							December 31, 2019
	Multi-family residential	Retail & shopping centres	Office buildings	Industrial	Equity release	Other	Total	Total
Mortgages	$ 719	$ 1,433	$ 1,449	$ 940	$ 2,020	$ 541	$ 7,102	$ 6,223
Investment properties	–	801	637	812	–	339	2,589	2,726
Total	$ 719	$ 2,234	$ 2,086	$ 1,752	$ 2,020	$ 880	$ 9,691	$ 8,949

At December 31, 2020, the Company's holdings of property related investments in the U.K. were $9.7 billion, or 4.9% of invested assets compared to $8.9 billion at December 31, 2019. The increase from December 31, 2019 was primarily due to originations of equity release mortgages. Holdings in Central London were $3.1 billion ($2.8 billion at December 31, 2019) or 1.6% of invested assets, while holdings in other regions of the U.K. were $6.6 billion ($6.1 billion at December 31, 2019) or 3.3% of invested assets. These holdings were well diversified across property type – Retail (23%), Industrial/Other (27%), Office (22%), Equity release (21%) and Multi-family (7%). Of the Retail sector holdings, 55% relate to warehouse/distribution and other retail, 23% relate to shopping centres and department stores and 22% relate to grocery retail sub-categories. The weighted average loan-to-value ratio of the mortgages was 51% (51% at December 31, 2019) and the weighted average debt-service coverage ratio was 2.6 at December 31, 2020 (2.7 at December 31, 2019). At December 31, 2020, the weighted average mortgage and property lease term exceeded 11 years (11 years at December 31, 2019).

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 2020. 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, 2020, total financial collateral, including initial margin and overcollateralization, received on derivative assets was $211 million ($156 million at December 31, 2019) and pledged on derivative liabilities was $560 million ($634 million at December 31, 2019). Collateral received on derivative assets increased and collateral pledged on derivative liabilities decreased in 2020, primarily driven by the impact of the Canadian dollar strengthening against the U.S. dollar on cross-currency swaps that pay U.S. and receive Canadian dollars.

During the twelve month period ended December 31, 2020, the outstanding notional amount of derivative contracts increased by $8.5 billion to $30.1 billion, primarily due to regular hedging activities, an increase in forward settling mortgage backed security transactions ("to-be-announced-securities") and an increase in foreign exchange forwards related to the MassMutual transaction.

The Company's exposure to derivative counterparty credit risk, which reflects the current fair value of those instruments in a gain position, increased to $829 million at December 31, 2020 from $451 million at December 31, 2019. The increase was primarily driven by the impact of the Canadian dollar strengthening against the U.S. dollar on cross-currency swaps that pay U.S and receive Canadian dollars. There were no changes to derivative counterparty ratings during the fourth quarter of 2020 and all had investment grade ratings as of December 31, 2020. Refer to "Financial Instruments Risk Management", note 8 in the Company's December 31, 2020 annual consolidated financial statements for details of the Company's derivative counterparties' ratings.

Goodwill and Intangible Assets

Goodwill and intangible assets

	December 31	
	2020	2019
Goodwill	**$10,106**	$ 6,505
Indefinite life intangible assets	**2,798**	2,704
Finite life intangible assets	**1,487**	1,175
Total	**$14,391**	$ 10,384

The Company's goodwill and intangible assets relate primarily to its acquisitions of London Life, Canada Life, Putnam, Irish Life, Personal Capital and MassMutual. Goodwill and intangible assets of $14.4 billion at December 31, 2020 increased by $4.0 billion compared to December 31, 2019. Goodwill increased by $3.6 billion, indefinite life intangible assets increased by $0.1 billion and finite life intangible assets increased by $0.3 billion primarily due to the acquisitions of Personal Capital and the retirement services business of MassMutual. As at December 31, 2020, the accounting for the acquisition is not finalized pending completion of a comprehensive valuation of the net assets acquired. The December 31, 2020 balances reflect management's current best estimate of the purchase price allocation. Final valuation of the assets acquired and liabilities assumed and the completion of the purchase price allocation are expected to occur during 2021. As at December 31, 2020, provisional amounts for intangible assets have not been separately identified and valued within the assets of the purchase price allocation pending completion of the valuation exercise.

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 2020, the Company conducted its annual impairment testing of goodwill and intangible assets based on September 30, 2020 asset balances. It was determined that the recoverable amounts of cash generating unit groupings for goodwill and cash generating units for intangible assets were in excess of their carrying values and there was no evidence of significant impairment. Recoverable amount is based on fair value less cost of disposal.

Refer to note 10 in the Company's December 31, 2020 annual consolidated financial statements for further details of the Company's goodwill and intangible assets. Also, refer to the "Summary of Critical Accounting Estimates" section of this document for details on impairment testing of these assets.

Other General Fund Assets

Other general fund assets

	December 31	
	2020	2019
Reinsurance assets	**$ 22,121**	$ 20,707
Funds held by ceding insurers	**18,383**	8,714
Premiums in course of collection, accounts and interest receivable	**6,102**	5,881
Other assets	**3,347**	3,110
Owner occupied properties	**741**	727
Deferred tax assets	**975**	693
Fixed assets	**426**	455
Derivative financial instruments	**829**	451
Current income taxes	**145**	236
Total	**$ 53,069**	$ 40,974

Total other general fund assets at December 31, 2020 were $53.1 billion, an increase of $12.1 billion from December 31, 2019. The increase was primarily due to an increase of $9.7 billion in funds held by ceding insurers, primarily due to the acquisition of the MassMutual retirement services business and an increase of $1.4 billion in reinsurance assets.

Other assets comprise several items including prepaid expenses and accounts receivable. Refer to note 12 in the Company's December 31, 2020 annual consolidated financial statements for a breakdown of other assets.

Investments on Account of Segregated Fund Policyholders

Segregated funds

	December 31	
	2020	2019
Stock and units in unit trusts	**$112,675**	$104,330
Mutual funds	**127,577**	55,779
Bonds	**65,338**	44,973
Investment properties	**12,430**	12,986
Cash and other	**11,836**	9,137
Mortgage loans	**2,686**	2,670
Sub-total	**$332,542**	$229,875
Non-controlling mutual funds interest	**1,490**	1,147
Total	**$334,032**	$231,022

Investments on account of segregated fund policyholders, which are measured at fair value, increased by $103.0 billion to $334.0 billion at December 31, 2020 compared to December 31, 2019. The increase was primarily due to an increase of $84.8 billion related to the acquisition of the MassMutual retirement services business, the combined impact of market value gains and investment income of $12.1 billion and the impact of currency movement of $3.9 billion.

Proprietary Mutual Funds

Proprietary mutual funds and institutional assets (1)

	December 31	
	2020	2019
Mutual funds (1)		
Blend equity	**$ 23,478**	$ 23,945
Growth equity	**23,523**	19,405
Equity value	**24,341**	24,732
Fixed-income	**52,009**	53,613
Money market	**317**	187
Empower Funds (2)	**42,514**	22,362
Sub-total	**$166,182**	$144,244
Institutional assets (1)		
Equity	**$112,439**	$108,229
Fixed-income	**63,681**	59,112
Other	**8,641**	8,963
Sub-total	**$184,761**	$176,304
Total proprietary mutual funds and institutional assets (1)	**$350,943**	$320,548

(1) This metric is a non-IFRS measure. Refer to the "Non-IFRS Financial Measures" section of this document for additional details.

(2) At December 31, 2020, Empower funds exclude $21.8 billion of Putnam managed funds ($17.9 billion at December 31, 2019), which are included in the categories above.

At December 31, 2020, total proprietary mutual funds and institutional assets include $284.3 billion at Putnam and GWL&A, $53.8 billion at Irish Life and $7.3 billion at Quadrus Investment Services Ltd (Quadrus). Proprietary mutual funds and institutional assets under management increased by $30.4 billion, primarily due to market movement and net cash inflows, partially offset by the impact of currency movement. GWL&A includes proprietary mutual funds related to Empower Retirement including assets acquired in the Personal Capital and MassMutual transactions.

Liabilities

Total liabilities

	December 31	
	2020	2019
Insurance and investment contract liabilities	**$218,047**	$176,177
Other general fund liabilities	**21,396**	18,425
Investment and insurance contracts on account of segregated fund policyholders	**334,032**	231,022
Total	**$573,475**	$425,624

Total liabilities increased by $147.9 billion to $573.5 billion at December 31, 2020 from December 31, 2019.

Insurance and investment contract liabilities increased by $41.9 billion, primarily due to an increase of $27.3 billion from the acquisition of the MassMutual retirement services business, the impact of new business and fair value adjustments. Investment and insurance contracts on account of segregated fund policyholders increased by $103.0 billion, primarily due to an increase of $84.8 billion from the acquisition of the MassMutual retirement services business, the combined impact of market value gains and investment income of $12.1 billion and the impact of currency movement of $3.9 billion. Other general fund liabilities increased by $3.0 billion, primarily due to the net issuance of debentures of $3.7 billion, partially offset by a decrease in accounts payable and deferred tax liabilities.

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

Assets supporting insurance and investment contract liabilities

	Participating Account	Non-Participating Canada	United States	Europe	Capital and Risk Solutions	Total
December 31, 2020						
Bonds	**$ 27,768**	**$ 21,511**	**$ 31,631**	**$ 34,941**	**$ 2,365**	**$ 118,216**
Mortgage loans	**11,150**	**4,498**	**4,586**	**5,746**	**52**	**26,032**
Stocks	**6,227**	**2,789**	**46**	**332**	**–**	**9,394**
Investment properties	**2,992**	**360**	**–**	**2,536**	**–**	**5,888**
Other assets (1)	**10,127**	**6,291**	**29,440**	**4,533**	**8,126**	**58,517**
Total assets	**$ 58,264**	**$ 35,449**	**$ 65,703**	**$ 48,088**	**$ 10,543**	**$ 218,047**
Total insurance and investment contract liabilities	**$ 58,264**	**$ 35,449**	**$ 65,703**	**$ 48,088**	**$ 10,543**	**$ 218,047**
December 31, 2019						
Bonds	$ 25,328	$ 20,270	$ 14,311	$ 33,062	$ 2,484	$ 95,455
Mortgage loans	10,301	4,111	2,678	5,387	55	22,532
Stocks	6,205	2,237	–	299	–	8,741
Investment properties	2,484	407	–	2,672	–	5,563
Other assets (1)	10,301	5,643	15,371	4,069	8,502	43,886
Total assets	$ 54,619	$ 32,668	$ 32,360	$ 45,489	$ 11,041	$ 176,177
Total insurance and investment contract liabilities	$ 54,619	$ 32,668	$ 32,360	$ 45,489	$ 11,041	$ 176,177

(1) Other assets include reinsurance assets, premiums in the course of collection, interest due and accrued, other investment receivables, deferred acquisition costs, accounts receivable, current income taxes and prepaid expenses. Reinsurance assets include assets recognized as a result of the indemnity reinsurance agreement with Protective Life.

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

Other General Fund Liabilities

Other general fund liabilities

	December 31 2020	2019
Debentures and other debt instruments	**$ 9,693**	$ 5,993
Other liabilities	**5,147**	4,689
Accounts payable	**2,698**	3,352
Derivative financial instruments	**1,221**	1,381
Funds held under reinsurance contracts	**1,648**	1,433
Deferred tax liabilities	**646**	1,116
Current income taxes	**343**	461
Total	**$ 21,396**	$ 18,425

Total other general fund liabilities at December 31, 2020 were $21.4 billion, an increase of $3.0 billion from December 31, 2019, primarily due to an increase of $3.7 billion in debentures and other debt instruments driven by net issuances. The increase was partially offset by a decrease of $0.7 billion in accounts payable, and a decrease of $0.5 billion in deferred tax liabilities.

Other liabilities of $5.1 billion include pension and other post-employment benefits, lease liabilities, deferred income reserve, bank overdraft and other liability balances. Refer to note 17 in the Company's December 31, 2020 annual consolidated financial statements for a breakdown of the other liabilities balance and note 15 in the Company's December 31, 2020 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.

In Canada, the Company offers individual segregated fund products through Canada Life (offered through Great-West Life, London Life and Canada Life prior to amalgamation on January 1, 2020). These products provide guaranteed minimum death benefits (GMDB) and guaranteed minimum accumulation on maturity benefits (GMAB). Prior to November 4, 2020, the Company also offered lifetime guaranteed minimum withdrawal benefits (GMWB) products in Canada.

For a certain generation of products, the guarantees in connection with the Canadian individual segregated fund businesses are reinsured to London Reinsurance Group Inc. (LRG), a subsidiary of Canada Life. This does not include the guarantees on newer Canadian products. LRG also has a closed portfolio of 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 in Germany and unit-linked products with investment guarantees in Ireland. These products are similar to segregated fund products but include minimum credited interest rates and pooling of policyholders' funds. The Company also offers a GMWB product in Germany.

In the U.S., the Company offers group variable annuities with GMWB and group standalone GMDB products which mainly provide return of premium on death.

The GMWB products offered by the Company in the U.S. and Germany, and previously offered in Canada and 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, 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, 2020, the amount of GMWB product in-force in Canada, the U.S., Ireland and Germany was $3,375 million ($3,332 million at December 31, 2019).

Segregated fund and variable annuity guarantee exposure

		December 31, 2020 Investment deficiency by benefit type			
	Market Value	Income	Maturity	Death	Total (1)
Canada	$ 33,429	$ 3	$ 14	$ 36	$ 36
United States	20,232	1	–	22	23
Europe	10,770	7	–	919	919
Capital and Risk Solutions (2)	859	339	–	–	339
Total	**$ 65,290**	**$ 350**	**$ 14**	**$ 977**	**$ 1,317**

(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, 2020.

(2) Capital and Risk Solutions exposure is to markets in Canada and the U.S.

Investment deficiency at December 31, 2020 increased by $332 million to $1,317 million compared to December 31, 2019. The increase was primarily due to a year-to-date decrease in Germany UWP asset market values relative to the guarantees and a higher value of LRG GMIB annuitization benefit guarantees. 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, 2020 and does not include the impact of the Company's hedging program for GMWB products. 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 nil in-quarter ($6 million for the fourth quarter of 2019) and $20 million year-to-date ($21 million year-to-date for 2019), with the majority arising in the Capital and Risk Solutions segment related to the LRG GMIB legacy block of business. The market value increased by $11,484 million to $65,290 million compared to December 31, 2019. The increase was primarily due to the MassMutual transaction in the fourth quarter of 2020 and the year-to-date increase in equity markets.

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 considering both the short and long-term capital needs of the Company.

Debentures and Other Debt Instruments

At December 31, 2020, debentures and other debt instruments increased by $3,700 million to $9,693 million compared to December 31, 2019.

On May 14, 2020, the Company issued $600 million aggregate principal amount 2.379% debentures at par, maturing on May 14, 2030.

On July 8, 2020, the Company issued $250 million aggregate principal amount 2.981% debentures at par, maturing on July 8, 2050.

On July 13, 2020, the Company announced the reopening of the offering of 2.981% debentures due July 8, 2050 and on July 15, 2020 issued an additional $250 million aggregate principal amount. Upon issuance of the July 15, 2020 debentures, $500 million aggregate principal amount of 2050 debentures were issued and outstanding.

On August 12, 2020, Great-West Lifeco U.S. Finance 2020, LP, a subsidiary of the Company, issued $663 million (US$500 million) aggregate principal amount of 0.904% senior notes due August 12, 2025.

On August 13, 2020, the Company repaid the principal amount of its maturing 4.65% $500 million debentures, together with accrued interest.

On September 17, 2020, Empower Finance 2020, LP, a subsidiary of the Company, issued $526 million (US$400 million) aggregate principal amount of 1.357% senior notes due September 17, 2027, $526 million (US$400 million) aggregate principal amount of 1.776% senior notes due March 17, 2031 and $921 million (US$700 million) aggregate principal amount of 3.075% senior notes due September 17, 2051.

On November 2, 2020, Great-West Lifeco U.S. LLC, a subsidiary of the Company, established a 1-year $635 million (US$500 million) revolving credit facility with interest on the drawn balance equal to the LIBOR rate plus 1.0%. The facility was fully drawn as at December 31, 2020 as part of the MassMutual retirement services business acquisition financing plan. The Company intends to pay down the drawn amount during 2021.

Refer to note 15 in the Company's December 31, 2020 annual consolidated financial statements for further details of the Company's debentures and other debt instruments.

Capital Trust Securities

At December 31, 2020, 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, 2020 were CLiCS – Series B with a fair value of $55 million and principal value of $37 million (fair value of $53 million at December 31, 2019).

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

Equity

Share capital outstanding at December 31, 2020 was $8,365 million, which comprises $5,651 million of common shares, $2,464 million of fixed rate First Preferred Shares and $250 million of 5-year rate reset First Preferred Shares.

Common shares

At December 31, 2020, the Company had 927,853,106 common shares outstanding with a stated value of $5,651 million compared to 927,281,186 common shares with a stated value of $5,633 million at December 31, 2019.

The Company commenced a normal course issuer bid (NCIB) on January 22, 2020 for one year to purchase and cancel up to 20,000,000 of its common shares at market prices in order to mitigate the dilutive effect of stock options granted under the Company's Stock Option Plan and for other capital management purposes. During the twelve months ended December 31, 2020, the Company did not purchase any common shares under the current NCIB (2019 - 2,000,000). As a result of the COVID-19 pandemic impacts on markets, on March 13, 2020, OSFI set expectations that Canadian banks and insurers should suspend share buybacks until further notice. Subsequent to December 31, 2020, on January 25, 2021, the Company announced a normal course issuer bid (NCIB) commencing January 27, 2021 and terminating January 26, 2022 to purchase for cancellation up to but not more than 20,000,000 of its common shares at market prices. The Company does not currently intend to engage in share repurchases that reduce its outstanding shares while OSFI maintains its expectation that the institutions it regulates suspend share buybacks. However, the Company may use the renewed NCIB for other purposes permitted by the Toronto Stock Exchange or, when OSFI no longer maintains its expectation or circumstances otherwise change, to acquire common shares to mitigate the dilutive effect of issuing shares under the Company's Stock Option Plan and for other capital management purposes.

Preferred shares

At December 31, 2020, the Company had 11 series of fixed rate First Preferred Shares and one series of 5-year rate reset First Preferred Shares outstanding with aggregate stated values of $2,464 million and $250 million, respectively.

On December 17, 2020, the Company announced that holders of 59,830 Series N Shares elected to convert their shares into Series O Shares, and that holders of 547,303 Series O Shares elected to convert their shares into Series N Shares. After taking into account all shares tendered for conversion, the Company determined that there would be less than 1,000,000 Series O Shares outstanding on December 31, 2020. As a result and in accordance with the terms and conditions attached to the shares, no Series N Shares were converted into Series O Shares and all remaining Series O Shares were automatically converted into Series N Shares on a one-for-one basis on December 31, 2020. Following the automatic conversion, Lifeco has 10,000,000 Series N Shares and no Series O Shares issued and outstanding. The Series N Shares carry an annual fixed non-cumulative dividend rate of 1.749% up to but excluding December 31, 2025 (2.176% up to but excluding December 31, 2020) and are redeemable at the option of the Company on December 31, 2025 and on December 31 every five years thereafter for $25.00 per share plus all declared and unpaid dividends up to but excluding the date of redemption. Prior to conversion, the Series O Shares carried a floating non-cumulative dividend rate equal to the relevant Government of Canada Treasury Bill rate plus 1.30%.

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

	Great-West Lifeco Inc. Series F	Series G	Series H	Series I	Series L	Series M	Series N
General Type	Fixed Rate	Fixed Rate	Fixed Rate	Fixed Rate	Fixed Rate	Fixed Rate	5-Year Rate Reset
Cumulative/Non-Cumulative	Non-cumulative	Non-cumulative	Non-cumulative	Non-cumulative	Non-cumulative	Non-cumulative	Non-cumulative
Date Issued	Jul 10, 2003	Sep 14, 2004	Aug 12, 2005	Apr 12, 2006	Oct 2, 2009	Mar 4, 2010	Nov 23, 2010
Shares Outstanding	7,740,032	12,000,000	12,000,000	12,000,000	6,800,000	6,000,000	10,000,000
Amount Outstanding (Par)	$193,500,800	$300,000,000	$300,000,000	$300,000,000	$170,000,000	$150,000,000	$250,000,000
Yield	5.90%	5.20%	4.85%	4.50%	5.65%	5.80%	1.749%
Earliest Issuer Redemption Date	Sep 30, 2008	Dec 31, 2009	Sep 30, 2010	Jun 30, 2011	Dec 31, 2014	Mar 31, 2015	Dec 31, 2020

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

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

Non-Controlling Interests

The Company's non-controlling interests include participating account surplus in subsidiaries and non-controlling interests in subsidiaries. Refer to note 18 in the Company's December 31, 2020 annual consolidated financial statements for further details of the Company's non-controlling interests.

Non-controlling interests

	December 31 2020	2019
Participating account surplus in subsidiaries:		
Canada Life	**$ 2,858**	$ 284
GWL&A	**13**	14
Great-West Life	**–**	595
London Life	**–**	1,866
	$ 2,871	$ 2,759
Non-controlling interests in subsidiaries	**$ 116**	$ 107

At December 31, 2020, the carrying value of non-controlling interests increased by $121 million to $2,987 million compared to December 31, 2019. For the twelve months ended December 31, 2020, net earnings attributable to participating account before policyholder dividends were $1,430 million and policyholder dividends were $1,364 million.

Effective January 1, 2020, following the amalgamation of Great-West Life, London Life and Canada Life, non-controlling interests attributable to participating account surplus previously recorded in the Great-West Life, London Life and Canada Life are recorded in the amalgamated company, Canada Life.

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 levels of liquid investments adequate to meet anticipated liquidity needs. 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, 2020, the Company and its operating subsidiaries held cash, cash equivalents and short-term bonds of $11.2 billion ($8.9 billion at December 31, 2019) and other liquid assets and marketable securities of $100.2 billion ($86.6 billion at December 31, 2019). Included in the cash, cash equivalents and short-term bonds at December 31, 2020 was $0.9 billion ($0.7 billion at December 31, 2019) held at the Lifeco holding company level which includes cash at Great-West Lifeco U.S. LLC, the Company's U.S. holding company. Cash and cash equivalents and short-term bonds held increased as a result of debenture issuances totaling $1.1 billion and $2.6 billion (US$2 billion) of senior notes, partially offset by the acquisitions of Personal Capital and MassMutual's retirement services business and the repayment of $500 million of debentures that matured on August 13, 2020. In addition, the Company maintains committed lines of credit with Canadian chartered banks for potential 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 and, in part, its ability to deploy capital 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. Refer to "Risk Management – COVID-19 Pandemic Impact, Government and Regulatory Responses" section for additional discussion of the impact of the current environment.

CASH FLOWS

Cash flows

	For the three months ended December 31		For the twelve months ended December 31	
	2020	2019	**2020**	2019
Cash flows relating to the following activities:				
Operations	**$ 1,896**	$ 1,291	**$ 9,610**	$ 6,110
Financing	**381**	(781)	**2,010**	(3,981)
Investment	**464**	224	**(8,202)**	(1,539)
	2,741	734	**3,418**	590
Effects of changes in exchange rates on cash and cash equivalents	**(167)**	41	**(100)**	(130)
Increase (decrease) in cash and cash equivalents in the period	**2,574**	775	**3,318**	460
Cash and cash equivalents, beginning of period	**5,372**	3,853	**4,628**	4,168
Cash and cash equivalents, end of period	**$ 7,946**	$ 4,628	**$ 7,946**	$ 4,628

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 2020, cash and cash equivalents increased by $2.6 billion from September 30, 2020. Cash flows provided by operations during the fourth quarter of 2020 were $1.9 billion, an increase of $0.6 billion compared to the fourth quarter of 2019. Cash flows used in financing were $0.4 billion, primarily used for the payment of dividends to common and preferred shareholders of $0.4 billion, partially offset by an increase in line of credit of subsidiary of $0.8 billion. For the three months ended December 31, 2020, cash inflows from investment activities related to net disposals of $0.5 billion, primarily reflecting the net proceeds from the sale of GLC and net dispositions of investment assets, partially offset by the acquisition of the retirement services business of MassMutual.

For the twelve months ended December 31, 2020, cash and cash equivalents increased by $3.3 billion from December 31, 2019. Cash flows provided by operations were $9.6 billion, an increase of $3.5 billion compared to the same period in 2019. Included in the cash flows provided by operations for the twelve months ended December 31, 2019 was $1.0 billion of cash received during the second quarter of 2019 as a result of the indemnity reinsurance agreement with Protective Life. Cash flows used in financing of $2.0 billion were primarily provided by a net issuance of debentures and senior notes of $3.2 billion and an increase in line of credit of subsidiary of $0.5 billion, partially offset by the payment of dividends to common and preferred shareholders of $1.8 billion. In the first quarter of 2020, the Company increased the quarterly dividend to common shareholders from $0.413 per common share to $0.438 per common share. For the twelve months ended December 31, 2020, cash outflows of $8.2 billion were used by the Company to acquire investment assets and for the acquisitions of Personal Capital and the retirement services business of MassMutual, partially offset by the net proceeds from the sale of GLC in the fourth quarter and the sale of IPSI in the third quarter of 2020.

Commitments/Contractual Obligations

Commitments/contractual obligations

	Payments due by period						
At December 31, 2020	Total	1 year	2 years	3 years	4 years	5 years	Over 5 years
1) Debentures and other debt instruments	$ 8,639	$ –	$ –	$ 775	$ –	$ 635	$ 7,229
2) Lease obligations	734	88	78	67	60	54	387
3) Purchase obligations	261	113	65	23	13	10	37
4) Credit-related arrangements							
(a) Contractual commitments	1,990	1,874	95	21	–	–	–
(b) Letters of credit	see note 4(b) below						
5) Pension contributions	316	316	–	–	–	–	–
Total contractual obligations	**$ 11,940**	**$ 2,391**	**$ 238**	**$ 886**	**$ 73**	**$ 699**	**$ 7,653**

(1) Refer to note 15 in the Company's December 31, 2020 annual consolidated financial statements. Excluded from debentures and other debt instruments are unamortized transaction costs.

(2) For a further description of the Company's lease obligations, refer to note 17 in the Company's December 31, 2020 annual consolidated financial statements.

(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 (LC) are written commitments provided by a bank. The total amount of LC facilities is US$2,107 million of which US$1,791 million were issued as of December 31, 2020. There are seven primary facilities within Lifeco.

The Reinsurance business unit 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 LCs on maturity.

A total of US$1,493 million has been issued to subsidiaries or branches of Canada Life and the additional US$70 million has been issued to Great-West Life & Annuity Insurance Company of South Carolina.

The remaining US$228 million has been issued to external parties. Clients residing in the United States are required pursuant to their insurance laws to obtain LCs issued on the Company's behalf from approved banks in order to further secure the Company's obligations under certain reinsurance contracts.

(5) Pension contributions include funding estimates for defined benefit pension plans, defined contribution pension plans and other post-employment plans. These 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 2021 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.

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.

In Canada, OSFI has established a regulatory capital adequacy measurement for life insurance companies incorporated under the Insurance Companies Act (Canada) and their subsidiaries, known as the Life Insurance Capital Adequacy Test (LICAT).

The LICAT ratio compares the regulatory capital resources of a company to its Base Solvency Buffer or required capital. The Base Solvency Buffer is calibrated so that a life insurer can both withstand severe stress events and have assets remaining to allow continued support of its existing business. The total Base Solvency Buffer is the aggregate of all OSFI defined capital requirements multiplied by a fixed scalar of 1.05. The total capital resources include equity items such as common shares, retained earnings and participating policyholders' surplus. There are deductions for goodwill, intangibles and some deferred tax assets. Assets backing certain provisions for adverse deviation within the insurance contract liabilities reported on the financial statements are also included in total capital resources.

OSFI has established a Supervisory Target Total Ratio of 100%, and a Supervisory Minimum Total Ratio of 90%. The internal target range of the LICAT ratio for Lifeco's major Canadian operating subsidiaries is 110% to 120% (on a consolidated basis).

Canada Life's consolidated LICAT Ratio at December 31, 2020 was 129% (135% at December 31, 2019). The LICAT Ratio does not take into account any impact from $0.9 billion of liquidity at the Lifeco holding company level at December 31, 2020 ($0.7 billion at December 31, 2019). The decrease in the LICAT Ratio from December 31, 2019 is primarily due to the growth in capital requirements from new business written in the year, market movements and the switch in the LICAT interest rate scenario for North America midway through the year.

The following provides a summary of the LICAT information and ratios for Canada Life:

LICAT Ratio

	Dec. 31 2020	Dec. 31 2019
Tier 1 Capital	**$11,593**	$ 11,952
Tier 2 Capital	**4,568**	3,637
Total Available Capital	**16,161**	15,589
Surplus Allowance & Eligible Deposits	**14,226**	12,625
Total Capital Resources	**$30,387**	$ 28,214
Required Capital	**$23,607**	$ 20,911
Total Ratio (OSFI Supervisory Target = 100%) (1)	**129%**	135%

(1) Total Ratio (%) = Total Capital Resources / Base Solvency Buffer (after 1.05 scalar)

At December 31, 2020, the Risk-Based Capital (RBC) ratio of GWL&A, Lifeco's regulated U.S. operating company, is estimated to be 409% of the Company Action Level set by the National Association of Insurance Commissioners. The estimated RBC ratio reflects acquisitions completed during 2020 including the MassMutual transaction. GWL&A reports its RBC ratio annually to U.S. Insurance Regulators. The RBC ratio is included for information only and is not intended as a means to rank insurers generally or for any other purposes.

LICAT Sensitivities

Caution Related to Sensitivities

This section includes estimates of sensitivities for certain risks. 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;
- 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. Given the nature of these calculations, the Company cannot provide assurance that the actual impact on the Canada Life consolidated LICAT Ratio will be as indicated.

Publicly Traded Common Stocks

The following table sets out the estimated immediate impact to Canada Life's consolidated LICAT Ratio of certain instantaneous changes in publicly traded common stock values as at December 31, 2020. These sensitivity estimates assume instantaneous shocks, followed by a return to historical average growth levels for broader equity markets. The sensitivity estimates relate to publicly traded common stocks and do not cover other non-fixed income assets. These estimates are illustrative as actual equity exposures may vary due to active management of the public stock portfolios.

Immediate change in publicly traded common stock values

	December 31, 2020			
	20% increase	**10% increase**	**10% decrease**	**20% decrease**
Potential increase (decrease) on LICAT Ratio	1 point	1 point	0 points	(1 point)

Interest Rates

Sensitivity to interest rates is dependent on many factors and may result in non-linear impacts to the LICAT Ratio. Canada Life's consolidated LICAT Ratio will generally increase in an environment of declining interest rates and vice-versa. Lower interest rates will increase the value of the Company's surplus assets and other regulatory capital resources. These sensitivity estimates are illustrative. Actual movement in credit spreads or government treasury rates may produce different movements in Canada Life's consolidated LICAT Ratio. These sensitivities do not include a change in the ultimate interest rates outlined in Actuarial Standards.

Immediate parallel shift in yield curve

	December 31, 2020	
	50 bps increase	**50 bps decrease**
Potential increase (decrease) on LICAT Ratio	(2 points)	3 points

Impact of a LICAT interest rate risk scenario shift is not included in the sensitivity estimates.

LICAT Interest Rate Scenario Shift

The LICAT interest rate requirements are based on the results of the most adverse of four scenarios. The determination of the most adverse scenario is dependent on government treasury rates and credit spreads, as well as the position of the Company's assets and liabilities. A change in the level and term structure of interest rates used can cause a shift in the interest rate scenario applied in the LICAT calculation. This results in a discontinuity where capital requirements can change materially. During the first quarter of 2020, OSFI introduced a smoothing calculation to address potential volatility in the interest rate requirement for participating insurance products. The smoothing calculation averages the participating interest rate risk requirements over the trailing six quarters, thereby reducing unwarranted volatility.

During the third quarter of 2020, the Company experienced a shift to a new most adverse interest rate scenario in North America. The Company previously communicated that a shift to a different adverse scenario was estimated to decrease the Company's consolidated LICAT Ratio by approximately 5.5 points. This impact is spread over a six quarter period resulting in less than a 1 point decrease in the current quarter ratio with the remaining decrease of approximately 4 points being reflected over the next 4 quarters, if the Company remains on the current scenario.

COVID-19 OSFI Regulatory Measures

OSFI is providing capital relief for insurance companies due to the COVID-19 economic environment. During the fourth quarter of 2020, OSFI updated its relief measures announced earlier in the year to phase out the special capital treatment for payment deferrals. The capital relief provided by this temporary measure is not material to the Company.

OSFI Regulatory Capital Initiatives

During the fourth quarter of 2020, OSFI issued an Advisory which confirmed the interest rate risk smoothing calculation on participating insurance, and provided clarification of available capital for certain participating insurance blocks, effective January 1, 2021. The Advisory will remain in effect until January 1, 2023, when it will be subsequently incorporated into the LICAT guideline. The noted clarification is not expected to be material to the Company.

The Company will continue to work with OSFI, the Canadian Institute of Actuaries, and other industry participants, as the LICAT guideline further evolves to allow for adaptations relating to the IFRS 17 accounting standard and developments relating to Segregated Fund Guarantee Risk requirements.

The International Accounting Standards Board (IASB) has issued IFRS 17, *Insurance Contracts*, which will replace IFRS 4, *Insurance Contracts* with an effective date of January 1, 2023. IFRS 17 includes new requirements for the recognition, measurement, presentation and disclosure of insurance contracts the Company issues and reinsurance contracts it holds. The new standard is expected to have a significant impact for insurers related to the timing of earnings recognition and on the presentation and disclosure of results. Adoption of the standard is expected to lead to further review and possible amendments to the OSFI LICAT Guideline. Refer to the "Accounting Policies – International Financial Reporting Standards" section for further details.

Return On Equity (ROE) [(1)]

Base Return on Equity [(1)]	Dec. 31 2020	Sept. 30 2020	Dec. 31 2019
Canada	**18.5%**	16.5%	16.8%
U.S. Financial Services	**8.6%**	10.1%	11.4%
U.S. Asset Management (Putnam)	**0.7%**	(0.3)%	1.2%
Europe	**11.8%**	13.0%	13.1%
Capital Risk and Solutions	**38.8%**	38.5%	33.2%
Total Lifeco Base Earnings Basis [(1)]	**12.8%**	13.5%	13.4%

Return on Equity [(1)]	Dec. 31 2020	Sept. 30 2020	Dec. 31 2019
Canada	**16.4%**	14.0%	15.0%
U.S. Financial Services	**5.6%**	10.5%	5.1%
U.S. Asset Management (Putnam)	**11.6%**	(11.7)%	(9.7)%
Europe	**15.7%**	15.9%	16.5%
Capital and Risk Solutions	**44.4%**	38.2%	31.9%
Total Lifeco Net Earnings Basis	**14.1%**	12.4%	11.7%

(1) This metric is a non-IFRS measure. Refer to the "Non-IFRS Financial Measures" section of this document for additional details.

The Company reported base return on equity of 12.8% at December 31, 2020, compared to 13.4% at December 31, 2019. The Company reported return on equity of 14.1% at December 31, 2020, compared to 11.7% at December 31, 2019.

Ratings

The Company's intention is to maintain its financial leverage ratio in line with credit rating agencies' targets for highly rated entities. At December 31, 2020, the Company's leverage ratio was slightly in excess of target levels following debt issuances relating to U.S acquisitions and the Company's desire to maintain a higher liquidity balance through the COVID pandemic. The Company intends to reduce leverage back in line with targets during 2021. Refer to the "Non-IFRS Financial Measures" section in this MD&A for additional details.

Lifeco maintains ratings from five independent ratings companies. Credit ratings are intended to provide investors with an independent measure of the credit quality of the securities of a corporation and are indicators of the likelihood of payment and the capacity of a corporation to meet its obligations in accordance with the terms of each obligation. In 2020, 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 strong capitalization. These ratings are not a recommendation to buy, sell or hold the securities of the Company or its subsidiaries and do not address market price or other factors that might determine suitability of a specific security for a particular investor. The ratings also may not reflect the potential impact of all risks on the value of securities and are subject to revision or withdrawal at any time by the rating agency.

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. Each of Lifeco's operating companies benefits from the strong implicit financial support and collective ownership by Lifeco. There were no changes to the Company's group credit ratings in 2020.

Rating agency	Measurement	Lifeco	Canada Life	Irish Life	GWL&A
A.M. Best Company	Financial Strength		A+		A+
DBRS Morningstar	Issuer Rating	A (high)	AA		
	Financial Strength		AA		NR
	Senior Debt	A (high)			
	Subordinated Debt		AA (low)		
Fitch Ratings	Insurer Financial Strength		AA	AA	AA
	Senior Debt	A			
	Subordinated Debt		A+		
Moody's Investors Service	Insurance Financial Strength		Aa3		Aa3
S&P Global Ratings	Insurer Financial Strength		AA		AA
	Senior Debt	A+			
	Subordinated Debt		AA-		

As part of its announcement on September 8, 2020 that its subsidiary, GWL&A, through its Empower Retirement business, had reached an agreement to acquire the retirement services business of MassMutual, Lifeco announced that the transaction was expected to be funded by US$1.5 billion of new long-term debt and US$0.5 billion of short-term financing, as well as existing cash. In addition, Lifeco noted that the short-term financing allows for leverage ratio reduction once the acquired business generates meaningful earnings and cash flow.

Following the announcement, and having regard to the financing plan and its impact on leverage in the near term, all five rating agencies affirmed the ratings as set out above. Four of the five agencies also affirmed the ratings outlook as stable while Fitch Ratings revised its outlook to negative from stable.

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 Canada Life and its operating subsidiary, Irish Life; GWL&A (Financial Services) and Putnam (Asset Management); together with Lifeco's Corporate results.

Effective January 1, 2020, as a result of strategic operational changes, the Company has divided the previously reported Europe segment into two separate reporting segments – Europe and Capital and Risk Solutions. The Company's other reportable segments – Canada, United States and Lifeco Corporate – are unchanged. Comparative figures have been reclassified to reflect the new composition of the reportable segments.

CANADA

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

BUSINESS PROFILE

INDIVIDUAL CUSTOMER

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

Individual insurance includes individual life, disability and critical illness insurance products and services. Individual wealth management includes individual wealth savings and income products and services. The Company is a leader in Canada for all insurance and wealth management products and services and utilizes diverse, complementary distribution channels: Freedom 55 Financial™ (Freedom), Wealth and Insurance Solutions Enterprise (WISE), managing general agencies (MGAs) and national accounts, including IG Wealth Management, a member of the Power Financial Corporation group of companies. Through Financial Horizons Group, the Company participates in the MGA channel, distributing products from across the insurance industry.

By offering this broad suite of products and services through multiple distribution channels, the Company is able to provide advice and product solutions to meet the needs of Canadians at all phases of their lives.

GROUP CUSTOMER

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

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

The Company's creditor business offers creditor insurance products through large financial institutions and credit card companies. Canada Life is a leader in the creditor insurance business in Canada.

Group retirement and investment product lines include group Registered Retirement Savings Plans (RRSP), Tax-Free Savings Accounts (TFSA), Registered Education Savings Plans (RESP), group retirement income products, and institutional investment services. The Company is focused on innovation within its savings and investment product lines.

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

Market Overview

Products and Services

Individual Customer

The Company provides an array of individual insurance and individual wealth management products that are distributed through multiple sales channels.

Market Position

- A leader in individual life insurance sales measured by new annualized premium with 21.9% market share (1)
- A significant provider of individual disability and critical illness insurance with 12.1% market share of new sales (1)
- An industry leader with 26.3% market share of individual segregated fund assets (2)

Products and Services

Individual Life Insurance
- Term life
- Universal life
- Participating life

Living Benefits
- Disability
- Critical illness

Individual Wealth Management
- Savings plans
  - RRSPs
  - Non-registered savings programs
  - TFSAs
  - RESPs

  Invested in:
  - Segregated funds
  - Mutual funds
  - Guaranteed investment options
- Retirement Income Plans
  - Retirement income funds
  - Life income funds
  - Payout annuities
  - Deferred annuities
- Residential mortgages
- Banking products

Distribution (3)

Wealth and Insurance Solutions Enterprise
- 2,150 financial security advisors

Freedom 55 Financial™
- 2,252 financial security advisors

Affiliated Partnerships
- 7,092 independent brokers associated with 31 MGAs
- 1,395 advisors associated with 14 national accounts
- 1,629 IG Wealth Management consultants who actively sell Canada Life products
- 90 direct brokers and producer groups

Financial Horizons Group (4)
- 5,175 independent brokers selling products from across the insurance industry, including Canada Life

Quadrus Investment Services Ltd.
(also included in WISE & Freedom advisor counts):
- 3,217 investment representatives

(1) Nine months ended September 30, 2020.
(2) As at November 30, 2020.
(3) WISE & Freedom includes all contracted advisors. Affiliated Partnerships and Financial Horizons Group include advisors who placed new business in 2020.
(4) FHG advisors that placed Canada Life business in 2020 are also included in the MGA independent broker count.

Group Customer

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

Market Position

- Employee benefits to over 29,700 plan sponsors (1)
- 21% market share for employee benefit plans (1)
- Leading market share for creditor products with coverage provided to over 7.4 million plan members (2)
- 19% market share of group capital accumulation plans (1)

Products and Services

Group Life and Health Benefits
- Life
- Disability
- Critical illness
- Accidental death & dismemberment
- Dental
- Expatriate coverage
- Extended health care

Group Creditor
- Life
- Disability
- Job loss
- Critical illness

Group Retirement & Investment Services
- Group Capital Accumulation Plans including:
  - Defined contribution pension plans
  - Group RRSPs, RESPs & TFSAs
  - Deferred profit sharing plans
  - Non-registered savings programs

  Invested in:
  - Segregated funds
  - Guaranteed investment options
  - Single company stock
- Retirement Income Plans
  - Payout annuities
  - Deferred annuities
  - Retirement income funds
  - Life income funds
- Investment management services only plans

Invested in:
  - Segregated funds
  - Guaranteed investment options
  - Securities

Specialty Products and Services
- Dialogue™
- Best Doctors™
- Contact
- Individual Health

Distribution

- Group Life and Health and Group Retirement and Investment Services are distributed through brokers, consultants, and financial security advisors. Sales and service support are provided by an integrated team of over 619 employees, located in 26 offices across the country, including 114 account executives. (2)
- Group Creditor products and services are distributed primarily though large financial institutions and serviced through a dedicated sales and service organization.

(1) As at December 31, 2019
(2) As at November 30, 2020

Competitive Conditions

Individual Customer

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

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

Group Customer

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

The group capital accumulation plan market is also very competitive. Three major insurance companies hold a significant market share while several smaller insurance companies have an important market presence.

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

Selected consolidated financial information – Canada

	For the three months ended			For the twelve months ended	
	Dec. 31 2020	Sept. 30 2020	Dec. 31 2019	**Dec. 31 2020**	Dec. 31 2019
Premiums and deposits [(1) (4)]	**$ 7,017**	$ 6,161	$ 7,229	**$ 25,838**	$ 27,346
Sales[(1)]	**3,729**	2,520	3,609	**12,271**	13,249
Fee and other income	**461**	445	457	**1,756**	1,766
Base earnings [(1)]	**$ 348**	$ 270	$ 274	**$ 1,206**	$ 1,178
Items excluded from base earnings [(2)]					
Actuarial assumption changes and other management actions [(2)]	**(147)**	4	(82)	**(194)**	(121)
Market-related impacts on liabilities [(2)]	**(10)**	(8)	(4)	**(51)**	(6)
Net gain/charge on business dispositions [(2) (3)]	**143**	–	–	**143**	–
Restructuring costs [(2) (3)]	**(34)**	–	–	**(34)**	–
Net earnings	**$ 300**	$ 266	$ 188	**$ 1,070**	$ 1,051
Total assets	**$ 187,698**	$ 181,727	$ 176,304		
Proprietary mutual funds and institutional net assets [(1)]	**7,311**	6,979	6,986		
Total assets under management [(1)]	**195,009**	188,706	183,290		
Other assets under administration [(1)]	**18,554**	17,749	17,118		
Total assets under administration [(1)]	**$ 213,563**	$ 206,455	$ 200,408		

(1) This metric is a non-IFRS measure. Refer to the "Non-IFRS Financial Measures" section of this document for additional details.
(2) Items excluded from base earnings, a non-IFRS measure. Refer to the "Non-IFRS Financial Measures" section of this document for additional information.
(3) The net gain on the sale of GLC and restructuring costs are included in the Canada Corporate business unit.
(4) Comparative figures have been reclassified to reflect presentation adjustments.

Base earnings [(1)] and Net earnings – common shareholders

	For the three months ended			For the twelve months ended	
	Dec. 31 2020	Sept. 30 2020	Dec. 31 2019	**Dec. 31 2020**	Dec. 31 2019
Individual Customer	**$ 132**	$ 123	$ 143	**$ 552**	$ 580
Group Customer	**205**	134	144	**677**	610
Canada Corporate	**11**	13	(13)	**(23)**	(12)
Base earnings [(1)]	**$ 348**	$ 270	$ 274	**$ 1,206**	$ 1,178
Individual Customer	**$ (9)**	$ 119	$ 87	**$ 317**	$ 431
Group Customer	**189**	134	114	**667**	632
Canada Corporate	**120**	13	(13)	**86**	(12)
Net earnings – common shareholders	**$ 300**	$ 266	$ 188	**$ 1,070**	$ 1,051

(1) This metric is a non-IFRS measure. Refer to the "Non-IFRS Financial Measures" section of this document for additional details.

2020 Developments

- ***COVID-19 Pandemic Impacts*** – The results of the Canada segment for the twelve months ended December 31, 2020 reflect the continued positive impact of market recoveries but also the impact of the economic slowdown caused by the COVID-19 pandemic on new business growth and lower contributions from investment experience. The impact of lower sales due to the economic slowdown was mostly offset by lower redemptions or lower business attrition. Many new product launches and digital capabilities are helping to build sales momentum. Experience was positive with limited impact on mortality and lower claims experience and morbidity improvement offsetting pressures on expense recoveries. Insurance premium deferrals for customers were limited in 2020.

  ASO expense recoveries are temporarily affected by lower claim volumes driven by restrictions on provider activity, but results are expected to improve as the economy re-opens and as services become accessible. Physical distancing and self-isolation requirements as well as the restrictions on business and social activities and the adverse economic environment resulting from the pandemic may cause unfavourable disability experience in future periods. Pricing of disability coverage will be adjusted over time as experience emerges. Paramedical services started to return early in the third quarter of 2020; insurance sales were affected for a period of time due to the absence of these services but have shown improvement in the fourth quarter.

  The Canada segment remains focused on supporting customers, communities and employees by providing Canadians with protection and wealth management solutions for their financial, physical and mental well-being during this unprecedented time. Products, services and support are being delivered digitally to promote physical distancing and help keep customers, advisors and employees safe. The Company has been supporting customers through digital solutions such as SimpleProtect, which provides online insurance policy application and approval, Consult+, which provides group customers virtual health care access, a digital context based messaging feature in the GroupNet for Plan Members mobile application that allows members to receive personalized notifications and offers directly to their device. This service has been used to connect members with some of the supports and measures that were introduced as a result of COVID-19. Financial assistance is being provided to plan sponsors and members to help maintain and extend coverage for employees, and to the communities through donations.

  The Canadian business is maintaining a cautious approach to employees returning to the office, in line with the Company's principles and local government guidelines. During the fourth quarter of 2020, confirmed COVID-19 cases began to rise in the jurisdictions in Canada in which the Company operates. The Company estimates that maximum occupancy will not exceed the current level of 15% to 20% by the end of the first quarter of 2021 with health and safety protocols recommended by public health authorities in place.

  Canada Life continued its temporary suspension of contributions, redemptions and transfers for its real estate segregated funds, as the economic conditions caused by the COVID-19 situation continue to lead to valuation uncertainty in the real estate industry. As of January 11, 2021, the suspension has been partially lifted, allowing contributions and transfers into the fund. As well, requests for redemptions and transfers out of the fund are being accepted for a limited period and will be processed, subject to available liquidity, on pre-specified dates; however, redemptions and transfers out of the funds otherwise remain suspended.

- On January 1, 2020, the Company amalgamated its three Canadian life insurance companies, The Great-West Life Assurance Company, London Life Insurance Company and The Canada Life Assurance Company, and their holding companies, Canada Life Financial Corporation and London Insurance Group Inc., into a single life insurance company, The Canada Life Assurance Company. This amalgamation creates operating efficiencies and simplifies the Company's capital structure to allow for more efficient use of capital, although it is not expected to have a material financial impact.

- On October 29, 2020, the Company entered into a strategic relationship with Mackenzie and Northleaf Capital Partners Ltd. (Northleaf) to expand and enhance the private markets product capabilities across distribution channels. Mackenzie and Lifeco jointly acquired a non-controlling interest in Northleaf through an acquisition vehicle 80% owned by Mackenzie and 20% owned by Lifeco, providing a significant presence in the large and rapidly growing private markets investments industry, with an obligation and right to purchase the remaining equity and voting interests in the firm commencing in approximately five years and extending into future periods. Lifeco has also committed, as part of the transaction, to make a minimum investment of its balance sheet through 2022 in Northleaf's product offerings.

- On December 31, 2020, the Company completed the sale of GLC Asset Management Group Ltd. (GLC) to Mackenzie Financial Corporation (Mackenzie), an affiliate of the Company. GLC was a wholly-owned subsidiary of Canada Life whose principal activity was the provision of investment management services to Canada Life. The Company recognized a net gain on disposal of $143 million, net of restructuring costs of $16 million after-tax. The carrying value and earnings of the business are immaterial to the Company. Refer to the "Transactions with Related Parties" section of this document for additional information regarding the sale.

  Canada Life also established its own fund management company, Canada Life Investment Management Ltd. (CLIML), and on December 31, 2020, CLIML assumed fund management responsibilities for the Canada Life Mutual Funds, offered by Quadrus Investment Services Ltd., a subsidiary of Canada Life, and other Canada Life branded investment funds. CLIML entered into a long-term administration agreement with Mackenzie and Canada Life, and CLIML and Canada Life entered into a long-term distribution agreement with Mackenzie to provide them with access to Mackenzie's investment management services at preferred rates.

- In the fourth quarter of 2020, two initiatives impacting the Canada segment operations were announced. The Company announced changes to its Canadian distribution strategy and vision for advisor based distribution, and IGM Financial, an affiliate of the Company, has notified the Company of its intent to terminate its long-term technology infrastructure related sharing agreement in the first quarter of 2021. These initiatives, together with the sale of GLC, will result in staff reductions, exit costs for certain facilities lease agreements and decommissioning activities related to technology and other assets. As a result of these transactions, the Company has recorded a restructuring provision of $92 million, including the restructuring costs associated with the GLC disposition, ($68 million in the shareholder account and $24 million in the participating account). The after-tax impact of the restructuring provision is $68 million in-quarter ($50 million in the shareholder account, $34 million excluding restructuring costs related to the GLC disposition, and $18 million in the participating account). Changes relating to these initiatives are expected to be implemented by the end of 2022 and are not expected to have a material impact on the Company's ongoing financial results.
- During the year, the Company launched other new tools and products to improve customer experience and help them meet their financial and wellness objectives:
  - Canada Life launched a new participating life insurance product available to advisors in all channels and supported by the amalgamated Canada Life participating account.
  - Canada Life launched the newly rebranded Canada Life mutual fund shelf, Canada Life Mutual Funds. The shelf features 18 new mutual funds, which were available for sale starting September 9, 2020, and rebrands the existing Quadrus Group of Funds shelf, creating a curated selection of competitive investment strategies across a range of managers, asset classes and styles. Canada Life Mutual Funds are managed by CLIML and are exclusively available through Quadrus Investment Services Ltd.
  - Canada Life updated its target risk asset allocation funds and also launched new Risk-Managed Portfolios to help protect clients from the unexpected while still helping them reach their goals.
  - Rolled out the new Advisor Workspace to all Freedom 55 Financial and WISE advisors, approximately 93% of whom have registered to use the platform as of December 31, 2020. Advisor Workspace allows advisors to view their clients' complete book of business with Canada Life as well as to complete some simple non-financial transactions. Advisor Workspace will become the platform for all advisor information and activity with Canada Life as it continues to evolve.
  - Group Customer became the first Group provider in Canada to launch an employer sponsored Registered Education Savings Program (RESP). This digital RESP simplifies the enrollment process and forms, offers lower fees and an easy to use portal.
- During the year, the Company received the following awards and rankings:
  - The Company earned an A ('Leadership') rating on CDP's 2020 Climate Change Questionnaire, a rating which identifies the global leaders in the management of carbon, climate change risks and low carbon opportunities. The Company once again achieved the highest rating among Canadian insurance companies for the sixth consecutive year.
  - The Company won the CNA Canada Award for Excellence in Philanthropy and Community Service at the 2020 Insurance Business Canada Awards for the Company's major philanthropic and community service initiatives, impact on local and national causes and strong presence in the insurance space in Canada.

Business Units – Canada

Individual Customer

Operating Results

	For the three months ended			For the twelve months ended	
	Dec. 31 2020	Sept. 30 2020	Dec. 31 2019	**Dec. 31 2020**	Dec. 31 2019
Premiums and deposits (1) (3)	**$ 3,049**	$ 2,503	$ 3,110	**$ 10,626**	$ 10,619
Sales (1)	**2,934**	1,928	2,718	**9,541**	9,318
Fee and other income	**251**	251	258	**981**	995
Base earnings (1)	**$ 132**	$ 123	$ 143	**$ 552**	$ 580
Items excluded from base earnings (2)					
Actuarial assumption changes and other management actions (2)	**(131)**	4	(52)	**(184)**	(143)
Market-related impacts on liabilities (2)	**(10)**	(8)	(4)	**(51)**	(6)
Net earnings	**$ (9)**	$ 119	$ 87	**$ 317**	$ 431

(1) This metric is a non-IFRS measure. Refer to the "Non-IFRS Financial Measures" section of this document for additional details.

(2) Items excluded from base earnings, a non-IFRS measure. Refer to the "Non-IFRS Financial Measures" section of this document for additional information.

(3) Comparative figures have been reclassified to reflect presentation adjustments.

Premiums and deposits

Premiums and deposits for the fourth quarter of 2020 decreased by $0.1 billion to $3.0 billion compared to the same quarter last year, primarily due to lower segregated fund deposits, partially offset by higher proprietary mutual fund deposits and higher participating life insurance premiums.

For the twelve months ended December 31, 2020, premiums and deposits were comparable to the same period last year.

Premiums and deposits for the fourth quarter of 2020 increased by $0.5 billion compared to the previous quarter, primarily due to an increase in participating life insurance premiums.

Sales

Sales for the fourth quarter of 2020 increased by $0.2 billion to $2.9 billion compared to the same quarter last year, primarily due to higher mutual fund sales.

For the twelve months ended December 31, 2020, sales of $9.5 billion increased by $0.2 billion compared to the same period last year, primarily due to the same reasons discussed for the in-quarter results.

Sales for the fourth quarter of 2020 increased by $1.0 billion compared to the previous quarter, primarily due to higher segregated fund and mutual fund sales.

For the individual wealth investment fund business, net cash outflows for the fourth quarter of 2020 were $99 million compared to $299 million for the same quarter last year and $125 million for the previous quarter. Net cash outflows for the twelve months ended December 31, 2020 were $464 million compared to $1,386 million for the same period last year.

Assets under administration – Individual Wealth

	December 31	
	2020	2019
Assets under management (1)		
Risk-based products	**$ 4,899**	$ 4,920
Segregated funds	**33,866**	32,915
Proprietary mutual funds	**7,311**	6,803
Total assets under management (1)	**$46,076**	$ 44,638
Other assets under administration (1) (2)	**$11,597**	$ 9,996
Total assets under administration – Individual Wealth (1)	**$57,673**	$ 54,634

(1) This metric is a non-IFRS measure. Refer to the "Non-IFRS Financial Measures" section of this document for additional details.

(2) Includes third party mutual funds distributed by Quadrus.

Fee and other income

Fee and other income for the fourth quarter of 2020 decreased by $7 million to $251 million compared to the same quarter last year, primarily due to lower margins, partially offset by higher average assets under administration.

For the twelve months ended December 31, 2020, fee and other income of $981 million decreased by $14 million compared to the same period last year, primarily due to lower margins.

Fee and other income for the fourth quarter of 2020 were comparable to the previous quarter.

Base earnings

Base earnings for the fourth quarter of 2020 decreased by $11 million to $132 million compared to the same quarter last year. The decrease was primarily due to lower net fee income and the impact of changes to certain tax estimates, partially offset by favourable policyholder behaviour experience.

For the twelve months ended December 31, 2020, base earnings decreased by $28 million to $552 million compared to the same period last year. The decrease was primarily due to lower net fee income, lower impact of new business driven by lower interest rates and unfavourable morbidity experience, partially offset by favourable mortality and policyholder behaviour experience.

Base earnings for the fourth quarter of 2020 increased by $9 million compared to the previous quarter, primarily due to higher contributions from investment experience and higher impact of new business, partially offset by the impact of changes to certain tax estimates, unfavourable policyholder behaviour experience and lower net fee income.

Net earnings

Net earnings for the fourth quarter of 2020 decreased by $96 million to negative $9 million compared to the same quarter last year. The decrease was primarily due to unfavourable impact of insurance contract liability basis changes, unfavourable market-related impacts and the reasons discussed for base earnings for the same period. Insurance contract liability basis changes in 2020 include the unfavourable impact of updates to policyholder behaviour assumptions and certain investment-related assumptions, partially offset by the favourable impact of updates to mortality assumptions.

For the twelve months ended December 31, 2020, net earnings decreased by $114 million to $317 million compared to the same period last year. The decrease was primarily due to higher unfavourable impacts of insurance contract liability basis changes, unfavourable market-related impacts, and the reasons discussed for base earnings for the same period. The unfavourable market-related impacts were primarily driven by the impact of the equity market declines and volatility in the first quarter of 2020 on segregated fund guarantees and their related hedging ineffectiveness.

Net earnings for the fourth quarter of 2020 decreased by $128 million compared to the previous quarter, primarily due to unfavourable impacts of insurance contract liability basis changes, partially offset by the reasons discussed for base earnings for the same period.

For the fourth quarter of 2020, net earnings attributable to the participating account was $9 million compared to a net loss of $30 million for the same quarter last year, primarily due to higher impact of new business. Included in participating account earnings for the fourth quarter of 2020 were restructuring costs of $18 million related to strategic initiatives as discussed in the "2020 Developments" section. In addition, participating account earnings for the fourth quarter of 2019 included unfavourable impacts of insurance contract liability basis changes.

For the twelve months ended December 31, 2020, net earnings attributable to the participating account were $76 million compared to net earnings of $13 million for the same period last year, primarily due to higher impact of new business, partially offset by lower contributions from insurance contract liability basis changes and the restructuring costs discussed for the in-quarter results.

For the fourth quarter of 2020, net earnings attributable to the participating account were $9 million compared to net earnings of $23 million for the previous quarter, primarily due to the restructuring costs discussed for the in-quarter results, partially offset by higher impact of new business. Participating account earnings for the third quarter of 2020 included unfavourable impacts of insurance contract liability basis changes.

Outlook – Individual Customer

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

The Individual Customer business unit delivered strong core business results in 2020. The new single brand and company provides efficiencies and focus that when added to the Company's reputation for strength and stability, prudent business practices and the depth and breadth of its distribution channels, positions the Company well for 2021 and beyond.

COVID-19 impacted Individual Customer sales as a result of slower market activity and paramedical services closing for part of 2020. Individual Insurance application activity has returned to close to pre-COVID-19 levels and paramedical services have re-opened, but it is unclear what impact COVID-19 will have on future period results. Continued focus on providing customers and advisors with digital solutions for sales and service will remain a key priority.

In 2021, Individual Customer will continue to advance on strategies to position for growth. The Company will further establish the value propositions for advisors in all channels, providing them with strategies and tools for helping customers focus on achieving long-term financial security regardless of life stage and market fluctuations. This commitment to advice is beneficial to strong customer retention as well as helping advisors attract new customers to the Company. A key distribution strategy will be to maximize the use of common tools, processes and support, while tailoring support to specific segments of advisors where appropriate.

The Company will continue to competitively develop, price and market its comprehensive range of individual insurance and individual wealth management products while maintaining its focus on sales and service support to customers and advisors in all channels. The Company will also continue to monitor and respond to the impacts of long-term interest rates and fee income compression.

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

Group Customer

Operating Results

	For the three months ended			For the twelve months ended	
	Dec. 31 2020	Sept. 30 2020	Dec. 31 2019	**Dec. 31 2020**	Dec. 31 2019
Premiums and deposits (1)	**$ 3,968**	$ 3,658	$ 4,119	**$ 15,212**	$ 16,727
Sales (1)	**795**	592	891	**2,730**	3,931
Fee and other income	**195**	179	184	**716**	708
Base earnings (1)	**$ 205**	$ 134	$ 144	**$ 677**	$ 610
Items excluded from base earnings (2)					
Actuarial assumption changes and other management actions (2)	**(16)**	–	(30)	**(10)**	22
Net earnings	**$ 189**	$ 134	$ 114	**$ 667**	$ 632

(1) This metric is a non-IFRS measure. Refer to the "Non-IFRS Financial Measures" section of this document for additional details.

(2) Items excluded from base earnings, a non-IFRS measure. Refer to the "Non-IFRS Financial Measures" section of this document for additional information.

Premiums and deposits

Premiums and deposits for the fourth quarter of 2020 decreased by $0.2 billion to $4.0 billion compared to the same quarter last year, primarily due to lower segregated fund deposits.

For the twelve months ended December 31, 2020, premiums and deposits decreased by $1.5 billion to $15.2 billion compared to the same period last year. The decrease was primarily due to lower administrative services only (ASO) deposits for group insurance, lower segregated fund deposits and lower premiums from single premium group annuities (SPGAs). Lower ASO deposits were primarily related to the impact of the COVID-19 pandemic service restrictions resulting in lower claims of approximately $0.3 billion.

Premiums and deposits for the fourth quarter of 2020 increased by $0.3 billion to $4.0 billion compared to the previous quarter, primarily due to higher ASO deposits for group insurance, higher segregated fund deposits and higher premiums from SPGAs.

Sales

Sales for the fourth quarter of 2020 decreased by $0.1 billion to $0.8 billion compared to the same quarter last year, primarily due to lower segregated fund deposits.

For the twelve months ended December 31, 2020, sales of $2.7 billion decreased by $1.2 billion compared to the same period last year, primarily due to lower large case sales. There has been low market activity as a result of the COVID-19 pandemic, resulting in lower sales.

Sales for the fourth quarter of 2020 increased by $0.2 billion compared to the previous quarter, primarily due to higher SPGA sales and higher segregated fund deposits.

For the group wealth segregated fund business, net cash outflows for the fourth quarter of 2020 were $76 million, compared to net cash inflows of $122 million for the same quarter last year and net cash outflows of $117 million for the previous quarter. For the twelve months ended December 31, 2020, net cash inflows were $68 million compared to $529 million for the same period last year.

Assets under administration – Group Retirement & Investment Services

	December 31	
	2020	2019
Assets under management (1)		
Risk-based products	**$ 8,693**	$ 8,532
Segregated funds	**56,814**	52,697
Institutional assets	**–**	183
Total assets under management (1)	**$65,507**	$ 61,412
Other assets under administration (1) (2)	**$ 481**	$ 472
Total assets under administration – Group Retirement & Investment Services (1)	**$65,988**	$ 61,884

(1) This metric is a non-IFRS measure. Refer to the "Non-IFRS Financial Measures" section of this document for additional details.

(2) Includes mutual funds distributed by Quadrus, stock purchase plans administered by Canada Life and portfolio assets managed by GLC Asset Management Group.

Fee and other income

Fee and other income for the fourth quarter of 2020 of $195 million increased by $11 million compared to the same quarter last year and by $16 million compared to the previous quarter, primarily due to higher ASO fee income and higher fee income for group wealth products primarily due to higher average assets under management.

For the twelve months ended December 31, 2020, fee and other income increased by $8 million to $716 million compared to the same period last year, primarily due to higher fee income for group wealth products primarily due to higher average assets under management. The increase was partially offset by lower ASO fee income.

Base earnings

Base earnings for the fourth quarter of 2020 increased by $61 million to $205 million compared to the same quarter last year, primarily due to favourable morbidity experience, partially offset by lower contributions from investment experience.

For the twelve months ended December 31, 2020, base earnings increased by $67 million to $677 million compared to the same period last year. The increase was primarily due to favourable morbidity experience and higher tax benefits, partially offset by lower contributions from investment experience.

Base earnings for the fourth quarter of 2020 increased by $71 million compared to the previous quarter, primarily due to favourable morbidity experience.

Net earnings

Net earnings for the fourth quarter of 2020 increased by $75 million to $189 million compared to the same quarter last year. The increase was primarily due to the same reasons discussed for base earnings for the same period as well as lower unfavourable impacts of insurance contract liability basis changes.

For the twelve months ended December 31, 2020, net earnings increased by $35 million to $667 million compared to the same period last year. The increase was primarily due to the same reasons discussed for base earnings for the same period, partially offset by unfavourable impacts of insurance contract liability basis changes.

Net earnings for the fourth quarter of 2020 increased by $55 million compared to the previous quarter, primarily due to the same reason discussed for base earnings for the same period, partially offset by unfavourable impacts of insurance contract liability basis changes.

Outlook – Group Customer

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

During 2020, the Company maintained its strong competitive position in the Canadian group market with leading or strong market share in all case size, regional and benefit market segments. The Company believes that this market share position, together with its distribution capacity, will facilitate continued growth in net premium income.

COVID-19 has impacted the overall Canada employment rate and this may impact employee attrition in existing Group plans, however impact to date has been limited. While uncertainty remains about the future of the economy, the supports that employers and Canada Life have put in place have helped preserve the critical benefits and savings programs for those on reduced working hours, temporary layoffs, or leaves of absences. Federal and Provincial governments have also stepped in to define emergency leaves that support members in the continuation of their benefit programs. These have all helped allow Canada Life to continue to offer critical Group Benefits and Savings programs to Canadians throughout the pandemic.

Additionally, through ongoing investment in digital technologies and innovative benefit solutions, the Company expects to continue to enhance its competitive position in the marketplace. For example, in 2020 and continuing into 2021, Group Customer is launching an integrated plan member digital platform to service customers of Group Benefits and Group Savings products. This new portal, *My Canada Life at Work,* will facilitate a more streamlined experience for both members and plan sponsors, bringing together the great digital experiences from *GroupNet* and *GRS Access*.

For customers that have both group benefits and pension business with Canada Life, this provides an integrated view into both benefits and pensions and makes it easier for members to interact and do business with Canada Life. It will also allow Group Customer to more effectively and efficiently service these customers through a singular experience, allow members to easily purchase additional services from Canada Life with an integrated view into their health and savings, and improve our digital market leadership in the Group Benefits and Savings space.

Group Customer also rolled out Portable Benefits, a fully digital optional benefits offering that provides members with additional flexibility in purchasing Life, Critical Illness or Accidental Death & Dismemberment coverages. This coverage is unique in that it requires no additional administration on the Group Sponsors' behalf, and quick and easy approval for members online, advancing our ability to provide financial protection to our members. In 2021, we will continue to offer Portable Benefits to more sponsors and more members, leveraging innovative new digital methods for surfacing and fulfilling this innovative solution. This product helps deepen our relationship with Group Customer plan members, and helps fulfil our purpose of improving the physical, financial and mental well-being of our customers.

The Canadian distribution landscape continues to evolve and the Company is working closely with all distribution partners to demonstrate how it can help build on the value of their advice.

Canada Corporate

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

For the fourth quarter of 2020, Canada Corporate had net earnings of $120 million compared to a net loss of $13 million for the same quarter last year, primarily due to the net gain on the sale of GLC of $143 million and more favourable changes in certain tax items, partially offset by a restructuring provision for strategic activities discussed in the "2020 Developments" section.

Net earnings for the twelve months ended December 31, 2020 were $86 million compared to a net loss of $12 million for the same period last year, primarily due to the same reasons discussed for the in-quarter results.

In the fourth quarter of 2020, net earnings were $120 million compared to $13 million in the previous quarter, primarily due to a gain on the sale of GLC of $143 million and more favourable changes in certain tax items, partially offset by a restructuring provision discussed for the in-quarter results.

United States

The United States operating results for Lifeco include the results of GWL&A (which operates primarily as 'Empower Retirement'), Putnam Investments and the results of the insurance businesses in the United States branch of 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. Following the close of the reinsurance transaction with Protective Life in the second quarter of 2019, Financial Services also includes a retained block of life insurance, predominately participating policies, which are now administered by Protective Life, as well as a closed retrocession block of life insurance. The Financial Services business unit also includes the results of Personal Capital, a hybrid wealth manager that provides financial tools and advice to individuals, following the completion of its acquisition in the third quarter of 2020. On December 31, 2020, Empower Retirement acquired the retirement services business of MassMutual, strengthening Empower Retirement's position as the second largest player in the U.S retirement market.

Following the close of the reinsurance transaction with Protective Life in the second quarter of 2019, the Reinsured Insurance & Annuity Business, which was previously reflected in Financial Services, is being reported as a separate business unit. The Reinsured Insurance & Annuity Business unit reflects substantially all of the individual life insurance and annuity business which has been sold, through indemnity reinsurance, to Protective Life effective June 1, 2019. These products include life insurance, annuity and executive benefits, which are no longer offered by the U.S. segment.

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.

Impact of currency movement is a non-IFRS financial measure. Refer to the "Non-IFRS Financial Measures" section of this document for additional details.

Business Profile

Financial Services

Empower Retirement offers employer-sponsored defined contribution plans, individual retirement accounts, enrollment services, communication materials, investment options and education services. The Great-West Investments brand offers fund management, investment and advisory services. The Empower Institutional brand offers private label recordkeeping and administrative services for other providers of defined contribution plans. Empower Retirement is the second largest defined contribution recordkeeper in the U.S. and the largest provider of services to state defined contribution plans. Personal Capital is a hybrid wealth manager that combines a leading-edge digital experience with personalized advice delivered by human advisors.

Asset Management

Putnam provides investment management services and related 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 (including hedge fund and other alternative strategies), model-based separately managed accounts (SMAs) and model 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 [(1)] by participants providing services for 9.4 million participant accounts and 41,000 plans [(2)]. In addition, Empower added 2.5 million participant accounts and 26,000 plans[(3)] in the MassMutual transaction • 21.0% market share in state and local government deferred compensation plans, based on number of participant accounts [(4)] • Great-West Lifetime Funds are the 15th largest target date fund offering in the U.S. [(2)]
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) and taxable brokerage accounts
DISTRIBUTION
• Retirement services products distributed to plan sponsors through brokers, consultants, advisors, third-party administrators and banks • Empower Institutional recordkeeping and administrative services distributed through institutional clients • IRAs and taxable brokerage accounts available to individuals through the Retirement Solutions Group as well as distributed directly to consumers

(1) As at June 30, 2020
(2) As at December 31, 2020
(3) As at November 30, 2020
(4) As at September 30, 2019

ASSET MANAGEMENT
MARKET POSITION
• A global investment manager with assets under management of US$191.6 billion [(1)] • Global distribution includes sales teams that are focused on major institutional markets in the U.S., Europe, the Middle East, Asia and Australia and through a long-standing strategic distribution relationship in Japan
PRODUCTS AND SERVICES
Investment Management Products & Services • Individual retail investors – a family of open-end mutual funds and closed-end funds, college savings plans, mutual funds underlying variable annuity products, and model-only separately managed accounts and model portfolios for clients of third party financial firms • Institutional investors – defined benefit plans sponsored by corporations, state, municipal and other governmental authorities, university endowment funds, charitable foundations, sovereign wealth funds and collective investment vehicles (both U.S. and non-U.S.) • Investment offerings for defined contribution plans • Alternative investment products across the fixed-income and equity groups as well as PanAgora Asset Management Inc., a Putnam subsidiary offering quantitative strategies • Seven equity model-based separately managed accounts (SMAs) and six multi-asset model portfolios ***Administrative Services*** • Transfer agency, underwriting, distribution, shareholder services, and trustee and other fiduciary services
DISTRIBUTION
Individual Retail Investors • A broad network of distribution relationships with unaffiliated broker dealers, financial planners, registered investment advisors and other financial institutions that distribute the Putnam Funds and defined contribution investment only offerings to their customers, which, in total, includes approximately 140,500 advisors [(1)] • Sub-advisory relationships and Putnam-labeled funds as investment options for insurance companies and non-U.S. residents • Retail distribution channels are supported by Putnam's sales and relationship management team • Retirement plan sponsors and participants are supported by Putnam's dedicated defined contribution investment only professionals and through a relationship with Empower Retirement and other recordkeeping firms ***Institutional Investors*** • Supported by Putnam's dedicated account management, product management and client service professionals

(1) As at December 31, 2020

Competitive Conditions

Financial Services

The retirement and investment marketplaces are 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 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 generally offers its funds only through intermediaries.

Selected consolidated financial information – United States

	For the three months ended			For the twelve months ended	
	Dec. 31 2020	Sept. 30 2020	Dec. 31 2019	**Dec. 31 2020**	Dec. 31 2019
Premiums and deposits [1] [4]	**$ 20,582**	$ 24,138	$ 19,480	**$ 93,479**	$ 70,475
Sales [1] [4]	**27,439**	27,987	31,781	**136,884**	163,087
Fee and other income [4]	**754**	696	679	**2,769**	3,767
Base earnings [1] [4]	**$ 90**	$ 83	$ 89	**$ 273**	$ 350
Items excluded from base earnings [2]					
Actuarial assumption changes and other management actions [2]	**3**	38	25	**41**	23
Market-related impact on liabilities [2]	**(1)**	(1)	–	**(19)**	–
Net gain/charge on business dispositions [2]	**–**	–	–	**–**	(199)
Transaction costs related to the acquisitions of Personal Capital and MassMutual [2] [3]	**(47)**	(31)	–	**(78)**	–
Revaluation of a deferred tax asset [2] [6]	**196**	–	(199)	**196**	(199)
Restructuring and integration costs [2] [6]	**(33)**	–	(36)	**(33)**	(36)
Net earnings (loss) – common shareholders [4]	**$ 208**	$ 89	$ (121)	**$ 380**	$ (61)
Total assets	**$ 208,580**	$ 97,104	$ 85,612		
Proprietary mutual funds and institutional net assets [1]	**284,251**	276,401	257,301		
Total assets under management [1]	**492,831**	373,505	342,913		
Other assets under administration [1]	**994,989**	817,693	792,110		
Total assets under administration [1]	**$ 1,487,820**	$ 1,191,198	$ 1,135,023		

(1) This metric is a non-IFRS measure. Refer to the "Non-IFRS Financial Measures" section of this document for additional details.

(2) Items excluded from base earnings, a non-IFRS measure. Refer to the "Non-IFRS Financial Measures" section of this document for additional information.

(3) The transaction costs incurred to date related to the acquisitions of Personal Capital and the retirement services business of MassMutual are included in the U.S. Corporate business unit.

(4) For the twelve months ended December 31, 2019, premiums and deposits excluded the initial ceded premium of $13,889 million (US$10,365 million) related to the sale, via indemnity reinsurance, of the U.S. individual life insurance and annuity business.

(5) For the twelve months ended December 31, 2019, fee and other income included a ceding commission of $1,080 million (US$806 million) related to the sale, via indemnity reinsurance, of the U.S. individual life insurance and annuity business.

(6) Included in the U.S. segment are the results of the Reinsured Insurance & Annuity business unit, which reflects substantially all of the individual life insurance and annuity business which was sold, through indemnity reinsurance, to Protective Life effective June 1, 2019. Following the sale there were no additional sales, fee and other income and net earnings related to this business unit and premiums and deposits primarily relate to deposits received on separate accounts, with the economics ceded to Protective Life, resulting in no net earnings impact. Premiums and deposits for the three and twelve months ended December 31, 2020 were $234 million and $636 million respectively ($107 million and $347 million for the three months ended September 30, 2020 and December 31, 2019 respectively). The following table includes the results for the Reinsured Insurance & Annuity business unit for the twelve months ended December 31, 2019:

	For the twelve months ended
	Dec. 31 2019
Premiums and deposits	$ 1,393
Sales	408
Fee and other income	1,157
Base earnings	63
Net earnings (loss) – common shareholders	(136)
Base earnings (US$)	47
Net earnings (loss) – common shareholders (US$)	(101)

Base earnings [(1)] and Net earnings – common shareholders

	For the three months ended			For the twelve months ended	
	Dec. 31 2020	Sept. 30 2020	Dec. 31 2019	**Dec. 31 2020**	Dec. 31 2019
Base earnings (loss) [(1)]					
Financial Services	**$ 64**	$ 75	$ 75	**$ 268**	$ 255
Asset Management	**35**	13	18	**18**	33
U.S. Corporate	**(9)**	(5)	(4)	**(13)**	(1)
Reinsured Insurance & Annuity Business	**–**	–	–	**–**	63
Base earnings (loss) [(1)]	**$ 90**	$ 83	$ 89	**$ 273**	$ 350
Items excluded from base earnings (loss) [(2)]					
Actuarial assumption changes and other management actions [(2)]	**$ 3**	$ 38	$ 25	**$ 41**	$ 23
Market-related impact on liabilities [(2)]	**(1)**	(1)	–	**(19)**	–
Net gain/charge on business dispositions [(2)]	**–**	–	–	**–**	(199)
Transaction costs related to the acquisitions of Personal Capital and MassMutual [(2) (3)]	**(47)**	(31)	–	**(78)**	–
Revaluation of a deferred tax asset [(2) (4)]	**196**	–	(199)	**196**	(199)
Restructuring and integration costs [(2) (4)]	**(33)**	–	(36)	**(33)**	(36)
Net earnings (loss) – common shareholders	**$ 208**	$ 89	$ (121)	**$ 380**	$ (61)
Base earnings (loss) (US$) [(1)]					
Financial Services (US$)	**$ 49**	$ 56	$ 57	**$ 200**	$ 193
Asset Management (US$)	**26**	10	13	**14**	24
U.S. Corporate (US$)	**(7)**	(3)	(2)	**(9)**	–
Reinsured Insurance & Annuity Business (US$)	**–**	–	–	**–**	47
Base earnings (loss) (US$) [(1)]	**$ 68**	$ 63	$ 68	**$ 205**	$ 264
Items excluded from base earnings (loss) [(2)]					
Actuarial assumption changes and other management actions (US$) [(2)]	**$ 2**	$ 29	$ 19	**$ 31**	$ 18
Market-related impact on liabilities (US$) [(2)]	**(1)**	(1)	–	**(15)**	–
Net gain/charge on business dispositions [(2)]	**–**	–	–	**–**	(148)
Transaction costs related to the acquisition of Personal Capital and MassMutual (US$) [(2) (3)]	**(36)**	(24)	–	**(60)**	–
Revaluation of a deferred tax asset [(2) (4)]	**151**	–	(151)	**151**	(151)
Restructuring and integration costs [(2) (4)]	**(25)**	–	(28)	**(25)**	(28)
Net earnings (loss) (US$) – common shareholders	**$ 159**	$ 67	$ (92)	**$ 287**	$ (45)

(1) This metric is a non-IFRS measure. Refer to the "Non-IFRS Financial Measures" section of this document for additional details.

(2) Items excluded from base earnings, a non-IFRS measure. Refer to the "Non-IFRS Financial Measures" section of this document for additional information.

(3) The transaction costs incurred to date related to the acquisitions of Personal Capital and the retirement services business of MassMutual are included in the U.S. Corporate business unit.

(4) For the twelve months ended December 31, 2020, the revaluation of a deferred tax asset of $196 million (US$151 million) and restructuring costs of $29 million (US$22 million) are included in the U.S. Corporate results. For the twelve months ended December 31, 2019, $199 million (US$151 million) and restructuring costs of $36 million (US$28 million) are included in the U.S. Corporate results.

2020 Developments

- ***COVID-19 Pandemic Impacts*** – The Coronavirus Aid, Relief and Economic Security Act (the CARES Act) was enacted on March 27, 2020. Under the CARES Act, the U.S. Federal government authorized broad based economic relief and support for individuals and businesses, including changes to distribution and loan rules from employer retirement plans and Individual Retirement Accounts (IRAs) which are similar to the relief offered in prior disaster relief laws. The Company implemented the distribution and loan changes. The Internal Revenue Service (IRS) and the U.S. Department of Labor (DOL) subsequently issued an interpretive guidance on the CARES Act and the Company updated its CARES Act distribution and loan processes and procedures accordingly. The CARES Act distributions were allowed through December 31, 2020 and loans were allowed through September 22, 2020. The CARES Act did not prevent the Company from executing on its overall business strategy and growth objectives.
- During 2020, Putnam restructuring activities were mostly completed resulting in approximately US$28 million in pre-tax annual operating expense savings to realign its resources to better position itself for current and future opportunities. These actions included technology modernization, product consolidation, a reduction in staff and facilities reorganization and resulted in restructuring charges which reduced net earnings in 2019 by $36 million (US$28 million). This charge was recorded in the U.S. Corporate business unit.

- During the fourth quarter of 2020, management revalued the deferred income tax asset pertaining to the Asset Management business unit as a result of Empower Retirement's acquisitions of MassMutual's retirement services business and Personal Capital. The acquisitions are expected to increase consolidated U.S. tax group income and thereby the ability to utilize the deferred income tax asset that was previously de-recognized. As a result, net earnings includes a recovery of the deferred tax asset of $196 million (US$151 million) in U.S. Corporate results. The deferred income tax asset de-recognition was originally reported in U.S. Corporate in the fourth quarter of 2019. The Empower Retirement acquisitions will also impact the allocation of state taxes between Empower Retirement to Putnam beginning in 2021, but with no net change to the total U.S. segment state taxes.

Business Units – United States

Financial Services

2020 Developments

- ***COVID-19 Pandemic Impacts*** – During the fourth quarter of 2020, Empower Retirement operations and technology functions maintained full execution as the market disruption created by the COVID-19 pandemic subsided. The Company maintained a nearly full work-at-home status across the entire enterprise throughout the quarter, including associates in North America and India. Call volumes and web traffic returned to normal levels. For the most part, retirement investors have not engaged in reactive selling with a significant majority of Empower Retirement plan participants making no change to their investments. The Company continued to see increased levels of interest in advisory and financial wellness offerings.

  Empower Retirement and others in the retirement industry lobbied for, and received, relief from federal government regulators to help individuals who needed to access their retirement savings in the event of financial hardships. Following the passage of the CARES Act, Empower Retirement implemented new processes and waived fees on all new retirement plan loans and hardship withdrawals to support these needs. Empower Retirement did not charge origination fees on any new plans and suspended charges for all hardship withdrawals. These changes covered all tax-qualified workplace retirement plans administered by Empower Retirement that permit such distributions, and include new provisions allowed for under the CARES Act. Beginning in the third quarter of 2020, Empower Retirement reinstated fees on certain new retirement plan loans and hardship withdrawals.

- On August 17, 2020, Empower Retirement completed the acquisition of Personal Capital, a hybrid wealth manager that combines a leading-edge digital experience with personalized advice delivered by human advisors. Under the terms of the agreement, Empower Retirement acquired 100% of the equity of Personal Capital for net consideration of US$813 million on closing and deferred consideration of US$20 million, which represents management's best estimate and could increase up to US$175 million subject to achievement of target growth objectives. The upfront consideration was funded with cash on hand and US$500 million in debt financing. Financial Services' 2020 year-to-date results include the results of Personal Capital from the August 17, 2020 acquisition date.

  Empower Retirement expects to incur integration expenses of US$57 million pre-tax, of which US$3 million were incurred to date (US$2 million post-tax), with the integration of Personal Capital expected to be completed in the first quarter of 2022. During the twelve months ended December 31, 2020, the Company incurred transaction expenses of US$22 million pre-tax (US$20 million post-tax) related to the Personal Capital acquisition, which are included in the U.S. Corporate business unit.

  Refer to the "Transactions with Related Parties" section of this document for additional information regarding the acquisition.

- On December 31, 2020, Empower Retirement acquired the retirement services business of MassMutual, via indemnity reinsurance, strengthening Empower Retirement's position as the second largest player in the U.S. retirement market. Concurrent to the acquisition of the MassMutual retirement services business, Empower Retirement is serving as recordkeeper for MassMutual's defined contribution plan. The Company paid a ceding commission of US$2.3 billion, net of working capital adjustments, to MassMutual, and funded the transaction with existing cash, short-term debt and US$1.5 billion in long-term debt issued on September 17, 2020.

  This transaction increases the synergy potential of Empower Retirement's acquisition of Personal Capital across a larger combined business. In addition, Empower Retirement and MassMutual intends to enter into a strategic partnership through which digital insurance products offered by Haven Life Insurance Agency, LLC and MassMutual's voluntary insurance and lifetime income products will be made available to customers of Empower Retirement and Personal Capital.

  Empower Retirement anticipates realizing cost synergies through the migration of the MassMutual's retirement services business onto Empower Retirement's recordkeeping platform. Run rate cost synergies are expected to be US$160 million pre-tax at the end of integration in 2022. Revenue synergies in 2022 are expected to be US$30 million pre-tax and continue to grow beyond 2022.

  Empower Retirement expects to incur integration and restructuring expenses of US$125 million pre-tax, of which US$29 million pre-tax (US$23 million post-tax), were recognized in the fourth quarter of 2020. Empower Retirement incurred transaction expenses of US$46 million pre-tax (US$36 million post-tax) in the fourth quarter of 2020 (US$51 million pre-tax and US$40 million post-tax for the twelve months ended December 31, 2020) related to the MassMutual transaction. These costs are included in the U.S. Corporate business unit. The integration is expected to be completed within 18 months following closing.

- On November 27, 2020, Empower Retirement acquired the retirement business of Fifth Third Bank. The transaction is not expected to have a material impact on Empower Retirement's financial results.

- Subsequent to the fourth quarter of 2020, on January 6, 2021, Empower Retirement announced an intent to acquire the retirement business of Truist Bank. The transaction, which is expected to close in the first quarter of 2021, is not expected to have a material impact on Empower Retirement's financial results.

- Empower Retirement participant accounts were 11.9 million at December 31, 2020, including 2.5 million participant accounts from the MassMutual transaction, up from 9.4 million at December 31, 2019.
- Empower Retirement assets under administration were US$958 billion at December 31, 2020, up from US$673 billion at December 31, 2019, primarily due to the acquisitions of Personal Capital and the retirement services business of MassMutual as well as higher average equity markets. Assets under administration related to MassMutual were US$190 billion and Personal Capital assets under management were US$16 billion at December 31, 2020.
- During 2020, the Company received the following awards and rankings:
  - In July 2020, Empower Retirement was named the 2020 Retirement Leader of the Year in the annual Mutual Fund Industry Awards, organized by Pageant Media. Retirement Leader of the Year is awarded to a firm that has made a key impact on growing retirement assets through unique retirement solutions, marketing campaigns and significant contributions to the retirement industry at large.
  - In October 2020, PLANADVISER named Empower Retirement the best in the country among recordkeepers for the ninth consecutive year on "Value for Price".
  - In PlanSponsor's annual recordkeeping survey, Empower Retirement ranked 2nd nationally in Total 401(k) Assets, with $493.6 billion as of July 15th, 2020. In the same survey, Empower ranked 3rd in Total 457 Plan Assets with $76.1 billion.
  - In September 2020, Empower Retirement was awarded "gold medals" from Financial Advisor IQ in six categories, including "Best Client Service" and "Best Price".
  - In September 2020, Investment News selected Empower Retirement as a finalist for its 2020 Excellence in Diversity and Inclusion Awards.
  - In July 2020, Empower Retirement was named "Best Place to Work for Disability Inclusion" using the Disability Equality Index, sponsored by the American Association of People with Disabilities.

Operating Results

	For the three months ended			For the twelve months ended	
	Dec. 31 2020	Sept. 30 2020	Dec. 31 2019	**Dec. 31 2020**	Dec. 31 2019
Premiums and deposits (1) (2)	**$ 3,505**	$ 5,665	$ 3,150	**$ 16,979**	$ 11,783
Sales (1) (3)	**10,596**	9,621	15,798	**61,020**	105,380
Fee and other income	**428**	395	376	**1,567**	1,428
Base earnings (1)	**$ 64**	$ 75	$ 75	**$ 268**	$ 255
Items excluded from base earnings (4)					
Actuarial assumption changes and other management actions (4)	**3**	38	25	**41**	23
Market-related impacts on liabilities (4)	**(1)**	(1)	–	**(19)**	–
Integration costs (4)	**(4)**	–	–	**(4)**	–
Net earnings – common shareholders (5)	**$ 62**	$ 112	$ 100	**$ 286**	$ 278
Premiums and deposits (US$) (1) (2)	**$ 2,696**	$ 4,260	$ 2,386	**$ 12,701**	$ 8,877
Sales (US$) (1) (3)	**8,151**	7,234	11,968	**45,641**	79,353
Fee and other income (US$)	**329**	297	285	**1,171**	1,076
Base earnings (US$) (1)	**$ 49**	$ 56	$ 57	**$ 200**	$ 193
Items excluded from base earnings (US$) (4)					
Actuarial assumption changes and other management actions (US$) (4)	**2**	29	19	**31**	18
Market-related impacts on liabilities (US$) (4)	**(1)**	(1)	–	**(15)**	–
Integration costs (US$) (4)	**(3)**	–	–	**(3)**	–
Net earnings – common shareholders (US$) (5)	**$ 47**	$ 84	$ 76	**$ 213**	$ 211

(1) This metric is a non-IFRS measure. Refer to the "Non-IFRS Financial Measures" section of this document for additional details.

(2) For the three months and twelve months ended December 31, 2020, premiums and deposits included US$46 million and US$148 million, respectively, relating to the retained policies (US$54 million and US$166 million for the three and twelve months ended December 31, 2019, US$31 million for the three months ended September 30, 2020).

(3) For the three months and twelve months ended December 31, 2020, sales included US$0.2 billion and US$1.3 billion, respectively, relating to Putnam managed funds sold on the Empower Retirement platform (US$0.3 billion and US$1.1 billion for the three and twelve months ended December 31, 2019, and US$0.2 billion for the three months ended September 30, 2020).

(4) Items excluded from base earnings, a non-IFRS measure. Refer to the "Non-IFRS Financial Measures" section of this document for additional information.

(5) For the three months and twelve months ended December 31, 2020, net earnings included US$3 million and US$15 million, respectively, relating to the retained policies (US$19 million net loss and US$6 million net earnings for the three and twelve months ended December 31, 2019, and US$3 million for the three months ended September 30, 2020).

Premiums and deposits

Premiums and deposits for the fourth quarter of 2020 of US$2.7 billion increased by US$0.3 billion compared to the same quarter last year, primarily due to higher premiums from existing Empower Retirement participants.

Premiums and deposits for the twelve months ended December 31, 2020 increased by US$3.8 billion to US$12.7 billion compared to the same period last year, primarily due to higher premiums and deposits transferred in from assets under administration and existing Empower Retirement participants.

Premiums and deposits in the fourth quarter of 2020 decreased by US$1.6 billion compared to the previous quarter, primarily due to the higher deposits transferred in from assets under administration and existing Empower Retirement participants.

Sales

Sales in the fourth quarter of 2020 decreased by US$3.8 billion to US$8.2 billion compared to the same quarter last year, primarily due to a decrease in Empower Retirement sales across all plan sizes, partially offset by Personal Capital related sales.

For the twelve months ended December 31, 2020, sales decreased by US$33.7 billion to US$45.6 billion compared to the same period last year. Included in the sales for the twelve months ended December 31, 2019 was one large sale relating to a new client with approximately 200,000 participants. Excluding the impact of this sale, Empower Retirement large plan sales and Personal Capital related sales increased, partially offset by decreases in Empower Retirement mid and small sized plan sales. Large plan sales can be highly variable from period to period and tend to be lower margin; however, contribute to covering fixed overhead costs.

Sales in the fourth quarter of 2020 increased by US$0.9 billion compared to the previous quarter, primarily due to increases in Personal Capital related sales and Empower Retirement small plan sales, partially offset by a decrease in Empower Retirement mid-sized plans.

Empower Retirement – assets under administration (US$)

	December 31	
	2020	2019
General account – fixed options	**$ 36,590**	$ 13,532
Segregated funds – variable options	**87,578**	19,504
Proprietary mutual funds (1)	**50,232**	30,949
Unaffiliated retail investment options & administrative services only	**783,456**	609,316
	$ 957,856	$ 673,301

(1) At December 31, 2020, proprietary mutual funds included US$16.8 billion in Putnam managed funds (US$13.7 billion at December 31, 2019).

Empower Retirement customer account values at December 31, 2020 increased by US$284.6 billion compared with December 31, 2019, primarily due to the acquisitions of MassMutual's retirement services business and Personal Capital, which added US$190.1 billion and US$16.3 billion of assets under administration. Favourable equity market impacts also contributed to the increase.

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 2020 of US$329 million increased by US$44 million compared to the same quarter last year, primarily due to Personal Capital related fee income of US$28 million and higher average equity markets.

For the twelve months ended December 31, 2020, fee and other income increased by US$95 million to US$1,171 million compared to the same period last year, primarily due to Personal Capital related fee income of US$41 million, growth in participants and higher average equity markets.

Fee and other income for the fourth quarter of 2020 increased by US$32 million compared to the previous quarter, primarily due to the same reasons discussed for the in-quarter results.

Base earnings

Base earnings for the fourth quarter of 2020 of US$49 million decreased by US$8 million compared to the same quarter last year. The decrease was primarily due to Personal Capital related net loss of US$7 million and lower contributions from investment experience, partially offset by net business growth.

For the twelve months ended December 31, 2020, base earnings increased by US$7 million to US$200 million compared to the same period last year. The increase was primarily due to higher contributions from investment experience and net business growth, partially offset by the Personal Capital related net loss of US$12 million and less favorable mortality experience.

Base earnings for the fourth quarter of 2020 decreased by US$7 million compared to the previous quarter, primarily due to higher operating expenses and an increase in the Personal Capital related net loss, partially offset by higher contributions from investment experience and net business growth.

Net earnings

Net earnings for the fourth quarter of 2020 of US$47 million decreased by US$29 million compared to the same quarter last year. The decrease was primarily due to the same reasons discussed for base earnings and integration costs. In addition, included in the fourth quarter of 2019 was the positive impact of a partial settlement of an employee pension plan.

For the twelve months ended December 31, 2020, net earnings increased by US$2 million to US$213 million compared to the same period last year. The increase was primarily due to the same reasons discussed for base earnings and higher contributions from insurance contract liability basis changes, partially offset by market volatility creating hedge ineffectiveness losses related to guaranteed lifetime withdrawal benefits and integration costs. Included in the twelve months ended December 31, 2019 was the positive impact of a partial settlement of an employee pension plan.

Net earnings for the fourth quarter of 2020 decreased by US$37 million compared to the previous quarter, primarily due to the same reasons as discussed for base earnings, lower contributions from insurance contract liability basis changes and integration costs.

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. The acquisition of MassMutual's retirement services business strengthens Empower Retirement's position as the second largest player in the U.S. retirement market and makes Empower Retirement first in the core marketplace. Financial Services business unit continually examines opportunities to structure products and develop strategies to stimulate growth in assets under management.

The acquisition of Personal Capital, a hybrid wealth manager that combines a leading-edge digital experience with personalized advice delivered by human advisors, brings together Empower Retirement's leading retirement plan services and integrated financial tools, and Personal Capital's rapidly growing, digitally oriented personal wealth management platform.

Empower Retirement anticipates realizing cost synergies through the migration of MassMutual's retirement services business onto Empower Retirement's recordkeeping platform. Further, the MassMutual acquisition increases the synergy potential of Empower Retirement's acquisition of Personal Capital across a larger combined business.

In 2021, 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 2020, 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 2021, investments will be made in integrating the previously referenced businesses as well as continue investment to improve the customer web experiences, including adding innovative capabilities and ease of service products. These efforts are expected to increase customer retention and ultimately increase participant retirement savings.

Asset Management

2020 Developments

- ***COVID-19 Pandemic Impacts*** – At Putnam and across the broader asset management industry during the first quarter of 2020, client channels experienced reduced gross sales and elevated redemptions given concerns about the breadth and severity of the pandemic and its longer-term effect on an array of economic factors, including corporate earnings. On the investment management front, Putnam's work on risk profiles and portfolio construction has led to solid relative performance across asset classes. Early in the second quarter of 2020, redemptions slowed and turned back into positive net flows, which positioned the Company well for the market recovery that occurred throughout the remainder of 2020.
- Putnam's ending assets under management (AUM) at December 31, 2020 of US$191.6 billion increased by US$9.8 billion compared to the same period last year, while average AUM for the twelve months ended December 31, 2020 of US$173.8 billion increased by US$0.6 billion compared to the same period last year. For the twelve months ended December 31, 2020, mutual fund sales increased by US$2.0 billion compared to the same period last year.
- Putnam continues to sustain strong investment performance relative to its peers. As of December 31, 2020, approximately 76% of Putnam's fund assets performed at levels above the Lipper median on a three-year basis, and approximately 91% on a five-year basis. In addition, 36% and 41% of Putnam's fund assets were in the Lipper top quartile on a three- and five-year basis, respectively. Putnam has 26 funds currently rated 4-5 stars by Morningstar.
- For the 31st consecutive year, Putnam has been recognized by DALBAR Inc. for mutual fund service quality. This recognition includes Putnam being named as a DALBAR Mutual Fund Service Award winner for 29 of those years. Additionally, Putnam has been named the sole recipient of DALBAR's Total Client Experience Award recognizing overall mutual fund customer service quality for the past ten years.

Operating Results

	For the three months ended			For the twelve months ended	
	Dec. 31 2020	Sept. 30 2020	Dec. 31 2019	**Dec. 31 2020**	Dec. 31 2019
Sales [(1)]	**$ 16,843**	$ 18,366	$ 15,983	**$ 75,864**	$ 57,299
Fee income					
Investment management fees	**$ 203**	$ 206	$ 206	**$ 801**	$ 813
Performance fees	**32**	2	2	**30**	(10)
Service fees	**36**	37	37	**148**	149
Underwriting & distribution fees	**55**	56	58	**223**	230
Fee income	**$ 326**	$ 301	$ 303	**$ 1,202**	$ 1,182
Core net earnings (loss) [(1)]	**$ 49**	$ 25	$ 28	**$ 68**	$ 78
Less: Financing and other expenses [(1)]	**(14)**	(12)	(10)	**(50)**	(45)
Net earnings (loss) [(2)]	**$ 35**	$ 13	$ 18	**$ 18**	$ 33
Sales (US$) [(1)]	**$ 12,957**	$ 13,809	$ 12,108	**$ 56,541**	$ 43,185
Fee income (US$)					
Investment management fees (US$)	**$ 157**	$ 155	$ 155	**$ 599**	$ 611
Performance fees (US$)	**25**	1	2	**23**	(6)
Service fees (US$)	**28**	28	28	**111**	112
Underwriting & distribution fees (US$)	**42**	42	44	**166**	173
Fee income (US$)	**$ 252**	$ 226	$ 229	**$ 899**	$ 890
Core net earnings (loss) (US$) [(1)]	**$ 37**	$ 19	$ 21	**$ 51**	$ 59
Less: Financing and other expenses (US$) [(1)]	**(11)**	(9)	(8)	**(37)**	(35)
Net earnings (loss) (US$) [(2)]	**$ 26**	$ 10	$ 13	**$ 14**	$ 24
Pre-tax operating margin [(1)]	**20.6%**	11.9%	7.2%	**8.6%**	8.1%
Average assets under management (US$) [(1)]	**$ 185,425**	$ 176,726	$ 178,023	**$ 173,752**	$ 173,159

(1) This metric is a non-IFRS measure. Refer to the "Non-IFRS Financial Measures" section of this document for additional details.

(2) For the Asset Management business unit, there were no differences between net earnings (loss) and base earnings (loss) in the periods presented.

Sales

Sales in the fourth quarter of 2020 increased by US$0.8 billion to US$13.0 billion compared to the same quarter last year, primarily due to an increase in institutional sales of US$2.3 billion offset by a decrease in mutual fund sales of US$1.4 billion.

For the twelve months ended December 31, 2020, sales increased by US$13.4 billion to US$56.5 billion compared to the same period last year, primarily due to an increase in mutual fund sales of US$2.0 billion and an increase in institutional sales of US$11.3 billion.

Sales in the fourth quarter of 2020 decreased by US$0.9 billion compared to the previous quarter, primarily due to a US$0.5 billion decrease in mutual fund sales and US$0.3 billion decrease in institutional sales.

Fee income

Fee income is derived primarily from investment management fees, performance fees, transfer agency and other service fees, as well as underwriting and distribution fees. Generally, fees are earned based on AUM and may depend on financial markets, the relative performance of Putnam's investment products, the number of retail accounts and sales. Performance fees are generated on certain mutual funds and institutional portfolios and are generally based on a rolling 36-month performance period for mutual funds and a 12-month performance period for institutional portfolios. Performance fees on mutual funds are symmetric, and as a result, can be positive or negative.

Fee income for the fourth quarter of 2020 increased by US$23 million to US$252 million compared to the same quarter last year, primarily due to higher performance fees.

For the twelve months ended December 31, 2020, fee income increased by US$9 million to US$899 million compared to the same period last year. The increase was primarily due to higher performance fees, partially offset by lower investment management and underwriting and distribution fees.

Fee income for the fourth quarter of 2020 increased by US$26 million compared to the previous quarter, primarily due to higher performance fees.

Core net earnings and net earnings

Core net earnings for the fourth quarter of 2020 increased by US$16 million to US$37 million compared to the same quarter last year, primarily due to higher performance fee income and net investment income. In the fourth quarter of 2020, net earnings, including financing and other expenses, were US$26 million compared to US$13 million for the same quarter last year. Financing and other expenses for the fourth quarter of 2020 increased by US$3 million to US$11 million compared to the same quarter last year, primarily due to allocated expenses from affiliates.

For the twelve months ended December 31, 2020, core net earnings were US$51 million compared to a core net earnings of US$59 million for the same period last year. Core net earnings decreased by US$8 million primarily due to higher sales and compensation related expenses, partially offset by higher performance fee income. Net earnings, including financing and other expenses, for the twelve months ended December 31, 2020, were US$14 million compared to US$24 million for the same period last year. Financing and other expenses for the twelve months ended December 31, 2020 increased by US$2 million to US$37 million compared to the same period last year, primarily due to allocated expenses from affiliates, partially offset by lower financing costs.

Core net earnings for the fourth quarter of 2020 were US$37 million compared to core net earnings of US$19 million for the previous quarter, an increase of US$18 million, primarily due to higher performance fee income and higher net investment income, partially offset by higher sales and compensation related expenses. Net earnings, including financing and other expenses, for the fourth quarter of 2020, were US$26 million compared to US$10 million for the previous quarter. Financing and other expenses for the fourth quarter of 2020 increased by US$2 million compared to the previous quarter, primarily due to allocated expenses from affiliates and higher taxes.

Assets Under Management

Assets under management (US$) [1]

	For the three months ended			For the twelve months ended	
	Dec. 31 2020	Sept. 30 2020	Dec. 31 2019	**Dec. 31 2020**	Dec. 31 2019
Beginning assets	**$ 179,018**	$ 168,526	$ 174,191	**$ 181,724**	$ 160,200
Sales – Mutual funds	**6,389**	6,897	7,798	**29,509**	27,474
Redemptions – Mutual funds	**(7,155)**	(6,210)	(6,316)	**(33,492)**	(25,031)
Net asset flows – Mutual funds	**(766)**	687	1,482	**(3,983)**	2,443
Sales – Institutional	**6,568**	6,912	4,310	**27,032**	15,711
Redemptions – Institutional	**(6,791)**	(5,542)	(5,587)	**(29,735)**	(22,081)
Net asset flows – Institutional	**(223)**	1,370	(1,277)	**(2,703)**	(6,370)
Net asset flows – Total	**(989)**	2,057	205	**(6,686)**	(3,927)
Impact of market/performance	**13,525**	8,435	7,328	**16,516**	25,451
Ending assets	**$ 191,554**	$ 179,018	$ 181,724	**$ 191,554**	$ 181,724
Average assets under management					
Mutual funds	**90,164**	86,808	86,824	**85,687**	83,096
Institutional assets	**95,261**	89,918	91,199	**88,065**	90,063
Total average assets under management	**$ 185,425**	$ 176,726	$ 178,023	**$ 173,752**	$ 173,159

(1) This metric is a non-IFRS measure. Refer to the "Non-IFRS Financial Measures" section of this document for additional details.

Average AUM for the three months ended December 31, 2020 were US$185.4 billion, an increase of US$7.4 billion or 4% compared to the same quarter last year, primarily due to the impact of markets and cumulative assets inflows. Net asset outflows for the fourth quarter of 2020 were US$1.0 billion compared to net assets inflows of US$0.2 billion for the same quarter last year. In-quarter mutual fund net asset outflows were US$0.8 billion and institutional net asset outflows were US$0.2 billion.

Average AUM for the twelve months ended December 31, 2020 increased by US$0.6 billion to US$173.8 billion compared to the same period last year, primarily due to cumulative assets inflows in mutual funds, partially offset by cumulative assets outflows in institutional funds. Net asset outflows for the twelve months ended December 31, 2020 were US$6.7 billion compared to US$3.9 billion for the same period last year. Year-to-date mutual fund net asset outflows of US$4.0 billion and institutional net asset outflows were US$2.7 billion. Within the institutional category, Putnam's valuation oriented quantitative manager has been experiencing outflows for several quarters. While their performance in this category has been comparable to peers, this style of investing has been in outflows across the industry. During these same time periods, Putnam's active institutional mandates have experienced positive flows.

Average AUM for the three months ended December 31, 2020 increased by US$8.7 billion compared to the previous quarter, primarily due to impact of market movements.

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 risk-adjusted investment performance across asset classes for its clients and investors in the mutual fund, institutional and retirement marketplaces.

In 2021, Putnam will continue to focus efforts on driving growth and market share through new sales and asset retention in all markets it serves including Global Institutional, PanAgora (Putnam's quantitative institutional manager), U.S. Retail and Defined Contribution Investment Only, while maintaining its industry recognized reputation for service excellence.

Innovation will remain a key differentiator in 2021, as Putnam further develops and refines its product offerings, service features and operational functions, while bolstering its corporate and business/product brand image with a broad range of constituents. Putnam continues to increasingly incorporate digital technology throughout its business to drive greater efficiencies and create business opportunities.

Putnam will remain focused on growth of revenues and assets in 2021, while at the same time managing firm-wide expenses, as the firm seeks to further build a scalable, profitable asset management franchise.

United States Corporate

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

In the fourth quarter of 2020, net earnings were US$86 million compared to a net loss of US$181 million for the same period in 2019. Net earnings increased by US$267 million primarily due to a revaluation of a deferred tax asset of US$151 million which was de-recognized in the fourth quarter of 2019, partially offset by transaction costs of US$36 million and restructuring costs of US$22 million related to the acquisitions of Personal Capital and the retirement services business of MassMutual. In addition, included in the fourth quarter of 2019 were restructuring costs of US$28 million related to the Asset Management business unit.

For the twelve months ended December 31, 2020, net earnings of US$60 million increased by US$239 million compared to the same period in 2019. The increase was primarily due to the same reasons discussed for the in-quarter results.

In the fourth quarter of 2020, net earnings were US$86 million compared to a net loss of US$27 million in the previous quarter. Net earnings increased by US$113 million primarily due to revaluation of a previously de-recognized deferred tax asset, partially offset by transaction and restructuring costs related to the acquisitions of Personal Capital and the retirement services business of MassMutual.

Europe

The Europe segment is comprised of three distinct business units serving customers in the United Kingdom, Ireland and Germany and offers protection and wealth management products, including payout annuity products. The U.K. and German business units operate under the Canada Life brand and Irish business unit operates under the Irish Life brand.

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.

Impact of currency movement is a non-IFRS financial measure. Refer to the "Non-IFRS Financial Measures" section of this document for additional details.

Business Profile

United Kingdom

The core products offered by the U.K. business unit are bulk and individual payout annuities, equity release mortgages, investments (including life bonds, retirement drawdown and pension), individual protection and group insurance. These products are distributed through independent financial advisors and employee benefit consultants in the U.K. and Isle of Man.

Ireland

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

Germany

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

The Company continues to expand its presence in its business units 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.

Market Overview

Products and Services

Europe

Market Position

U.K.
- Group life market share 24% [(1)]
- Group income protection market share 17% [(1)]
- Payout annuities market share 12% (Advisor only) [(2)]
- A market leading international life company selling into the U.K. market, with over 30% market share [(3)]
- Among the top five in the onshore unit-linked single premium bond market, with 13% market share (Advisor only) [(3)]
- An award winning competitor in the equity release market with a market share of 11% [(6)]

Ireland
- Life assurance company market share 43% [(4)]
- Retail life and pensions market share 27% [(4)]
- Group pensions, group risk and corporate annuities market share 59% [(4)]
- ILIM is one of the largest institutional fund managers in Ireland with €87 billion assets under management [(5)]
- Third largest health insurance business through Irish Life Health [(1)]

Germany
- 3% share of the broker market [(3)]

Products and Services

U.K.
- Individual and bulk payout annuities
- Fixed term annuities
- Individual savings and investments (retirement drawdown & pension, onshore & international bonds and collective investment funds)
- Group and individual life insurance
- Group income protection (disability)
- Group and individual critical illness
- Equity release mortgages

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

Europe (cont'd)

Distribution

U.K.
- Financial advisors
- 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, 2019
(2) Market share based on second quarter 2020 data through financial advisors, restricted whole market advisors and non-advised distributor.
(3) Market share shows a year-to-date position based on year-to-date sales at September 30, 2020.
(4) As at June 30, 2020
(5) As at December 31, 2020
(6) Equity Release Council market statistics for first quarter 2020 to third quarter 2020.

Competitive Conditions

United Kingdom

In the U.K., the Company has strong market positions for payout annuities, wealth management and group risk, where it is a market leader. Combined sales from the onshore and international wealth management businesses put Canada Life as one of the top single investment premium bond providers in the U.K.

The Company has benefited over recent years from an increase in the proportion of customers seeking the best price in the open market. This has increased the proportion of customers buying annuities through financial advisors, which are the Company's primary distribution channel. The Company continues to offer both standard and enhanced annuities as well as investment based pension and drawdown products for customers wanting to take advantage of the greater pension flexibility introduced in recent years. The Company expects further growth in the retirement retail market and is well placed to continue to grow in this market, supported by its equity release mortgage expertise which is an important part of the retirement market and an area of growth. The Company also offers bulk annuities aimed at trustees of defined benefits plans who want to insure pension annuities in payment. This is a large 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. With expertise and experience in longevity and investment products, the Company is well placed to continue to grow bulk annuity new business.

In international wealth management operations, the Company continued to focus efforts on increasing sales within the retail market while maintaining our strong presence in the institutional sector of the market. Future estate planning continues to be an area of focus for U.K. advisors and Canada Life International remains one of the leading companies in this sector of the market.

Ireland

The Company continues to be the largest life assurance company in Ireland with a market share of 43% as at June 30, 2020. Irish Life follows a multi-channel distribution strategy with a large 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 one of Ireland's largest institutional fund managers with approximately €87 billion of assets under management, including funds managed for other companies within the Lifeco group, as at December 31, 2020. As market leader in the domestic market ILIM continued to expand its capabilities and solutions for Responsible Investments with multiple awards and ratings both in public markets and in its Real Estate offerings. It has also continued to evolve its Asset and Liability Management, Liability-Driven Investments and Bulk Annuity services to large defined benefit pension schemes.

Setanta Asset Management, a subsidiary of the Company, manages assets for a number of institutional clients, both third-party institutions as well as for companies in the Lifeco group and has approximately €12 billion of assets under management as at December 31, 2020.

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

The Company also owns a number of employee benefits and wealth consultancy businesses in Ireland.

Germany

The Company has a leading position among providers of products to the German independent intermediary market. The Company is among the top six providers in the independent intermediary market through continuous product, technology and service improvements. The low interest rate environment for traditional German insurance products has been challenging leading to increased competition in the Canada Life hybrid and lighter guarantee product categories.

Selected consolidated financial information – Europe

	For the three months ended			For the twelve months ended	
	Dec. 31 2020	Sept. 30 2020	Dec. 31 2019	**Dec. 31 2020**	Dec. 31 2019
Premiums and deposits [1]	**$ 7,896**	$ 6,114	$ 7,925	**$ 32,621**	$ 35,351
Sales [1]	**6,874**	5,313	6,566	**28,996**	31,976
Fee and other income	**351**	342	377	**1,366**	1,539
Base earnings [1]	**$ 195**	$ 182	$ 317	**$ 688**	$ 796
Items excluded from base earnings [2]					
Actuarial assumption changes and other management actions [2]	**78**	22	19	**188**	283
Market-related impacts on liabilities [2]	**(20)**	18	(9)	**(57)**	(83)
Net gain/charge on business dispositions [2]	**–**	94	8	**94**	8
Net earnings – common shareholders	**$ 253**	$ 316	$ 335	**$ 913**	$ 1,004
Total assets	**$ 189,351**	$ 180,091	$ 174,121		
Proprietary mutual funds and institutional net assets [1]	**59,381**	58,056	56,261		
Total assets under management [1]	**248,732**	238,147	230,382		
Other assets under administration [1]	**10,871**	10,420	48,738		
Total assets under administration [1] [3]	**$ 259,603**	$ 248,567	$ 279,120		

(1) This metric is a non-IFRS measure. Refer to the "Non-IFRS Financial Measures" section of this document for additional details.

(2) Items excluded from base earnings, a non-IFRS measure. Refer to the "Non-IFRS Financial Measures" section of this document for additional information.

(3) At December 31, 2020, total assets under administration excludes $7.4 billion of assets managed for other business units within the Lifeco group of companies ($7.3 billion at September 30, 2020 and $8.4 billion at December 31, 2019).

Base earnings [1] and Net earnings – common shareholders

	For the three months ended			For the twelve months ended	
	Dec. 31 2020	Sept. 30 2020	Dec. 31 2019	**Dec. 31 2020**	Dec. 31 2019
United Kingdom	**$ 96**	$ 78	$ 233	**$ 334**	$ 503
Ireland	**62**	70	52	**212**	166
Germany	**41**	37	34	**155**	136
Europe Corporate	**(4)**	(3)	(2)	**(13)**	(9)
Base earnings [1]	**$ 195**	$ 182	$ 317	**$ 688**	$ 796
United Kingdom	**$ 156**	$ 67	$ 206	**$ 423**	$ 566
Ireland	**54**	196	88	**335**	279
Germany	**47**	56	35	**168**	160
Europe Corporate	**(4)**	(3)	6	**(13)**	(1)
Net earnings – common Shareholders	**$ 253**	$ 316	$ 335	**$ 913**	$ 1,004

(1) This metric is a non-IFRS measure. Refer to the "Non-IFRS Financial Measures" section of this document for additional details.

2020 Developments

- ***COVID-19 Pandemic Impacts*** – The European businesses in the U.K., Ireland and Germany focused on supporting customers, communities and employees by providing pensions, protection and wealth management solutions for their financial, physical and mental well-being during this unprecedented time. Products, services and support are being delivered digitally to promote physical distancing and help keep customers, advisors and employees safe.

  On October 8, 2020, Canada Life U.K. reopened its real estate fund following a period of valuation uncertainty in the real estate industry caused by COVID-19. The suspension period was introduced in March following advice from the independent valuers that it was not possible to provide accurate and reliable valuations. On October 20, 2020, Irish Life removed deferral periods from its small U.K. and European property funds. The deferral period for redemptions and transfers for Irish Life's pension property fund is under review following the removal of third party appraisal uncertainty clauses in the Irish property market. The deferral period remains in place for the smaller fund focused on individual clients. Processes remain in place to facilitate hardship, death claims and certain other withdrawals as required for these funds.
- On January 31, 2020, the U.K. left the European Union (EU) and was in a transition period that ended on December 31, 2020. During December of 2020, a comprehensive trading agreement was made between the EU and U.K. which is now in force.
- On August 4, 2020, Irish Life completed the previously announced sale of Irish Progressive Services International Limited (IPSI), a wholly-owned subsidiary, whose principal activity is the provision of outsourced administration services for life assurance companies, to a member of the FNZ group of companies. The net gain resulting from the transaction was $94 million post-tax.
- As of December 31, 2020, the Company has largely completed the Canada Life U.K. restructuring program with £18 million achieved to date, compared to targeted reductions of £20 million pre-tax. The expense reductions have come from various sources including systems and process improvements and a reduction in headcount.
- During 2020, the Company completed a number of acquisitions listed below. While individually the acquisitions are not material to the Company's financial results, they position the Europe segment for growth.
  - On February 3, 2020, Irish Life, through its subsidiary Invesco Limited, completed the acquisition of Acumen & Trust DAC, an Irish financial services consultancy firm expanding into the areas of employee benefits consulting and individual financial advice.
  - On March 2, 2020, Irish Life acquired Conexim Advisors Limited (Conexim), which provides access to funds, equities, bonds and exchange traded funds across all major markets through an independent platform. Conexim provides its services through financial advisors who provide financial and investment advice to individual and corporate clients.
  - On May 1, 2020, Irish Life completed the acquisition of APT Workplace Pensions Limited, which specializes in corporate pension consultancy for multi-national and indigenous corporate clients, and APT Wealth Management Limited, which provides private wealth management to individuals.
  - On July 1, 2020, Irish Life completed the acquisition of Clearview Investments & Pensions Limited, which provides private wealth management to individuals.
  - On December 7, 2020, Irish Life announced it had entered into an agreement to acquire Harvest Financial Services Limited and Harvest Trustees Limited. Harvest Financial Services is one of Ireland's largest privately-owned wealth management firms. The transaction is subject to regulatory approval and is expected to close during the first half of 2021.

Business Units – Europe

United Kingdom

Operating Results

	For the three months ended			For the twelve months ended	
	Dec. 31 2020	Sept. 30 2020	Dec. 31 2019	**Dec. 31 2020**	Dec. 31 2019
Premiums and deposits [1]	**$ 1,361**	$ 677	$ 957	**$ 4,191**	$ 5,144
Sales [1]	**1,469**	672	1,027	**4,302**	5,229
Fee and other income	**43**	42	63	**168**	225
Base earnings [1]	**$ 96**	$ 78	$ 233	**$ 334**	$ 503
Items excluded from base earnings [2]					
Actuarial assumption changes and other management actions [2]	**80**	(27)	(9)	**114**	150
Market-related impacts on liabilities [2]	**(20)**	16	(18)	**(25)**	(87)
Net earnings	**$ 156**	$ 67	$ 206	**$ 423**	$ 566

(1) This metric is a non-IFRS measure. Refer to the "Non-IFRS Financial Measures" section of this document for additional details.

(2) Items excluded from base earnings, a non-IFRS measure. Refer to the "Non-IFRS Financial Measures" section of this document for additional information.

Premiums and deposits

Premiums and deposits for the fourth quarter of 2020 increased by $0.4 billion to $1.4 billion compared to the same quarter last year, primarily due to higher bulk and individual annuity sales, partially offset by lower wealth management sales.

For the twelve months ended December 31, 2020, premiums and deposits decreased by $1.0 billion to $4.2 billion compared to the same period last year, primarily due to lower wealth management and individual annuity sales, partially offset by higher bulk annuity sales and the impact of currency movement.

Premiums and deposits for the fourth quarter of 2020 increased by $0.7 billion compared to the previous quarter, primarily due to higher bulk and individual annuity sales.

Sales

Sales for the fourth quarter of 2020 increased by $0.4 billion to $1.5 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, 2020, sales decreased by $0.9 billion to $4.3 billion compared to the same period last year, primarily due to lower wealth management and individual annuity sales, partially offset by higher bulk annuity sales and the impact of currency movement.

Sales for the fourth quarter of 2020 increased by $0.8 billion compared to the previous quarter, primarily due to higher bulk and individual annuity sales.

Fee and other income

Fee and other income for the fourth quarter of 2020 decreased by $20 million to $43 million compared to the same quarter last year, primarily due to lower management fees as a result of the unit-linked policies sold to Scottish Friendly in the fourth quarter of 2019.

For the twelve months ended December 31, 2020, fee and other income decreased by $57 million to $168 million compared to the same period last year, primarily due to the same reasons discussed for the in-quarter results.

Fee and other income for fourth quarter of 2020 of $43 million was comparable to the previous quarter.

Base earnings

Base earnings for the fourth quarter of 2020 decreased by $137 million to $96 million compared to the same quarter last year. The decrease was primarily due to the positive impact of the resolution of an outstanding issue with a foreign tax authority in the fourth quarter of 2019 as well as unfavourable group mortality experience. These items were partially offset by higher impact of new business and favourable group morbidity and longevity experience.

Base earnings for the twelve months ended December 31, 2020 decreased by $169 million to $334 million compared to the same period last year. The decrease was primarily due to lower impact of new business, unfavourable group mortality experience and lower contributions from investment experience, partially offset by favourable group morbidity and longevity experience. In addition, the twelve months ended December 31, 2019 included the positive impact of the resolution of an outstanding issue with a foreign tax authority.

Base earnings for the fourth quarter of 2020 increased by $18 million compared to the previous quarter, primarily due to higher impact of new business and favourable investment experience, partially offset by unfavourable mortality experience.

Net earnings

Net earnings for the fourth quarter of 2020 decreased by $50 million to $156 million compared to the same quarter last year. The decrease was primarily due to the same reasons discussed for base earnings for the same period, partially offset by higher contributions from insurance contract liability basis changes.

Net earnings for the twelve months ended December 31, 2020 decreased by $143 million to $423 million compared to the same period last year. The decrease was primarily due to lower contributions from insurance contract liability basis changes as well as the same reasons discussed for base earnings for the same period, partially offset by lower unfavourable market-related impacts related to changes to certain tax estimates driven by equity market declines in 2020.

Net earnings for the fourth quarter of 2020 increased by $89 million compared to the previous quarter, primarily due to higher contributions from insurance contract liability basis changes and the same reasons discussed for base earnings for the same period. These items were partially offset by the unfavourable market-related impacts relating to changes to certain tax estimates driven by equity market recovery in the fourth quarter of 2020 and a positive contribution from property valuations in the third quarter not repeated in fourth quarter of 2020. Included in the third quarter of 2020 was a positive impact from property valuations.

Outlook – United Kingdom

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

The short-term outlook for the retail payout annuities market is negative due to the COVID-19 pandemic. Over the medium to long-term, management expects the market will continue to show modest growth. Individuals continue to have flexibility in 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. However, the Company expects that the attractiveness of guaranteed income from annuities will remain a key part of customers' retirement planning in the future and the Company sees the opportunity to grow its payout annuity business in line with the expected growth in the overall retirement market.

The overall size of the retirement market continues to grow as more employers transition from defined benefit to defined contribution pension plans, with significant growth expected in equity release, pension consolidation and income drawdown. The Company will continue to develop products for individuals who require additional pension flexibility and will further develop its presence in the bulk annuity market where trustees of defined benefit schemes want to remove longevity risk by insuring its pension liabilities near to or already in payment.

Canada Life continues to be a key player in the single premium investment bond marketplace. It will continue to develop its presence in both the international and onshore market segments. The Company's distribution strategy for onshore will remain focused on financial advisors. In the international wealth management segment, the outlook is cautiously optimistic with an expectation that the market will recover from COVID-19 and continue to grow. The majority of the Company's business growth is expected to be through discretionary fund management wealth advisors, the retail market and through tax and estate planning products.

2020 has seen increased mortality claims from COVID-19, which have broadly been balanced by increased annuitant mortality experience and that is expected to continue in 2021. The Company expects a reduction in the existing group customer base in 2021 with a contraction of employment arising from COVID-19 impact on the U.K. economy. This is expected to return to moderate growth in 2021 now that employers have implemented the changes required by the Auto Enrollment legislation. The Company's group operations will continue to maintain pricing discipline, reflecting the current low interest rate environment and the outlook for the group risk operation remains positive.

The Company's bulk annuity capability has been enhanced by an outsourcing agreement in 2020, which will allow the administration of deferred annuities in the future. The increased capability in the expanding equity release mortgage market allows improved annuity market competitiveness as well as providing an enhanced product offering to customers.

Ireland

Operating Results

	For the three months ended			For the twelve months ended	
	Dec. 31 2020	Sept. 30 2020	Dec. 31 2019	**Dec. 31 2020**	Dec. 31 2019
Premiums and deposits (1) (2)	**$ 6,161**	$ 5,136	$ 6,602	**$ 27,168**	$ 29,011
Sales (1) (2)	**5,270**	4,561	5,393	**24,312**	26,378
Fee and other income	**189**	189	229	**752**	927
Base earnings (1)	**$ 62**	$ 70	$ 52	**$ 212**	$ 166
Items excluded from base earnings (3)					
Actuarial assumption changes and other management actions (3)	**(6)**	31	27	**52**	114
Market-related impacts on liabilities (3)	**(2)**	1	9	**(23)**	(1)
Net gain on IPSI sale (3)	**–**	94	–	**94**	–
Net earnings	**$ 54**	$ 196	$ 88	**$ 335**	$ 279

(1) This metric is a non-IFRS measure. Refer to the "Non-IFRS Financial Measures" section of this document for additional details.

(2) For the three and twelve months ended December 31, 2020, premiums and deposits and sales exclude $29 million and $0.6 billion, respectively, of assets managed for other business units within the Lifeco group of companies ($0.1 billion and $0.8 billion for the three and twelve months ended December 31, 2019 and $0.1 billion for the three months ended September 30, 2020).

(3) Items excluded from base earnings, a non-IFRS measure. Refer to the "Non-IFRS Financial Measures" section of this document for additional information.

Premiums and deposits

Premiums and deposits for the fourth quarter of 2020 decreased by $0.4 billion to $6.2 billion compared to the same quarter last year, primarily due to lower fund management and retail sales, partially offset by the renewal of health premiums and higher pension sales as well as the impact of currency movement.

For the twelve months ended December 31, 2020, premiums and deposits decreased by $1.8 billion to $27.2 billion compared to the same period last year, primarily due to the same reasons discussed for the in-quarter results.

Premiums and deposits for the fourth quarter of 2020 increased by $1.0 billion compared to the previous quarter, primarily due to higher fund management and the renewal of health premiums.

Sales

Sales for the fourth quarter of 2020 decreased by $0.1 billion to $5.3 billion compared to the same quarter last year, primarily due to lower fund management and retail sales, partially offset by higher corporate pension sales and the impact of currency movement.

For the twelve months ended December 31, 2020, sales decreased by $2.1 billion to $24.3 billion compared to the same period last year, primarily due to the same reasons discussed for the in-quarter results.

Sales for the fourth quarter of 2020 increased by $0.7 billion compared to the previous quarter, primarily due to higher fund management.

For the fund management businesses, net cash outflows in the fourth quarter of 2020 were $1.5 billion compared to net cash inflows of $1.5 billion for the same period last year and net cash outflows of $1.4 billion for the previous quarter. Net cash outflows for the twelve months ended December 31, 2020 were $1.1 billion compared to net cash inflows of $10.3 billion for the same period last year.

Fee and other income

Fee and other income for the fourth quarter of 2020 decreased by $40 million to $189 million compared to the same quarter last year, primarily due to a new reinsurance treaty and lower management fees as a result of the sale of IPSI, partially offset by the impact of currency movement.

For the twelve months ended December 31, 2020, fee and other income decreased by $175 million to $752 million compared to the same period last year, primarily due to the same reasons discussed for the in-quarter results.

Fee and other income for fourth quarter of 2020 was comparable to the previous quarter.

Base earnings

Base earnings for the fourth quarter of 2020 increased by $10 million to $62 million compared to the same quarter last year. The increase was primarily due to favourable morbidity experience, partially offset by lower contributions from investment experience, less favourable mortality and expense experience and lower impact of new business.

Base earnings for the twelve months ended December 31, 2020 increased by $46 million to $212 million compared to the same period last year. The increase was primarily due to favourable mortality and morbidity experience, partially offset by lower impact of new business and higher expenses.

Base earnings for the fourth quarter of 2020 decreased by $8 million compared to the previous quarter, primarily due to less favourable morbidity experience.

Net earnings

Net earnings for the fourth quarter of 2020 decreased by $34 million to $54 million compared to the same quarter last year, primarily due to unfavourable contributions from insurance contract liability basis changes, partially offset by the same reasons discussed for base earnings.

Net earnings for the twelve months ended December 31, 2020 increased by $56 million to $335 million compared to the same period last year. The increase was primarily due to the same reasons discussed for base earnings for the same period as well as the net gain on the sale of IPSI. The increase was partially offset by less favourable contributions from insurance contract liability basis changes and unfavourable market-related impacts related to unhedged market movements in the first quarter of 2020. Market impacts were primarily driven by the impact of the equity market declines and volatility and lower interest rates in the first quarter of 2020 on segregated fund guarantees.

Net earnings for the fourth quarter of 2020 decreased by $142 million compared to the previous quarter, primarily due to the net gain on the sale of IPSI. Excluding the IPSI gain, the decrease is primarily due to unfavourable contributions from insurance contract liability basis changes and the same reasons discussed for base earnings for the same period.

Outlook – Ireland

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

Although the pandemic crisis continues to have a substantial impact, economic growth, measured by gross domestic product (GDP), is forecasted to be 3% in 2021, comparable to 2020. This reflects strong multinational Pharma and Information and Communication Technology exports, offset by significant pandemic control measures. A range of government Pandemic Unemployment Payments (PUP) were put in place in 2020, and while the unadjusted measure for unemployment was 7.2% at December 2020, the adjusted rate for those in receipt of PUP was 20.4%. While consumer confidence has been negatively impacted by the crisis, household savings levels have increased to record levels, presenting an opportunity as households turn to investments as a way to maximize returns in the low interest rate environment, possibly influenced by strong returns in equity markets.

Irish Life's vision to be "Ireland's home of Health and Wealth" continues to drive mergers and acquisitions, innovation and transformation initiatives in the Irish business unit. Society's transition to mobile and virtual working was the backdrop to the Company's digital developments in 2020 which saw the successful roll out of digital workplace and virtual financial advice models. The Company is accruing benefits from being a collaborative, centrally connected, inquisitive and digitally enabled organization that embraces technology for the benefit of all its stakeholders. The Company's broadly diversified product portfolio, distribution channels and target market segments have helped it to adapt successfully to the challenges of the pandemic, and position it to benefit from any upturn in the Irish economy post-crisis.

Germany

Operating Results

	For the three months ended			For the twelve months ended	
	Dec. 31 2020	Sept. 30 2020	Dec. 31 2019	**Dec. 31 2020**	Dec. 31 2019
Premiums and deposits (1)	$ **374**	$ 301	$ 366	$ **1,262**	$ 1,196
Sales (1)	**135**	80	146	**382**	369
Fee and other income	**119**	111	109	**446**	411
Base earnings (1)	$ **41**	$ 37	$ 34	$ **155**	$ 136
Items excluded from base earnings (2)					
Actuarial assumption changes and other management actions (2)	**4**	18	1	**22**	19
Market-related impacts on liabilities (2)	**2**	1	–	**(9)**	5
Net earnings	$ **47**	$ 56	$ 35	$ **168**	$ 160

(1) This metric is a non-IFRS measure. Refer to the "Non-IFRS Financial Measures" section of this document for additional details.

(2) Items excluded from base earnings, a non-IFRS measure. Refer to the "Non-IFRS Financial Measures" section of this document for additional information.

Premiums and deposits

Premiums and deposits for the fourth quarter of 2020 increased by $8 million to $374 million compared to the same quarter last year, primarily due to the impact of currency movement, partially offset by lower pension sales.

For the twelve months ended December 31, 2020, premiums and deposits increased by $66 million to $1,262 million compared to the same period last year, primarily due to higher segregated fund premiums and the impact of currency movement.

Premiums and deposits for the fourth quarter of 2020 increased by $73 million compared to the previous quarter, primarily due to higher pension sales.

Sales

Sales for the fourth quarter of 2020 decreased by $11 million to $135 million compared to the same quarter last year, primarily due to lower pension sales, partially offset by the impact of currency movement.

For the twelve months ended December 31, 2020, sales increased by $13 million to $382 million compared to the same period last year, primarily due to the impact of currency movement.

Sales for the fourth quarter of 2020 increased by $55 million compared to the previous quarter, primarily due to higher pension sales.

Fee and other income

Fee and other income for the fourth quarter of 2020 increased by $10 million to $119 million compared to the same quarter last year, primarily due to higher management fees on segregated fund assets and the impact of currency movement.

For the twelve months ended December 31, 2020, fee and other income increased by $35 million to $446 million compared to the same period last year, primarily due to the same reasons discussed for the in-quarter results.

Fee and other income for fourth quarter of 2020 increased by $8 million compared to the previous quarter, primarily due to higher management fees on segregated fund assets.

Base earnings

Base earnings for the fourth quarter of 2020 increased by $7 million to $41 million compared to the same quarter last year and increased by $4 million compared to the previous quarter, primarily due to higher impact of new business and lower expenses.

Base earnings for the twelve months ended December 31, 2020 increased by $19 million to $155 million compared to the same period last year, primarily due to the impact of changes to certain tax estimates and higher impact of new business.

Net earnings

Net earnings for the fourth quarter of 2020 increased by $12 million to $47 million compared to the same quarter last year. The increase was primarily due to favourable contributions from insurance contract liability basis changes and the same reasons discussed for base earnings for the same period.

Net earnings for the twelve months ended December 31, 2020 increased by $8 million to $168 million compared to the same period last year. The increase was primarily due to the same reasons discussed for base earnings for the same period, partially offset by the unfavourable equity market impacts related to variable annuity guarantees and related hedge ineffectiveness.

Net earnings for the fourth quarter of 2020 decreased by $9 million compared to the previous quarter, primarily due to lower contributions from insurance contract liability basis changes, partially offset by the same reasons discussed for base earnings for the same period.

Outlook – Germany

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

The outlook for the German business continues to be positive and the Company expects continued growth in assets under management and its share of the market during 2021. The Company is positioning itself to further strengthen its presence through continued investments in product development, distribution technology and service improvements.

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.

In the fourth quarter of 2020, Europe Corporate had a net loss of $4 million compared to net earnings of $6 million for the same period last year. The fourth quarter of 2019 results included a net gain on the Scottish Friendly transaction of $8 million. Excluding this item, the net loss increased by $2 million, primarily due to lower expenses.

For the twelve months ended December 31, 2020, Europe Corporate had a net loss of $13 million compared to $1 million for the same period last year, primarily due to the same reasons discussed for the in-quarter results.

For the three months ended December 31, 2020, Europe Corporate had a net loss of $4 million compared to a net loss of $3 million for the previous quarter, primarily due to higher expenses.

Capital and Risk Solutions

The Capital and Risk Solutions segment of Lifeco includes the operating results of the Reinsurance business unit which operates primarily in the U.S., Barbados, Bermuda and Ireland, together with an allocation of a portion of Lifeco's corporate results. Capital and Risk Solutions Corporate consists of items not associated directly with or allocated to the Reinsurance business unit as well as the results for the legacy international businesses.

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.

Impact of currency movement is a non-IFRS financial measure. Refer to the "Non-IFRS Financial Measures" section of this document for additional details.

Business Profile

Reinsurance

Reinsurance provides capital and risk solutions and operates primarily in the U.S., Barbados, Bermuda and Ireland. In the U.S., the reinsurance business operates through a branch of Canada Life, subsidiaries of Canada Life and a subsidiary of GWL&A. In Barbados, the reinsurance business operates primarily through a branch of Canada Life and subsidiaries of Canada Life. In Bermuda and Ireland, the reinsurance business operates through a subsidiary of Canada Life. In the third quarter of 2020, Capital and Risk Solutions established a subsidiary in Bermuda. The subsidiary, Canada Life International Reinsurance Corporation Limited, has been approved as a Certified Reinsurer by the Michigan Department of Insurance and Financial Services.

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 enable those companies to manage their insurance risk.

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

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

Market Overview

Products and Services

Reinsurance
Market Position • Among the top two life reinsurers in the U.S. for assumed structured life reinsurance [(1)] • Leading provider in the evolving European structured life reinsurance market • Ranked 6th for traditional mortality reinsurance in the U.S. • Leading provider of U.K. and other European annuity/longevity reinsurance • Long-standing provider of a range of property and casualty catastrophe retrocession coverages
Products and Services ***Life*** • Yearly renewable term • Co-insurance • Modified co-insurance • Capital management solutions ***Mortgage and Surety Reinsurance*** • Stop loss ***Annuity / Longevity*** • Longevity protection • Payout annuity • Fixed annuity ***Property & Casualty*** • Catastrophe retrocession • Capital management solutions
Distribution • Independent reinsurance brokers • Direct placements

(1) As at November 30, 2019 (biennial survey)

Competitive Conditions

Reinsurance

In the U.S. life reinsurance market, insurers continue to view reinsurance as an important tool for risk and capital management. Several competitors are now focusing on growing their market share, which resulted in increased competition. However, a biennial independent industry survey released in November 2019 confirmed that the Company remains one of the top two providers of risk and capital management solutions in the U.S. market.

The Company's financial strength and ability to offer risk and capital solutions and traditional mortality reinsurance continues to be a competitive advantage.

In Europe, Solvency II dominates the regulatory landscape and interest in capital management transactions that produce capital benefits continues to grow. Demand for longevity reinsurance remains strong in the U.K., the Netherlands and some other continental European countries. As a result, there are now more reinsurers participating in this market.

Selected consolidated financial information – Capital and Risk Solutions

	For the three months ended			For the twelve months ended	
	Dec. 31 2020	Sept. 30 2020	Dec. 31 2019	**Dec. 31 2020**	Dec. 31 2019
Premiums and deposits [1]	**$ 5,336**	$ 4,490	$ 4,462	**$ 19,407**	$ 17,466
Fee and other income	**3**	3	2	**11**	9
Base earnings [1]	**$ 124**	$ 156	$ 157	**$ 536**	$ 401
Items excluded from base earnings [2]					
Actuarial assumption changes and other management actions [2]	**43**	2	(40)	**78**	(15)
Market-related impact on liabilities [2]	**–**	9	–	**–**	–
Net earnings – common shareholders	**$ 167**	$ 167	$ 117	**$ 614**	$ 386
Total assets	**$ 14,861**	$ 14,815	$ 15,130		
Proprietary mutual funds and institutional assets [1]	**–**	–	–		
Total assets under management [1]	**14,861**	14,815	15,130		
Other assets under administration [1]	**–**	–	–		
Total assets under administration [1]	**$ 14,861**	$ 14,815	$ 15,130		

(1) This metric is a non-IFRS measure. Refer to the "Non-IFRS Financial Measures" section of this document for additional details.

(2) Items excluded from base earnings, a non-IFRS measure. Refer to the "Non-IFRS Financial Measures" section of this document for additional information.

Base earnings [1] and Net earnings – common shareholders

	For the three months ended			For the twelve months ended	
	Dec. 31 2020	Sept. 30 2020	Dec. 31 2019	**Dec. 31 2020**	Dec. 31 2019
Reinsurance	**$ 124**	$ 157	$ 162	**$ 539**	$ 405
Capital and Risk Solutions Corporate	**–**	(1)	(5)	**(3)**	(4)
Base earnings [1]	**$ 124**	$ 156	$ 157	**$ 536**	$ 401
Reinsurance	**171**	168	128	**621**	397
Capital and Risk Solutions Corporate	**(4)**	(1)	(11)	**(7)**	(11)
Net earnings – common shareholders	**$ 167**	$ 167	$ 117	**$ 614**	$ 386

(1) This metric is a non-IFRS measure. Refer to the "Non-IFRS Financial Measures" section of this document for additional details.

2020 Developments

- ***COVID-19 Pandemic Impacts*** – The Capital and Risk Solutions segment continues to have a strong new business pipeline and has not seen a material impact as a result of the COVID-19 pandemic in 2020. Capital and Risk Solutions will continue to focus on meeting market demand for life reinsurance involving capital solutions in the U.S. and Europe.
- The Company offers property catastrophe coverage to reinsurance companies. Current preliminary estimates of industry losses arising from catastrophe events in 2020 do not reach the level where any claims would be anticipated. As any precautionary claim notifications are unlikely to be received for some period of time, the Company will continue to monitor events and will update any estimates as required.
- On May 20, 2020, the Company announced it had entered into a long-term longevity reinsurance agreement with an insurance company in the Netherlands. The agreement covers approximately €5.3 billion of pension liabilities and close to 82,000 in-payment pensioners. In exchange for ongoing premium payments, the Company will pay the actual benefit obligations incurred by the insurance company.
- On July 7, 2020, the Company announced it had entered into a long-term longevity reinsurance agreement with an insurance company in the U.K. The agreement covers approximately £1.4 billion of pension liabilities and approximately 2,700 in-payment pensioners. In exchange for ongoing premium payments, the Company will pay the actual benefit obligations incurred by the insurance company.
- On December 15, 2020, the Company announced it had entered into a long-term longevity reinsurance agreement with an insurance company in the U.K. The agreement covers approximately £3 billion of pension liabilities and approximately 7,500 in-payment pensioners. In exchange for ongoing premium payments, Canada Life will pay the actual benefit obligations incurred by the insurance company.

Business Units – Capital and Risk Solutions

Reinsurance

Operating Results

	For the three months ended			For the twelve months ended	
	Dec. 31 2020	Sept. 30 2020	Dec. 31 2019	**Dec. 31 2020**	Dec. 31 2019
Premiums and deposits (1)	**$ 5,330**	$ 4,484	$ 4,455	**$ 19,385**	$ 17,443
Fee and other income	**3**	3	2	**11**	9
Base earnings (1)	**$ 124**	$ 157	$ 162	**$ 539**	$ 405
Items excluded from base earnings (2)					
Actuarial assumption changes and other management actions (2)	**47**	2	(34)	**82**	(8)
Market-related impact on liabilities (2)	**–**	9	–	**–**	–
Net earnings	**$ 171**	$ 168	$ 128	**$ 621**	$ 397

(1) This metric is a non-IFRS measure. Refer to the "Non-IFRS Financial Measures" section of this document for additional details.

(2) Items excluded from base earnings, a non-IFRS measure. Refer to the "Non-IFRS Financial Measures" section of this document for additional information.

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 2020 of $5.3 billion increased by $0.9 billion compared to the same quarter last year, primarily due to new reinsurance agreements and volumes relating to existing business.

For the twelve months ended December 31, 2020, premiums and deposits increased by $1.9 billion to $19.4 billion compared to the same period last year, primarily due to new reinsurance agreements and higher volumes relating to existing business.

Premiums and deposits for the fourth quarter of 2020 increased by $0.8 billion compared to the previous quarter, primarily due to new reinsurance agreements and higher volumes relating to existing business.

Fee and other income

Fee and other income for the fourth quarter of 2020 of $3 million was comparable to the previous quarter and to the same quarter last year.

For the twelve months ended December 31, 2020, fee and other income of $11 million was comparable to the same period last year.

Base earnings

Base earnings for the fourth quarter of 2020 decreased by $38 million to $124 million compared to the same quarter last year. The decrease primarily reflects new business strain in the fourth quarter of 2020 compared to new business gains in the fourth quarter of 2019. The results in the fourth quarter of 2020 also reflect unfavourable claims experience in the life business, partially offset by favourable longevity experience.

Base earnings for the twelve months ended December 31, 2020 increased by $134 million to $539 million compared to the same period last year, primarily due to favourable longevity experience and higher business volumes partially offset by new business strain and less favourable claims experience in the life business.

Base earnings for the fourth quarter of 2020 decreased by $33 million compared to the previous quarter. The decrease was primarily due to new business strain in the fourth quarter of 2020 compared to new business gains in the previous quarter and less favourable claims experience in the life business partially offset by higher business volumes and favourable longevity experience.

Net earnings

Net earnings for the fourth quarter of 2020 increased by $43 million to $171 million compared to the same quarter last year. The increase was primarily due to the same reasons discussed for base earnings, as well as higher contributions from insurance contract liability basis changes.

For the twelve months ended December 31, 2020, net earnings increased by $224 million to $621 million compared to the same period last year, primarily due to the same reasons discussed for base earnings and higher contributions from insurance contract liability basis changes.

Net earnings for the fourth quarter of 2020 increased by $3 million compared to the previous quarter, primarily due to higher contributions from insurance contract liability basis changes, partially offset by the base earnings impacts and a decrease in actuarial liabilities on a legacy block of business with investment performance guarantees reflecting market recoveries in the third quarter of 2020.

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.

In Europe, low interest rates and the associated financial impact on reserve and capital positions under Solvency II is a key market dynamic. The Company's Reinsurance business unit continues to help European clients and other affiliated companies meet these capital challenges through innovative reinsurance solutions. Demand for longevity reinsurance remains strong and will remain a focus for 2021.

2020 was the fourth consecutive year of significant hurricane and typhoon events. The Company expects 2021 retrocessional pricing to continue to increase. Insurance linked securities capacity is expected to decrease due to trapped collateral from 2017 to 2020 events. However, capital raising has also been evident in the market. The Company's primary focus in the property catastrophe market for 2021, will be to continue to support the core client base with prudent attachment levels and risk adjusted premiums.

Capital and Risk Solutions Corporate

In the fourth quarter of 2020, Capital and Risk Solutions Corporate had a net loss of $4 million compared to a net loss of $11 million for the same period last year, primarily due to unfavourable contributions from insurance contract liability basis associated with the legacy international business.

For the twelve months ended December 31, 2020, Capital and Risk Solutions Corporate had a net loss of $7 million compared to a net loss of $11 million for the same period last year, primarily due to the same reasons discussed for the in-quarter results.

For the three months ended December 31, 2020, Capital and Risk Solutions Corporate had a net loss of $4 million compared to a net loss of $1 million for the previous quarter, primarily due to the same reasons discussed for the in-quarter results.

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, 2020 was $16 million compared to a net loss of $6 million for the same period last year and a net loss of $12 million for the previous quarter, primarily due to higher operating expenses and lower net investment income.

The net loss for the twelve months ended December 31, 2020 was $34 million compared to a net loss of $21 million for the same period last year, primarily due to higher operating expenses, partially offset by higher net investment income.

Risk Management

COVID-19 Pandemic – Government and Regulatory Responses

While conditions have become more stable, governments and central banks in the jurisdictions in which the Company's subsidiaries operate have implemented and extended many of the measures introduced earlier in 2020 to deal with the economic impacts of the COVID-19 pandemic, including emergency spending, interest rate cuts, wage subsidies and other supports for individuals and businesses.

The overall level of regulatory engagement with the Company's regulated subsidiaries has moderated somewhat to reflect the more stable conditions. However, regulators continue to monitor the impact of the pandemic to ensure that regulated companies maintain sufficient capital and liquidity. Regulators in Canada, the U.K. and Ireland, where some of the Company's regulated subsidiaries operate, have maintained the guidance they provided earlier in 2020 on the payment of dividends and other shareholder distributions during the crisis.

On March 13, 2020, the Office of the Superintendent of Financial Institutions (OSFI) set expectations that Canadian banks and insurers should suspend share buybacks and not to increase dividend payments. The Company does not currently intend to increase dividends or engage in share repurchases.

In the U.K., the Prudential Regulatory Authority (PRA) wrote to all insurance companies in March and April 2020 to remind them to manage their financial resources prudently to ensure they are able to meet their commitments to policyholders and maintain safety and soundness and to satisfy themselves that any dividends are prudent, consistent with their risk appetite and informed by a range of scenarios including very severe ones. The Company's subsidiaries that are supervised by the PRA paid dividends in July, September and November 2020.

In Ireland, the position of the Central Bank of Ireland (CBI) is that, as the impact of COVID-19 remains uncertain, insurance firms should, at this time, postpone any dividend payment distribution or similar transactions until they can forecast their costs and future revenues with a greater degree of certainty. The CBI has indicated that it will continue to review its position in conjunction with ongoing guidance from the European Insurance and Occupational Pension Authority and the European Systematic Risk Board.

The declaration and payment of dividends by the Company in future periods remains at the discretion of its directors and will depend, among other things, on the Company's financial position, which will in turn depend on the duration of the COVID-19 pandemic and the severity and duration of the financial impacts. Although there can be no assurance, to the extent that the pandemic abates and the actions taken by governments lead to a sustained global financial recovery within a reasonable time, the Company expects that its ability to pay dividends at current levels will not be adversely impacted.

Overview

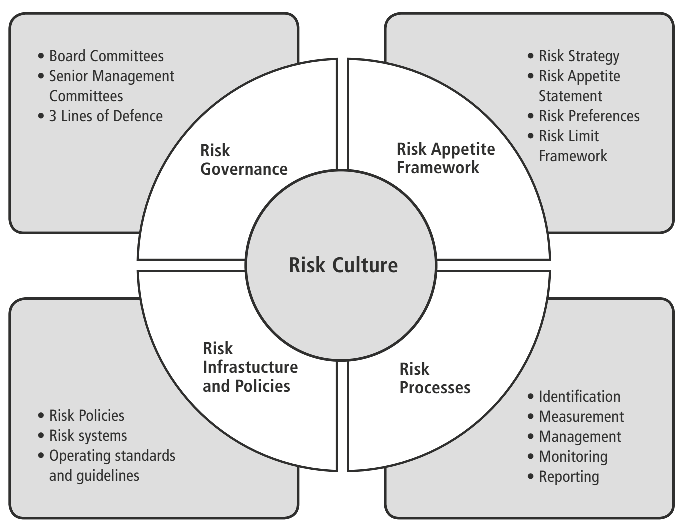
As a diverse financial services company, the effective management of risk is integral to the success of the Company's business. The Company is committed to a comprehensive system of risk management, which is embedded across all business activities, operated through a three lines of defense organization and overseen by the Board of Directors. The Company's three lines of defense include business unit and support functions, oversight functions including actuarial, finance, risk and compliance, and the Company's internal audit function. 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 losses and risks. The Company's Risk Function is responsible for the Risk Appetite Framework (RAF), the supporting risk policies and risk limit structure, and provides independent risk oversight across the Company's operations.

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

Enterprise Risk Management Framework

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



Risk Culture

Risk culture is defined as the system of values and behaviours which reflect the Company's collective sense of responsibility to fulfill its promises and safeguard the Company's financial strength and reputation while growing shareholder value. This culture reflects the Company's commitment to treat customers fairly and support open communication and ethical behaviour.

This culture is instilled through a mindset of risk awareness as demonstrated by:

- Consistent tone from the Board of Directors and senior management in respect of behavioural and ethical expectations;
- Recognition that risk is inherent in the Company's business success and reflects opportunity when appropriately managed;

- Common commitment throughout the Company to the importance of continuous management of risk, including clear accountability for and ownership of specific risks and risk areas;
- Rewarding positive risk taking and management behaviours while challenging and remediating those that are inappropriate;
- Encouragement of risk event reporting and the presence of robust whistleblowing processes, actively seeking to learn from mistakes; and
- Recognition that risk management skills and knowledge are valued, encouraged and developed, throughout the Company and supported by an appropriately resourced Risk Function.

Risk Governance

Risk governance sets out the roles and responsibilities for the Board of Directors (Board) and Board Committees.

Board of Directors

The mandate of the Board, which it discharges directly or through one of its Committees, is to supervise the management of the business and affairs of the Company. The Board is ultimately accountable and responsible for the governance and oversight of risk throughout the Company. The Board annually approves the strategic goals, objectives, plans and initiatives for Lifeco and in so doing reviews the risks associated with Lifeco's diverse business, strategic goals and high priority initiatives. Key risk responsibilities include:

- Approving the ERM Policy and RAF;
- Monitoring the implementation and maintenance by management of appropriate systems, policies, procedures and controls to manage the risks associated with the Company's businesses and operations;
- Annually approving Lifeco's business, financial and capital plans and monitoring the implementation by management thereof;
- Upon the recommendation of the Risk Committee, adopting a Code of Conduct applicable to Directors, officers and employees of the Company; and
- Periodically approving policies designed to support independence of the Internal Audit, Risk, Finance, Actuarial and Compliance oversight functions.

Risk Committee

The Risk Committee of the Board of Directors is responsible for assisting the Board with risk management oversight and governance throughout the Company. 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, conduct, strategic and other risk policies;
- Approval of the risk limit framework, associated risk limits and monitoring adherence to those limits;
- Approval of the organizational structure and resources of the risk management and compliance functions;
- Evaluation of the Company's risk culture;
- Discussion of the risks in aggregate and by type of risk;
- Review relevant reports including stress testing and Financial Condition Testing;
- Review and approval of the Own Risk and Solvency Assessment (ORSA) Report;
- Periodically approve the recovery plan playbook;
- Review of the risk impact of business strategies, capital plans, financial plans and new business initiatives;
- Review and assessment of the performance of the Company's Chief Risk Officer (CRO) and Chief Compliance Officer (CCO);
- Monitoring compliance with the Company's Code of Conduct;
- Periodic consideration and input regarding the relationships between risk and compensation; and
- Review and assessment of the effectiveness of risk management across the Company including processes to ensure effective identification, measurement, management, monitoring and reporting on significant current and emerging risks.

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

Audit Committee – The primary mandate of the Audit Committee is to review the financial statements of the Company and public disclosure documents containing financial information and to report on such review to the Board, to be satisfied that adequate procedures are in place for the review of the Company's public disclosure documents that contain financial information and to oversee the work and review the independence of the external auditor. The Audit Committee is also responsible for reviewing, evaluating and approving the internal control procedures that are implemented and maintained by management. The Audit Committee meets as often as necessary to discharge its duties and responsibilities and meets at least annually, with the Risk Committee. Members of the Audit Committee are independent of management.

Conduct Review Committee – The primary mandate of the Conduct Review Committee is to require management to establish satisfactory procedures for the consideration and approval of material transactions with related parties and to review and, if deemed appropriate, to approve related party transactions in accordance with such procedures. Members of the Conduct Review Committee are independent of management.

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

Human Resources Committee – The primary mandate of the Human Resources Committee is to support the Board in its oversight of compensation, talent management and succession planning. This includes the responsibility to approve compensation policies, to review the designs of major compensation programs, to approve compensation arrangements and any benefit or perquisite plan for senior executives of the Company and to recommend to the Board compensation arrangements for the Directors and for the President and Chief Executive Officer. The mandate also includes the responsibility to review succession plans for the President and Chief Executive Officer and other senior executives, to review talent management programs and initiatives and to review the leadership capabilities required to support the advancement of the Company's strategic objectives. The Human Resources Committee is also responsible for considering the implications of the risks associated with the Company's compensation policies, plans and practices and in doing so meets annually with the Chief Risk Officer. The Human Resources Committee also meets with the Risk Committee on an as needed basis.

Investment Committee – The primary mandate of the Investment Committee is to oversee the Company's global investment strategy and activities, including approving the Company's Investment Policy and monitoring the Company's compliance with the Investment Policy. The mandate also includes reviewing the Company's annual investment plan and monitoring emerging risks, market trends and performance, investment regulatory issues and any other matters relevant to the oversight of the Company's global investment function. The Investment Committee meets as often as necessary to discharge its duties and responsibilities and meets with the Risk Committee as appropriate.

Reinsurance Committee – The primary mandate of the Reinsurance Committee is to advise on the Corporation's reinsurance transactions. The mandate also includes reviewing and approving management's recommendations with respect to policies applicable to reinsurance.

Senior Management Risk Committees

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

- Market and Credit Risk 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. In addition, each business segment has established its own executive risk management committee providing oversight for all forms of risk and the implementation of the ERM Framework.

Accountabilities

The Company has adopted a Three Lines of Defense model to clearly segregate risk management and risk oversight responsibilities and applies the ERM Framework rigorously across the enterprise:

- **First Line:** Business units and business support functions, including Investment Management, Human Resources, Information Services and Legal, are the ultimate owners of the risk and have primary risk management as well as risk-taking responsibility and accountability through day-to-day operations within ongoing business process;
- **Second Line:** The Risk Function has the primary and overall responsibility and accountability for independent oversight of risk-taking and risk management of the first line of defense. In this role, the Risk Function receives support from other oversight functions including Actuarial, Compliance and Finance; and
- **Third Line:** Internal Audit is responsible for independent assurance of 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 Chief Executive Officer 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.

Business Segment 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 and further support is provided by centrally based risk areas of expertise.

Although the Company takes steps to anticipate and minimize risks in general, no risk management framework can guarantee that all risks will be identified, appreciated or mitigated effectively. Unforeseen future events may have a negative impact on the Company's business, financial condition and results of operations.

RISK APPETITE FRAMEWORK

The Company has an articulated Risk Appetite Framework (RAF) that includes the following elements along with the associated governance structure:

- **Risk Strategy:** Risk philosophy of the Company that links to the business strategy
- **Risk Appetite Statement:** Qualitative reflection of the aggregate level of risk and types of risk that the Company is willing to accept to achieve its business objective
- **Risk Preference:** Qualitative description of risk tolerances
- **Risk Limit Framework:** Quantitative components of the RAF including excess and escalation process

Risk Strategy

The Company's business strategy is aligned with its risk strategy and risk appetite. The risk strategy supports the Company's main objectives to keep its commitments while growing shareholder value. The risk strategy requires:

- diversification of products and services, customers, distribution channels and geographies;
- a prudent and measured approach to risk-taking;
- resilience of business operations and sustainable growth, taking into consideration corporate social responsibility;
- conducting business to safeguard the Company's reputation and deliver fair customer outcomes through maintaining high standards of integrity based on the Code of Conduct and sound sales and marketing practices; and
- generating returns to grow shareholder value through profitable and growing operations while maintaining a strong balance sheet.

Risk Appetite Statement

The Company's Risk Appetite Statement has four key components:

- **Strong Capital Position:** The Company intends to maintain a strong balance sheet and not take risks that would jeopardize its financial strength;
- **Mitigated Earnings Volatility:** The Company seeks to avoid substantial earnings volatility through appropriate diversification and limiting exposure to more volatile lines of business;
- **Strong Liquidity:** The Company intends to maintain a high quality, diversified investment portfolio with sufficient liquidity to meet the demands of policyholder and financing obligations under normal and stressed conditions; and
- **Treating Customers Fairly and Maintaining the Company's Reputation:** The Company seeks to maintain a high standing and positive reputation with its customers, counterparties, creditors and other stakeholders. This includes building and maintaining trust, fair treatment of the customers, consideration of corporate social responsibility, and effective management of sustainability and reputational risk.

Risk Preference

The Company has established qualitative risk preferences for each risk type. Each risk is assigned a risk preference level, in the context of understanding and managing these risks. The current level of exposure is regularly measured and risk tolerances are expressed quantitatively through actual constraints to the Company's risk profile within pre-agreed limits. Maximum guidelines are established to monitor risk concentration and inform the risk limit setting process.

Risk Limit Framework

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 excess 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. Business units are responsible for operating within the risk appetite and the risk limit framework and satisfying local needs as required.

Risk Processes

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

Risk Identification, Measurement and Management

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

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

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

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

Risk Monitoring, Reporting and Escalation

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

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

A clearly defined escalation protocol is in place to address any excesses against thresholds or limits established by the RAF, risk policies, operating standards and guidelines. Remediation plans are reviewed by the Risk Function and escalated to designated management and Board committees.

Risk Infrastructure and Policies

The Company's organization and infrastructure is established to provide resources and risk systems to support adequate and appropriate risk policies, operating standards and guidelines and processes. The Company endeavours to take a consistent approach to risk management across key risk types.

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 business segment.

Risk Management and Control Practices

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

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

COVID-19 Pandemic

The global pandemic is elevating disruption themes, amplifying existing financial and nonfinancial risks, introducing new uncertainties, and highlighting interdependencies and accentuating risk correlations.

Many factors still remain unknown, such as the depth and length of the recession, rollout and efficacy of vaccines, ongoing effectiveness of monetary and fiscal stimulus, and impacts from the cross-accumulation of risks. Near and longer term implications of COVID-19 pandemic raise several unique challenges that may affect Lifeco's business strategy.

The Company is monitoring the situation closely, including carrying out stress and scenario testing, and has implemented processes for the continuation of operations and to support the well-being of customers, employees and broader communities. The risks associated with the COVID-19 pandemic (financial, operational, regulatory and other risks) are being managed within the Company's existing risk management framework.

Market and Liquidity Risk

Risk Description

Market risk is the risk of loss resulting from potential changes in market rates, prices or liquidity in various markets such as for interest rates, real estate, currency, common shares and commodities. Exposure to this risk results from business activities including investment transactions which create on-balance sheet and off-balance sheet positions.

Liquidity risk is the risk of the Company's inability to generate the necessary funds to meet its obligations as they come due, including off-balance sheet commitments and obligations.

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 other policies and guidelines that provide detailed guidance.

A 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, excess management and mitigation pertaining to market risk. Each business segment has established oversight committees and operating committees to help manage market risk within the segment. The Company has developed risk limits, RFIs and measures to support the management of market and liquidity risk in compliance with the Company's RAF. The Risk Function works with the business units and other oversight functions to identify current and emerging market risks and take appropriate action, if required.

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. To reduce market risk, the Company uses a dynamic hedging program associated with segregated fund and variable annuity guarantees. This is supplemented by a general macro equity hedging program that has been established to execute hedge transactions in circumstances and at levels that have been determined by the Company.

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

Interest Rate Risk

Interest rate risk is the risk of loss resulting from the effect of the volatility and uncertainty of future interest rates on asset cash flows relative to liability cash flows and on assets backing surplus. This also includes changes in the amount and timing of cash flows related to asset and liability optionality, including interest rate guarantees and book value surrender benefits in the liabilities.

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 supporting insurance and investment contract liabilities are segmented to align with the duration and other characteristics (e.g. liquidity) of the associated liabilities.

A prolonged period of low interest rates may adversely impact the Company's earnings and regulatory capital and could impact the Company's business strategy. During periods of prolonged low interest rates, investment earnings may be lower because the interest earned on new fixed income investments will likely have declined with the market interest rates, and hedging costs may increase. Also, early repayment on investments held such as mortgage-backed securities, asset-backed securities, and callable bonds, may be experienced and proceeds forced to be reinvested at lower yields, which will reduce investment margins.

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. These hedging programs are designed to offset changes in the economic value of liabilities using 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 value of assets, liabilities, financial instruments and fee revenue to changes in the level or in the volatility of market prices of common shares and real estate. This includes the equity risk associated with the Company's general fund assets and investments on account of segregated fund policyholders.

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 using derivative instruments. The Company's approach to dynamic hedging of equity risk principally involves the short selling of equity index futures. The hedge asset portfolios are dynamically rebalanced within approved thresholds and rebalancing criteria. The Company's product-level hedging programs are supplemented by a general macro hedging strategy that has been established to execute hedge transactions in circumstances and at levels that have been determined by the Company.

For certain very long-dated liabilities it is not practical or efficient to closely match liability cash flows with fixed-income investments. Therefore, certain long-dated asset portfolios target an investment return sufficient to meet liability cash flows over the longer term. These liabilities 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. Real estate losses can arise from fluctuations in the value of or future cash flows from the Company's investments in real estate.

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

Foreign Exchange Risk

Foreign exchange risk is the risk of loss resulting from changes in currency exchange rates against the reporting currency. 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 using forward contracts and swaps.

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

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

- A 5% appreciation (depreciation) of the average exchange rate of the Canadian dollar to each of the British pound, euro and U.S. dollar would increase (decrease) net earnings in 2020 by $43 million, $34 million and $26 million, respectively.
- A 5% appreciation (depreciation) of the Canadian dollar end-of-period market rate compared to each of the U.S. dollar, British pound and euro end-of-period market rates would decrease (increase) the unrealized foreign currency translation gains, 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 $347 million, $306 million and $170 million, respectively, as at December 31, 2020.

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

The Company's liquidity risk management 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 (LCs) to other parties, or beneficiaries. A beneficiary will typically hold a LC as collateral 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 LCs at maturity. The Company monitors its use of LCs 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 LCs issued to the LC beneficiaries for certain reinsurance treaties. The Company staggers the maturities of LCs to reduce the renewal risk.

Liquidity

	December 31	
	2020	2019
Cash, cash equivalents and short-term bonds	**$ 11,197**	$ 8,852
Other liquid assets and marketable securities		
Government bonds	**33,635**	30,865
Corporate bonds	**52,583**	41,792
Common/Preferred shares (public)	**10,208**	9,766
Residential mortgages – insured	**3,785**	4,141
	$100,211	$ 86,564
Total	**$111,408**	$ 95,416

Cashable liability characteristics

	December 31	
	2020	2019
Surrenderable insurance and investment contract liabilities (1)		
At market value	**$ 50,855**	$ 21,606
At book value	**49,981**	44,829
Total	**$100,836**	$ 66,435

(1) Cashable liabilities include insurance and investment contract liabilities classified as held for sale.

The carrying value of the Company's liquid assets and marketable securities is approximately $111.4 billion or 1.1 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. Surrenderable insurance and investment contract liabilities at December 31, 2020 increased $34.4 billion compared to December 31, 2019 primarily due to the acquisition of the retirement services business of MassMutual.

Approximately 48% (approximately 57% in 2019) of insurance and investment contract liabilities are non-cashable prior to maturity or claim, with a further 26% approximately (14% in 2019) of insurance and investment contract liabilities subject to fair value adjustments under certain conditions.

The majority of liquid assets and other marketable securities comprise fixed-income securities whose value decrease when interest rates rise. Also, a high interest rate environment may encourage holders of certain types of policies to terminate their policies, thereby placing demands on the Company's liquidity position.

For a further description of the Company's financial instrument risk management policies, refer to note 8 in the Company's December 31, 2020 annual consolidated financial statements.

Credit Risk

Risk Description

Credit risk is the risk of loss resulting from an obligor's potential inability or unwillingness to fully meet its contractual obligations. Exposure to this risk occurs any time funds are extended, committed or invested through actual or implied contractual agreements. Components of credit risk include: loan loss/principal risk, pre-settlement/replacement risk and settlement risk. Obligors include issuers, debtors, borrowers, brokers, policyholders, reinsurers, derivative counterparties and guarantors.

Credit exposure resulting from the purchase of fixed-income securities, which are primarily used to support policyholder liabilities. The Company also manages financial contracts with counterparties. Such contracts may be used to mitigate insurance and market risks (reinsurance ceded agreements and derivative contracts) or they may arise from the Company's direct business operations (Reinsurance business unit) and may result in counterparty risk. The risk arising from these types of arrangements is included in the Company's measurement of its risk profile.

Credit Risk Management

The Company's credit risk management framework focuses on minimizing undue concentration of assets, in-house credit analysis to identify and measure risks, continuous monitoring, and proactive management. Diversification is achieved through the establishment of appropriate concentration limits (by asset class, issuers, credit rating, industries, and individual geographies) and transaction approval authority protocols. The Company's approach to credit risk management includes the continuous review of its existing risk profile relative to the RAF as well as to the projection of potential changes in the risk profile under stress scenarios.

Effective governance of credit risk management requires the involvement of dedicated senior management committees, experienced credit risk personnel, and with the guidance of appropriate credit risk policies, standards and processes. For credit risk, the Investment Committee 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 excess 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 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 business segment review and approve new investments above the transaction approval authority delegated to management and manage credit risk across invested assets and counterparties. The Market and Credit Risk Committee (MCRC), is the ERMC sub-committee responsible for providing oversight of market and credit risk management activities, which includes completing reviews and making recommendations regarding risk limits, the risk policy and associated compliance, excess management and mitigation pertaining to credit risk.

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 describes the role of the Risk Function in the oversight of credit risk, including the setting and monitoring of aggregate concentration 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 default, exposures at default) to all credit exposures to measure the Company's aggregate credit risk profile. In addition, the Risk Function establishes limits and processes, performs stress and scenario testing (using stochastically generated and deterministic scenarios) and assesses compliance with the limits established in the RAF. It regularly reports on the Company's credit risk profile to executive management, the Board of Directors and various committees at enterprise, business segment 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 excesses as they occur. Investment Management 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 business segment levels to plan and execute the relevant risk mitigation strategies for obligors experiencing heightened credit stress.

The Risk Function oversees monitoring, management of excesses and escalation activities, and has developed risk limits, RFIs 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

Counterparties include both reinsurers and derivative counterparties.

The Company uses reinsurance to mitigate insurance risks. This mitigation results in increased credit risk to reinsurance counterparties from the potential failure to collect reinsurance recoveries due to either the inability, or an unwillingness to fulfill their contractual obligation.

Counterparties providing reinsurance to the Company are reviewed for financial soundness as part of an ongoing monitoring process. The minimum financial strength of reinsurers is outlined in the Reinsurance Risk Management Policy. The Company seeks to minimize reinsurance credit risk through diversification as well as seeking protection in the form of collateral or funds withheld arrangements where possible.

The Company enters into derivative contracts primarily to mitigate market risks. Derivative counterparty risk is the risk of loss resulting from the potential failure of the derivative counterparty to meet their financial obligations under the contract. 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 through diversification 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 arising from 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, policyholder behaviour risk, expense risk and property catastrophe risk. Mortality risk, morbidity risk and longevity risk are core business risks and the exchange of these risks into value is a core business activity. Policyholder behaviour risk and expense risk associated with offering core products are accepted as a consequence of the business model and mitigated where appropriate. Property catastrophe risk is a selectively accepted business risk which is constrained, actively managed and controlled within risk limits.

Insurance Risk Management

Insurance products involve commitments by the insurer to provide services and financial obligations with coverage for extended periods of time. 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. As a result, the Company is exposed to product design and pricing risk which is the risk of financial loss resulting from transacting business where the costs and liabilities arising in respect of a product line exceed the pricing expectations.

Insurance contract liabilities are established to fund future claims and include a provision for adverse deviation, set in accordance with professional actuarial standards. Insurance contract liability valuation requires regular updating of assumptions to reflect emerging experience.

A 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 an 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, excess management and mitigation pertaining to insurance risk. Each business segment has established oversight committees and operating committees to help manage insurance risk within the segment.

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 several other policies and guidelines that provide detailed guidance, including:

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

The Risk Function, in conjunction with Corporate Actuarial, implements a number of processes to carry out its responsibility for oversight of insurance risk. It reviews the Insurance Risk Policy relative to current risk exposures and updates it as required. It reviews insurance risk management processes carried out by the business units, including product design and pricing, underwriting, claims adjudication, and reinsurance ceding, and provides challenge as required.

The Risk Function works with the business units and other oversight functions to identify current and emerging insurance risks and take appropriate action, if required. Insurance risk limits, risk budgets and RFIs 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 excesses are required to be escalated so that appropriate remediation may 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. The Risk Function performs thematic reviews and/or enhances the monitoring and reporting of associated exposures to these risks.

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 write business which generates 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 actuarial 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 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, some segregated fund products with Guaranteed Minimum Withdrawal Benefits and longevity reinsurance 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 consider recent Company and industry experience and the latest research on expected future trends in mortality.

Aggregate risk is managed through reinsurance to transfer the risk as appropriate, as well as consideration of capital market solutions if deemed necessary. 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.

Policyholder Behaviour Risk

Policyholder behaviour risk is the risk of loss resulting from adverse changes in the level or volatility of the rates of policy lapses, terminations, renewals, surrenders, or exercise of embedded policy options.

Many products are priced and valued to reflect the expected duration of contracts and the exercising of options embedded in those contracts. There is a risk that contracts may be terminated earlier or later than assumed in pricing and plan design. To the extent that higher costs are incurred in early contract years, there is a risk that contracts are terminated before higher early expenses can be recovered. Conversely, on certain long-term level premium products where costs increase by age, there is risk that contracts are terminated later than assumed.

Business is priced using policy termination assumptions which consider 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 as necessary for both pricing of new policies and valuation of in-force policies.

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

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

Expense Risk

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

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

Property Catastrophe Risk

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

The reinsurance business in particular has exposure to extreme or 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 resulting from potential problems relating to internal processes, people and systems or from external events. Exposure to Operational risk results from either normal day-to-day operations or a specific unanticipated event, and can have material financial and/or reputational consequences.

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 to maintain a strong reputation, standing and financial strength and to protect customers and the Company's value. Ongoing 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. The Risk Function is responsible for the development of operational risk management policies and operating standards as well as overseeing operational risk management activities performed in the first line of defense. The Operational Risk Committee has the primary mandate to provide risk oversight for operational risk across the enterprise. In addition, each business segment has established 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 including detailed practices related to stress testing, modeling, fraud, regulatory compliance, information technology risk management and risk data aggregation & risk reporting. The Company implements controls to manage operational risk through integrated policies, procedures, processes and practices, with consideration given to the cost/benefit trade-off. Processes and controls are monitored and refined by the business areas and periodically reviewed by the Company's Internal Audit department. Financial reporting processes and controls are further examined by external auditors.

The Company also manages operational risks through the corporate insurance program which mitigates a portion of the operational risk exposure by purchasing insurance coverage that provides protection against unexpected material losses resulting from events such as property loss or damage and liability exposures. 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, as well as legal requirements and contractual obligations.

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

The Risk Function monitors the status of actions being undertaken to remediate risks to ensure that risk exposures are mitigated in a timely manner. Processes are in place to escalate significant matters to senior management to inform and enable management to take appropriate action when needed. The Risk Function regularly reports on the Company's operational risk profile to executive management, the Board of Directors and various committees at enterprise, business segment 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 is the risk of loss resulting from non-compliance with specific local or international rules, laws, regulations, or prescribed practices, as well as civil or criminal litigation engaged in/by 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, Germany and other jurisdictions. These requirements cover most aspects of the Company's operations including capital adequacy, privacy, liquidity and solvency, investments, the sale and marketing of insurance and wealth 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 an adverse effect on the Company. An increase in the pace of regulatory change could lead to increased operational costs to implement changes and ensure ongoing compliance.

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, using the subject matter expertise of both local and enterprise-wide Compliance and Legal stakeholders and reporting on emerging changes that could have a significant impact on the Company's operations or business.

The Company is subject to the risk of litigation and regulatory action relating to its business, operations, products, securities and contractual relationships and it establishes contingency reserves for litigation that it determines are appropriate.

People Risk

People risk is the risk of loss resulting from the Company's inability to attract, retain, train and develop the right talent from inadequate recruitment, talent management and succession planning programs and practices, ineffective governance practices or legal action related to discrimination, and can impact the ability of the Company to meet its business objectives. The Company has compensation programs, succession planning, talent management and employee engagement processes that are designed to manage these risks, support a high performance culture and maintain a highly skilled workforce that is reflective of the diverse cultures and practices of the countries in which the Company operates. The Company's ability to recognize and accommodate changing trends with respect to human resources in the industry is important to execute upon business strategies.

Infrastructure Risk

Infrastructure risk is the risk of loss resulting from the reduction or non-availability of any aspect of a fully functioning business environment, including corporate facilities, physical assets, human resources and/or technology (technology assets, systems, applications, cloud computing and virtualization), 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 customer confidence, non-compliance of regulatory requirements, harm to the Company's reputation, exposure to disciplinary action and liability to the Company's customers.

The Company invests in and manages infrastructure that is intended to be sustainable and effective in meeting the Company's needs for a fully functioning and secure business operation that protects assets and stakeholder value. Infrastructure risk management programs include strong business continuity capabilities across the enterprise to manage incidents or outages and the recovery of critical functions in the event of a disaster. In addition, security measures are intended 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.

Physical Security Risk – Physical security risk is the risk of damage to physical assets, physical data, corporate facilities or human resources.

Physical security risk management entails safeguarding people, facilities, hardware and software assets, network infrastructure, and digital data from physical incidents which can cause significant loss to the organization. Physical security threats can be natural, such as weather events and floods, man-made, such as theft or workplace violence or inadvertent, such as industrial or motor vehicle accidents. Physical security strategies also complement the cybersecurity protocols, structures and technology that protect our digital assets.

The objective of physical security risk management is to identify, assess, and mitigate the impact of security risks to the Company, and utilize physical security measures which allow the Company to advance its overall objectives. Physical security risk management is a strategic approach that links the Company's physical security measures to its operations using established and acceptable risk management strategies.

IT and Cyber Risk – IT and cyber risk is the risk of loss resulting from events such as failures, faults or incompleteness in computer operations, or illegal or unauthorized use of computer systems. It includes the risk of cyber-attack that leads to unplanned outages, unauthorized access, or unplanned disclosure of confidential or restricted information resulting in a potential privacy non-compliance. IT risk includes not only the risk of existing failures, faults or incompleteness in computer operations but also the risk of a deterioration in the reliability and availability of internal, customer-facing, or vendor-supported applications, infrastructure systems and/or services. These risks can arise as a result of the Company's implementation or use of its own technology or as a result of the implementation or use of third party technology providers and other service providers.

The nature of advancing technology introduces additional uncertainty as to how the insurance industry will evolve. Cloud services, which are being adopted by the Company to improve systems flexibility and information security, require scrutiny as digital supply chains grow in complexity.

Technology is a critical component of the Company's business operations and is also central to the Company's customer-focused digital strategy. The Company continues to face technology and cyber risks stemming from legacy technology constraints and the advancement of techniques used in cyber-attacks.

The Company has been implementing new risk management processes and practices designed to allow it to better identify, measure, mitigate, and report this risk, but those processes and practices continue to require further development as well as ongoing updates as technology and business needs evolve. The Company's strategy and approach to managing technology and cyber risks includes policies that govern the technology environment and set standards related to information security and the use of technology, including:

- the use of multiple layers of technologies that are designed to prevent unauthorized access, ransomware attacks, distributed denial of service and other cyber-attacks;
- coordinated global and regional information security offices that gather threat intelligence, detect, monitor and respond to security events and conduct regular threat and vulnerability risk assessments;
- independent oversight and assessment of the approach taken to mitigate technology and cyber risks by the Technology Risk Management team, an independent group that acts as the second line of defense; and
- regular cyber security awareness sessions and mandatory cyber security training for all employees.

The Company also manages operational risks through the corporate insurance program which mitigates a portion of the operational risk exposure by purchasing insurance coverage that provides protection against unexpected material losses resulting from events such as property loss, cyber-attack or damage and liability exposures. 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, as well as legal requirements and contractual obligations.

Business Continuity Risk – Business continuity risk is the risk of loss as a result of the failure to provide for the continuity of business processes and operations under adverse conditions that may arise from natural, technological or human caused events involving the loss of sites, workforce disruptions, technology and supply chain outages.

A business continuity management framework has been implemented to manage business continuity risks and impacts through the development, testing, training and maintenance in four key areas: emergency response planning incident management planning, business continuity planning and disaster recovery planning.

Poor operational resiliency in the face of natural, technological, or human caused events could prevent the Company from carrying out mission-critical business processes, with potential for lost revenue, regulatory sanctions and damage to reputation.

Process Risk

Process risk is the risk of loss resulting from inadequate or failed business processes that deliver products and services and grow shareholder value. These processes include change management, data aggregation and reporting, product development, product introduction, new business (including the distribution and sales process) and renewal (including underwriting process), investment activities, client administration, claims and benefit payments, risk and financial modelling and financial management. The inadequacy can arise in transaction processing, governance, communication or general process management.

Risk management seeks strategic alignment and congruency across all of the Company's business activities, including change initiatives and business-as-usual activities, with the Company's operational risk appetite and considers the potential impact on the Company's reputation. The Company monitors change initiatives to mitigate risks and realize benefits. Core business operational activities have quality control measures in place.

One of the processes relates to model risk and use of models. The Company uses models in many functions and processes that support business decisions and reporting. Model risk arises from the potential for adverse consequences from decisions based on incorrect models or misused model outputs and reports. Robust processes are in place for the management and oversight of model risk as outlined in the Model Risk Management and Validation Standard.

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 risk is the risk of loss resulting from acts or activities that are intended to defraud, misappropriate assets, or circumvent laws or regulations by customers, contractors or other third parties, directors, officers, employees or distribution associates. The external fraud environment continues to intensify for financial institutions, as increasingly sophisticated methods of organized fraud and cyber fraud are employed. Fraud can result in a financial loss or reputational impact to the Company and have other impacts that are detrimental to customers and other stakeholders.

The Company manages fraud through a combined focus on its governance framework, assessment, prevention, detection, investigation and response. The Company promotes a culture of honesty, integrity, transparency and fairness in its operations and further manages fiduciary responsibilities through the Company's Fraud Risk Management Policy, Fraud Risk Operating Standard and Code of Conduct. The Company has processes and controls in place that are intended to prevent fraud and employs various methods to detect fraud. A fraud response framework is in place to deal with events through a coordinated investigative strategy designed to protect stakeholders and the interests of the Company.

Supplier Risk

Supplier risk is the risk of financial loss, adverse operational impacts and reputational damage resulting from the failure to establish and manage adequate supplier arrangement transactions or other interactions to meet the expected or contracted service level. Supplier risk is applicable to both external and internal suppliers. The Company strategically engages suppliers to maintain cost efficiency, to optimize internal resources and capital and to utilize skills, expertise and resources not otherwise available to the Company. Suppliers are engaged based on our prescribed supplier risk management principles in our Supplier Risk Management Policy. The Company applies a supplier risk management framework to oversee and monitor interactions with suppliers throughout the entire supplier lifecycle, including how they meet standards for quality of service and protect stakeholders and the interests of the Company.

Conduct Risk

Risk Description

Conduct risk is the risk of unfair outcomes for customers as a result of inadequate or failed processes and/or inappropriate behaviours, offerings or interactions by the Company or its agents. A failure to identify and mitigate conduct risk impacts not only the Company's customers but can also have adverse reputational and financial consequences for the Company due to the cost of customer remediation, damage to reputation and/or regulatory fines.

Conduct Risk Management

The Company manages conduct risk through various processes which include:

- providing appropriate and clear customer disclosures and communications;
- applying product design, complaint, claims management and sales and advice processes that consider outcomes to customers; and
- conducting risk based advisor assessments and suitability reviews, maintaining controls and adhering to Board-approved policies and processes, including the Conduct Risk Policy and the Code of Conduct.

Conduct Risk is incorporated in risk management and compliance activities, including risk and control assessments, internal events reporting, emerging risk assessments, and other measurement, monitoring and reporting activities.

Strategic Risk

Risk Description

Strategic Risk is the risk of failing to set or meet appropriate strategic objectives in the context of the internal and external operating environment resulting in a material impact on business performance (e.g. earnings, capital, reputation or standing).

The Company's ability to maintain leadership positions in today's highly competitive environment is dependent on many factors, including scale, price and yields offered, distribution channels, digital capabilities, financial strength ratings, range of product lines and product quality, brand strength, investment performance, historical dividend levels to provide value added services to distributors and customers and the ability to innovate and deploy innovations rapidly.

Competitors and new entrants have significant potential to disrupt the Company's business through targeted strategies to reduce the Company's market share which may include targeting key people and other distributors or aggressively pricing their products. The Company's ability to achieve strategic objectives depends significantly upon the Company's capacity to anticipate and respond quickly to these competitive pressures.

The Company has placed strategic focus on improving technology infrastructure and capabilities. Not adapting effectively to changes in the technological environment or to evolving customer expectations could impact the Company's ability to remain competitive.

There are significant uncertainties relating to the political and economic environment. Increasing geopolitical tensions and slower global economic recovery may result in reduced trade and investment opportunities, failures of national, regional or global governance, interstate conflict or terrorism which may impact the Company's business.

The Company evaluates and optimizes strategy through a combined lens to meet strategic objectives. It assesses market attractiveness and the ability to drive leadership in the markets, sectors, and regions where the Company chooses to participate, evaluates portfolio and businesses from the lens of shareholder value creation and embeds resilience in strategies and operations to anticipate and respond quickly to external environment and competitive pressures. This enables the Company to dynamically manage tactical initiatives that ensure strategies will be both achievable in the short term and sustainable over the long term.

Strategic Risk Management

Strategic risk-taking is inherent to achieving strategic objectives and arises from the fundamental decisions made and actions taken concerning an organization's objectives. It may relate to or stem from the design and development of strategy, including the formulation, evaluation and ongoing validation of strategy, or execution of corporate and business strategies, and management of associated risks stemming from the same.

Strategic risk may reflect intentional risk-taking in anticipation or response to industry forces or it may emerge as unintended consequences from changes to strategy, execution of strategy, or from lack of responsiveness to external forces. The Company aligns business strategies with its Risk Appetite and mitigates exposure to strategic risk through strategic planning and value-based decision making, establishing appropriate performance indicators, reporting of strategy execution and implementation against strategic goals and ongoing monitoring, together with robust oversight and challenge. The Company carefully aligns business strategies with the Risk Appetite.

In respect initiatives, a review of the alignment with risk strategy and qualitative risk preferences is completed. Material change initiatives, including those related to new markets, mergers and acquisitions, distribution channels, product design and investments, are also subject to independent risk review.

Other Risks

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 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 Canada Life, GWL&A, and their subsidiaries and certain subsidiaries of Putnam. There are considerable risks and benefits related to this structure.

Management monitors the solvency and capital positions of its principal subsidiaries opposite liquidity requirements at the holding company level. Management also establishes lines of credit for additional liquidity and may also access capital markets for funds. Management monitors compliance with the regulatory laws and regulations at both the holding company and operating company levels.

Mergers and Acquisitions Risk

From time-to-time, the Company and its subsidiaries evaluate existing companies, businesses, assets, products and services, and such review could result in the Company or its subsidiaries acquiring or disposing of businesses or assets. In the ordinary course of business, the Company considers and discusses the purchase or sale of companies, businesses segments or assets.

If effected, such transactions could be material to the Company in size or scope, could result in risks and contingencies, including integration risks, relating to companies, businesses or assets that the Company acquires or expose it to the risk of claims relating to those it has disposed of, could result in changes in the value of the securities of the Company, including the common shares of the Company, and could result in the Company holding additional capital for contingencies that may arise after the transaction is completed.

To mitigate these risks, due diligence reviews are undertaken and risks are assessed in the context of our Risk Appetite. Before acquiring or disposing of companies, businesses, business segments, or assets, businesses assess and provide assurance that systems and processes are in place to manage the risks after the transaction is completed.

Product Distribution Risk

Product distribution risk is the risk of loss resulting from the Company's inability to market its products through its 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 provider 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.

Sustainability Risk

Sustainability risk is the risk that business operations and business growth are not sustained due to failure to meet societal expectations related to corporate social responsibility.

Dynamics and attitudes towards societal issues have solidified and been further amplified during COVID-19. Factors such as diversity and inclusion and climate change are now a significant focus on the Company's strategic agenda. The Company may experience direct or indirect financial, operational or reputational impact stemming from societal related events, which include climate change, regulatory enforcement or costs associated with changes in environmental laws and regulations as well as diversity and inclusion related matters.

Sustainability considerations are formally reflected in the Company's risk management principles and associated policies. The Company recognizes that sustainability risk impacts both financial risks (market, credit, insurance) as well as non-financial risks (operational, conduct, strategic). Sustainability risk is not a stand-alone risk type, but underlies all risk types (e.g. credit, market, insurance, operational and strategic risk). As a result, the processes for managing sustainability risk are embedded in the processes for managing each risk type.

The Company endeavors to respect the environment and to take a balanced and 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

In determining the Company's insurance contract liabilities, valuation assumptions are 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. When the assumptions are revised to reflect emerging experience or change in outlook, the result is a change in the value of liabilities which in turn affects the Company's earnings.

The following table 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. For changes in asset related assumptions, the sensitivity is shown net of the corresponding impact on earnings of the change in the value of the assets supporting liabilities.

Increase (decrease) in net earnings

	2020	2019
Mortality – 2% increase	$ (288)	$ (279)
Annuitant mortality – 2% decrease	$ (756)	$ (601)
Morbidity – 5% adverse change	$ (279)	$ (253)
Investment returns		
Parallel shift in yield curve		
1% increase	$ –	$ –
1% decrease	$ –	$ –
Change in interest rates		
1% increase	$ 224	$ 175
1% decrease	$ (920)	$ (619)
Change in publicly traded common stock values		
20% increase	$ 28	$ 54
10% increase	$ 15	$ 27
10% decrease	$ (51)	$ (39)
20% decrease	$ (208)	$ (182)
Change in other non-fixed income asset values		
10% increase	$ 34	$ 60
5% increase	$ 6	$ 25
5% decrease	$ (69)	$ (28)
10% decrease	$ (108)	$ (90)
Change in best estimate return assumptions for equities		
1% increase	$ 556	$ 509
1% decrease	$ (682)	$ (585)
Expenses – 5% increase	$ (165)	$ (125)
Policy termination and renewal – 10% adverse change	$ (1,017)	$ (813)

Refer to the "Accounting Policies – Summary of Critical Accounting Estimates" section of this document for additional information on earnings sensitivities.

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 market conditions related to global credit, equities, investment properties and foreign exchange and prevailing health and mortality experience. These estimates and judgments are more challenging in a period of uncertainty as is currently being experienced as a result of the COVID-19 pandemic. The fair value of portfolio investments, the valuation of goodwill and other intangible assets, the valuation of insurance contract liabilities and the recoverability of deferred tax asset carrying values reflect management's judgement based on current expectations but could be impacted in the future depending on current market developments.

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 independent third-party credit ratings where available as an input to its internal credit rating process. Investment properties, which are primarily held in the U.K. and Canada, rely upon independent third-party appraisals for their valuation which impact the estimation of insurance contract liabilities. Independent appraisals for the portfolio occur over the year with management adjustments for material changes in the interim periods. Credit rating changes for fixed income investments and market values for investment properties may lag developments in the current environment. Subsequent credit rating adjustments and market value adjustments on investment properties will impact actuarial liabilities.

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 9 in the Company's December 31, 2020 annual consolidated financial statements for disclosure of the Company's financial instruments fair value measurement by hierarchy level as at December 31, 2020.

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 an 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 equity release mortgages classified as fair value through profit or loss are determined by an internal valuation model that uses discounted future cash flows. Inputs to the model include marketable observable and non-market observable inputs.

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 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 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 net investment income; therefore, in the event of an impairment, the reduction 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, including those resulting from an acquisition during the year, are tested for impairment annually or more frequently if events indicate that impairment may have occurred. Intangible assets that were previously impaired are reviewed at each reporting date for evidence of reversal. In the event that certain conditions have been met, the Company would be required to reverse the impairment loss or a portion thereof.

Goodwill has been allocated to cash generating unit groupings, representing the lowest level that the assets are monitored for internal reporting purposes. Goodwill is tested for impairment by comparing the carrying value of each cash generating unit grouping to its recoverable amount. An impairment loss is recognized for the amount by which the asset's carrying amount exceeds its recoverable amount.

Intangible assets have been allocated to cash generating units, representing the lowest level that the assets are monitored for internal reporting purposes.

Intangible assets with an indefinite useful life are reviewed annually to determine if there are indicators of impairment. If indicators of impairment have been identified, a test for impairment is performed and recognized as necessary. Impairment is assessed by comparing the carrying values of the assets to their recoverable amounts. An impairment loss is recognized for the amount by which the asset's carrying amount exceeds its recoverable amount.

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

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

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 regularly 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. Annuitant mortality is also studied regularly, and the results are used to modify established annuitant mortality tables. When there is insufficient data, use is made of the latest industry experience to derive an appropriate valuation mortality assumption. Improvement scales for life insurance and annuitant mortality are updated periodically based on population and industry studies, product specific considerations, as well as professional guidance. In addition, appropriate provisions are made for future mortality deterioration on term insurance.

- A 2% increase in the best estimate life insurance mortality assumption would cause a decrease in net earnings of approximately $288 million.
- A 2% decrease in the best estimate annuitant assumption would cause a decrease in net earnings of approximately $756 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 $279 million.

Property and casualty reinsurance – Insurance contract liabilities for property and casualty reinsurance written by London Reinsurance Group Inc. (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 a number of interest rate scenarios (including increasing, decreasing and fluctuating rates) is done to provide for reinvestment risk. The total provision for interest rates is sufficient to cover a broader or more severe set of risks than the minimum arising from the current Canadian Institute of Actuaries' prescribed scenarios.

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

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

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

The total provision for interest rate 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 following is the impact to the value of liabilities net of changes in the value of assets supporting liabilities 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. For some products, interest rate risk is modelled stochastically in determining the insurance contract liabilities, and for those products, the sensitivities reflect the estimated impact of an immediate 1% increase and 1% decrease in interest rates on the liability.

- 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 $289 million causing an increase in net earnings of approximately $224 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 $1,185 million causing a decrease in net earnings of approximately $920 million.

As at December 31, 2020, the accounting for the acquisition of MassMutual is not finalized pending completion of a comprehensive valuation of the net assets acquired. As such, the impact of the acquired business included in the sensitivities above reflects management's current best estimate of the sensitivities.

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

Some insurance and investment contract liabilities with long-tail cash-flows are supported by publicly traded common stocks and investments in other non-fixed income assets, primarily comprised of investment properties, real estate funds, private stocks, and equity release mortgages. The value of the liabilities may fluctuate with changes in the value of the supporting assets. The liabilities for other products such as segregated fund products with guarantees also fluctuate with equity values.

There may be additional market and liability impacts as a result of changes in the value of publicly traded common stocks and other non-fixed income assets that will cause the liabilities to fluctuate differently than the equity values. This means that there is a greater impact on net earnings from larger falls in equity values, relative to the change in equity values. Falls in equity values beyond those shown in the table below would have a greater impact on net earnings, relative to the change in equity values. The following provides information on the expected impacts of an immediate 10% or 20% increase or decrease in the value of publicly traded common stocks on insurance and investment contract liabilities and on the shareholders' net earnings of the Company. The expected impacts take into account the expected changes in the value of assets supporting liabilities and hedge assets.

The following shows the impact of an immediate 10% or 20% increase or decrease in the value of publicly traded common stocks on insurance and investment contract liabilities and on the shareholders' net earnings of the Company. The expected impacts take into account the expected changes in the value of assets supporting liabilities and hedge assets:

- A 10% increase in publicly traded common stock values would be expected to additionally decrease non-participating insurance and investment contract liabilities by approximately $18 million, causing an increase in net earnings of approximately $15 million.
- A 10% decrease in publicly traded common stock values would be expected to additionally increase non-participating insurance and investment contract liabilities by approximately $62 million, causing a decrease in net earnings of approximately $51 million.
- A 20% increase in publicly traded common stock values would be expected to additionally decrease non-participating insurance and investment contract liabilities by approximately $34 million, causing an increase in net earnings of approximately $28 million.

- A 20% decrease in publicly traded common stock values would be expected to additionally increase non-participating insurance and investment contract liabilities by approximately $264 million, causing a decrease in net earnings of approximately $208 million.

The following provides information on the expected impacts of an immediate 5% or 10% increase or decrease in the value of other non-fixed income assets on insurance and investment contract liabilities and on the shareholders' net earnings of the Company. The expected impacts take into account the expected changes in the value of assets supporting liabilities:

- A 5% increase in other non-fixed income asset values would be expected to decrease non-participating insurance and investment contract liabilities by approximately $8 million, causing an increase in net earnings of approximately $6 million.
- A 5% decrease in other non-fixed income asset values would be expected to increase non-participating insurance and investment contract liabilities by approximately $88 million, causing a decrease in net earnings of approximately $69 million.
- A 10% increase in other non-fixed income asset values would be expected to decrease non-participating insurance and investment contract liabilities by approximately $41 million, causing an increase in net earnings of approximately $34 million.
- A 10% decrease in other non-fixed income asset values would be expected to increase non-participating insurance and investment contract liabilities by approximately $138 million, causing a decrease in net earnings of approximately $108 million.

The best-estimate return assumptions for publicly traded common stocks, and other non-fixed income assets 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 $691 million causing an increase in net earnings of approximately $556 million.
- A 1% decrease in the best estimate assumption would be expected to increase non-participating insurance contract liabilities by approximately $861 million causing a decrease in net earnings of approximately $682 million.

For a further description of the Company's sensitivity to equity market and interest rate fluctuations, refer to "Financial Instruments Risk Management:, note 8 in the Company's annual consolidated financial statements for the period ended December 31, 2020.

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 $165 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's most significant exposures are 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 Capital and Risk Solutions. 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 $1,017 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 otherwise based on judgement 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 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.

Tax planning strategies to obtain tax efficiencies are used. 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 balances for 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 realization of the asset.

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

Employee future benefits

The Company's subsidiaries maintain contributory and non-contributory defined benefit and defined contribution pension plans for eligible employees and advisors. The defined benefit pension plans provide pensions based on length of service and final average pay; however, these plans are closed to new entrants. Many of the subsidiaries' defined benefit pension plans also no longer provide future defined benefit accruals. The Company's defined benefit plan exposure is expected to reduce in future years. Where defined benefit pension accruals continue, 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. Assets supporting the funded pension plans are held in separate trusteed pension funds. Obligations for the wholly unfunded plans are included in other liabilities and are supported by general assets. New hires and active plan participants in defined benefit plans closed to future defined benefit accruals are eligible for defined contribution benefits. The defined contribution pension plans provide pension benefits based on accumulated employee and employer contributions. The Company's subsidiaries also provide post-employment health, dental and life insurance benefits to eligible employees, advisors and their dependents. These plans are also closed to new entrants. For further information on the pension plans and other post-employment benefits refer to note 23 in the Company's December 31, 2020 annual consolidated financial statements.

For the defined benefit plans, 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 pension plans		Other post-employment benefits	
At December 31	**2020**	2019	**2020**	2019
Actuarial assumptions used to determine benefit cost				
Discount rate – past service liabilities	**2.6%**	3.4%	**3.1%**	3.8%
Discount rate – future service liabilities	**3.2%**	3.8%	**3.3%**	4.4%
Rate of compensation increase	**2.9%**	3.0%	**–**	–
Future pension increases (1)	**1.3%**	1.4%	**–**	–
Actuarial assumptions used to determine defined benefit obligation				
Discount rate – past service liabilities	**2.1%**	2.6%	**2.5%**	3.1%
Rate of compensation increase	**2.9%**	2.9%	**–**	–
Future pension increases (1)	**1.0%**	1.3%	**–**	–
Medical cost trend rates:				
Initial medical cost trend rate			**4.7%**	4.7%
Ultimate medical cost trend rate			**4.1%**	4.1%
Year ultimate trend rate is reached			**2039**	2039

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

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

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

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

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

Impact of a change of 1.0% in actuarial assumptions on defined benefit obligation (1)

	1% increase		1% decrease	
	2020	2019	**2020**	2019
Defined benefit pension plans:				
Impact of a change to the discount rate	**$ (1,350)**	$ (1,242)	**$ 1,784**	$ 1,630
Impact of a change to the rate of compensation increase	**329**	311	**(291)**	(284)
Impact of a change to the rate of inflation	**662**	598	**(569)**	(541)
Other post-employment benefits:				
Impact of a change to assumed medical cost trend rates	**31**	27	**(26)**	(23)
Impact of a change to the discount rate	**(44)**	(41)	**53**	50

(1) 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 $309 million ($294 million in 2019) to the pension plans and made benefit payments of $17 million ($20 million in 2019) for post-employment benefits. The Company's subsidiaries expect to contribute $294 million to the pension plans and make benefit payments of $22 million for post-employment benefits in 2021.

International Financial Reporting Standards

Due to the evolving nature of IFRS, there are a number of IFRS changes impacting the Company in 2020, 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 International Financial Reporting Standards (IFRS) for IFRS 3, *Business Combinations*; IAS 1, *Presentation of Financial Statements* and IAS 8, *Accounting Policies, Changes in Accounting Estimates and Errors*; and IAS 39, *Financial Instruments: Recognition and Measurement* and IFRS 7, *Financial Instruments: Disclosures*, effective January 1, 2020. The adoption of these narrow scope amendments did not have a significant impact on the Company's financial statements.

For a further description of the impact of the accounting policy change, refer to note 2 of the Company's December 31, 2020 annual consolidated financial statements.

IFRS that have changed or may change subsequent to 2020 and could impact the Company in future reporting periods, are set out in the following table:

Standard	Summary of Future Changes
IFRS 17 – *Insurance Contracts*	In May 2017, the IASB issued IFRS 17, *Insurance Contracts* (IFRS 17), which will replace IFRS 4, *Insurance Contracts*. On June 26, 2019 the IASB issued an exposure draft covering targeted amendments to the IFRS 17 standard, including a proposed amendment to defer the effective date of the standard. In June 2020, the IASB finalized the amendments to IFRS 17, which included confirmation of the effective date for the standard of January 1, 2023. In addition, the IASB confirmed the extension to January 1, 2023 of the exemption for insurers to apply the financial instruments standard, IFRS 9, *Financial Instruments* (IFRS 9), keeping the alignment of the effective dates for IFRS 9 and IFRS 17. The adoption of IFRS 17 is a significant initiative for the Company supported by a formal governance framework and project plan, for which substantial resources are being dedicated. The Company has assembled a project team that is working on implementation which involves preparing the financial reporting systems and processes for reporting under IFRS 17, policy development and operational and change management. The project team is also monitoring developments from the IASB and various industry groups that the Company has representation on. The Company continues to make progress in implementing its project plan, with key policy decisions well advanced as well as significant progress on the technology solutions. IFRS 17 sets out the requirements for the recognition, measurement, presentation and disclosures of insurance contracts a company issues and reinsurance contracts it holds. IFRS 17 introduces three new measurement models depending on the nature of the insurance contracts: the General Measurement Model, the Premium Allocation Approach and the Variable Fee Approach. For the General Measurement Model and Variable Fee Approach, IFRS 17 requires entities to measure insurance contract liabilities on the balance sheet as the total of: (a) the fulfilment cash flows – the current estimates of amounts that a company expects to collect from premiums and pay out for claims, benefits and expenses, including an adjustment for the timing and risk of those amounts; and (b) the contractual service margin – the future profit for providing insurance coverage. Under IFRS 17, the discount rate used to reflect the time value of money in the fulfillment cash flows must be based on the characteristics of the liability. This is a significant change from IFRS 4 and the Canadian Asset Liability Method, where the discount rate was based on the yield curves of the assets supporting those liabilities. The future profit for providing insurance coverage (including impacts of new business) is reflected in the initial recognition of insurance contract liabilities and then recognized into profit or loss over time as the insurance services are provided. IFRS 17 also requires the Company to distinguish between groups of contracts expected to be profit making and groups of contracts expected to be onerous. The Company is required to update the fulfilment cash flows at each reporting date, using current estimates of the amount, timing and uncertainty of cash flows and discount rates. As a result of the new valuation methodologies required under IFRS 17, the Company expects its insurance contract liabilities to increase upon adoption. IFRS 17 will affect how the Company accounts for its insurance contracts and how it reports financial performance in the Consolidated Statements of Earnings, in particular the timing of earnings recognition for insurance contracts. The adoption of IFRS 17 will also have a significant impact on how insurance contract results are presented and disclosed in the consolidated financial statements and on regulatory and tax regimes that are dependent upon IFRS accounting values. The Company is also actively monitoring potential impacts on regulatory capital and the associated ratios and disclosures. The Company continues to assess all these impacts through its global implementation plan.

Standard	Summary of Future Changes
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 standard provides changes to financial instruments accounting for the following: • classification and measurement of financial instruments based on a business model approach for managing financial assets and the contractual cash flow characteristics of the financial asset; • impairment based on an expected loss model; and • hedge accounting that incorporates the risk management practices of an entity. In September 2016, the IASB issued an amendment to IFRS 4, *Insurance Contracts* (IFRS 4). The amendment "Applying IFRS 9, *Financial Instruments* with IFRS 4, *Insurance Contracts*" provides qualifying insurance companies with two options to address the potential volatility associated with implementing the IFRS 9 standard before the new proposed insurance contract standard is effective. The two options are as follows: • *Deferral Approach* – provides the option to defer implementation of IFRS 9 until the effective date of the new insurance contract standard; 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 is applying the deferral approach to allow adoption of both IFRS 9 and IFRS 17 simultaneously. The disclosure for the measurement and classification of the Company's portfolio investments provides most of the information required by IFRS 9. The Company continues to evaluate the impact of the adoption of this standard with the adoption of IFRS 17.
IAS 37 – *Provisions, Contingent Liabilities and Contingent Assets*	In May 2020, the IASB issued amendments to IAS 37, *Provisions, Contingent Liabilities, and Contingent Assets*. The amendments specify which costs should be included when assessing whether a contract will be loss-making. These amendments are effective for annual reporting periods beginning on or after January 1, 2022, with earlier application permitted. The Company is evaluating the impact of the adoption of these amendments.
Annual Improvements 2018-2020 Cycle	In May 2020, the IASB issued *Annual Improvements 2018-2020 Cycle* as part of its ongoing process to efficiently deal with non-urgent narrow scope amendments to IFRS. Two amendments were included in this issue that are applicable for the Company relating to IFRS 9, *Financial Instruments* and IFRS 16, *Leases*. The amendments are effective January 1, 2022. The Company is evaluating the impact of the adoption of these amendments.
IFRS 16 – *Leases*	In May 2020, the IASB published amendments to IFRS 16, *Leases* amending the standard to provide lessees with an optional exemption from assessing whether a COVID-19-related rent concession is a lease modification. The amendments are effective for annual reporting periods beginning on or after June 1, 2020, with earlier application permitted. The Company does not anticipate a significant impact on its consolidated financial statements as a result of this amendment.
IFRS 9 – *Financial Instruments* **IAS 39 – *Financial Instruments: Recognition and Measurement*** **IFRS 7 – *Financial Instruments: Disclosures*** **IFRS 4 – *Insurance Contracts* and** **IFRS 16 – *Leases***	In August 2020, the IASB published *Interest Rate Benchmark Reform – Phase 2* which issued amendments to IFRS 9, IAS 39, IFRS 7, IFRS 4 and IFRS 16. The amendments provide relief from remeasurement impacts on financial instruments, and discontinuation of hedging relationships arising from reform of interest rate benchmarks, including its replacement with alternative benchmark rates. The amendments are effective for annual periods beginning on or after January 1, 2021, with earlier application permitted. The Company is monitoring the interest rate benchmark reform process and has established an internal program to fully transition to alternative reference rates by the end of 2021. The transition to alternative reference rates is not expected to impact the Company's risk management strategy. The adoption of these amendments is not expected to have a significant impact on the consolidated financial statements.

Other Information

Non-IFRS Financial Measures

The Company uses several non-IFRS measures to measure overall performance of the Company and to assess each of its business units. A financial measure is considered a non-IFRS measure for Canadian securities law purposes if it is presented other than in accordance with generally accepted accounting principles used for the Company's consolidated financial statements. The consolidated financial statements of the Company have been prepared in compliance with IFRS as issued by the IASB. Non-IFRS measures do not have a standardized meaning under IFRS and may not be comparable to similar financial measures presented by other issuers.

Base earnings and base earnings per share

Base earnings (loss) and financial measures based on base earnings (loss), including base earnings per common share and base return on equity, are non-IFRS financial measures. Base earnings reflect management's view of the underlying business performance of the Company and provides an alternate measure to understand the underlying business performance compared to IFRS net earnings. Base earnings (loss) exclude:

- The impact of actuarial assumption changes and other management actions;
- The net earnings impact related to the direct equity and interest rate market impacts on insurance and investment contract liabilities, net of hedging, and related deferred tax liabilities, which includes:
  - the impact of hedge ineffectiveness related to segregated fund guarantee liabilities that are hedged and the performance of the related hedge assets;
  - the impact on segregated fund guarantee liabilities not hedged;
  - the impact on general fund equity and investment properties supporting insurance contract liabilities;
  - other market impacts on insurance and investment contract liabilities and deferred tax liabilities, including those arising from the difference between actual and expected market movements; and
- Certain items that management believes are not indicative of the Company's underlying business results including restructuring costs, integration costs related to business acquisitions, material legal settlements, material impairment charges related to goodwill and intangible assets, impact of substantially enacted income tax rate changes and other tax impairments and net gains, losses or costs related to the disposition or acquisition of a business.

Base earnings

	For the three months ended			For the twelve months ended	
	Dec. 31 2020	Sept. 30 2020	Dec. 31 2019	**Dec. 31 2020**	Dec. 31 2019
Base earnings	**$ 741**	$ 679	$ 831	**$ 2,669**	$ 2,704
Items excluded from Lifeco base earnings:					
Actuarial assumption changes and other management actions	**(23)**	66	(78)	**113**	170
Market-related impact on liabilities	**(31)**	18	(13)	**(127)**	(89)
Net gain/charge on business dispositions (1)	**143**	94	8	**237**	(191)
Transaction costs related to the acquisitions of Personal Capital and MassMutual	**(47)**	(31)	–	**(78)**	–
Revaluation of a deferred tax asset	**196**	–	(199)	**196**	(199)
Restructuring and integration costs	**(67)**	–	(36)	**(67)**	(36)
Net earnings – common shareholders	**$ 912**	$ 826	$ 513	**$ 2,943**	$ 2,359
Base earnings per common share – basic	**$ 0.799**	$ 0.732	$ 0.895	**$ 2.878**	$ 2.859
Items excluded from Lifeco base earnings:					
Actuarial assumption changes and other management actions	**(0.025)**	0.071	(0.084)	**0.122**	0.179
Market-related impact on liabilities	**(0.033)**	0.020	(0.014)	**(0.137)**	(0.095)
Net gain/charge on business dispositions (1)	**0.154**	0.101	0.009	**0.255**	(0.201)
Transaction costs related to the acquisitions of Personal Capital and MassMutual	**(0.051)**	(0.033)	–	**(0.084)**	–
Revaluation of a deferred tax asset	**0.211**	–	(0.215)	**0.211**	(0.210)
Restructuring and integration costs	**(0.072)**	–	(0.039)	**(0.072)**	(0.038)
Net earnings per common share – basic	**$ 0.983**	$ 0.891	$ 0.552	**$ 3.173**	$ 2.494

(1) Net gain/charge on business dispositions includes:

- for the three and twelve months ended December 31, 2020 a net gain of $143 million on the sale of GLC Asset Management Group Ltd. included in the Canada Corporate business unit;
- for the three months ended September 30, 2020 and twelve months ended December 31, 2020 a net gain of $94 million on the sale of IPSI included in Europe Ireland business unit;
- for the three and twelve months ended December 31, 2019 a net gain of $8 million on the sale of heritage block of individual policies to Scottish Friendly included in the Europe Corporate business unit; and
- for the twelve months ended December 31, 2019 a net charge of $199 million (US$148 million) relating to the sale, via indemnity reinsurance, of the U.S. individual life insurance and annuity business included in the U.S. Reinsured Insurance & Annuity Business unit.

Return on equity (ROE)

The Company has a capital allocation methodology, which allocates financing costs in proportion to allocated capital. For the Canadian, European and Capital and Risk Solutions segments (essentially Canada Life), this allocation method generally 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 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. IFRS does not prescribe the calculation of ROE and therefore a comparable measure under IFRS is not available. To determine ROE and base ROE, respectively, net earnings (loss) and base net earnings (loss) for the trailing four quarters are divided by the average common shareholders' equity over the trailing four quarters. This measure provides an indicator of business unit profitability.

Premiums and deposits

Total premiums and deposits include premiums on risk-based insurance and annuity products net of ceded reinsurance (as defined under IFRS), premium equivalents on self-funded group insurance ASO contracts, deposits on individual and group segregated fund products as well as deposits on proprietary mutual funds and institutional accounts. Total premiums and deposits exclude the initial ceded premium related to the sale, via indemnity reinsurance, of the U.S. individual life insurance and annuity business. This measure provides an indicator of top-line growth.

Premiums and deposits

	For the three months ended			For the twelve months ended	
	Dec. 31 2020	Sept. 30 2020	Dec. 31 2019	**Dec. 31 2020**	Dec. 31 2019
Amounts reported in the financial statements					
Net premium income (Life insurance, guaranteed annuities and insured health products)	**$ 11,747**	$ 9,976	$ 9,478	**$ 43,019**	$ 24,510
Policyholder deposits (segregated funds):					
Individual products	**3,962**	3,578	5,446	**15,034**	16,947
Group products	**1,679**	1,538	1,913	**6,882**	7,738
Premiums and deposits reported in the financial statements	**$ 17,388**	$ 15,092	$ 16,837	**$ 64,935**	$ 49,195
Self-funded premium equivalents (ASO contracts) and other	**1,687**	3,104	841	**6,123**	3,295
Proprietary mutual funds and institutional deposits	**21,756**	22,707	21,418	**100,287**	84,259
Add back: U.S. Individual Life Insurance & Annuity Business – initial reinsurance ceded premiums	**–**	–	–	**–**	13,889
Total premiums and deposits	**$ 40,831**	$ 40,903	$ 39,096	**$ 171,345**	$ 150,638

Assets under management (AUM) and assets under administration (AUA)

Assets under management and assets under administration are non-IFRS measures that provide an indicator of the size and volume of the Company's overall business.

Assets under management include internally and externally managed funds where the Company has oversight of the investment policies. 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.

Other assets under administration includes assets where the Company only provides administration services for which the Company earns fees and other income. These assets are beneficially owned by the 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.

Total assets under administration includes total assets per financial statements, proprietary mutual funds and institutional net assets and other assets under administration.

Assets under administration

	Dec. 31 2020	Sept. 30 2020	Dec. 31 2019
Total assets per financial statements	**$ 600,490**	$ 473,737	$ 451,167
Proprietary mutual funds and institutional net assets	**350,943**	341,436	320,548
Total assets under management	**951,433**	815,173	771,715
Other assets under administration	**1,024,414**	845,862	857,966
Total assets under administration	**$1,975,847**	$1,661,035	$ 1,629,681

Sales

Sales is a non-IFRS measure for which there is no comparable measure in IFRS and is an indicator of new business growth. Sales are measured according to product type:

- For risk-based insurance and annuity products, sales 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.

Impact of currency movement

Items impacting the Company's Consolidated Statements of Earnings, such as income and benefits and expenses and net earnings, are translated into Canadian dollars at an average rate for the period. For items impacting the Company's Consolidated Balance Sheets, such as assets and liabilities, period end rates are used for currency translation purposes.

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

Pre-tax operating margin

For the Company's Asset Management business unit in the U.S. segment, this ratio provides measure of the profitability of the business unit. It is based on the business unit's pre-tax core net earnings (loss) divided by the sum of fee income and net investment income. There is no directly comparable IFRS measure.

Core net earnings (loss)

For its Asset Management business unit in the U.S segment, the Company discloses core net earnings (loss), which is a measure of the business unit's performance. Core net earnings (loss) includes the impact of dealer commissions and software amortization and excludes the impact of certain corporate financing charges and allocations, certain tax adjustments and other non-recurring transactions.

Core net earnings (1)

	For the three months ended			For the twelve months ended	
	Dec. 31 2020	Sept. 30 2020	Dec. 31 2019	**Dec. 31 2020**	Dec. 31 2019
Core net earnings	**$ 49**	$ 25	$ 28	**$ 68**	$ 78
Less: Financing and other expenses	**(14)**	(12)	(10)	**(50)**	(45)
Net earnings (loss)	**$ 35**	$ 13	$ 18	**$ 18**	$ 33
Core net earnings (US$)	**$ 37**	$ 19	$ 21	**$ 51**	$ 59
Less: Financing and other expenses (US$)	**(11)**	(9)	(8)	**(37)**	(35)
Net earnings (loss) (US$)	**$ 26**	$ 10	$ 13	**$ 14**	$ 24

(1) For the Asset Management business unit, there were no differences between net earnings (loss) and base earnings (loss) in the periods presented.

Selected Annual Information

(in $ millions, except per share amounts)	Years ended December 31 2020	2019	2018
Total revenue	**$ 60,583**	$ 44,698	$ 44,032
Earnings – common shareholders			
Net earnings	**2,943**	2,359	2,961
Base earnings	**2,669**	2,704	2,380
Net earnings per common share			
Basic – net earnings	**3.173**	2.494	2.996
Diluted – net earnings	**3.172**	2.493	2.994
Basic – base earnings	**2.878**	2.859	2.408
Diluted – base earnings	**2.877**	2.857	2.406
Total assets			
Total assets	**$ 600,490**	$ 451,167	$ 427,689
Proprietary mutual funds and institutional assets [1]	**350,943**	320,548	281,664
Total assets under management [1]	**951,433**	771,715	709,353
Other assets under administration [1]	**1,024,414**	857,966	689,520
Total assets under administration [1]	**$ 1,975,847**	$ 1,629,681	$ 1,398,873
Total liabilities	**$ 573,475**	$ 425,624	$ 400,291
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 [2]	**0.544000**	0.544000	0.544000
Series O First Preferred [3]	**0.556412**	0.744956	0.628745
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	**1.312500**	1.312500	1.312500
Series T First Preferred	**1.2875**	1.2875	1.2875
Common	**1.752**	1.652	1.556

(1) This metric is a non-IFRS measure. Refer to the "Non-IFRS Financial Measures" section of this document for additional details.

(2) The Series N First Preferred Share dividend was reset to a five year fixed dividend rate of 2.176% per annum on December 30, 2015. On December 31, 2020, the dividend was reset to a five year fixed dividend rate of 1.749% per annum which applies until December 30, 2025.

(3) The Series O First Preferred Share dividend was reset to 3 month floating dividend rate on December 30, 2015. The floating dividend rate is reset quarterly to the three month Government of Canada Treasury Bill yield plus 1.30%. Please refer to the "Lifeco Capital Structure" section of this document for additional details on the conversion.

Quarterly Financial Information

(in $ millions, except per share amounts)	2020				2019			
	Q4	Q3	Q2	Q1	Q4	Q3	Q2	Q1
Total revenue (1)	**$ 16,860**	$ 13,740	$ 19,710	$ 10,273	$ 10,689	$ 14,374	$ 2,746	$ 16,889
Common shareholders								
Base earnings (2)								
Total	**$ 741**	$ 679	$ 706	$ 543	$ 831	$ 677	$ 627	$ 569
Basic – per share	**0.799**	0.732	0.761	0.585	0.895	0.729	0.668	0.576
Diluted – per share	**0.799**	0.732	0.761	0.585	0.894	0.728	0.667	0.576
Net earnings								
Total	**$ 912**	$ 826	$ 863	$ 342	$ 513	$ 730	$ 459	$ 657
Basic – per share	**0.983**	0.891	0.930	0.369	0.552	0.786	0.489	0.665
Diluted – per share	**0.983**	0.891	0.930	0.369	0.552	0.785	0.489	0.665

(1) Revenue includes the changes in fair value through profit or loss on investment assets, an initial premium ceded to Protective Life ($13,889 million for the three months ended June 30, 2019) and a ceding commission received from Protective Life ($1,080 million for the three months ended June 30, 2019) related to the sale, via indemnity reinsurance, of the individual life insurance and annuity business.

(2) Base earnings attributable to common shareholders and base earnings per common share are non-IFRS measures of earnings performance. The following items were excluded from base earnings in each quarter:

Items excluded from base earnings

	2020				2019			
	Q4	Q3	Q2	Q1	Q4	Q3	Q2	Q1
Actuarial assumption changes and other management actions	**$ (23)**	$ 66	$ 122	$ (52)	$ (78)	$ 81	$ 38	$ 129
Market-related impact on liabilities	**(31)**	18	35	(149)	(13)	(28)	(7)	(41)
Net gain/charge on business dispositions	**143**	94	–	–	8	–	(199)	–
Transaction costs related to the acquisitions of Personal Capital and MassMutual	**(47)**	(31)	–	–	–	–	–	–
Revaluation of a deferred tax asset	**196**	–	–	–	(199)	–	–	–
Restructuring and integration costs	**(67)**	–	–	–	(36)	–	–	–
Total	**$ 171**	$ 147	$ 157	$ (201)	$ (318)	$ 53	$ (168)	$ 88

Lifeco's consolidated net earnings attributable to common shareholders were $912 million for the fourth quarter of 2020 compared to $513 million reported a year ago. On a per share basis, this represents $0.983 per common share ($0.983 diluted) for the fourth quarter of 2020 compared to $0.552 per common share ($0.552 diluted) a year ago.

Total revenue for the fourth quarter of 2020 was $16,860 million and comprises premium income of $11,747 million, regular net investment income of $1,560 million, a positive change in fair value through profit or loss on investment assets of $1,984 million and fee and other income of $1,569 million.

Disclosure Controls and Procedures

The Company's disclosure controls and procedures are designed to provide reasonable assurance that information required to be disclosed by the Company in reports filed or submitted by it 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, 2020 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.

During the twelve months ended December 31, 2020, there have been no changes in the Company's internal control over financial reporting that have materially affected, or are reasonably likely to materially affect, the Company's internal control over financial reporting. Internal controls over financial reporting have been adapted for the remote work environment that has resulted from the COVID-19 pandemic, as necessary, and were effective. Management evaluated the effectiveness of the Company's internal control over financial reporting as at December 31, 2020 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.

Limitation on Disclosure Controls and Procedures & Internal Control Over Financial Reporting

As permitted by securities legislation, for the period ended December 31, 2020, the Company's management has limited the scope of its design of the Company's disclosure controls and procedures and the Company's internal control over financial reporting to exclude controls, policies and procedures of MassMutual, which the Company acquired on December 31, 2020.

During the year ended December 31, 2020, the Company incurred acquisition expenses of $52 million post-tax (US$40 million post-tax) which are included within operating and administrative expenses in the Consolidated Statements of Earnings. As the acquisition occurred on December 31, 2020, the reinsured business did not contribute to 2020 earnings. At December 31, 2020, the estimated total assets and goodwill acquired was $115,169 million. Total estimated liabilities were $112,232 million with the final valuation of the assets acquired and liabilities assumed expected to occur during 2021.

Relationship with Power Corporation Group of Companies

Lifeco's controlling shareholder is Power Financial Corporation (Power Financial), which is controlled by Power Corporation of Canada (Power Corporation) and, ultimately, by the Desmarais Family Residuary Trust. Power Corporation also controls IGM Financial Inc. and its subsidiaries (IGM), as well as Portag3 Ventures II Limited Partnership (Portag3), which invests in the FinTech sector and in which both Lifeco and IGM are investors. Some of these related entities operate in similar or related sectors to those in which Lifeco's subsidiaries operate. A number of the Company's directors are also directors or officers of Power Corporation or one of its affiliates.

Lifeco's relationship with Power Financial, Power Corporation, IGM, Portag3 and other members of the Power Corporation group of companies enables Lifeco to access expertise and industry knowledge, achieve economies of scale and access investment opportunities. As a result of these relationships, Lifeco and other members of the Power Corporation group of companies may become aware of opportunities that are also of potential interest to other members of the group and Lifeco may share information for that purpose. Power Corporation and Power Financial from time to time also assist Lifeco to identify and analyze strategic corporate opportunities that may be of potential interest to it. However, Power Corporation and Power Financial have no commitment to Lifeco that would require them or their respective subsidiaries, directors or officers to offer any particular opportunity to Lifeco.

The Company has related party procedures that require, among other things, transactions between the Company and its subsidiaries and any member of the Power Corporation group of companies to be on terms no less favourable than market terms or where there is no open market, on terms that would reasonably be expected to provide at least fair value to the Company. Under the related party procedures, any material related party transactions must be reviewed and approved by a conduct review committee composed entirely of directors who are independent of management and Power Corporation and its affiliates.

Transactions with Related Parties

In the normal course of business, Canada 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 enabling each organization to take advantage of economies of scale and areas of expertise. In all cases, transactions were at market terms and conditions.

During the year, Canada Life provided to and received from IGM and its subsidiaries, a member of the Power Financial group of companies, certain administrative and information technology services. During the year, IGM notified the Company that it intends to terminate its long-term technology infrastructure related sharing agreement in the first quarter of 2021. In addition, Canada Life also provided life insurance, annuity and disability insurance products under a distribution agreement with IGM. In addition, Canada 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 IG Wealth Management 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.

On December 31, 2020, the Company completed the sale of GLC to Mackenzie, an affiliate of the Company. This is a related party transaction and board of directors of each of the Company and its subsidiary, Canada Life, established a committee of directors independent of management and Mackenzie to assess, review and consider the proposed terms of the transaction and to make recommendations regarding the transaction to its board of directors.

On August 17, 2020, Empower Retirement, Lifeco's U.S. retirement services business, acquired Personal Capital. Prior to completion of the Personal Capital acquisition, IGM Financial Inc., an affiliated company controlled by Power Corporation, held a 24.8% interest in Personal Capital (approximately 21.7% after giving effect to dilution). The transaction resulted from an auction process conducted by Personal Capital and shareholders other than IGM.

During 2020, the Company and Mackenzie jointly acquired a non-controlling interest in Northleaf, a premier global private equity, private credit and infrastructure fund manager.

At December 31, 2020, the Company held $110 million ($101 million in 2019) of debentures issued by IGM.

During the normal course of business in 2020, the Company purchased residential mortgages of $21 million from IGM ($11 million in 2019).

The Company owns 9,200,518 shares representing 3.86% ownership interest, held through Canada Life, in IGM an affiliated company controlled by Power Corporation. The Company uses the equity method to account for its investment in IGM as it exercises significant influence. In 2020, the Company earned equity income of $25 million and received dividends of $21 million from the investment in IGM.

The Company holds investments in Portag3 Ventures Limited Partnership, Portag3 Ventures II Limited Partnership, Wealthsimple Europe S.a.r.l. and other entities which invest in the FinTech sector. These investments were made in partnership with Power Corporation, IGM and, in certain circumstances, outside investors.

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 material loans or guarantees issued to or from related parties during 2020 or 2019. There were no significant outstanding loans or guarantees with related parties at December 31, 2020 or December 31, 2019. There were no provisions for uncollectible amounts with related parties at December 31, 2020 or December 31, 2019.

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

	2020				2019			
Period ended	**Dec. 31**	Sept. 30	June 30	Mar. 31	Dec. 31	Sept. 30	June 30	Mar. 31
United States dollar								
Balance sheet	**$ 1.27**	$ 1.33	$ 1.36	$ 1.40	$ 1.30	$ 1.32	$ 1.31	$ 1.34
Income and expenses	**$ 1.30**	$ 1.33	$ 1.39	$ 1.34	$ 1.32	$ 1.32	$ 1.34	$ 1.33
British pound								
Balance sheet	**$ 1.74**	$ 1.72	$ 1.68	$ 1.74	$ 1.72	$ 1.63	$ 1.66	$ 1.74
Income and expenses	**$ 1.72**	$ 1.72	$ 1.72	$ 1.72	$ 1.70	$ 1.63	$ 1.72	$ 1.73
Euro								
Balance sheet	**$ 1.55**	$ 1.56	$ 1.52	$ 1.55	$ 1.46	$ 1.44	$ 1.49	$ 1.50
Income and expenses	**$ 1.55**	$ 1.56	$ 1.53	$ 1.48	$ 1.46	$ 1.47	$ 1.50	$ 1.51

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

Financial Reporting Responsibility

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

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

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

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

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

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

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

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

Paul Mahon
President and
Chief Executive Officer

Garry MacNicholas
Executive Vice-President and
Chief Financial Officer

February 10, 2021

Consolidated Statements of Earnings

(in Canadian $ millions except per share amounts)

For the years ended December 31	2020	2019
Income		
Premium income		
Gross premiums written	$ **47,754**	$ 43,266
Ceded premiums	**(4,735)**	(18,756)
Total net premiums	**43,019**	24,510
Net investment income (note 6)		
Regular net investment income	**5,963**	6,161
Changes in fair value through profit or loss	**5,699**	6,946
Total net investment income	**11,662**	13,107
Fee and other income	**5,902**	7,081
	60,583	44,698
Benefits and expenses		
Policyholder benefits		
Gross	**39,605**	37,769
Ceded	**(2,946)**	(2,916)
Total net policyholder benefits	**36,659**	34,853
Changes in insurance and investment contract liabilities		
Gross	**12,079**	10,155
Ceded	**(1,751)**	(13,479)
Total net changes in insurance and investment contract liabilities	**10,328**	(3,324)
Policyholder dividends and experience refunds	**1,500**	1,562
Total paid or credited to policyholders	**48,487**	33,091
Commissions	**2,396**	2,429
Operating and administrative expenses (note 27)	**5,492**	5,231
Premium taxes	**480**	506
Financing charges (note 16)	**284**	285
Amortization of finite life intangible assets (note 10)	**238**	224
Restructuring and integration expenses (note 4)	**134**	52
Earnings before income taxes	**3,072**	2,880
Income taxes (note 26)	**(82)**	373
Net earnings before non-controlling interests	**3,154**	2,507
Attributable to non-controlling interests (note 18)	**78**	15
Net earnings	**3,076**	2,492
Preferred share dividends (note 20)	**133**	133
Net earnings – common shareholders	$ **2,943**	$ 2,359
Earnings per common share (note 20)		
Basic	$ **3.173**	$ 2.494
Diluted	$ **3.172**	$ 2.493

Consolidated Statements of Comprehensive Income

(in Canadian $ millions)

For the years ended December 31	2020	2019
Net earnings	**$ 3,076**	$ 2,492
Other comprehensive income		
Items that may be reclassified subsequently to Consolidated Statements of Earnings		
Unrealized foreign exchange gains (losses) on translation of foreign operations	**105**	(561)
Income tax (expense) benefit	**(2)**	–
Unrealized foreign exchange gains (losses) on euro debt designated as hedges of the net investment in foreign operations	**(90)**	100
Income tax (expense) benefit	**12**	(14)
Unrealized gains (losses) on available-for-sale assets	**287**	232
Income tax (expense) benefit	**(49)**	(37)
Realized (gains) losses on available-for-sale assets	**(141)**	(69)
Income tax expense (benefit)	**15**	6
Unrealized gains (losses) on cash flow hedges	**36**	2
Income tax (expense) benefit	**(10)**	–
Realized (gains) losses on cash flow hedges	**(21)**	–
Income tax expense (benefit)	**6**	–
Non-controlling interests	**(69)**	(46)
Income tax (expense) benefit	**21**	7
Total items that may be reclassified	**100**	(380)
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)	**(169)**	(226)
Income tax (expense) benefit	**40**	47
Revaluation surplus on transfer to investment properties (note 9)	**11**	–
Income tax (expense) benefit	**(1)**	–
Non-controlling interests	**15**	13
Income tax (expense) benefit	**(4)**	(4)
Total items that will not be reclassified	**(108)**	(170)
Total other comprehensive income (loss)	**(8)**	(550)
Comprehensive income	**$ 3,068**	$ 1,942

Consolidated Balance Sheets

(in Canadian $ millions)

December 31	2020	2019
Assets		
Cash and cash equivalents (note 5)	$ **7,946**	$ 4,628
Bonds (note 6)	**137,592**	115,028
Mortgage loans (note 6)	**27,803**	24,268
Stocks (note 6)	**11,000**	10,375
Investment properties (note 6)	**6,270**	5,887
Loans to policyholders	**8,387**	8,601
	198,998	168,787
Funds held by ceding insurers (note 7)	**18,383**	8,714
Reinsurance assets (note 13)	**22,121**	20,707
Goodwill (note 10)	**10,106**	6,505
Intangible assets (note 10)	**4,285**	3,879
Derivative financial instruments (note 28)	**829**	451
Owner occupied properties (note 11)	**741**	727
Fixed assets (note 11)	**426**	455
Other assets (note 12)	**3,347**	3,110
Premiums in course of collection, accounts and interest receivable	**6,102**	5,881
Current income taxes	**145**	236
Deferred tax assets (note 26)	**975**	693
Investments on account of segregated fund policyholders (note 14)	**334,032**	231,022
Total assets	**$ 600,490**	$ 451,167
Liabilities		
Insurance contract liabilities (note 13)	**$ 208,902**	$ 174,521
Investment contract liabilities (note 13)	**9,145**	1,656
Debentures and other debt instruments (note 15)	**9,693**	5,993
Funds held under reinsurance contracts	**1,648**	1,433
Derivative financial instruments (note 28)	**1,221**	1,381
Accounts payable	**2,698**	3,352
Other liabilities (note 17)	**5,147**	4,689
Current income taxes	**343**	461
Deferred tax liabilities (note 26)	**646**	1,116
Investment and insurance contracts on account of segregated fund policyholders (note 14)	**334,032**	231,022
Total liabilities	**573,475**	425,624
Equity		
Non-controlling interests (note 18)		
Participating account surplus in subsidiaries	**2,871**	2,759
Non-controlling interests in subsidiaries	**116**	107
Shareholders' equity		
Share capital (note 19)		
Preferred shares	**2,714**	2,714
Common shares	**5,651**	5,633
Accumulated surplus	**14,990**	13,660
Accumulated other comprehensive income (note 24)	**487**	495
Contributed surplus	**186**	175
Total equity	**27,015**	25,543
Total liabilities and equity	**$ 600,490**	$ 451,167

Approved by the Board of Directors:

Jeffrey Orr
Chair of the Board

Paul Mahon
President and Chief Executive Officer

Consolidated Statements of Changes in Equity

(in Canadian $ millions)

	December 31, 2020					
	Share capital	**Contributed surplus**	**Accumulated surplus**	**Accumulated other comprehensive income (loss)**	**Non-controlling interests**	**Total equity**
Balance, beginning of year	**$ 8,347**	**$ 175**	**$ 13,660**	**$ 495**	**$ 2,866**	**$ 25,543**
Net earnings	**–**	**–**	**3,076**	**–**	**78**	**3,154**
Other comprehensive income (loss)	**–**	**–**	**–**	**(8)**	**37**	**29**
	8,347	**175**	**16,736**	**487**	**2,981**	**28,726**
Dividends to shareholders						
Preferred shareholders (note 20)	**–**	**–**	**(133)**	**–**	**–**	**(133)**
Common shareholders	**–**	**–**	**(1,626)**	**–**	**–**	**(1,626)**
Shares exercised and issued under share-based payment plans (note 19)	**18**	**(50)**	**–**	**–**	**49**	**17**
Share-based payment plans expense	**–**	**54**	**–**	**–**	**–**	**54**
Equity settlement of Putnam share-based plans	**–**	**–**	**–**	**–**	**(15)**	**(15)**
Shares cancelled under Putnam share-based plans	**–**	**7**	**–**	**–**	**(15)**	**(8)**
Dilution gain on non-controlling interests	**–**	**–**	**13**	**–**	**(13)**	**–**
Balance, end of year	**$ 8,365**	**$ 186**	**$ 14,990**	**$ 487**	**$ 2,987**	**$ 27,015**

	December 31, 2019					
	Share capital	Contributed surplus	Accumulated surplus	Accumulated other comprehensive income (loss)	Non-controlling interests	Total equity
Balance, beginning of year	$ 9,997	$ 139	$ 13,342	$ 1,045	$ 2,875	$ 27,398
Change in accounting policy	–	–	(109)	–	–	(109)
Revised balance, beginning of year	9,997	139	13,233	1,045	2,875	27,289
Net earnings	–	–	2,492	–	15	2,507
Other comprehensive income (loss)	–	–	–	(550)	30	(520)
	9,997	139	15,725	495	2,920	29,276
Dividends to shareholders						
Preferred shareholders (note 20)	–	–	(133)	–	–	(133)
Common shareholders	–	–	(1,559)	–	–	(1,559)
Shares exercised and issued under share-based payment plans (note 19)	39	(36)	–	–	31	34
Share-based payment plans expense	–	37	–	–	–	37
Equity settlement of Putnam share-based plans	–	–	–	–	(33)	(33)
Shares purchased and cancelled under Substantial Issuer Bid (note 19)	(2,000)	–	–	–	–	(2,000)
Excess of redemption proceeds over stated capital per Substantial Issuer Bid (note 19)	1,628	–	(1,628)	–	–	–
Common share carrying value adjustment per Substantial Issuer Bid (note 19)	(1,304)	–	1,304	–	–	–
Substantial Issuer Bid transaction costs (note 19)	–	–	(3)	–	–	(3)
Shares purchased and cancelled under Normal Course Issuer Bid (note 19)	(66)	–	–	–	–	(66)
Excess of redemption proceeds over stated capital per Normal Course Issuer Bid (note 19)	53	–	(53)	–	–	–
Shares cancelled under Putnam share-based plans	–	35	–	–	(45)	(10)
Dilution gain on non-controlling interests	–	–	7	–	(7)	–
Balance, end of year	$ 8,347	$ 175	$ 13,660	$ 495	$ 2,866	$ 25,543

Consolidated Statements of Cash Flows

(in Canadian $ millions)

For the years ended December 31	2020	2019
Operations		
Earnings before income taxes	$ **3,072**	$ 2,880
Income taxes paid, net of refunds received	**(367)**	(235)
Adjustments:		
Change in insurance and investment contract liabilities	**14,476**	10,412
Change in funds held by ceding insurers	**467**	570
Change in funds held under reinsurance contracts	**201**	81
Change in reinsurance assets	**(1,629)**	(900)
Changes in fair value through profit or loss	**(5,699)**	(6,946)
Other	**(911)**	248
	9,610	6,110
Financing Activities		
Issue of common shares (note 19)	**18**	39
Purchased and cancelled common shares (note 19)	**–**	(2,066)
Substantial issuer bid transaction costs (note 19)	**–**	(3)
Issue of debentures and senior notes (note 15)	**3,713**	–
Repayment of debentures (note 15)	**(500)**	(232)
Increase (decrease) in line of credit of subsidiaries	**539**	(28)
Increase (decrease) in debentures and other debt instruments	**(1)**	1
Dividends paid on common shares	**(1,626)**	(1,559)
Dividends paid on preferred shares (note 20)	**(133)**	(133)
	2,010	(3,981)
Investment Activities		
Bond sales and maturities	**22,650**	25,155
Mortgage loan repayments	**2,339**	2,532
Stock sales	**3,859**	2,814
Investment property sales	**73**	5
Change in loans to policyholders	**84**	16
Business acquisitions, net of cash and cash equivalents acquired (note 3)	**(1,403)**	–
Sale of businesses, net of cash and cash equivalents in subsidiaries (note 3)	**281**	–
Cash and cash equivalents related to transfer of business	**–**	(4)
Investment in bonds	**(27,942)**	(25,087)
Investment in mortgage loans	**(3,377)**	(3,816)
Investment in stocks	**(4,285)**	(2,510)
Investment in investment properties	**(481)**	(644)
	(8,202)	(1,539)
Effect of changes in exchange rates on cash and cash equivalents	**(100)**	(130)
Increase in cash and cash equivalents	**3,318**	460
Cash and cash equivalents, beginning of year	**4,628**	4,168
Cash and cash equivalents, end of year	$ **7,946**	$ 4,628
Supplementary cash flow information		
Interest income received	$ **4,589**	$ 5,112
Interest paid	**286**	301
Dividend income received	**333**	299

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 (Power Corporation) group of companies and is a subsidiary of Power Corporation.

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 Canada Life Assurance Company (Canada Life), Great-West Life & Annuity Insurance Company (GWL&A) and Putnam Investments, LLC (Putnam).

The consolidated financial statements (financial statements) of the Company as at and for the year ended December 31, 2020 were approved by the Board of Directors on February 10, 2021.

2. Basis of Presentation and Summary of Accounting Policies

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

Changes in Accounting Policies

The Company adopted the narrow scope amendments to International Financial Reporting Standards (IFRS) for IFRS 3, *Business Combinations*; IAS 1, *Presentation of Financial Statements* and IAS 8, *Accounting Policies, Changes in Accounting Estimates and Errors*; and IAS 39, *Financial Instruments: Recognition and Measurement* and IFRS 7, *Financial Instruments: Disclosures*, effective January 1, 2020. 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, 2020 with comparative information as at and for the year ended December 31, 2019. 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 and transactions, including income and expenses, profits or losses and dividends, are eliminated on consolidation.

Impact of COVID-19 on Significant Judgments, Estimates and Assumptions

Beginning in January 2020, the outbreak of a virus known as COVID-19 and ensuing global pandemic have resulted in travel and border restrictions, quarantines, supply chain disruptions, lower consumer demand and significant market uncertainty. In the first quarter of 2020, global financial markets experienced material and rapid declines and significant volatility; however, following March 31, 2020, the markets have experienced recoveries. Governments and central banks have reacted with significant monetary and fiscal interventions designed to stabilize economic conditions. The duration and impact of the COVID-19 pandemic continues to be unknown at this time, as is the efficacy of the government and central bank interventions.

The results of the Company reflect management's judgments regarding the impact of prevailing market conditions related to global credit, equities, investment properties and foreign exchange, as well as prevailing health and mortality experience.

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 credit rating. Given rapid market changes, third party credit rating changes may lag developments in the current environment.

The fair value of portfolio investments (note 6), the valuation of goodwill and other intangible assets (note 10), the valuation of insurance contract liabilities (note 13) and the recoverability of deferred tax asset carrying values (note 26) reflect management's judgment.

Given the uncertainty surrounding the current environment, the actual financial results could differ from the estimates made in preparation of these financial statements.

Use of Significant Judgments, Estimates and Assumptions

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

- Management uses judgment to determine the fair value of assets acquired and liabilities assumed in a business combination.
- 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 6).

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

- Management uses internal valuation models which utilize judgments and estimates to determine the fair value of equity release mortgages. These valuations are adjusted by applying management judgments and estimates for material changes in projected asset cash flows, and discount rates (note 6).
- In the determination of the fair value of financial instruments, the Company's management exercises judgment in the determination of fair value inputs, particularly those items categorized within level 3 of the fair value hierarchy (note 9).
- Cash generating units for indefinite life intangible assets and cash generating unit groupings for goodwill have been determined by management as the lowest level that the assets are monitored for internal reporting purposes, which requires management judgment in the determination of the lowest level of monitoring (note 10).
- Management evaluates the future benefit for initial recognition and measurement of goodwill and intangible assets as well as testing the recoverable amounts. The determination of the carrying value and recoverable amounts of the cash generating unit groupings for goodwill and cash generating units for intangible assets relies upon the determination of fair value or value-in-use using valuation methodologies (note 10).
- Judgments are used by management in determining whether deferred acquisition costs and deferred income reserves can be recognized on the Consolidated Balance Sheets. Deferred acquisition costs are recognized if management determines the costs meet the definition of an asset and are incremental and related to the issuance of the investment contract. Deferred income reserves are amortized on a straight-line basis over the term of the policy (notes 12 and 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 13).
- The actuarial assumptions used in determining the expense and benefit obligations for the Company's defined benefit pension plans and other post-employment benefits requires significant judgment and estimation. Management reviews previous experience of its plan members and market conditions including interest rates and inflation rates in evaluating the assumptions used in determining the expense for the current year (note 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 applies judgment in assessing the recoverability of the deferred income tax asset carrying values based on future years' taxable income projections (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 29).
- The operating segments of the Company are the segments reviewed by the Company's Chief Executive Officer to assess performance and allocate resources within the Company. Management applies judgment in the aggregation of the business units into the Company's operating segments (note 31).
- 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 whether the Company retains the primary obligation with a client in sub-advisor arrangements. Where the Company retains the primary obligation to the client, revenue and expenses are recorded on a gross basis.
- Within the Consolidated Statements of Cash Flows, purchases and sales of portfolio investments are recorded within investment activities due to management's judgment that these investing activities are long-term in nature.
- The results of the Company reflect management's judgments regarding the impact of prevailing global credit, equity and foreign exchange market conditions. The provision for future credit losses within the Company's insurance contract liabilities relies upon investment credit ratings. The Company's practice is to use third-party independent credit ratings where available. Management judgment is required when setting credit ratings for instruments that do not have a third-party rating.

The significant accounting policies are as follows:

(a) Portfolio Investments

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

Investments in bonds and stocks normally actively traded on a public market or where fair value can be reliably measured are either designated or classified as fair value through profit or loss or classified as available-for-sale on a trade date basis. Equity release mortgages are designated as fair value through profit or loss. 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 calculated using the effective interest method and 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 Corporation group of companies.

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

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

Fair Value Measurement

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

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

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

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

Fair values for bonds classified and designated as fair value through profit or loss or available-for-sale are determined with reference to quoted market bid prices primarily provided by third-party independent pricing sources. Where prices are not quoted in an 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.

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

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.

Equity Release Mortgages – Fair Value Through Profit or Loss

There are no market observable prices for equity release mortgages; therefore an internal valuation model is used discounting expected future cash flows and includes consideration of the embedded no-negative equity guarantee. Inputs to the model include market observable inputs such as benchmark yields and risk-adjusted spreads. Non market observable inputs include property growth and volatility rates, expected rates of voluntary redemptions, death, moving to long term care and interest cessation assumptions and the value of the no negative equity guarantee.

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 the 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 recorded in net investment income, therefore, in the event of an impairment, the reduction will be recorded in net investment income.

Securities Lending

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

(b) Transaction Costs

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

(c) Cash and Cash Equivalents

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

(d) Trading Account Assets

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

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

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

(f) Other Assets and Other Liabilities

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

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

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

(g) Disposal Group Classified As Held For Sale

Disposal groups are classified as held for sale when the carrying amount will be recovered through a sale transaction rather than continuing use. The fair value of a disposal group is measured at the lower of its carrying amount and fair value less costs to sell. Individual assets and liabilities in a disposal group not subject to these measurement requirements include financial assets, investment properties and insurance contract liabilities. These assets and liabilities are measured in accordance with the relevant accounting policies described for those assets and liabilities included in this note before the disposal group as a whole is measured to the lower of its carrying amount and fair value less cost to sell. Any impairment loss for the disposal group is recognized as a reduction to the carrying amount for the portion of the disposal group under the measurement requirements for IFRS 5, *Non-Current Assets Held for Sale and Discontinued Operations*.

Disposal group assets and liabilities classified as held for sale are presented separately on the Company's Consolidated Balance Sheets. Gains and losses from disposal groups held for sale are presented separately in the Company's Consolidated Statements of Earnings.

(h) Derivative Financial Instruments

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

The Company includes disclosure of the maximum credit risk, future credit exposure, credit risk equivalent and risk weighted equivalent in note 28 as prescribed by the Office of the Superintendent of Financial Institutions (OSFI) in Canada.

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

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

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

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

Derivatives not designated as hedges for accounting purposes

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

Fair value hedges

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

The Company currently uses foreign exchange forward contracts designated as fair value hedges.

Cash flow hedges

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

The Company currently uses interest rate swaps and equity total return 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 uses foreign exchange forward contracts and debt instruments designated as net investment hedges.

(i) Embedded Derivatives

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

(j) Foreign Currency Translation

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

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

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

(k) Loans to Policyholders

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

(l) Reinsurance Contracts

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

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

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

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

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

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

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

(n) Business Combinations, Goodwill and Intangible Assets

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

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

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

Impairment Testing

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

Goodwill has been allocated to cash generating unit groupings, representing the lowest level that the assets are monitored for internal reporting purposes. Goodwill is tested for impairment by comparing the carrying value of each cash generating unit grouping to its recoverable amount. An impairment loss is recognized for the amount by which the asset's carrying amount exceeds its recoverable amount.

Intangible assets have been allocated to cash generating units, representing the lowest level that the assets are monitored for internal reporting purposes.

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

Intangible assets with an indefinite useful life are reviewed annually to determine if there are indicators of impairment. If indicators of impairment have been identified, a test for impairment is performed and recognized as necessary. Impairment is assessed by comparing the carrying values of the assets to their recoverable amounts. An impairment loss is recognized for the amount by which the asset's carrying amount exceeds its recoverable amount.

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

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

(o) Revenue Recognition

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

Interest income on bonds and mortgages is recognized and accrued using the effective interest 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 income includes fees earned from management of segregated fund assets, proprietary mutual fund assets, record-keeping, fees earned on administrative services only Group health contracts, commissions and fees earned from management services. Fee and other income is recognized on the transfer of services to customers for the amount that reflects the consideration expected to be received in exchange for those services promised.

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

(p) Owner Occupied Properties and Fixed Assets

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

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

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

(q) Deferred Acquisition Costs

Included in other assets are deferred acquisition costs related to investment contracts and service contracts. 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 term of the contract, not to exceed 20 years.

(r) Segregated Funds

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

(s) Insurance and Investment Contract Liabilities

Contract Classification

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

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

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

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

Measurement

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

In the computation of insurance contract liabilities, valuation assumptions have been made regarding rates of mortality/morbidity, investment returns, levels of operating expenses, rates of policy termination and rates of utilization of elective policy options or provisions. The valuation assumptions use best estimates of future experience together with a margin for adverse deviation. These margins are necessary to provide for possibilities of mis-estimation and/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.

(t) Deferred Income Reserves

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

(u) Income Taxes

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

Current Income Tax

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

A provision for tax treatment uncertainties which meet the probable threshold for recognition is measured using either the most likely amount or the expected value, depending upon which method provides the better prediction of the resolution of the uncertainty. The provision for tax uncertainties will be classified as current or deferred based on how a disallowance of the underlying uncertain tax treatment would impact the tax provision accrual as of the balance sheet date.

Deferred Income Tax

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

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

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

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

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

(v) Policyholder Benefits

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

(w) Repurchase Agreements

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

(x) Pension Plans and Other Post-Employment Benefits

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

(y) Equity

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

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

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

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

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

(z) Share-Based Payments

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

The Company follows the fair value based method of accounting for the valuation of compensation expense for shares and share options granted to employees under its stock option plans (note 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 subsidiaries have Deferred Share Unit Plans (DSU Plans) in which the Directors and certain employees of the Company participate. Units issued to Directors under the DSU Plans vest when granted. Units issued to certain employees under the DSU Plans primarily vest over a three year period. 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 remeasured 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 PSU 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, net of related hedges. The liability is remeasured at fair value at each reporting period.

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

(aa) Earnings Per Common Share

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

(ab) Leases

Where the Company is the lessee, a right-of-use asset and a lease liability are recognized on the Consolidated Balance Sheets as at the lease commencement date.

Right-of-use assets are initially measured based on the initial amount of lease liability adjusted for any lease payments made at or before the commencement date, plus any initial direct costs incurred and an estimate of costs to dismantle and remove the underlying asset or to restore the underlying asset or the site on which it is located, less any lease incentive received. Right-of-use assets are included within other assets with the exception of right-of-use assets which meet the definition of investment property which are presented within investment properties and subject to the Company's associated accounting policy. Right-of-use assets presented within other assets are depreciated to the earlier of the useful life of the right-of-use asset or the lease term using the straight-line method. Depreciation expense on right-of-use assets is included within operating and administrative expenses.

Lease liabilities are initially measured at the present value of the lease payments that are not paid at the commencement date, discounted using the interest rate implicit in the lease or, if that rate cannot be readily determined, the Company shall use the lessee's incremental borrowing rate. Generally, the Company uses the lessee's incremental borrowing rate as its discount rate. The lease liability is measured at amortized cost using the effective interest method and is included within other liabilities. Interest expense on lease liabilities is included within operating and administrative expenses.

The Company has elected to apply a practical expedient not to recognize right-of-use assets and lease liabilities for short-term leases that have a lease term of 12 months or less and leases of low-value assets.

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

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

(ac) Operating Segments

Operating segments have been identified based on internal reports that are regularly reviewed by the Company's Chief Executive Officer to allocate resources and assess performance of segments and for which discrete financial information is available. The Company's operating segments include Canada, United States, Europe, Capital and Risk Solutions, and Lifeco Corporate. Effective January 1, 2020, as a result of strategic operational changes, the Company has divided the Europe segment into two separate reporting segments – Europe and Capital and Risk Solutions. The realignment resulted in a change to comparative figures within these operating segments (note 31). The Company's other reportable segments – Canada, United States and Lifeco Corporate – are unchanged. The Canada segment comprises the Individual Customer and Group Customer business units. GWL&A (financial services) and Putnam (asset management) are included in the United States segment. The Europe segment comprises United Kingdom, Ireland, and Germany. Reinsurance, which had previously been reported as part of the Europe segment, is reported in the Capital and Risk Solutions segment. The Lifeco Corporate segment represents activities and transactions that are not directly attributable to the measurement of the operating segments of the Company.

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

(ad) Future Accounting Policies

Standard	Summary of Future Changes
IFRS 17 – *Insurance Contracts*	In May 2017, the IASB issued IFRS 17, Insurance Contracts (IFRS 17), which will replace IFRS 4, Insurance Contracts. On June 26, 2019 the IASB issued an exposure draft covering targeted amendments to the IFRS 17 standard, including a proposed amendment to defer the effective date of the standard. In June 2020, the IASB finalized the amendments to IFRS 17, which included confirmation of the effective date for the standard of January 1, 2023. In addition, the IASB confirmed the extension to January 1, 2023 of the exemption for insurers to apply the financial instruments standard, IFRS 9, Financial Instruments (IFRS 9), keeping the alignment of the effective dates for IFRS 9 and IFRS 17. The adoption of IFRS 17 is a significant initiative for the Company supported by a formal governance framework and project plan, for which substantial resources are being dedicated. The Company has assembled a project team that is working on implementation which involves preparing the financial reporting systems and processes for reporting under IFRS 17, policy development and operational and change management. The project team is also monitoring developments from the IASB and various industry groups that the Company has representation on. The Company continues to make progress in implementing its project plan, with key policy decisions well advanced as well as significant progress on the technology solution. IFRS 17 sets out the requirements for the recognition, measurement, presentation and disclosures of insurance contracts a company issues and reinsurance contracts it holds. IFRS 17 introduces three new measurement models depending on the nature of the insurance contracts: the General Measurement Model, the Premium Allocation Approach and the Variable Fee Approach. For the General Measurement Model and Variable Fee Approach, IFRS 17 requires entities to measure insurance contract liabilities on the balance sheet as the total of: (a) the fulfilment cash flows – the current estimates of amounts that a company expects to collect from premiums and pay out for claims, benefits and expenses, including an adjustment for the timing and risk of those amounts; and (b) the contractual service margin – the future profit for providing insurance coverage. Under IFRS 17, the discount rate used to reflect the time value of money in the fulfillment cash flows must be based on the characteristics of the liability. This is a significant change from IFRS 4 and the Canadian Asset Liability Method, where the discount rate was based on the yield curves of the assets supporting those liabilities (refer to the Company's significant accounting policies in note 2 of these financial statements). The future profit for providing insurance coverage (including impacts of new business) is reflected in the initial recognition of insurance contract liabilities and then recognized into profit or loss over time as the insurance services are provided. IFRS 17 also requires the Company to distinguish between groups of contracts expected to be profit making and groups of contracts expected to be onerous. The Company is required to update the fulfilment cash flows at each reporting date, using current estimates of the amount, timing and uncertainty of cash flows and discount rates. As a result of the new valuation methodologies required under IFRS 17, the Company expects its insurance contract liabilities to increase upon adoption. IFRS 17 will affect how the Company accounts for its insurance contracts and how it reports financial performance in the Consolidated Statements of Earnings, in particular the timing of earnings recognition for insurance contracts. The adoption of IFRS 17 will also have a significant impact on how insurance contract results are presented and disclosed in the consolidated financial statements and on regulatory and tax regimes that are dependent upon IFRS accounting values. The Company is also actively monitoring potential impacts on regulatory capital and the associated ratios and disclosures. The Company continues to assess all these impacts through its global implementation plan.
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 standard provides changes to financial instruments accounting for the following: • classification and measurement of financial instruments based on a business model approach for managing financial assets and the contractual cash flow characteristics of the financial asset; • impairment based on an expected loss model; and • hedge accounting that incorporates the risk management practices of an entity. In September 2016, the IASB issued an amendment to IFRS 4, *Insurance Contracts* (IFRS 4). The amendment "Applying IFRS 9, *Financial Instruments* with IFRS 4, *Insurance Contracts*" provides qualifying insurance companies with two options to address the potential volatility associated with implementing the IFRS 9 standard before the new proposed insurance contract standard is effective. The two options are as follows: • *Deferral Approach* – provides the option to defer implementation of IFRS 9 until the effective date of the new insurance contract standard; 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 is applying the deferral approach to allow adoption of both IFRS 9 and IFRS 17 simultaneously. The disclosure for the measurement and classification of the Company's portfolio investments provides most of the information required by IFRS 9. The Company continues to evaluate the impact of the adoption of this standard with the adoption of IFRS 17.
IAS 37 – *Provisions, Contingent Liabilities, and Contingent Assets*	In May 2020, the IASB issued amendments to IAS 37, *Provisions, Contingent Liabilities, and Contingent Assets*. The amendments specify which costs should be included when assessing whether a contract will be loss-making. These amendments are effective for annual reporting periods beginning on or after January 1, 2022, with earlier application permitted. The Company is evaluating the impact of the adoption of these amendments.
Annual Improvements 2018-2020 Cycle	In May 2020, the IASB issued *Annual Improvements 2018-2020 Cycle* as part of its ongoing process to efficiently deal with non-urgent narrow scope amendments to IFRS. Two amendments were included in this issue that are applicable for the Company relating to IFRS 9, *Financial Instruments* and IFRS 16, *Leases*. The amendments are effective January 1, 2022. The Company is evaluating the impact of the adoption of these amendments.
IFRS 16 – *Leases*	In May 2020, the IASB published amendments to IFRS 16, *Leases* amending the standard to provide lessees with an optional exemption from assessing whether a COVID-19-related rent concession is a lease modification. The amendments are effective for annual reporting periods beginning on or after June 1, 2020, with earlier application permitted. The Company does not anticipate a significant impact on its consolidated financial statements as a result of this amendment.

Standard	Summary of Future Changes
IFRS 9 – *Financial Instruments*, IAS 39 – *Financial Instruments: Recognition and Measurement*, IFRS 7 – *Financial Instruments: Disclosures*, IFRS 4 – *Insurance Contracts* and IFRS 16 – *Leases*	In August 2020, the IASB published *Interest Rate Benchmark Reform – Phase 2* which issued amendments to IFRS 9, IAS 39, IFRS 7, IFRS 4 and IFRS 16. The amendments provide relief from remeasurement impacts on financial instruments, and discontinuation of hedge relationships arising from reform of an interest rate benchmark, including its replacement with alternative benchmark rates. The amendments are effective for annual periods beginning on or after January 1, 2021, with earlier application permitted. The Company is monitoring the interest rate benchmark reform process and has established an internal program to fully transition to alternative reference rates by the end of 2021. The transition to alternative reference rates is not expected to impact the Company's risk management strategy. The adoption of these amendments is not expected to have a significant impact on the consolidated financial statements.

3. Business Acquisitions and Other Transactions

(a) Acquisition of MassMutual Retirement Services Business

On December 31, 2020, GWL&A completed the purchase, via indemnity reinsurance, of the retirement services business of Massachusetts Mutual Life Insurance Company (MassMutual). The acquisition strengthens the Company's position as a leader in the U.S. retirement market. The Company anticipates realizing cost synergies through the migration of MassMutual's retirement services business onto the Company's recordkeeping platform. The Company assumed the economics and risks associated with the reinsured business.

The Company paid a ceding commission of $2,937 (U.S. $2,312) net of working capital adjustments to MassMutual, and funded the transaction with existing cash, short-term debt and $1,973 (U.S. $1,500) in long-term debt issued on September 17, 2020 (note 15). The assets acquired, liabilities assumed and ceding commission paid at the closing of this transaction are subject to future adjustments.

The initial amounts assigned to the assets acquired, goodwill, and liabilities assumed and reported as at December 31, 2020 are as follows:

Assets acquired and goodwill	
Cash and cash equivalents	$ 2,594
Bonds	12,006
Mortgage Loans	2,326
Funds held by ceding insurers	9,928
Goodwill	2,827
Other assets	231
Premiums in the course of collection, accounts and interest receivable	172
Deferred tax assets	300
Investments on account of segregated fund policyholders	84,785
Total assets acquired and goodwill	**$ 115,169**
Liabilities assumed	
Insurance contract liabilities	$ 22,316
Investment contract liabilities	4,984
Accounts payable	31
Other liabilities	116
Investment and insurance contracts on account of segregated fund policyholders	84,785
Total liabilities assumed	**$ 112,232**

As at December 31, 2020, the accounting for the acquisition is not finalized pending completion of a comprehensive valuation of the net assets acquired. The financial statements at December 31, 2020 reflect management's current best estimate of the purchase price allocation. Final valuation of the assets acquired and liabilities assumed and the completion of the purchase price allocation are expected to occur during 2021. As at December 31, 2020, provisional amounts for intangible assets have not been separately identified and valued within the assets of the purchase price allocation pending completion of the valuation exercise.

As a result, the excess of the purchase price over the fair value of net assets acquired, representing goodwill of $2,827 (U.S. $2,226) on the date of acquisition, will be adjusted in future periods.

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 of the MassMutual retirement services business. These synergies represent meaningful expense and revenue opportunities which are expected to be accretive to earnings.

During the year ended December 31, 2020, the Company incurred acquisition expenses of $66 (U.S. $51) which are included within operating and administrative expenses in the Consolidated Statements of Earnings.

3. Business Acquisitions and Other Transactions (cont'd)

As the acquisition occurred on December 31, 2020, the reinsured business did not contribute to 2020 earnings.

Supplemental pro-forma revenue and net earnings for the combined entity, as though the acquisition date for this business combination had been as of the beginning of the annual reporting period, has not been included as it is impracticable as MassMutual had a different financial reporting basis than the Company.

(b) Acquisition of Personal Capital Corporation

On August 17, 2020, GWL&A completed the acquisition of 100% of the equity of Personal Capital Corporation (Personal Capital), a hybrid wealth manager that combines a digital experience with personalized advice delivered by human advisors. Prior to the completion of the acquisition, IGM, an affiliated company controlled by Power Corporation, held a 24.8% interest in Personal Capital (approximately 21.7% after giving effect to dilution). The transaction resulted from an auction process conducted by Personal Capital and shareholders other than IGM (note 25).

The amounts assigned to the assets acquired, goodwill, and liabilities assumed on August 17, 2020, reported as at December 31, 2020 are as follows:

Assets acquired and goodwill	
Cash and cash equivalents	$ 36
Goodwill	718
Intangible assets	294
Deferred tax assets	43
Other assets	40
Total assets acquired and goodwill	**$ 1,131**
Liabilities assumed and contingent consideration	
Other liabilities	$ 33
Contingent consideration	26
Total liabilities assumed and contingent consideration	**$ 59**

During the fourth quarter of 2020, the Company completed its comprehensive evaluation of the fair value of the net assets acquired from Personal Capital and the purchase price allocation. As a result, initial goodwill of $954 recognized upon the acquisition of Personal Capital on August 17, 2020 and presented in the September 30, 2020 consolidated interim unaudited financial statements has been adjusted in the fourth quarter of 2020. Adjustments were made to the provisional amounts disclosed in the September 30, 2020 consolidated interim unaudited financial statements primarily for the recognition and measurement of intangible assets, contingent consideration and adjustments to the deferred tax assets acquired.

The following provides the change in carrying value from September 30, 2020 to December 31, 2020 of the goodwill on acquisition:

Goodwill previously reported at September 30, 2020	**$ 954**
Recognition and measurement of intangible assets	(294)
Recognition and measurement of contingent consideration	26
Adjustment to deferred tax assets and other adjustments	32
Goodwill reported at December 31, 2020	**$ 718**

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

Intangible assets include customer relationships, brand name and internally developed software (note 10).

The purchase consideration was adjusted from $1,097 to $1,072 (U.S. $825 to U.S. $813). The contingent consideration earn-out value of $26 (U.S. $20) represents management's best estimate, which could increase up to $231 (U.S. $175) based on the achievement of growth in assets under management metrics defined in the Merger Agreement, payable following measurements through December 31, 2021 and December 31, 2022. Future changes in the fair value of the contingent consideration measured in accordance with the Merger Agreement will be recognized in the Consolidated Statements of Earnings.

Supplemental pro-forma revenue and net earnings for the combined entity, as though the acquisition date for this business combination had been as of the beginning of the annual reporting period, have not been included as the results were not significant to the results of the Company.

During the year ended December 31, 2020, the Company incurred transaction expenses of $29 (U.S. $22) which are included within operating and administrative expenses in the Consolidated Statements of Earnings.

(c) U.S. Individual Life Insurance and Annuity Business Reinsurance Agreement

On January 24, 2019, GWL&A announced that it had entered into an agreement with Protective Life Insurance Company (Protective Life) to sell, via indemnity reinsurance, substantially all of its individual life insurance and annuity business in its United States segment. The transaction was completed on June 1, 2019.

The liabilities transferred and ceding commission received at the closing of this transaction were subject to future adjustments. In October 2019, Protective Life provided the Company with its listing of proposed adjustments with respect to the liabilities transferred, which the Company formally objected to in December 2019. In November 2020, the parties reached resolution and settled cash for adjustments which did not have a material effect on the consolidated financial position of the Company and no further adjustments are expected.

(d) Sale of Irish Progressive Services International Limited

On August 4, 2020, Irish Life Group Limited (Irish Life), an indirect wholly-owned subsidiary of the Company, completed the sale of Irish Progressive Services International Limited (IPSI), a wholly-owned subsidiary whose principal activity is the provision of outsourced administration services for life assurance companies, to a member of the FNZ group of companies. The Company recognized a net gain of $94 after-tax in the Consolidated Statements of Earnings that includes a curtailment gain and other restructuring and transaction costs. The carrying value and earnings of the business are immaterial to the Company.

(e) Sale of GLC Asset Management Group Ltd.

During the fourth quarter of 2020, the Company completed the sale of GLC Asset Management Group Ltd. (GLC) to Mackenzie Financial Corporation (Mackenzie), an affiliate of the Company. GLC was a wholly-owned subsidiary of Canada Life whose principal activity is the provision of investment management services to Canada Life.

The Company recorded a gain on disposal of $143 after-tax, net of restructuring and other one-time costs of $16 after-tax ($22 pre-tax) (note 4). The carrying value and earnings of the business are immaterial to the Company. This is a related party transaction (note 25), and the board of directors of each of the Company and Canada Life established a committee of directors independent of management and Mackenzie to assess, review and consider the proposed terms of the transaction and to make recommendations regarding the transaction to its board of directors.

(f) Northleaf Capital Partners Ltd.

On October 29, 2020, the Company and Mackenzie jointly acquired a non-controlling interest in Northleaf Capital Partners Ltd. (Northleaf), a premier global private equity, private credit and infrastructure fund manager, through an acquisition vehicle 80% owned by Mackenzie and 20% owned by Lifeco. The Company and Mackenzie acquired a 49.9% non-controlling interest and a 70% economic interest in Northleaf for consideration that includes a payment on closing of $245 as well as contingent consideration at the end of five years. The Company has also committed as part of the transaction to make a minimum investment through 2022 in Northleaf's product offerings. Mackenzie and Lifeco have an obligation and right to purchase an additional equity and voting interest in the firm commencing in approximately five years and extending into future periods. The revenue and net earnings of Northleaf are not expected to be significant to the results of the Company.

4. Restructuring and Integration Expenses

(a) Canada Restructuring

In addition to the sale of GLC by the Company (note 3), two initiatives impacting the Company's operations were announced in the fourth quarter of 2020:

1. The Company announced changes to its Canadian distribution strategy and vision for advisor-based distribution, and
2. IGM has notified the Company that it intends to terminate its long-term technology infrastructure related sharing agreement in the first quarter of 2021.

These initiatives, together with the sale of GLC will result in staff reductions, exit costs for certain facilities lease agreements and decommit activities related to technology and other assets.

As a result, the Company has recorded a restructuring provision of $92, which includes the restructuring costs associated with the GLC disposition ($68 in the shareholder account and $24 in the participating account). The after-tax impact of the restructuring provision is $68 ($50 in the shareholder account and $18 in the participating account). Changes relating to these initiatives are expected to be implemented by the end of 2022 and are not expected to have a significant impact on the Company's financial results.

At December 31, 2020, the Company has a restructuring provision of $86 remaining in other liabilities. The Company expects to pay out substantially all of these amounts by December 31, 2022.

	2020
Balance, beginning of year	$ –
Restructuring expenses	92
Amounts used	(6)
Balance, end of year	$ 86

(b) GWL&A Restructuring

Upon acquisition of MassMutual, GWL&A recorded restructuring expenses of $42 pre-tax ($33 after-tax) associated with the acquisition of the MassMutual retirement services business. These expenses are recorded in restructuring and integration expenses in the Consolidated Statement of Earnings and include a restructuring provision of $37 and integration costs of $5.

This restructuring is primarily attributed to the reduction of MassMutual staff not retained. In addition, expenses were incurred for the early termination of certain MassMutual vendor contracts. The Company expects to pay out a significant portion of these amounts during 2021. The Company expects to incur further restructuring and integration expenses associated with the acquisition over the following 18 months.

At December 31, 2020, the Company has a restructuring provision of $37 remaining in other liabilities.

(c) United Kingdom Business Transformation

In 2018, the Company recorded a restructuring provision in the European segment in respect of activities aimed at achieving planned expense reductions and an organizational realignment. Despite delays due to COVID-19, the Company had achieved most of the planned benefits by December 31, 2020 and the restructuring has been substantially completed. At December 31, 2020, the Company has a restructuring provision of $23 ($39 at December 31, 2019) remaining in other liabilities.

(d) Putnam Restructuring

In 2019, Putnam recorded a restructuring provision of $52 pre-tax ($36 after-tax), which is recorded in restructuring expenses in the Consolidated Statements of Earnings. This restructuring is in respect of expense reductions and a realignment of its resources to best position itself for current and future opportunities. The expense reductions will be achieved through a reduction in staff, consolidation of certain mutual funds, digital technology modernization and facilities downsizing.

The Putnam restructuring activities are substantially completed. At December 31, 2020, the Company has a restructuring provision of $4 ($37 at December 31, 2019) remaining in other liabilities.

5. 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.

	2020	2019
Cash	$ 2,978	$ 2,860
Short-term deposits	4,968	1,768
Total	$ 7,946	$ 4,628

At December 31, 2020, cash of $508 was restricted for use by the Company ($574 at December 31, 2019) 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.

6. Portfolio Investments

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

	2020		2019	
	Carrying value	Fair value	Carrying value	Fair value
Bonds				
Designated fair value through profit or loss (1)	$ 100,839	$ 100,839	$ 84,229	$ 84,229
Classified fair value through profit or loss (1)	2,053	2,053	1,717	1,717
Available-for-sale	11,352	11,352	11,710	11,710
Loans and receivables	23,348	26,545	17,372	19,344
	137,592	140,789	115,028	117,000
Mortgage loans				
Residential				
Designated fair value through profit or loss (1)	2,020	2,020	1,314	1,314
Loans and receivables	9,416	10,024	9,073	9,347
	11,436	12,044	10,387	10,661
Commercial	16,367	17,589	13,881	14,485
	27,803	29,633	24,268	25,146
Stocks				
Designated fair value through profit or loss (1)	10,335	10,335	9,752	9,752
Available-for-sale	20	20	16	16
Available-for-sale, at cost (2)	163	163	189	189
Equity method	482	445	418	410
	11,000	10,963	10,375	10,367
Investment properties	6,270	6,270	5,887	5,887
Total	$ 182,665	$ 187,655	$ 155,558	$ 158,400

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

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

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

6. Portfolio Investments (cont'd)

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

	2020			
	Term to maturity			
	1 year or less	**Over 1 year to 5 years**	**Over 5 years**	**Total**
Bonds [1]	**$ 10,690**	**$ 28,312**	**$ 98,555**	**$ 137,557**
Mortgage loans [2]	**1,727**	**9,523**	**16,530**	**27,780**
Total	**$ 12,417**	**$ 37,835**	**$ 115,085**	**$ 165,337**

	2019			
	Term to maturity			
	1 year or less	Over 1 year to 5 years	Over 5 years	Total
Bonds [1]	$ 12,142	$ 25,989	$ 76,860	$ 114,991
Mortgage loans [2]	941	8,180	15,118	24,239
Total	$ 13,083	$ 34,169	$ 91,978	$ 139,230

(1) Excludes the carrying value of impaired bonds as the ultimate timing of collectability is uncertain.

(2) Excludes the carrying value of impaired mortgage loans as the ultimate timing of collectability is uncertain. Mortgage loans include equity release mortgages which do not have a fixed redemption date. The maturity profile of the portfolio has therefore been estimated based on previous redemption experience.

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

The majority of the Company's equity method investments relate to the Company's investment, held through Canada Life, in an affiliated company, IGM, a member of the Power Corporation 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 9,200,518 shares of IGM at December 31, 2020 (9,200,505 at December 31, 2019) representing a 3.86% ownership interest (3.86% at December 31, 2019). 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 Corporation, shared representation on the Boards of Directors of the Company and IGM, interchange of managerial personnel, and certain shared strategic alliances, significant intercompany transactions and service agreements that influence the financial and operating policies of both companies.

	2020	2019
Carrying value, beginning of year	**$ 350**	$ 346
Equity method share of IGM net earnings	**25**	25
Dividends received	**(21)**	(21)
Carrying value, end of year	**$ 354**	$ 350
Share of equity, end of year	**$ 190**	$ 171
Fair value, end of year	**$ 317**	$ 342

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 other market expectations, to complete equity method accounting. The difference between actual and estimated results is reflected in the subsequent quarter and is not material to the Company's consolidated financial statements.

IGM's financial information as at December 31, 2020 can be obtained in its publicly available information.

At December 31, 2020, IGM owned 37,337,133 (37,337,133 at December 31, 2019) common shares of the Company.

(d) Included in portfolio investments are the following:

(i) Carrying amount of impaired investments

	2020	2019
Impaired amounts by classification		
Fair value through profit or loss	$ 20	$ 21
Available-for-sale	17	16
Loans and receivables	23	29
Total	$ 60	$ 66

The carrying amount of impaired investments includes $35 bonds, $23 mortgage loans and $2 stocks at December 31, 2020 ($37 bonds and $29 mortgage loans at December 31, 2019). The above carrying values for loans and receivables are net of allowances of $57 at December 31, 2020 and $51 at December 31, 2019.

(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:

	2020			2019		
	Bonds	Mortgage loans	Total	Bonds	Mortgage loans	Total
Balance, beginning of year	$ –	$ 51	$ 51	$ –	$ 20	$ 20
Net provision for credit losses – in year	–	16	16	–	50	50
Write-offs, net of recoveries	–	(10)	(10)	–	(19)	(19)
Balance, end of year	$ –	$ 57	$ 57	$ –	$ 51	$ 51

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:

	2020					
	Bonds	Mortgage loans	Stocks	Investment properties	Other	Total
Regular net investment income:						
Investment income earned	$ 3,589	$ 877	$ 357	$ 397	$ 571	$ 5,791
Net realized gains (losses)						
Available-for-sale	146	–	(5)	–	–	141
Other classifications (1)	33	47	245	–	–	325
Net allowances for credit losses on loans and receivables	–	(16)	–	–	–	(16)
Other income (expenses)	–	–	–	(127)	(151)	(278)
	3,768	908	597	270	420	5,963
Changes in fair value through profit or loss assets:						
Classified fair value through profit or loss	78	–	–	–	–	78
Designated fair value through profit or loss	5,154	157	77	–	307	5,695
Recorded at fair value through profit or loss	–	–	–	(74)	–	(74)
	5,232	157	77	(74)	307	5,699
Total	$ 9,000	$ 1,065	$ 674	$ 196	$ 727	$ 11,662

(1) Includes the realized gains on the sale of the shares of GLC and IPSI (note 3).

6. Portfolio Investments (cont'd)

	2019					
	Bonds	Mortgage loans	Stocks	Investment properties	Other	Total
Regular net investment income:						
Investment income earned	$ 3,948	$ 906	$ 301	$ 374	$ 553	$ 6,082
Net realized gains						
Available-for-sale	57	–	19	–	–	76
Other classifications	164	172	–	–	–	336
Net allowances for credit losses on loans and receivables	–	(50)	–	–	–	(50)
Other income (expenses)	–	–	–	(117)	(166)	(283)
	4,169	1,028	320	257	387	6,161
Changes in fair value through profit or loss assets:						
Classified fair value through profit or loss	45	–	–	–	–	45
Designated fair value through profit or loss	5,740	107	1,405	–	(388)	6,864
Recorded at fair value through profit or loss	–	–	–	37	–	37
	5,785	107	1,405	37	(388)	6,946
Total	$ 9,954	$ 1,135	$ 1,725	$ 294	$ (1)	$ 13,107

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. 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) 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. Included in the collateral deposited with the Company's lending agent is cash collateral of $267 at December 31, 2020 ($398 at December 31, 2019). 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, 2020, the Company had loaned securities (which are included in invested assets) with a fair value of $8,921 ($7,023 at December 31, 2019).

7. Funds Held by Ceding Insurers

At December 31, 2020, the Company had amounts on deposit of $18,383 ($8,714 at December 31, 2019) for funds held by ceding insurers on the Consolidated Balance Sheets. Income and expenses arising from the agreements are included in net investment income in the Consolidated Statements of Earnings.

As part of the MassMutual acquisition (note 3), GWL&A assumed, by way of indemnity reinsurance, a block of retirement plan service contracts from a previous reinsurance agreement held by MassMutual. Under the agreement, GWL&A is required to put amounts in trust with MassMutual and GWL&A retains the credit risk on the portfolio of assets included in the amounts on deposit.

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:

	2020		2019	
	Carrying value	**Fair value**	Carrying value	Fair value
Cash and cash equivalents	$ **245**	$ **245**	$ 216	$ 216
Bonds	**15,365**	**15,365**	6,445	6,445
Mortgages	**578**	**578**	–	–
Other assets	**137**	**137**	80	80
Total	$ **16,325**	$ **16,325**	$ 6,741	$ 6,741
Supporting:				
Reinsurance liabilities	$ **16,094**	$ **16,094**	$ 6,537	$ 6,537
Surplus	**231**	**231**	204	204
Total	$ **16,325**	$ **16,325**	$ 6,741	$ 6,741

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

	2020	2019
Bonds issued or guaranteed by:		
Treasuries	$ **843**	$ 624
Government related	**1,760**	1,275
Agency securitized	**287**	–
Non-agency securitized	**1,870**	763
Financials	**2,989**	1,412
Communications	**503**	154
Consumer products	**2,141**	438
Energy	**589**	176
Industrials	**1,420**	234
Technology	**344**	72
Transportation	**466**	170
Utilities	**2,101**	1,127
Total long-term bonds	**15,313**	6,445
Short-term bonds	**52**	–
Total	$ **15,365**	$ 6,445

(c) The following provides details of the carrying value of mortgages included in the funds on deposit by property type:

	2020	2019
Multi-family residential	$ **122**	$ –
Commercial	**456**	–
Total	$ **578**	$ –

(d) Asset quality

Bond Portfolio By Credit Rating

	2020	2019
AAA	$ **1,508**	$ 601
AA	**3,848**	2,670
A	**5,597**	2,264
BBB	**4,165**	822
BB and lower	**247**	88
Total	$ **15,365**	$ 6,445

8. Financial Instruments Risk Management

The Company has policies relating to the identification, measurement, management, monitoring and reporting of risks associated with financial instruments. The key risks related to financial instruments are credit risk, liquidity risk and market risk (currency, interest rate and equity). The Risk Committee of the Board of Directors is responsible for the oversight of the Company's key risks.

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.

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

- Investment policies aim to minimize undue concentration within issuers, connected companies, industries or individual geographies.
- Investment limits specify minimum and maximum limits for each asset class.
- Identification of credit risk through an internal credit risk rating system which includes a detailed assessment of an obligor's creditworthiness. Internal credit risk ratings cannot be higher than the highest rating provided by certain independent ratings companies.
- Portfolios are monitored continuously, and reviewed regularly with the Risk Committee and the Investment Committee of the Board of Directors.
- Credit risk associated with derivative instruments is evaluated quarterly based on conditions that existed at the balance sheet date, using practices that are at least as conservative as those recommended by regulators. The Company manages derivative credit risk by including derivative exposure to aggregate credit exposures measured against rating based obligor limits and through collateral arrangements where possible.
- Counterparties providing reinsurance to the Company are reviewed for financial soundness as part of an ongoing monitoring process. The minimum financial strength of reinsurers is outlined in the Reinsurance Risk Management Policy. The Company seeks to minimize reinsurance credit risk by setting rating based limits on net ceded exposure by counterparty as well as seeking protection in the form of collateral or funds withheld arrangements where possible.
- Investment guidelines also specify collateral requirements.

(i) Maximum Exposure to Credit Risk

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

	2020	2019
Cash and cash equivalents	**$ 7,946**	$ 4,628
Bonds		
Fair value through profit or loss	**102,892**	85,946
Available-for-sale	**11,352**	11,710
Loans and receivables	**23,348**	17,372
Mortgage loans	**27,803**	24,268
Loans to policyholders	**8,387**	8,601
Funds held by ceding insurers (1)	**18,383**	8,714
Reinsurance assets	**22,121**	20,707
Interest due and accrued	**1,320**	1,196
Accounts receivable	**3,080**	3,256
Premiums in course of collection	**1,702**	1,429
Trading account assets	**713**	1,092
Finance leases receivable	**404**	405
Other assets (2)	**965**	444
Derivative assets	**829**	451
Total	**$ 231,245**	$ 190,219

(1) Includes $16,325 ($6,741 at December 31, 2019) of funds held by ceding insurers where the Company retains the credit risk of the assets supporting the liabilities ceded (note 7).

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

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 $211 of collateral received from counterparties as at December 31, 2020 ($156 at December 31, 2019) relating to derivative assets.

As at December 31, 2020, $15,690 of the $22,121 of reinsurance assets are ceded to Protective ($14,848 of $20,707 at December 31, 2019). This concentration risk is mitigated by funds held in trust of $16,389 as at December 31, 2020 ($15,948 at December 31, 2019).

(ii) Concentration of Credit Risk

Concentrations of credit risk arise from exposures to a single obligor, a group of related obligors or groups of obligors that have similar credit risk characteristics and 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 operating segment:

	2020				
	Canada	**United States**	**Europe**	**Capital and Risk Solutions**	**Total**
Bonds issued or guaranteed by:					
Treasuries	**$ 586**	**$ 272**	**$ 10,282**	**$ 1,372**	**$ 12,512**
Government related	**20,555**	**2,308**	**9,287**	**316**	**32,466**
Agency securitized	**178**	**926**	**–**	**17**	**1,121**
Non-agency securitized	**2,057**	**6,550**	**1,402**	**136**	**10,145**
Financials	**4,361**	**6,022**	**5,880**	**572**	**16,835**
Communications	**1,142**	**1,338**	**1,124**	**98**	**3,702**
Consumer products	**4,197**	**6,127**	**2,816**	**762**	**13,902**
Energy	**2,453**	**2,450**	**675**	**270**	**5,848**
Industrials	**2,022**	**4,585**	**1,329**	**406**	**8,342**
Technology	**557**	**1,324**	**299**	**263**	**2,443**
Transportation	**3,409**	**1,394**	**977**	**154**	**5,934**
Utilities	**10,091**	**4,485**	**4,811**	**553**	**19,940**
Total long-term bonds	**51,608**	**37,781**	**38,882**	**4,919**	**133,190**
Short-term bonds	**2,332**	**557**	**1,066**	**447**	**4,402**
Total	**$ 53,940**	**$ 38,338**	**$ 39,948**	**$ 5,366**	**$ 137,592**

	2019				
	Canada	United States	Europe (1)	Capital and Risk Solutions (1)	Total
Bonds issued or guaranteed by:					
Treasuries	$ 479	$ 72	$ 10,118	$ 1,068	$ 11,737
Government related	19,307	1,795	8,521	293	29,916
Agency securitized	110	1,111	–	10	1,231
Non-agency securitized	2,159	4,664	1,573	165	8,561
Financials	4,119	3,011	5,786	560	13,476
Communications	888	617	991	129	2,625
Consumer products	3,761	2,738	2,649	855	10,003
Energy	2,173	1,071	640	266	4,150
Industrials	1,764	2,057	1,281	454	5,556
Technology	552	727	302	265	1,846
Transportation	2,897	546	1,017	180	4,640
Utilities	9,145	2,377	4,426	527	16,475
Total long-term bonds	47,354	20,786	37,304	4,772	110,216
Short-term bonds	2,680	720	1,049	363	4,812
Total	$ 50,034	$ 21,506	$ 38,353	$ 5,135	$ 115,028

(1) See comparative figures (note 32).

8. Financial Instruments Risk Management (cont'd)

The following provides details of the carrying value of mortgage loans by operating segment:

	2020				
	Canada	**United States**	**Europe**	**Capital and Risk Solutions**	**Total**
Single family residential	**$ 2,063**	**$ –**	**$ –**	**$ –**	**$ 2,063**
Multi-family residential	**4,331**	**2,297**	**684**	**41**	**7,353**
Equity release	**759**	**–**	**1,261**	**–**	**2,020**
Commercial	**8,883**	**3,660**	**3,801**	**23**	**16,367**
Total	**$ 16,036**	**$ 5,957**	**$ 5,746**	**$ 64**	**$ 27,803**

	2019				
	Canada	United States	Europe [(1)]	Capital and Risk Solutions [(1)]	Total
Single family residential	$ 2,069	$ –	$ –	$ –	$ 2,069
Multi-family residential	4,496	1,798	661	49	7,004
Equity release	374	–	940	–	1,314
Commercial	7,871	2,198	3,787	25	13,881
Total	$ 14,810	$ 3,996	$ 5,388	$ 74	$ 24,268

(1) See comparative figures (note 32).

(iii) Asset Quality

Bond Portfolio By Credit Rating

	2020	2019
AAA	**$ 21,820**	$ 22,083
AA	**35,530**	33,272
A	**45,673**	37,233
BBB	**33,382**	21,922
BB and lower	**1,187**	518
Total	**$ 137,592**	$ 115,028

Derivative Portfolio By Credit Rating

	2020	2019
Over-the-counter contracts (counterparty ratings):		
AA	**$ 424**	$ 271
A	**369**	146
BBB	**35**	34
Exchange-traded	**1**	–
Total	**$ 829**	$ 451

(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:

	2020	2019
Less than 30 days	**$ 17**	$ 28
30 – 90 days	**28**	1
Greater than 90 days	**10**	4
Total	**$ 55**	$ 33

(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:

	2020	2019
Participating	**$ 1,183**	$ 1,175
Non-participating	**2,185**	1,400
Total	**$ 3,368**	$ 2,575

(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 48% (approximately 57% in 2019) of insurance and investment contract liabilities are non-cashable prior to maturity or claim, with a further 26% approximately (14% in 2019) of insurance and investment contract liabilities subject to fair value adjustments under certain conditions.
- 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. At December 31, 2020, 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 Canada Life, a U.S. $500 revolving credit agreement at Great-West Lifeco U.S. LLC, 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 GWL&A.

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 for 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	$ 8,639	$ –	$ –	$ 775	$ –	$ 635	$ 7,229
Capital trust securities (1)	150	–	–	–	–	–	150
Purchase obligations	261	113	65	23	13	10	37
Pension contributions	316	316	–	–	–	–	–
Total	**$ 9,366**	**$ 429**	**$ 65**	**$ 798**	**$ 13**	**$ 645**	**$ 7,416**

(1) Payments due have not been reduced to reflect that the Company held capital trust securities of $37 principal amount ($55 carrying value).

(c) Market Risk

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

Caution Related to Risk Sensitivities

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

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

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

(i) Currency Risk

Currency risk relates to the Company operating and holding financial instruments in different currencies. For the assets backing insurance and investment contract liabilities that are not matched by currency, changes in foreign exchange rates can expose the Company to the risk of foreign exchange losses not offset by liability decreases. The Company has net investments in foreign operations. The Company's debt obligations are denominated in Canadian dollars, euros, and U.S. dollars. In accordance with IFRS, foreign currency translation gains and losses from net investments in foreign operations, net of related hedging activities and tax effects, are recorded in accumulated other comprehensive income. Strengthening or weakening of the Canadian dollar spot rate compared to the U.S. dollar, British pound and euro spot rates impacts the Company's total equity. Correspondingly, the Company's book value per share and capital ratios monitored by rating agencies are also impacted.

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

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

(ii) Interest Rate Risk

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

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

Projected cash flows from the current assets and liabilities are used in the Canadian Asset Liability Method to determine insurance contract liabilities. Valuation assumptions have been made regarding rates of returns on supporting assets, fixed income, equity and inflation. The valuation assumptions use best estimates of future reinvestment rates and inflation assumptions with an assumed correlation together with margins for adverse deviation set in accordance with professional standards. These margins are necessary to provide for possibilities of misestimation and/or future deterioration in the best estimate assumptions and provide reasonable assurance that insurance contract liabilities cover a range of possible outcomes. Margins are reviewed periodically for continued appropriateness.

Projected cash flows from fixed income assets used in actuarial calculations are reduced to provide for potential asset default losses. The net effective yield rate reduction averaged 0.11% in 2020 (0.10% in 2019). The calculation for future credit losses on assets is based on the credit quality of the underlying asset portfolio.

Testing under a number of interest rate scenarios (including increasing, decreasing and fluctuating rates) is done to assess reinvestment risk. The total provision for interest rates is sufficient to cover a broader or more severe set of risks than the minimum arising from the current Canadian Institute of Actuaries prescribed scenarios.

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

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

- At December 31, 2020 and December 31, 2019, the effect of an immediate 1% parallel increase in the yield curve on the prescribed scenarios results in interest rate changes to assets and liabilities that will offset each other with no impact to net earnings.
- At December 31, 2020 and December 31, 2019, the effect of an immediate 1% parallel decrease in the yield curve on the prescribed scenarios results in interest rate changes to assets and liabilities that will offset each other with no impact to net earnings.

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 following table provides information on the impact to the value of liabilities net of changes in the value of assets supporting liabilities 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. For some products, interest rate risk is modelled stochastically in determining the insurance contract liabilities, and for those products, the sensitivities reflect the estimated impact of an immediate 1% increase and 1% decrease in interest rates on the liability.

The sensitivities in the table include the impact of a parallel shift in ultimate interest rates outlined in actuarial standards.

	2020		2019	
	1% increase	**1% decrease**	1% increase	1% decrease
Change in interest rates				
Increase (decrease) in non-participating insurance and investment contract liabilities	**$ (289)**	**$ 1,185**	$ (230)	$ 811
Increase (decrease) in net earnings	**$ 224**	**$ (920)**	$ 175	$ (619)

As at December 31, 2020, the accounting for the acquisition of MassMutual is not finalized pending completion of a comprehensive valuation of the net assets acquired (note 3). As such, the impact of the acquired business included in the sensitivities above reflects management's current best estimate of the sensitivities.

(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 on lifetime Guaranteed Minimum Withdrawal Benefits have been mitigated through a hedging program using equity futures, currency forwards, and interest rate derivatives.

Some insurance and investment contract liabilities with long-tail cash-flows are supported by publicly traded common stocks and investments in other non-fixed income assets, primarily comprised of investment properties, real estate funds, private stocks, and equity release mortgages. The value of the liabilities may fluctuate with changes in the value of the supporting assets. The liabilities for other products such as segregated fund products with guarantees also fluctuate with equity values.

There may be additional market and liability impacts as a result of changes in the value of publicly traded common stocks and other non-fixed income assets that will cause the liabilities to fluctuate differently than the equity values. This means that there is a greater impact on net earnings from larger falls in equity values, relative to the change in equity values. Falls in equity values beyond those shown in the table below would have a greater impact on net earnings, relative to the change in equity values.

8. Financial Instruments Risk Management (cont'd)

The following table provides information on the expected impacts of an immediate 10% or 20% increase or decrease in the value of publicly traded common stocks on insurance and investment contract liabilities and on the shareholders' net earnings of the Company. The expected impacts take into account the expected changes in the value of assets supporting liabilities and hedge assets.

	2020				2019			
	20% increase	10% increase	10% decrease	20% decrease	20% increase	10% increase	10% decrease	20% decrease
Change in publicly traded common stock values								
Increase (decrease) in non-participating insurance and investment contract liabilities	$ (34)	$ (18)	$ 62	$ 264	$ (63)	$ (33)	$ 45	$ 223
Increase (decrease) in net earnings	$ 28	$ 15	$ (51)	$ (208)	$ 54	$ 27	$ (39)	$ (182)

The following table provides information on the expected impacts of an immediate 5% or 10% increase or decrease in the value of other non-fixed income assets on insurance and investment contract liabilities and on the shareholders' net earnings of the Company. The expected impacts take into account the expected changes in the value of assets supporting liabilities.

	2020				2019			
	10% increase	5% increase	5% decrease	10% decrease	10% increase	5% increase	5% decrease	10% decrease
Change in other non-fixed income asset values								
Increase (decrease) in non-participating insurance and investment contract liabilities	$ (41)	$ (8)	$ 88	$ 138	$ (74)	$ (32)	$ 35	$ 117
Increase (decrease) in net earnings	$ 34	$ 6	$ (69)	$ (108)	$ 60	$ 25	$ (28)	$ (90)

The Canadian Institute of Actuaries Standards of Practice for the valuation of insurance contract liabilities establish limits on the investment return assumptions for publicly traded common stocks and other non-fixed income assets which are generally based on historical returns on market indices. The sensitivities shown in the tables above allow for the impact of changes in these limits following market falls.

The best estimate return assumptions for publicly traded common stocks and other non-fixed income assets are primarily based on long-term historical averages. The following provides information on the expected impacts of a 1% increase or 1% decrease in the best estimate assumptions:

	2020		2019	
	1% increase	1% decrease	1% increase	1% decrease
Change in best estimate return assumptions				
Increase (decrease) in non-participating insurance contract liabilities	$ (691)	$ 861	$ (645)	$ 752
Increase (decrease) in net earnings	$ 556	$ (682)	$ 509	$ (585)

The Company sponsors a number of deferred compensation arrangements for employees where payments to participants are deferred and linked to the performance of the common shares of Lifeco. The Company hedges its exposure to the equity risk associated with its PSU Plan through the use of total return swaps.

(d) Enforceable Master Netting Arrangements or Similar Agreements

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

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

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

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

	2020			
		Related amounts not set-off in the Balance Sheet		
	Gross amount of financial instruments presented in the Balance Sheet	Offsetting counterparty position [(1)]	Financial collateral received/ pledged [(2)]	Net exposure
Financial instruments – assets				
Derivative financial instruments	$ 829	$ (596)	$ (154)	$ 79
Reverse repurchase agreements [(3)]	4	–	(4)	–
Total financial instruments – assets	$ 833	$ (596)	$ (158)	$ 79
Financial instruments – liabilities				
Derivative financial instruments	$ 1,221	$ (596)	$ (361)	$ 264
Total financial instruments – liabilities	$ 1,221	$ (596)	$ (361)	$ 264

	2019			
		Related amounts not set-off in the Balance Sheet		
	Gross amount of financial instruments presented in the Balance Sheet	Offsetting counterparty position [(1)]	Financial collateral received/ pledged [(2)]	Net exposure
Financial instruments – assets				
Derivative financial instruments	$ 451	$ (309)	$ (107)	$ 35
Reverse repurchase agreements [(3)]	4	–	(4)	–
Total financial instruments – assets	$ 455	$ (309)	$ (111)	$ 35
Financial instruments – liabilities				
Derivative financial instruments	$ 1,381	$ (309)	$ (556)	$ 516
Total financial instruments – liabilities	$ 1,381	$ (309)	$ (556)	$ 516

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

(2) Financial collateral presented above excludes overcollateralization and, for exchange-traded derivatives, initial margin. Financial collateral received on reverse repurchase agreements is held by a third party. At December 31, 2020, total financial collateral, including initial margin and overcollateralization, received on derivative assets was $211 ($156 at December 31, 2019), received on reverse repurchase agreements was $4 ($4 at December 31, 2019), and pledged on derivative liabilities was $560 ($634 at December 31, 2019).

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

9. Fair Value Measurement

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

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

Level 2: Fair value measurements utilize inputs other than quoted prices included in Level 1 that are observable for the asset or liability, either directly or indirectly. Level 2 inputs include quoted prices for similar assets and liabilities in active markets, and inputs other than quoted prices that are observable for the asset or liability, such as interest rates and yield curves that are observable at commonly quoted intervals. The fair values for some Level 2 securities were obtained from a pricing service. The pricing service inputs include, but are not limited to, benchmark yields, reported trades, broker/dealer quotes, issuer spreads, two-sided markets, benchmark securities, offers and reference data. Level 2 assets and liabilities include those priced using a matrix which is based on credit quality and average life, government and agency securities, restricted stock, some private bonds and investment funds, 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, investment properties and equity release mortgages.

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

	2020			
	Level 1	Level 2	Level 3	Total
Assets measured at fair value				
Cash and cash equivalents	$ 7,946	$ –	$ –	$ 7,946
Financial assets at fair value through profit or loss				
Bonds	–	102,819	73	102,892
Mortgage loans	–	–	2,020	2,020
Stocks	8,773	188	1,374	10,335
Total financial assets at fair value through profit or loss	8,773	103,007	3,467	115,247
Available-for-sale financial assets				
Bonds	–	11,352	–	11,352
Stocks	3	1	16	20
Total available-for-sale financial assets	3	11,353	16	11,372
Investment properties	–	–	6,270	6,270
Funds held by ceding insurers	245	15,943	–	16,188
Derivatives (1)	1	828	–	829
Reinsurance assets	–	130	–	130
Other assets:				
Trading account assets	302	353	58	713
Other (2)	79	188	–	267
Total assets measured at fair value	$ 17,349	$ 131,802	$ 9,811	$ 158,962
Liabilities measured at fair value				
Derivatives (3)	$ 5	$ 1,216	$ –	$ 1,221
Investment contract liabilities	–	9,145	–	9,145
Other liabilities	79	188	–	267
Total liabilities measured at fair value	$ 84	$ 10,549	$ –	$ 10,633

(1) Excludes collateral received from counterparties of $210.
(2) Includes collateral received under securities lending arrangements.
(3) Excludes collateral pledged to counterparties of $442.

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

	2019							
	Level 1		Level 2		Level 3		Total	
Assets measured at fair value								
Cash and cash equivalents	$	4,628	$	–	$	–	$	4,628
Financial assets at fair value through profit or loss								
Bonds		–		85,879		67		85,946
Mortgage loans		–		–		1,314		1,314
Stocks		8,956		118		678		9,752
Total financial assets at fair value through profit or loss		8,956		85,997		2,059		97,012
Available-for-sale financial assets								
Bonds		–		11,710		–		11,710
Stocks		12		–		4		16
Total available-for-sale financial assets		12		11,710		4		11,726
Investment properties		–		–		5,887		5,887
Funds held by ceding insurers		216		6,445		–		6,661
Derivatives (1)		–		451		–		451
Reinsurance assets		–		127		–		127
Other assets:								
Trading account assets		332		760		–		1,092
Other (2)		43		355		–		398
Total assets measured at fair value	$	14,187	$	105,845	$	7,950	$	127,982
Liabilities measured at fair value								
Derivatives (3)	$	3	$	1,378	$	–	$	1,381
Investment contract liabilities		–		1,656		–		1,656
Other liabilities		43		355		–		398
Total liabilities measured at fair value	$	46	$	3,389	$	–	$	3,435

(1) Excludes collateral received from counterparties of $155.
(2) Includes collateral received under securities lending arrangements.
(3) Excludes collateral pledged to counterparties of $580.

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

9. Fair Value Measurement (cont'd)

The following presents additional information about assets and liabilities measured at fair value on a recurring basis which the Company classifies as Level 3 in the fair value hierarchy:

	2020						
	Fair value through profit or loss bonds	Fair value through profit or loss mortgage loans	Fair value through profit or loss stocks (4)	Available for-sale stocks	Investment properties	Trading accounts assets	Total Level 3 assets
Balance, beginning of year	$ 67	$ 1,314	$ 678	$ 4	$ 5,887	$ –	$ 7,950
Total gains (losses)							
Included in net earnings	2	156	16	–	(74)	–	100
Included in other comprehensive income (1)	4	15	–	1	21	–	41
Purchases	–	–	406	11	481	–	898
Issues	–	622	–	–	–	–	622
Sales	–	–	(83)	–	(73)	–	(156)
Settlements	–	(87)	–	–	–	–	(87)
Transferred from owner occupied properties (2)	–	–	–	–	28	–	28
Transfers into Level 3 (3)	–	–	357	–	–	58	415
Transfers out of Level 3 (3)	–	–	–	–	–	–	–
Balance, end of year	$ 73	$ 2,020	$ 1,374	$ 16	$ 6,270	$ 58	$ 9,811
Total gains (losses) for the year included in net investment income	$ 2	$ 156	$ 16	$ –	$ (74)	$ –	$ 100
Change in unrealized gains (losses) for the year included in earnings for assets held at December 31, 2020	$ 2	$ 145	$ 17	$ –	$ (73)	$ –	$ 91

(1) Amount of other comprehensive income for fair value through profit or loss bonds, mortgage loans and investment properties represents the unrealized gains (losses) on foreign exchange.

(2) As a result of the sale of IPSI, a property with a fair value of $28 was reclassified from owner occupied properties to investment properties. The reclassification resulted in the recognition of revaluation surplus on the transfer to investment properties of $11 and income tax expense of $(1) in the Consolidated Statements of Comprehensive Income.

(3) Transfers into Level 3 are due primarily to decreased observability of inputs in valuation methodologies or the placement of redemption restrictions on investments in mutual and segregated funds. 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.

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

Since March 20, 2020, Canada Life has temporarily suspended contributions to and transfers into, as well as redemptions and transfers out of, its Canadian real estate investment funds as the COVID-19 virus has impacted the global property market and made it difficult to value the properties with the same degree of certainty as usual. As a result of these restrictions, the Company's investment in these funds with a fair value of $357 was transferred on March 20, 2020 from Level 1 to Level 3.

Subsequent event

On January 11, 2021, Canada Life lifted the temporary suspension on contributions to and transfers into its Canadian real estate investment funds as confidence over the valuation of the underlying properties has returned as a result of increased market activity. While the temporary suspension on redemptions and transfers out of the Canadian real estate funds remains, the funds are accepting initial redemption requests for a limited period which will be processed, subject to available liquidity, on pre-specified dates.

	2019								
	Fair value through profit or loss bonds	Fair value through profit or loss mortgage loans	Fair value through profit or loss stocks (3)	Available for-sale stocks	Investment properties	Assets held for sale	Total Level 3 assets	Liabilities held for sale	Total Level 3 liabilities
Balance, beginning of year	$ 67	$ 813	$ 404	$ 2	$ 5,218	$ 29	$ 6,533	$ 26	$ 26
Change in accounting policy	–	–	–	–	29	–	29	–	–
Revised balance, beginning of year	67	813	404	2	5,247	29	6,562	26	26
Total gains (losses)									
Included in net earnings	4	109	40	–	37	(2)	188	–	–
Included in other comprehensive income (1)	(4)	(5)	–	–	(36)	(1)	(46)	–	–
Purchases	–	–	299	2	644	–	945	–	–
Issues	–	469	–	–	–	–	469	–	–
Sales	–	–	(65)	–	(5)	(26)	(96)	–	–
Settlements	–	(72)	–	–	–	–	(72)	–	–
Other	–	–	–	–	–	–	–	(26)	(26)
Transfers into Level 3 (2)	–	–	–	–	–	–	–	–	–
Transfers out of Level 3 (2)	–	–	–	–	–	–	–	–	–
Balance, end of year	$ 67	$ 1,314	$ 678	$ 4	$ 5,887	$ –	$ 7,950	$ –	$ –
Total gains (losses) for the year included in net investment income	$ 4	$ 109	$ 40	$ –	$ 37	$ (2)	$ 188	$ –	$ –
Change in unrealized gains for the year included in earnings for assets held at December 31, 2019	$ 4	$ 105	$ 38	$ –	$ 37	$ –	$ 184	$ –	$ –

(1) Amount of other comprehensive income for fair value through profit or loss bonds, mortgage loans and investment properties represents the unrealized gains (losses) on foreign exchange.

(2) Transfers into Level 3 are due primarily to decreased observability of inputs in valuation methodologies or the placement of redemption restrictions on investments in mutual and segregated funds. 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 investment in mutual and segregated funds.

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

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

Type of asset	Valuation approach	Significant unobservable input	Input value	Inter-relationship between key unobservable inputs and fair value measurement
Investment properties	Investment property valuations are generally determined using property valuation models based on expected capitalization rates and models that discount expected future net cash flows. The determination of the fair value of investment property requires the use of estimates such as future cash flows (such as future leasing assumptions, rental rates, capital and operating expenditures) and discount, reversionary and overall capitalization rates applicable to the asset based on current market rates.	Discount rate Reversionary rate Vacancy rate	Range of 2.9% – 12.0% Range of 3.9% – 6.8% Weighted average of 3.0%	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 reversionary rate would result in a decrease in fair value. A decrease in the expected vacancy rate would generally result in an increase in fair value. An increase in the expected vacancy rate would generally result in a decrease in fair value.
Mortgage loans – equity release mortgages (fair value through profit or loss)	The valuation approach for equity release mortgages is to use an internal valuation model to determine the projected asset cash flows, including the stochastically calculated cost of the no negative-equity guarantee for each individual loan, to aggregate these across all loans and to discount those cash flows back to the valuation date. The projection is done monthly until expected redemption of the loan either voluntarily or on the death/entering into long term care of the loanholders.	Discount rate	Range of 3.2% – 4.4%	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.

9. Fair Value Measurement (cont'd)

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

	2020				
	Level 1	**Level 2**	**Level 3**	**Other assets/ liabilities not held at fair value**	**Total**
Assets disclosed at fair value					
Loans and receivables financial assets					
Bonds	**$ –**	**$ 26,488**	**$ 57**	**$ –**	**$ 26,545**
Mortgage loans	**–**	**27,613**	**–**	**–**	**27,613**
Loans to policyholders	**–**	**8,387**	**–**	**–**	**8,387**
Total loans and receivables financial assets	**–**	**62,488**	**57**	**–**	**62,545**
Available-for-sale financial assets					
Stocks (1)	**–**	**–**	**–**	**163**	**163**
Other stocks (2)	**317**	**–**	**–**	**128**	**445**
Funds held by ceding insurers	**–**	**–**	**–**	**137**	**137**
Total assets disclosed at fair value	**$ 317**	**$ 62,488**	**$ 57**	**$ 428**	**$ 63,290**
Liabilities disclosed at fair value					
Debentures and other debt instruments	**$ 970**	**$ 9,899**	**$ –**	**$ –**	**$ 10,869**
Total liabilities disclosed at fair value	**$ 970**	**$ 9,899**	**$ –**	**$ –**	**$ 10,869**

(1) Fair value of certain stocks available for sale cannot be reliably measured, therefore, these investments are recorded at cost.
(2) Other stocks include the Company's investment in IGM.

	2019				
	Level 1	Level 2	Level 3	Other assets/ liabilities not held at fair value	Total
Assets disclosed at fair value					
Loans and receivables financial assets					
Bonds	$ –	$ 19,281	$ 63	$ –	$ 19,344
Mortgage loans	–	23,832	–	–	23,832
Loans to policyholders	–	8,601	–	–	8,601
Total loans and receivables financial assets	–	51,714	63	–	51,777
Available-for-sale financial assets					
Stocks (1)	–	–	–	189	189
Other stocks (2)	342	–	–	68	410
Funds held by ceding insurers	–	–	–	80	80
Total assets disclosed at fair value	$ 342	$ 51,714	$ 63	$ 337	$ 52,456
Liabilities disclosed at fair value					
Debentures and other debt instruments	$ 429	$ 6,450	$ –	$ –	$ 6,879
Total liabilities disclosed at fair value	$ 429	$ 6,450	$ –	$ –	$ 6,879

(1) Fair value of certain stocks available for sale cannot be reliably measured, therefore, these investments are recorded at cost.
(2) Other stocks include the Company's investment in IGM.

10. Goodwill and Intangible Assets

(a) Goodwill

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

	2020	2019
Cost		
Balance, beginning of year	**$ 7,693**	$ 7,771
Business acquisitions	**3,621**	33
Finite life intangible assets	**(12)**	(6)
Changes in foreign exchange rates	**(19)**	(105)
Balance, end of year	**$ 11,283**	$ 7,693
Accumulated impairment		
Balance, beginning of year	**$ (1,188)**	$ (1,223)
Impairment	**(16)**	(19)
Changes in foreign exchange rates	**27**	54
Balance, end of year	**$ (1,177)**	$ (1,188)
Net carrying amount	**$ 10,106**	$ 6,505

(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 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:

	2020	2019
Canada		
Group Customer	**$ 1,464**	$ 1,481
Individual Customer	**2,553**	2,562
Europe	**2,395**	2,282
United States		
Financial Services	**3,694**	180
Total	**$ 10,106**	$ 6,505

10. Goodwill and Intangible Assets (cont'd)

(b) Intangible Assets

Intangible assets of $4,285 ($3,879 as at December 31, 2019) include indefinite life and finite life intangible assets. The carrying value and changes in the carrying value of these intangible assets are as follows:

(i) Indefinite life intangible assets:

	2020			
	Brands and trademarks	**Customer contract related**	**Shareholders' portion of acquired future participating account profit**	**Total**
Cost				
Balance, beginning of year	**$ 972**	**$ 2,562**	**$ 354**	**$ 3,888**
Additions	**92**	**30**	**–**	**122**
Changes in foreign exchange rates	**(1)**	**(50)**	**–**	**(51)**
Balance, end of year	**$ 1,063**	**$ 2,542**	**$ 354**	**$ 3,959**
Accumulated impairment				
Balance, beginning of year	**$ (133)**	**$ (1,051)**	**$ –**	**$ (1,184)**
Changes in foreign exchange rates	**–**	**23**	**–**	**23**
Balance, end of year	**$ (133)**	**$ (1,028)**	**$ –**	**$ (1,161)**
Net carrying amount	**$ 930**	**$ 1,514**	**$ 354**	**$ 2,798**

	2019			
	Brands and trademarks	Customer contract related	Shareholders' portion of acquired future participating account profit	Total
Cost				
Balance, beginning of year	$ 1,006	$ 2,665	$ 354	$ 4,025
Changes in foreign exchange rates	(34)	(103)	–	(137)
Balance, end of year	$ 972	$ 2,562	$ 354	$ 3,888
Accumulated impairment				
Balance, beginning of year	$ (140)	$ (1,101)	$ –	$ (1,241)
Changes in foreign exchange rates	7	50	–	57
Balance, end of year	$ (133)	$ (1,051)	$ –	$ (1,184)
Net carrying amount	$ 839	$ 1,511	$ 354	$ 2,704

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

	2020	2019
Canada		
Group Customer	**$ 354**	$ 354
Individual Customer	**649**	619
Europe	**233**	223
United States		
Asset Management	**1,473**	1,508
Financial Services	**89**	–
Total	**$ 2,798**	$ 2,704

(iii) Finite life intangible assets:

	2020			
	Customer contract related	Distribution channels	Technology/ Software	Total
Amortization period range	**7 – 30 years**	**30 years**	**3 – 10 years**	
Amortization method	**Straight-line**	**Straight-line**	**Straight-line**	
Cost				
Balance, beginning of year	**$ 1,031**	**$ 108**	**$ 1,885**	**$ 3,024**
Additions	**214**	**–**	**341**	**555**
Changes in foreign exchange rates	**3**	**3**	**(6)**	**–**
Disposals	**–**	**–**	**(35)**	**(35)**
Balance, end of year	**$ 1,248**	**$ 111**	**$ 2,185**	**$ 3,544**
Accumulated amortization and impairment				
Balance, beginning of year	**$ (630)**	**$ (60)**	**$ (1,159)**	**$ (1,849)**
Changes in foreign exchange rates	**(3)**	**(1)**	**5**	**1**
Disposals	**–**	**–**	**29**	**29**
Amortization	**(55)**	**(4)**	**(179)**	**(238)**
Balance, end of year	**$ (688)**	**$ (65)**	**$ (1,304)**	**$ (2,057)**
Net carrying amount	**$ 560**	**$ 46**	**$ 881**	**$ 1,487**

	2019			
	Customer contract related	Distribution channels	Technology/ Software	Total
Amortization period range	7 – 30 years	30 years	3 – 10 years	
Amortization method	Straight-line	Straight-line	Straight-line	
Cost				
Balance, beginning of year	$ 1,047	$ 111	$ 1,717	$ 2,875
Additions	11	–	247	258
Changes in foreign exchange rates	(27)	(3)	(54)	(84)
Disposals	–	–	(25)	(25)
Balance, end of year	$ 1,031	$ 108	$ 1,885	$ 3,024
Accumulated amortization and impairment				
Balance, beginning of year	$ (586)	$ (57)	$ (1,040)	$ (1,683)
Changes in foreign exchange rates	11	1	41	53
Disposals	–	–	5	5
Amortization	(55)	(4)	(165)	(224)
Balance, end of year	$ (630)	$ (60)	$ (1,159)	$ (1,849)
Net carrying amount	$ 401	$ 48	$ 726	$ 1,175

The weighted average remaining amortization period of the customer contract related and distribution channels are 14 and 13 years respectively (13 and 14 years respectively at December 31, 2019).

10. Goodwill and Intangible Assets (cont'd)

(c) Recoverable Amount

For the purposes of annual impairment testing, the Company allocates indefinite life intangibles to cash generating units and goodwill to cash generating unit groupings. Any potential impairment of indefinite life intangible assets is identified by comparing the recoverable amount of a cash generating unit to its carrying value. Any potential impairment of goodwill is identified by comparing the recoverable amount of a cash generating unit grouping to its carrying value.

Fair value is initially assessed with reference to valuation multiples of comparable publicly-traded financial institutions and precedent business acquisition 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 2020, the Company conducted its annual impairment testing of intangible assets and goodwill based on September 30, 2020 asset balances. It was determined that the recoverable amounts of cash generating units for intangible assets and cash generating unit groupings for goodwill were in excess of their carrying values and there was no evidence of significant impairment.

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

11. Owner Occupied Properties and Fixed Assets

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

	2020	2019
Carrying value, beginning of year	**$ 842**	$ 835
Less: accumulated depreciation/impairments	**(115)**	(104)
Net carrying value, beginning of year	**727**	731
Additions	**42**	34
Disposals	**–**	(10)
Impairment recovery	**–**	2
Transferred to investment properties [(1)]	**(17)**	–
Depreciation	**(15)**	(13)
Foreign exchange	**4**	(17)
Net carrying value, end of year	**$ 741**	$ 727

(1) As a result of the sale of IPSI, a property with a carrying value of $17 was reclassified from owner occupied properties to investment properties.

The net carrying value of fixed assets is $426 at December 31, 2020 ($455 at December 31, 2019).

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

	2020	2019
Canada	**$ 640**	$ 650
United States	**321**	334
Europe [(1)]	**205**	196
Capital and Risk Solutions [(1)]	**1**	2
Total	**$ 1,167**	$ 1,182

(1) See comparative figures (note 32).

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

12. Other Assets

	2020	2019
Deferred acquisition costs	$ 618	$ 595
Right-of-use assets	437	466
Trading account assets [1]	713	1,092
Finance leases receivable	404	405
Defined benefit pension plan assets (note 23)	240	231
Prepaid expenses	115	113
Miscellaneous other assets	820	208
Total	**$ 3,347**	$ 3,110

(1) Includes bonds of $386 and stocks of $327 at December 31, 2020 (bonds of $726 and stocks of $366 at December 31, 2019).

Total other assets of $1,678 ($1,443 at December 31, 2019) 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	2020	2019
Balance, beginning of year	**$ 595**	$ 597
Additions	**93**	118
Amortization	**(55)**	(51)
Changes in foreign exchange rates	**26**	(32)
Disposals	**(41)**	(36)
Write-off	**–**	(1)
Balance, end of year	**$ 618**	$ 595

	2020		
Right-of-use assets	Property	Equipment	Total
Cost, beginning of year	**$ 530**	**$ 7**	**$ 537**
Additions	**47**	**1**	**48**
Modifications	**(5)**	**–**	**(5)**
Changes in foreign exchange rates	**(4)**	**–**	**(4)**
Cost, end of year	**$ 568**	**$ 8**	**$ 576**
Accumulated amortization, beginning of year	**$ (69)**	**$ (2)**	**$ (71)**
Amortization	**(68)**	**(3)**	**(71)**
Changes in foreign exchange rates	**3**	**–**	**3**
Accumulated amortization, end of year	**$ (134)**	**$ (5)**	**$ (139)**
Carrying amount, end of year	**$ 434**	**$ 3**	**$ 437**

	2019		
	Property	Equipment	Total
Cost, beginning of year	$ 454	$ 6	$ 460
Additions	113	1	114
Modifications	(21)	–	(21)
Changes in foreign exchange rates	(16)	–	(16)
Cost, end of year	$ 530	$ 7	$ 537
Accumulated amortization, beginning of year	$ –	$ –	$ –
Amortization	(67)	(2)	(69)
Impairment	(3)	–	(3)
Changes in foreign exchange rates	1	–	1
Accumulated amortization, end of year	$ (69)	$ (2)	$ (71)
Carrying amount, end of year	$ 461	$ 5	$ 466

12. Other Assets (cont'd)

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 five finance leases on properties in Europe. These properties have been leased for terms ranging between 27 and 40 years.

The terms to maturity of the lease payments receivable are as follows:

	2020	2019
One year or less	$ 30	$ 30
Over one year to two years	30	30
Over two years to three years	30	30
Over three years to four years	30	30
Over four years to five years	30	30
Over five years	662	686
Total undiscounted lease payments	812	836
Less: unearned finance lease income	408	431
Total finance leases receivable	$ 404	$ 405
Finance income on the net investment in the leases	$ 26	$ 26

13. Insurance and Investment Contract Liabilities

(a) Insurance and investment contract liabilities

	2020		
	Gross liability	**Reinsurance assets**	**Net**
Insurance contract liabilities	**$ 208,902**	**$ 21,991**	**$ 186,911**
Investment contract liabilities	**9,145**	**130**	**9,015**
Total	**$ 218,047**	**$ 22,121**	**$ 195,926**

	2019		
	Gross liability	Reinsurance assets	Net
Insurance contract liabilities	$ 174,521	$ 20,580	$ 153,941
Investment contract liabilities	1,656	127	1,529
Total	$ 176,177	$ 20,707	$ 155,470

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

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

	2020		
	Gross liability	**Reinsurance assets**	**Net**
Participating			
Canada	**$ 46,107**	**$ (199)**	**$ 46,306**
United States	**11,090**	**13**	**11,077**
Europe	**155**	**–**	**155**
Capital and Risk Solutions	**912**	**–**	**912**
Non-Participating			
Canada	**35,449**	**638**	**34,811**
United States	**65,703**	**15,908**	**49,795**
Europe	**48,088**	**5,622**	**42,466**
Capital and Risk Solutions	**10,543**	**139**	**10,404**
Total	**$ 218,047**	**$ 22,121**	**$ 195,926**

	2019		
	Gross liability	Reinsurance assets	Net
Participating			
Canada	$ 42,271	$ (247)	$ 42,518
United States	11,329	12	11,317
Europe [(1)]	173	–	173
Capital and Risk Solutions [(1)]	846	–	846
Non-Participating			
Canada	32,668	498	32,170
United States	32,360	15,091	17,269
Europe [(1)]	45,489	5,230	40,259
Capital and Risk Solutions [(1)]	11,041	123	10,918
Total	$ 176,177	$ 20,707	$ 155,470

(1) See comparative figures (note 32).

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

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

2020	Bonds	Mortgage loans	Stocks	Investment properties	Other	Total
Carrying value						
Participating liabilities						
Canada	**$ 21,803**	**$ 10,545**	**$ 6,152**	**$ 2,983**	**$ 4,624**	**$ 46,107**
United States	**5,193**	**593**	**13**	**–**	**5,291**	**11,090**
Europe	**84**	**–**	**62**	**9**	**–**	**155**
Capital and Risk Solutions	**688**	**12**	**–**	**–**	**212**	**912**
Non-participating liabilities						
Canada	**21,511**	**4,498**	**2,789**	**360**	**6,291**	**35,449**
United States	**31,631**	**4,586**	**46**	**–**	**29,440**	**65,703**
Europe	**34,941**	**5,746**	**332**	**2,536**	**4,533**	**48,088**
Capital and Risk Solutions	**2,365**	**52**	**–**	**–**	**8,126**	**10,543**
Other	**15,285**	**1,135**	**754**	**141**	**338,113**	**355,428**
Total equity	**4,091**	**636**	**852**	**241**	**21,195**	**27,015**
Total carrying value	**$ 137,592**	**$ 27,803**	**$ 11,000**	**$ 6,270**	**$ 417,825**	**$ 600,490**
Fair value	**$ 140,789**	**$ 29,633**	**$ 10,963**	**$ 6,270**	**$ 417,825**	**$ 605,480**

2019	Bonds	Mortgage loans	Stocks	Investment properties	Other	Total
Carrying value						
Participating liabilities						
Canada	$ 19,484	$ 9,655	$ 6,142	$ 2,472	$ 4,518	$ 42,271
United States	5,128	626	–	–	5,575	11,329
Europe [(1)]	97	–	63	12	1	173
Capital and Risk Solutions [(1)]	619	20	–	–	207	846
Non-participating liabilities						
Canada	20,270	4,111	2,237	407	5,643	32,668
United States	14,311	2,678	–	–	15,371	32,360
Europe [(1)]	33,062	5,387	299	2,672	4,069	45,489
Capital and Risk Solutions [(1)]	2,484	55	–	–	8,502	11,041
Other	15,630	902	902	119	231,894	249,447
Total equity	3,943	834	732	205	19,829	25,543
Total carrying value	$ 115,028	$ 24,268	$ 10,375	$ 5,887	$ 295,609	$ 451,167
Fair value	$ 117,000	$ 25,146	$ 10,367	$ 5,887	$ 295,609	$ 454,009

(1) See comparative figures (note 32).

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

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

(c) Change in insurance contract liabilities

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

2020

	Participating		
	Gross liability	**Reinsurance assets**	**Net**
Balance, beginning of year	**$ 54,619**	**$ (235)**	**$ 54,854**
Impact of new business	**(7)**	**32**	**(39)**
Normal change in force	**3,883**	**9**	**3,874**
Management action and changes in assumptions	**55**	**8**	**47**
Impact of foreign exchange rate changes	**(286)**	**–**	**(286)**
Balance, end of year	**$ 58,264**	**$ (186)**	**$ 58,450**

	Non-participating			
	Gross liability	**Reinsurance assets**	**Net**	**Total Net**
Balance, beginning of year	**$ 119,902**	**$ 20,815**	**$ 99,087**	**$ 153,941**
Impact of new business	**7,028**	**706**	**6,322**	**6,283**
Normal change in force	**1,296**	**750**	**546**	**4,420**
Management action and changes in assumptions	**161**	**109**	**52**	**99**
Business movement from/to external parties	**(48)**	**–**	**(48)**	**(48)**
MassMutual acquisition (note 3)	**22,316**	**–**	**22,316**	**22,316**
Impact of foreign exchange rate changes	**(17)**	**(203)**	**186**	**(100)**
Balance, end of year	**$ 150,638**	**$ 22,177**	**$ 128,461**	**$ 186,911**

2019

	Participating		
	Gross liability	Reinsurance assets	Net
Balance, beginning of year	$ 50,927	$ (337)	$ 51,264
Impact of new business	59	–	59
Normal change in force	4,138	25	4,113
Management action and changes in assumptions	67	77	(10)
Impact of foreign exchange rate changes	(572)	–	(572)
Balance, end of year	$ 54,619	$ (235)	$ 54,854

	Non-participating			
	Gross liability	Reinsurance assets	Net	Total Net
Balance, beginning of year	$ 115,793	$ 6,463	$ 109,330	$ 160,594
Impact of new business	5,339	(266)	5,605	5,664
Normal change in force	1,784	645	1,139	5,252
Management action and changes in assumptions	(117)	(73)	(44)	(54)
Business movement from/to external parties	(176)	14,802	(14,978)	(14,978)
Impact of foreign exchange rate changes	(2,721)	(756)	(1,965)	(2,537)
Balance, end of year	$ 119,902	$ 20,815	$ 99,087	$ 153,941

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

In 2020, the major contributors to the increase in net insurance contract liabilities was the acquisition of MassMutual of $22,316, the impact of new business of $6,283, and the normal change in the in force business of $4,420.

Net non-participating insurance contract liabilities increased by $52 due to management actions and changes in assumptions including a $377 increase in Canada, partially offset by decreases of $212 in Europe, $59 in Capital & Risk Solutions, and $54 in the United States.

The increase in Canada was primarily due to updated policyholder behaviour assumptions of $269, updated morbidity assumptions of $140, of which $114 is offset by an increase in other assets, and updated economic and asset related assumptions of $98. This was partially offset by decreases due to updated life mortality assumptions of $129.

The decrease in Europe was primarily due to updated longevity assumptions of $138, modeling refinements of $28, updated morbidity assumptions of $24, updated policyholder behaviour assumptions of $19, and updated economic and asset related assumptions of $10. This was partially offset by an increase due to updated expense and tax assumptions of $6.

The decrease in Capital and Risk Solutions was primarily due to updated longevity assumptions of $135, updated economic assumptions of $41, and modeling refinements of $37. This was partially offset by increases due to updated life mortality assumptions of $107, updated expense and tax assumptions of $28, and updated policyholder behaviour assumptions of $14.

The decrease in the United States was primarily due to updated economic assumptions of $50.

Net participating insurance contract liabilities increased by $47 in 2020 due to management actions and changes in assumptions. The increase was primarily due to updated economic assumptions of $2,358, and updated policyholder behaviour assumptions of $34. This was partially offset by decreases due to provisions for future policyholder dividends of $1,899, updated expense and tax assumptions of $446, and modeling refinements of $5.

In July 2019, the Canadian Actuarial Standards Board published revised standards for the valuation of insurance contract liabilities, with an effective date of October 15, 2019. The revised standards include decreases to ultimate reinvestment rates and revised calibration criteria for stochastic risk-free interest rates.

In 2019, the major contributor to the decrease in net insurance contract liabilities was the business movement to external parties of $14,978, which includes the transfer to Protective Life, and the net impact of foreign exchange rate changes of $2,537. This was partially offset by increases due to the impact of new business of $5,664, and normal change in force of $5,252.

Net non-participating insurance contract liabilities decreased by $44 in 2019 due to management actions and assumption changes including a $272 decrease in Europe, partially offset by a $145 increase in Canada, a $52 increase in the United States, and a $31 increase in Capital and Risk Solutions.

The decrease in Europe was primarily due to updated longevity assumptions of $187, updated economic assumptions of $98, which includes the net impact of new standards, and updated life mortality assumptions of $7, partially offset by increases due to updated expense and tax assumptions of $25.

The increase in Canada was primarily due to updated policyholder behaviour assumptions of $254, and updated longevity assumptions of $54, partially offset by decreases due to updated morbidity assumptions of $169 and updated economic assumptions of $6, which includes the net impact of the new standards.

The increase in the United States was primarily due to updated expense and tax assumptions of $45, and updated mortality assumptions of $43 partially offset by decreases due to updated economic assumptions of $34, which includes the net impact of new standards.

The increase in Capital and Risk Solutions was primarily due to updated life mortality assumptions of $87, and updated expense and tax assumptions of $34, partially offset by decreases due to updated longevity assumptions of $112 and updated economic assumptions of $3, which includes the net impact of new standards.

Net participating insurance contract liabilities decreased by $10 in 2019 due to management actions and assumption changes. The decrease was primarily due to updated provisions for future policyholder dividends $2,232, updated expense and tax assumptions of $535, and modeling refinements of $198. This was partially offset by increases due to updated economic assumptions of $1,884, updated policyholder behaviour assumptions of $935 and updated mortality assumptions of $153.

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

	2020			2019		
	Gross liability	**Reinsurance assets**	**Net**	Gross liability	Reinsurance assets	Net
Balance, beginning of year	**$ 1,656**	**$ 127**	**$ 1,529**	$ 1,711	$ –	$ 1,711
Normal change in force business	**2,489**	**(20)**	**2,509**	(87)	38	(125)
Investment experience	**147**	**26**	**121**	103	(23)	126
Management action and changes in assumptions	**(4)**	**–**	**(4)**	(4)	–	(4)
Business movement from/to external parties	**–**	**–**	**–**	–	116	(116)
MassMutual acquisition (note 3)	**4,984**	**–**	**4,984**	–	–	–
Impact of foreign exchange rate changes	**(127)**	**(3)**	**(124)**	(67)	(4)	(63)
Balance, end of year	**$ 9,145**	**$ 130**	**$ 9,015**	$ 1,656	$ 127	$ 1,529

The carrying value of investment contract liabilities approximates their fair value.

(e) Gross premiums written and gross policyholder benefits

(i) Premium Income

	2020	2019
Direct premiums	**$ 28,102**	$ 25,419
Assumed reinsurance premiums	**19,652**	17,847
Total	**$ 47,754**	$ 43,266

(ii) Policyholder Benefits

	2020	2019
Direct	**$ 19,538**	$ 19,643
Assumed reinsurance	**20,067**	18,126
Total	**$ 39,605**	$ 37,769

(f) Actuarial Assumptions

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

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

Mortality

A life insurance mortality study is carried out annually for each major block of insurance business. The results of each study are used to update the Company's experience valuation mortality tables for that business. When there is insufficient data, use is made of the latest industry experience to derive an appropriate valuation mortality assumption. Improvement scales for life insurance and annuitant mortality are updated periodically based on population and industry studies, product specific considerations, as well as professional guidance. In addition, appropriate provisions have been made for future mortality deterioration on term insurance.

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

Morbidity

The Company uses industry developed experience tables modified to reflect emerging Company experience. Both claim incidence and termination are monitored regularly and emerging experience is factored into the current valuation.

Property and casualty reinsurance

Insurance contract liabilities for property and casualty reinsurance written by London Reinsurance Group (LRG), a subsidiary of Canada Life, 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 earnings. LRG analyzes the emergence of claims experience against expected assumptions for each reinsurance contract separately and at the portfolio level. If necessary, a more in-depth analysis is undertaken of the cedant experience.

Investment returns

The assets which correspond to the different liability categories are segmented. For each segment, projected cash flows from the current assets and liabilities are used in the Canadian Asset Liability Method to determine insurance contract liabilities. Cash flows from assets are reduced to provide for asset default losses. Testing under several interest rate and equity scenarios (including increasing and decreasing rates) is done to provide for reinvestment risk (note 8(c)).

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's most significant exposures are 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 Capital and Risk Solutions. 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	
	2020	2019
Mortality – 2% increase	**$ (288)**	$ (279)
Annuitant mortality – 2% decrease	**$ (756)**	$ (601)
Morbidity – 5% adverse change	**$ (279)**	$ (253)
Investment returns		
Parallel shift in yield curve		
1% increase	**$ –**	$ –
1% decrease	**$ –**	$ –
Change in interest rates		
1% increase	**$ 224**	$ 175
1% decrease	**$ (920)**	$ (619)
Change in publicly traded common stock values		
20% increase	**$ 28**	$ 54
10% increase	**$ 15**	$ 27
10% decrease	**$ (51)**	$ (39)
20% decrease	**$ (208)**	$ (182)
Change in other non-fixed income asset values		
10% increase	**$ 34**	$ 60
5% increase	**$ 6**	$ 25
5% decrease	**$ (69)**	$ (28)
10% decrease	**$ (108)**	$ (90)
Change in best estimate return assumptions for equities		
1% increase	**$ 556**	$ 509
1% decrease	**$ (682)**	$ (585)
Expenses – 5% increase	**$ (165)**	$ (125)
Policy termination and renewal – 10% adverse change	**$ (1,017)**	$ (813)

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.

	2020			2019		
	Gross liability	**Reinsurance assets**	**Net**	Gross liability	Reinsurance assets	Net
Canada	**$ 81,556**	**$ 439**	**$ 81,117**	$ 74,939	$ 251	$ 74,688
United States	**76,793**	**15,921**	**60,872**	43,689	15,103	28,586
Europe (1)	**48,243**	**5,622**	**42,621**	45,662	5,230	40,432
Capital and Risk Solutions (1)	**11,455**	**139**	**11,316**	11,887	123	11,764
Total	**$ 218,047**	**$ 22,121**	**$ 195,926**	$ 176,177	$ 20,707	$ 155,470

(1) See comparative figures (note 32).

(ii) Reinsurance risk

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

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

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

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

14. Segregated Funds and Other Structured Entities

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

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

In circumstances where the segregated funds are invested in structured entities and are deemed to control the entity, the Company has presented the non-controlling ownership interest within the segregated funds for the risk of policyholders as equal and offsetting amounts in the assets and liabilities. The amounts presented within are $1,490 at December 31, 2020 ($1,147 at December 31, 2019).

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

Segregated Funds Guarantee Exposure

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

In Canada, the Company offers retail segregated fund products through Canada Life. These products provide guaranteed minimum death benefits (GMDB) and guaranteed minimum accumulation on maturity benefits.

In the U.S., the Company offers group variable annuities with guaranteed minimum withdrawal benefits (GMWB) and group standalone GMDB products which mainly provide return of premium on death.

In Europe, the Company offers UWP products in Germany and unit-linked products with investment guarantees in Ireland. These products are similar to segregated fund products but include minimum credited interest rates and pooling of policyholders' funds.

The Company also offers a GMWB product in the U.S., and Germany, and previously offered GMWB product in Canada and Ireland. Certain GMWB products offered by the Company offer levels of death and maturity guarantees. At December 31, 2020, the amount of GMWB product in-force in Canada, the U.S., Ireland and Germany was $3,375 ($3,332 at December 31, 2019).

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

	2020	2019
Cash and cash equivalents	$ 15,558	$ 12,501
Bonds	65,338	44,973
Mortgage loans	2,686	2,670
Stocks and units in unit trusts	112,675	104,330
Mutual funds	127,577	55,779
Investment properties	12,430	12,986
	336,264	233,239
Accrued income	463	373
Other liabilities	(4,185)	(3,737)
Non-controlling mutual funds interest	1,490	1,147
Total (1)	$ 334,032	$ 231,022

(1) At December 31, 2020, $84,785 of investments on account of segregated fund policyholders are reinsured by the Company on a modified coinsurance basis (nil at December 31, 2019) (note 3). Included in this amount are $87 of cash and cash equivalents, $15,320 of bonds, $23 of stocks and units in unit trusts, $69,259 of mutual funds, $100 of accrued income and $(4) of other liabilities.

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

	2020	2019
Balance, beginning of year	$ 231,022	$ 209,527
Additions (deductions):		
Policyholder deposits	21,916	24,685
Net investment income	2,695	3,331
Net realized capital gains on investments	8,954	4,265
Net unrealized capital gains on investments	474	19,658
Unrealized gains (losses) due to changes in foreign exchange rates	3,920	(6,539)
Policyholder withdrawals	(20,371)	(24,721)
Business acquisition (1)	84,785	–
Change in Segregated Fund investment in General Fund	51	(4)
Change in General Fund investment in Segregated Fund	234	105
Net transfer from General Fund	9	23
Non-controlling mutual funds interest	343	283
Transfer from assets held for sale	–	409
Total	103,010	21,495
Balance, end of year	$ 334,032	$ 231,022

(1) Investment and insurance contracts on account of segregated fund policyholders acquired through the acquisition of MassMutual (note 3).

(c) Investment income on account of segregated fund policyholders

	2020	2019
Net investment income	$ 2,695	$ 3,331
Net realized capital gains on investments	8,954	4,265
Net unrealized capital gains on investments	474	19,658
Unrealized gains (losses) due to changes in foreign exchange rates	3,920	(6,539)
Total	16,043	20,715
Change in investment and insurance contracts liability on account of segregated fund policyholders	16,043	20,715
Net	$ –	$ –

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

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

	2020			
	Level 1	**Level 2**	**Level 3**	**Total**
Investments on account of segregated fund policyholders [(1)]	**$ 224,831**	**$ 98,424**	**$ 13,556**	**$ 336,811**

(1) Excludes other liabilities, net of other assets, of $2,779.

	2019			
	Level 1	Level 2	Level 3	Total
Investments on account of segregated fund policyholders [(1)]	$ 146,861	$ 73,173	$ 13,988	$ 234,022

(1) Excludes other liabilities, net of other assets, of $3,000.

During 2020, certain foreign stock holdings valued at $3,190 have been transferred from Level 1 to Level 2 ($153 were transferred from Level 1 to Level 2 at December 31, 2019) primarily based on the Company's change in use of inputs in addition to quoted prices in active markets for certain foreign stock holdings at year end. Level 2 assets include those assets where fair value is not available from normal market pricing sources, where inputs are utilized in addition to quoted prices in active markets and where the Company does not have access to the underlying asset details within an investment fund.

As at December 31, 2020, $9,770 ($8,471 at December 31, 2019) of the segregated funds were invested in funds managed by related parties IG Wealth Management and Mackenzie Investments, members of the Power Corporation 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:

	2020	2019		
	Total [(1)]	Investments on account of segregated fund policyholders	Investments on account of segregated fund policyholders held for sale	Total
Balance, beginning of year	**$ 13,988**	$ 13,235	$ 9	$ 13,244
Change in accounting policy	**–**	136	–	136
Revised balance, beginning of year	**13,988**	13,371	9	13,380
Total gains (losses) included in segregated fund investment income	**78**	141	(1)	140
Purchases	**167**	760	–	760
Sales	**(712)**	(284)	(8)	(292)
Transfers into Level 3	**35**	–	–	–
Transfers out of Level 3	**–**	–	–	–
Balance, end of year	**$ 13,556**	$ 13,988	$ –	$ 13,988

(1) At December 31, 2020, there were no investments on account of segregated fund policyholders held for sale.

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 2020, fee and other income earned by the Company resulting from the Company's interests in segregated funds and other structured entities was $5,034 ($4,919 during 2019).

Included within other assets (note 12) at December 31, 2020 is $557 ($957 at December 31, 2019) of investments by the Company in bonds and stocks of Putnam sponsored funds and $156 ($135 at December 31, 2019) of investments in stocks of sponsored unit trusts in Europe.

15. Debentures and Other Debt Instruments

	2020 Carrying value	2020 Fair value	2019 Carrying value	2019 Fair value
Short-term				
Commercial paper and other short-term debt instruments with interest rates from 0.223% to 0.274% (1.828% to 2.089% at December 31, 2019), unsecured	**$ 125**	**$ 125**	$ 130	$ 130
Revolving credit facility with interest equal to LIBOR plus 0.70% (U.S. $165; U.S. $230 at December 31, 2019), unsecured	**210**	**210**	299	299
Revolving credit facility with interest equal to LIBOR plus 1.00% (U.S. $500), unsecured	**635**	**635**	–	–
Total short-term	**970**	**970**	429	429
Capital:				
Current				
Lifeco				
4.65% Debentures due August 13, 2020, unsecured, repaid during the year	**–**	**–**	500	508
Long-term				
Lifeco				
6.74% Debentures due November 24, 2031, unsecured	**195**	**287**	194	278
6.67% Debentures due March 21, 2033, unsecured	**394**	**575**	393	557
5.998% Debentures due November 16, 2039, unsecured	**342**	**504**	342	487
3.337% Debentures due February 28, 2028, unsecured	**498**	**566**	498	526
2.981% Debentures due July 8, 2050, unsecured	**493**	**514**	–	–
2.50% Debentures due April 18, 2023, unsecured, (500 euro)	**774**	**825**	728	788
2.379% Debentures due May 14, 2030, unsecured	**597**	**637**	–	–
1.75% Debentures due December 7, 2026, unsecured, (500 euro)	**771**	**857**	725	785
	4,064	**4,765**	2,880	3,421
Canada Life				
6.40% Subordinated debentures due December 11, 2028, unsecured	**100**	**135**	100	128
Canada Life Capital Trust (CLCT)				
7.529% due June 30, 2052, unsecured, face value $150	**158**	**222**	159	221
Great-West Lifeco Finance 2018, LP				
4.581% Senior notes due May 17, 2048, unsecured, (U.S. $500)	**628**	**732**	643	749
4.047% Senior notes due May 17, 2028, unsecured, (U.S. $300)	**379**	**420**	388	430
	1,007	**1,152**	1,031	1,179
Great-West Lifeco Finance (Delaware) LP				
4.15% Senior notes due June 3, 2047, unsecured, (U.S. $700)	**874**	**970**	894	993
Great-West Lifeco U.S. Finance 2020, LP				
0.904% Senior notes due August 12, 2025, unsecured, (U.S. $500)	**631**	**638**	–	–
Empower Finance 2020, LP				
3.075% Senior notes due September 17, 2051, unsecured, (U.S. $700)	**879**	**984**	–	–
1.776% Senior notes due March 17, 2031, unsecured, (U.S. $400)	**505**	**521**	–	–
1.357% Senior notes due September 17, 2027, unsecured, (U.S. $400)	**505**	**512**	–	–
	1,889	**2,017**	–	–
Total long-term	**8,723**	**9,899**	5,564	6,450
Total	**$ 9,693**	**$ 10,869**	$ 5,993	$ 6,879

On May 14, 2020, the Company issued $600 aggregate principal amount 2.379% debentures at par, maturing on May 14, 2030. Interest on the debentures is payable semi-annually in arrears on May 14 and November 14 in each year, commencing November 14, 2020 until the date on which the debentures are repaid. The debentures are redeemable at any time prior to February 14, 2030 in whole or in part at the greater of the Canada Yield Price (as defined in the trust indenture governing the debentures) and par, and on or after February 14, 2030 in whole or in part at par, together in each case with accrued and unpaid interest.

On July 8, 2020, the Company issued $250 aggregate principal amount 2.981% debentures at par, maturing on July 8, 2050. Interest on the debentures is payable semi-annually in arrears on January 8 and July 8 in each year, commencing January 8, 2021 until the date on which the debentures are repaid. The debentures are redeemable at any time prior to January 8, 2050 in whole or in part at the greater of the Canada Yield Price (as defined in the trust indenture governing the debentures) and par, and on or after January 8, 2050 in whole or in part at par, together in each case with accrued and unpaid interest.

On July 13, 2020, the Company announced the re-opening of the offering of 2.981% debentures due July 8, 2050, and on July 15, 2020 issued an additional $250 aggregate principal amount. The July 15, 2020 debentures were issued at a price of $986.31 per $1,000 par value for an effective yield of 3.051%. Upon issuance of the July 15, 2020 debentures, $500 aggregate principal amount of 2050 debentures was issued and outstanding. The July 15, 2020 debentures form a single series with, are issued under the same Committee on Uniform Securities Identification Procedures (CUSIP) number as, and have the same terms as to status, redemption or otherwise as, the initial debentures issued on July 8, 2020.

On August 12, 2020, Great-West Lifeco U.S. Finance 2020, LP, a subsidiary of the Company, issued $663 (U.S. $500) aggregate principal amount of 0.904% senior notes due August 12, 2025. The senior notes are fully and unconditionally guaranteed by the Company.

On August 13, 2020, the Company repaid the principal amount of its maturing 4.65% $500 debentures, together with accrued interest.

On September 17, 2020, Empower Finance 2020, LP, a subsidiary of the Company, issued $526 (U.S. $400) aggregate principal amount of 1.357% senior notes due September 17, 2027, $526 (U.S. $400) aggregate principal amount of 1.776% senior notes due March 17, 2031 and $921 (U.S. $700) aggregate principal amount of 3.075% senior notes due September 17, 2051. The senior notes are fully and unconditionally guaranteed by the Company.

On November 2, 2020, Great-West Lifeco U.S. LLC, a subsidiary of the Company, established a 1-year $635 (U.S. $500) revolving credit facility with interest on the drawn balance equal to the LIBOR rate plus 1.00%. The facility is fully and unconditionally guaranteed by the Company. The facility was fully drawn as at December 31, 2020, with the proceeds used to finance a portion of the MassMutual retirement services business acquisition (note 3).

Capital Trust Securities

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

Distributions and interest on the capital trust securities are classified as financing charges in the Consolidated Statements of Earnings (note 16). The fair value for capital trust securities is determined by the bid-ask price. Refer to note 8 for financial instrument risk management disclosures.

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

16. Financing Charges

Financing charges consist of the following:

	2020	2019
Operating charges:		
Interest on operating lines and short-term debt instruments	$ 5	$ 12
Financial charges:		
Interest on long-term debentures and other debt instruments	251	243
Interest on capital trust securities	11	11
Other	17	19
	279	273
Total	$ 284	$ 285

17. Other Liabilities

	2020	2019
Pension and other post-employment benefits (note 23)	**$ 1,630**	$ 1,520
Lease liabilities	**568**	585
Bank overdraft	**444**	379
Deferred income reserves	**345**	380
Other	**2,160**	1,825
Total	**$ 5,147**	$ 4,689

Total other liabilities of $2,604 ($2,204 at December 31, 2019) are expected to be realized within 12 months from the reporting date. This amount excludes deferred income reserves, the changes in which are noted below.

Deferred income reserves	2020	2019
Balance, beginning of year	**$ 380**	$ 441
Additions	**51**	70
Amortization	**(78)**	(81)
Changes in foreign exchange	**12**	(15)
Disposals	**(20)**	(35)
Balance, end of year	**$ 345**	$ 380

	2020		
Lease liabilities	**Property**	**Equipment**	**Total**
Balance, beginning of year	**$ 580**	**$ 5**	**$ 585**
Additions	**56**	**1**	**57**
Modifications	**(4)**	**–**	**(4)**
Lease payments	**(85)**	**(3)**	**(88)**
Changes in foreign exchange rates	**(4)**	**–**	**(4)**
Interest	**22**	**–**	**22**
Balance, end of year	**$ 565**	**$ 3**	**$ 568**

	2019		
	Property	Equipment	Total
Balance, beginning of year	$ 545	$ 6	$ 551
Additions	124	1	125
Modifications	(22)	–	(22)
Lease payments	(72)	(2)	(74)
Changes in foreign exchange rates	(17)	–	(17)
Interest	22	–	22
Balance, end of year	$ 580	$ 5	$ 585

The following table presents the contractual undiscounted cash flows for lease obligations:

	2020	2019
One year or less	**$ 88**	$ 83
Over one year to two years	**78**	78
Over two years to three years	**67**	66
Over three years to four years	**60**	56
Over four years to five years	**54**	53
Over five years	**387**	417
Total undiscounted lease obligations	**$ 734**	$ 753

18. Non-Controlling Interests

The Company has a controlling equity interest in Canada Life, GWL&A, and Putnam at December 31, 2020. The Company had a controlling equity interest in Canada Life, GWL&A, The Great-West Life Assurance Company (Great-West Life), London Life Insurance Company (London Life) and Putnam at December 31, 2019. The non-controlling interests previously attributable to Great-West Life and London Life are now included in the non-controlling interests of Canada Life as part of the Canada Life amalgamation.

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 also include non-controlling interests for the issued and outstanding shares of Putnam and PanAgora held by employees of the respective companies, and non-controlling interests through Irish Life's controlling interest in Invesco Ltd. (Ireland).

(a) The non-controlling interests recorded in the Consolidated Statements of Earnings and other comprehensive income are as follows:

	2020	2019
Net earnings attributable to participating account before policyholder dividends		
Canada Life	$ **1,429**	$ 302
GWL&A	**1**	3
Great-West Life	**–**	150
London Life	**–**	919
	1,430	1,374
Policyholder dividends		
Canada Life	**(1,362)**	(315)
GWL&A	**(2)**	(3)
Great-West Life	**–**	(166)
London Life	**–**	(880)
	(1,364)	(1,364)
Net earnings – participating account	**66**	10
Non-controlling interests in subsidiaries	**12**	5
Total	$ **78**	$ 15

The non-controlling interests recorded in other comprehensive income (loss) for the year ended December 31, 2020 was $37 ($30 for the year ended December 31, 2019).

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

	2020	2019
Participating account surplus in subsidiaries:		
Canada Life	$ **2,858**	$ 284
GWL&A	**13**	14
Great-West Life	**–**	595
London Life	**–**	1,866
Total	$ **2,871**	$ 2,759
Non-controlling interests in subsidiaries	$ **116**	$ 107

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

	2020		2019	
	Number	**Carrying value**	Number	Carrying value
First Preferred Shares				
Series F, 5.90% Non-Cumulative	**7,740,032**	**$ 194**	7,740,032	$ 194
Series G, 5.20% Non-Cumulative	**12,000,000**	**300**	12,000,000	300
Series H, 4.85% Non-Cumulative	**12,000,000**	**300**	12,000,000	300
Series I, 4.50% Non-Cumulative	**12,000,000**	**300**	12,000,000	300
Series L, 5.65% Non-Cumulative	**6,800,000**	**170**	6,800,000	170
Series M, 5.80% Non-Cumulative	**6,000,000**	**150**	6,000,000	150
Series N, Non-Cumulative 5-Year Rate Reset	**10,000,000**	**250**	8,524,422	213
Series O, Non-Cumulative Floating Rate	**–**	**–**	1,475,578	37
Series P, 5.40% Non-Cumulative	**10,000,000**	**250**	10,000,000	250
Series Q, 5.15% Non-Cumulative	**8,000,000**	**200**	8,000,000	200
Series R, 4.80% Non-Cumulative	**8,000,000**	**200**	8,000,000	200
Series S, 5.25% Non-Cumulative	**8,000,000**	**200**	8,000,000	200
Series T, 5.15% Non-Cumulative	**8,000,000**	**200**	8,000,000	200
Total	**108,540,032**	**$ 2,714**	108,540,032	$ 2,714
Common shares				
Balance, beginning of year	**927,281,186**	**$ 5,633**	987,739,408	$ 7,283
Purchased and cancelled under Substantial Issuer Bid	**–**	**–**	(59,700,974)	(2,000)
Excess of redemption proceeds over stated capital per Substantial Issuer Bid	**–**	**–**	–	1,628
Share issuance – Qualifying Holdco Alternative per Substantial Issuer Bid	**–**	**–**	595,747,641	2,306
Cancellation of Shares – Qualifying Holdco Alternative per Substantial Issuer Bid	**–**	**–**	(595,747,641)	(3,610)
Purchased and cancelled under Normal Course Issuer Bid	**–**	**–**	(2,000,000)	(66)
Excess of redemption proceeds over stated capital per Normal Course Issuer Bid	**–**	**–**	–	53
Exercised and issued under stock option plan	**571,920**	**18**	1,242,752	39
Balance, end of year	**927,853,106**	**$ 5,651**	927,281,186	$ 5,633

Preferred Shares

On November 4, 2020, the Company announced that it did not intend to exercise its rights to redeem the 8,524,422 then outstanding Series N, Non-Cumulative 5-Year Rate Reset First Preferred Shares (Series N Shares) and the 1,475,578 then outstanding Series O, Non-Cumulative Floating Rate First Preferred Shares (Series O Shares) on December 31, 2020. As a result and subject to certain conditions set out in the terms and conditions attached to the shares, holders of Series N Shares had the right to convert all or any of their Series N Shares into Series O Shares, and holders of Series O Shares had the right to convert all or any of their Series O Shares into Series N Shares, on a one-for-one basis on December 31, 2020.

On December 17, 2020, the Company announced that holders of 59,830 Series N Shares elected to convert their shares into Series O Shares, and that holders of 547,303 Series O Shares elected to convert their shares into Series N Shares. After taking into account all shares tendered for conversion, the Company determined that there would be less than 1,000,000 Series O Shares outstanding on December 31, 2020. As a result and in accordance with the terms and conditions attached to the shares, no Series N Shares were converted into Series O Shares and all remaining Series O Shares were automatically converted into Series N Shares on a one-for-one basis on December 31, 2020. Following the automatic conversion, Lifeco has 10,000,000 Series N Shares and no Series O Shares issued and outstanding. The Series N Shares carry an annual fixed non-cumulative dividend rate of 1.749% up to but excluding December 31, 2025 (2.176% up to but excluding December 31, 2020) and are redeemable at the option of the Company on December 31, 2025 and on December 31 every five years thereafter for $25.00 per share plus all declared and unpaid dividends up to but excluding the date of redemption. Prior to conversion, the Series O Shares carried a floating non-cumulative dividend rate equal to the relevant Government of Canada Treasury Bill rate plus 1.30%.

19. Share Capital (cont'd)

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

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

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

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

The Series L, 5.65% Non-Cumulative First Preferred Shares are currently redeemable at the option of the Company for $25.00 per share, together with all declared and unpaid dividends up to but excluding the date of redemption.

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

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

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

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

The Series S, 5.25% Non-Cumulative First Preferred Shares are redeemable at the option of the Company 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.

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

Common Shares

Normal Course Issuer Bid

On January 17, 2020, the Company announced a normal course issuer bid commencing January 22, 2020 and terminating January 21, 2021 to purchase for cancellation up to but not more than 20,000,000 of its common shares at market prices.

As a result of the COVID-19 pandemic impact on markets, on March 13, 2020, OSFI set expectations that Canadian banks and insurers should suspend share buybacks until further notice.

On March 4, 2019, the Company announced a substantial issuer bid (the Offer) pursuant to which the Company offered to purchase for cancellation up to $2,000 of its common shares from shareholders for cash. The Offer commenced on March 8, 2019 and expired on April 12, 2019. On April 17, 2019, the Company purchased and subsequently cancelled 59,700,974 common shares under the Offer at a price of $33.50 per share for an aggregate purchase price of $2,000. The excess paid over the average carrying value under the Offer was $1,628 and was recognized as a reduction to accumulated surplus. Transaction costs of $3 were incurred in connection with the Offer and charged to accumulated surplus.

As part of the substantial issuer bid, Power Financial Corporation (Power Financial) and IGM participated in the Offer. IGM tendered its Lifeco shares proportionately. Power Financial tendered a portion of its Lifeco common shares on a proportionate basis and all remaining Lifeco common shares on a non-proportionate basis and this did not impact Power Financial's voting control of the Company. Power Financial and IGM effected their tender offers through a Qualifying Holdco Alternative, which the Company also offered to other shareholders, to assist them in achieving certain Canadian tax objectives. Under the Qualifying Holdco Alternative, the Corporation issued and subsequently cancelled 595,747,641 shares which resulted in a net decrease in share capital of $1,304 with a corresponding increase in accumulated surplus.

During the year ended December 31, 2020, the Company did not purchase any common shares under the current normal course issuer bid (2,000,000 during the year ended December 31, 2019, under the previous normal course issuer bid).

Subsequent Event

On January 25, 2021, the Company announced a normal course issuer bid (NCIB) commencing January 27, 2021 and terminating January 26, 2022 to purchase for cancellation up to but not more than 20,000,000 of its common shares at market prices. The Company does not currently intend to engage in share repurchases that reduce its outstanding shares while OSFI maintains its expectation that the institutions it regulates suspend share buybacks. However, the Company may use the renewed NCIB for other purposes permitted by the Toronto Stock Exchange or, when OSFI no longer maintains its expectation or circumstances otherwise change, to acquire common shares to mitigate the dilutive effect of issuing shares under the Company's Stock Option Plan and for other capital management purposes.

20. Earnings Per Common Share

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

	2020	2019
Earnings		
Net earnings	**$ 3,076**	$ 2,492
Preferred share dividends	**(133)**	(133)
Net earnings – common shareholders	**$ 2,943**	$ 2,359
Number of common shares		
Average number of common shares outstanding	**927,675,108**	946,003,629
Add: Potential exercise of outstanding stock options	**109,974**	522,755
Average number of common shares outstanding – diluted basis	**927,785,082**	946,526,384
Basic earnings per common share	**$ 3.173**	$ 2.494
Diluted earnings per common share	**$ 3.172**	$ 2.493
Dividends per common share	**$ 1.752**	$ 1.652

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 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.

21. Capital Management (cont'd)

(b) Regulatory Capital

In Canada, OSFI has established a regulatory capital adequacy measurement for life insurance companies incorporated under the Insurance Companies Act (Canada) and their subsidiaries.

The Life Insurance Capital Adequacy Test (LICAT) Ratio compares the regulatory capital resources of a company to its required capital, defined by OSFI, as the aggregate of all defined capital requirements. The total capital resources are provided by the sum of Available Capital, Surplus Allowance and Eligible Deposits.

The following provides a summary of the LICAT information and ratios for Canada Life:

	2020	2019
Tier 1 Capital	**$ 11,593**	$ 11,952
Tier 2 Capital	**4,568**	3,637
Total Available Capital	**16,161**	15,589
Surplus Allowance & Eligible Deposits	**14,226**	12,625
Total Capital Resources	**$ 30,387**	$ 28,214
Required Capital	**$ 23,607**	$ 20,911
Total LICAT Ratio (OSFI Supervisory Target = 100%) (1)	**129%**	135%

(1) Total Ratio (%) = (Total Capital Resources / Required Capital)

For entities based in Europe, the local solvency capital regime is the Solvency II basis. At December 31, 2020 and December 31, 2019, all European regulated entities met the capital and solvency requirements as prescribed under Solvency II.

GWL&A is subject to the risk-based capital regulatory regime in the U.S. 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, 2020 and December 31, 2019, the Company maintained capital levels above the minimum local regulatory requirements in each of its 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 granted prior to January 1, 2019 vest over a period of five years. Options granted on or after January 1, 2019 vest 50% three years after the grant date and 50% four years after the grant date. Options have a maximum exercise period of ten years from the grant date. Termination of employment may, in certain circumstances, result in forfeiture of the options, unless otherwise determined by the Committee. In 2020, the maximum number of Lifeco common shares issuable under the Plan was 65,000,000.

During 2020, 1,932,200 common share options were granted (2,699,500 during 2019). The weighted average fair value of common share options granted during 2020 was $1.86 per option ($2.86 in 2019). 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 2020: dividend yield 5.44% (5.45% in 2019), expected volatility 15.75% (18.63% in 2019), risk-free interest rate 1.10% (1.86% in 2019), and expected life of eight years (eight in 2019).

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

	2020		2019	
	Options	**Weighted average exercise price**	Options	Weighted average exercise price
Outstanding, beginning of year	**15,378,339**	**$ 32.57**	14,057,195	$ 32.49
Granted	**1,932,200**	**32.22**	2,699,500	30.33
Exercised	**(571,920)**	**26.71**	(1,242,752)	26.71
Forfeited/expired	**(339,340)**	**34.74**	(135,604)	34.12
Outstanding, end of year	**16,399,279**	**$ 32.69**	15,378,339	$ 32.57
Options exercisable at end of year	**10,084,559**	**$ 32.94**	9,653,016	$ 32.32

The weighted average share price at the date of exercise of stock options for the year ended December 31, 2020 was $32.59 ($32.29 in 2019).

Compensation expense due to the Plan transactions accounted for as equity-settled share-based payments of $4 after-tax in 2020 ($5 after-tax in 2019) 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, 2020:

	Outstanding			Exercisable		
Exercise price ranges	**Options**	**Weighted average remaining contractual life**	**Weighted average exercise price**	**Options**	**Weighted average exercise price**	**Expiry**
$27.16 – $36.87	652,320	0.28	30.37	652,320	30.37	2021
$23.16 – $36.87	1,229,618	1.28	27.70	1,223,018	27.69	2022
$27.13 – $36.87	1,573,700	2.31	31.04	1,573,700	31.04	2023
$30.28 – $36.87	1,876,040	3.31	32.86	1,876,040	32.86	2024
$34.68 – $36.87	1,670,699	4.18	35.66	1,670,699	35.66	2025
$34.68 – $36.87	2,013,822	5.16	34.68	1,640,842	34.68	2026
$36.87 – $36.87	1,241,000	6.16	36.87	755,760	36.87	2027
$32.99 – $34.21	1,685,780	7.16	34.20	683,780	34.20	2028
$30.28 – $32.50	2,524,100	8.16	30.32	8,400	30.28	2029
$32.22 – $32.22	1,932,200	9.16	32.22	–	–	2030

22. Share-Based Payments (cont'd)

(b) To promote greater alignment of interests between the Directors and Lifeco's shareholders, the Company and certain of its subsidiaries have 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 must receive 50% of their 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 their annual Board retainer and Board Committee 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 Lifeco common share on the Toronto Stock Exchange (TSX) for the last five trading days of the preceding fiscal quarter. Directors receive additional DSUs for dividends payable on the Company's common shares based on the value of a DSU at the dividend payment date. DSUs are redeemable when an individual ceases to be a Director, or as applicable, an officer or employee of the Company or any of its affiliates by a lump sum cash payment, based on the weighted average trading price per Lifeco common share on the TSX for the last five trading days preceding the date of redemption. In 2020, $6 in Directors' fees were used to acquire DSUs ($6 in 2019). At December 31, 2020, the carrying value of the DSU liability is $49 ($43 in 2019) recorded within other liabilities.

Certain employees of the Company are entitled to receive DSUs. Under these DSU Plans, certain employees may elect to receive DSUs as settlement of their annual incentive plan or as settlement of PSUs issued under the Company's PSU Plan. In both cases these employees are granted DSUs equivalent to the Company's common shares. Employees receive additional DSUs in respect of dividends payable on the common shares based on the value of the DSUs at the time. DSUs are redeemable when an individual ceases to be an officer or employee of the Company or any of its affiliates, by a lump sum cash payment representing the value of the DSUs at that date. The Company uses the fair-value based method to account for the DSUs granted to employees under the plans. For the year ended December 31, 2020, the Company recognized compensation expense of $4 ($7 in 2019) for the DSU Plans recorded in operating and administrative expenses in the Consolidated Statements of Earnings. At December 31, 2020, the carrying value of the DSU liability is $25 ($21 in 2019) recorded within other liabilities in the Consolidated Balance Sheets.

(c) Certain employees of the Company are entitled to receive PSUs. Under the PSU Plan, 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, 2020, the Company recognized compensation expense, excluding the impact of hedging, of $41 ($59 in 2019) for the PSU Plan recorded in operating and administrative expenses in the Consolidated Statements of Earnings. At December 31, 2020, the carrying value of the PSU liability is $93 ($86 in 2019) 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 Lifeco. 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, 2020, the Company recognized compensation expense of $13 ($12 in 2019) for the ESOP recorded in operating and administrative expenses in the Consolidated Statements of Earnings.

(e) Putnam sponsors the Putnam Investments, LLC Equity Incentive Plan. Under the terms of the Equity Incentive Plan, Putnam is authorized to grant or sell Class B Shares of Putnam (the Putnam Class B Shares), subject to certain restrictions, and to grant options to purchase Putnam Class B Shares (collectively, the Awards) to certain senior management and key employees of Putnam at fair value at the time of the award. Fair value is determined under the valuation methodology outlined in the Equity Incentive Plan. Awards vest over a period of up to five years and are specified in the individual's award letter. Holders of Putnam Class B Shares are not entitled to vote other than in respect of certain matters in regards to the Equity Incentive Plan and have no rights to convert their shares into any other securities. The number of Putnam Class B Shares that may be subject to Awards under the Equity Incentive Plan is limited to 16,764,705.

During 2020, Putnam granted 3,092,859 (2,544,222 in 2019) restricted Class B common shares to certain members of senior management and key employees.

Compensation expense recorded for the year ended December 31, 2020 related to restricted Class B common shares and Class B stock options earned was $31 ($20 in 2019) and is recorded in operating and administrative expenses in the Consolidated Statements of Earnings.

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

Compensation expense recorded for the year ended December 31, 2020 related to restricted Class C Shares and stock appreciation rights was $14 in 2020 ($14 in 2019) 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 eligible employees and advisors. The Company's subsidiaries also maintain defined contribution pension plans for eligible employees and advisors.

The defined benefit pension plans provide pensions based on length of service and final average pay; however, these plans are closed to new entrants. Many of the defined benefit pension plans also no longer provide future defined benefit accruals. The Company's defined benefit plan exposure is expected to reduce in future years. Where defined benefit pension accruals continue, 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. Assets supporting the funded pension plans are held in separate trusteed pension funds. Obligations for the wholly unfunded plans are included in other liabilities and are supported by general assets.

New hires and active plan participants in defined benefit plans closed to future defined benefit accruals are eligible for defined contribution pension benefits. The defined contribution pension plans provide pension benefits based on accumulated employee and employer contributions. Employer 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. The benefit plans are monitored on an ongoing basis to assess the benefit, funding and investment policies, financial status, and funding requirements. Significant changes to a subsidiary company's benefit plans require approval from that company's Board of Directors.

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

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

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

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

(a) Plan Assets, Benefit Obligation and Funded Status

	Defined benefit pension plans		Other post-employment benefits	
	2020	2019	**2020**	2019
Change in fair value of plan assets				
Fair value of plan assets, beginning of year	**$ 6,972**	$ 6,484	**$ –**	$ –
Interest income	**179**	210	**–**	–
Actual return over (less than) interest income	**453**	663	**–**	–
Employer contributions	**164**	176	**17**	20
Employee contributions	**15**	20	**–**	–
Benefits paid	**(285)**	(266)	**(17)**	(20)
Settlements	**(11)**	(113)	**–**	–
Administrative expenses	**(8)**	(10)	**–**	–
Net transfer out	**–**	(13)	**–**	–
Foreign exchange rate changes	**123**	(179)	**–**	–
Fair value of plan assets, end of year	**$ 7,602**	$ 6,972	**$ –**	$ –
Change in defined benefit obligation				
Defined benefit obligation, beginning of year	**$ 7,836**	$ 7,189	**$ 388**	$ 370
Current service cost	**88**	76	**2**	2
Interest cost	**204**	234	**12**	14
Employee contributions	**15**	20	**–**	–
Benefits paid	**(285)**	(266)	**(17)**	(20)
Plan amendments	**–**	(1)	**–**	–
Curtailments and termination benefits (1)	**(11)**	(3)	**–**	–
Settlements	**(14)**	(150)	**–**	–
Actuarial loss (gain) on financial assumption changes	**599**	942	**28**	29
Actuarial loss (gain) on demographic assumption changes	**(9)**	(20)	**1**	(5)
Actuarial loss (gain) arising from member experience	**18**	14	**(4)**	(1)
Net transfer out	**–**	(13)	**–**	–
Foreign exchange rate changes	**113**	(186)	**(1)**	(1)
Defined benefit obligation, end of year	**$ 8,554**	$ 7,836	**$ 409**	$ 388
Asset (liability) recognized on the Consolidated Balance Sheets				
Funded status of plans – surplus (deficit)	**$ (952)**	$ (864)	**$ (409)**	$ (388)
Unrecognized amount due to asset ceiling	**(29)**	(37)	**–**	–
Asset (liability) recognized on the Consolidated Balance Sheets	**$ (981)**	$ (901)	**$ (409)**	$ (388)
Recorded in:				
Other assets (note 12)	**$ 240**	$ 231	**$ –**	$ –
Other liabilities (note 17)	**(1,221)**	(1,132)	**(409)**	(388)
Asset (liability) recognized on the Consolidated Balance Sheets	**$ (981)**	$ (901)	**$ (409)**	$ (388)
Analysis of defined benefit obligation				
Wholly or partly funded plans	**$ 8,213**	$ 7,513	**$ –**	$ –
Wholly unfunded plans	**$ 341**	$ 323	**$ 409**	$ 388

(1) Includes a curtailment gain recognized on sale of shares of IPSI (note 3).

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

	Defined benefit pension plans	
	2020	2019
Change in asset ceiling		
Asset ceiling, beginning of year	**$ 37**	$ 103
Interest on asset ceiling	**1**	4
Change in asset ceiling	**(11)**	(70)
Foreign exchange rate changes	**2**	–
Asset ceiling, end of year	**$ 29**	$ 37

(b) Pension and Other Post-Employment Benefits Expense

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

	All pension plans		Other post-employment benefits	
	2020	2019	**2020**	2019
Defined benefit current service cost	**$ 103**	$ 96	**$ 2**	$ 2
Defined contribution current service cost	**145**	118	**–**	–
Employee contributions	**(15)**	(20)	**–**	–
Employer current service cost	**233**	194	**2**	2
Administrative expense	**8**	10	**–**	–
Plan amendments	**–**	(1)	**–**	–
Curtailments (1)	**(11)**	(3)	**–**	–
Settlements	**(3)**	(37)	**–**	–
Net interest cost	**26**	28	**12**	14
Expense – profit or loss	**253**	191	**14**	16
Actuarial (gain) loss recognized	**608**	936	**25**	23
Return on assets (greater) less than assumed	**(453)**	(663)	**–**	–
Change in the asset ceiling	**(11)**	(70)	**–**	–
Re-measurements – other comprehensive (income) loss	**144**	203	**25**	23
Total expense (income) including re-measurements	**$ 397**	$ 394	**$ 39**	$ 39

(1) Includes a curtailment gain recognized on sale of shares of IPSI (note 3).

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

	Defined benefit pension plans	
	2020	2019
Equity securities	**40%**	43%
Debt securities	**48%**	47%
Real estate	**7%**	8%
Cash and cash equivalents	**5%**	2%
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 $6,871 at December 31, 2020 and $6,031 at December 31, 2019, of which $6,790 ($5,961 at December 31, 2019) are included on 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	
	2020	2019	**2020**	2019
Benefit obligation without future salary increases	**$ 7,893**	$ 7,179	**$ 409**	$ 388
Effect of assumed future salary increases	**661**	657	**–**	–
Defined benefit obligation	**$ 8,554**	$ 7,836	**$ 409**	$ 388

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

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

	Defined benefit pension plans		Other post-employment benefits	
	2020	2019	**2020**	2019
Benefit obligation without future pension increases	**$ 7,918**	$ 7,221	**$ 409**	$ 388
Effect of assumed future pension increases	**636**	615	**–**	–
Defined benefit obligation	**$ 8,554**	$ 7,836	**$ 409**	$ 388

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

(iii) Maturity Profile of Plan Membership

	Defined benefit pension plans		Other post-employment benefits	
	2020	2019	**2020**	2019
Actives	**40%**	40%	**16%**	15%
Deferred vesteds	**20%**	19%	**n/a**	n/a
Retirees	**40%**	41%	**84%**	85%
Total	**100%**	100%	**100%**	100%
Weighted average duration of defined benefit obligation	**18.7 years**	18.5 years	**11.9 years**	11.7 years

(e) Cash Flow Information

	Pension plans	Other post-employment benefits	Total
Expected employer contributions for 2021:			
Funded (wholly or partly) defined benefit plans	$ 127	$ –	$ 127
Unfunded plans	16	22	38
Defined contribution plans	151	–	151
Total	**$ 294**	**$ 22**	**$ 316**

(f) Actuarial Assumptions and Sensitivities

(i) Actuarial Assumptions

	Defined benefit pension plans		Other post-employment benefits	
	2020	2019	**2020**	2019
To determine benefit cost:				
Discount rate – past service liabilities	**2.6%**	3.4%	**3.1%**	3.8%
Discount rate – future service liabilities	**3.2%**	3.8%	**3.3%**	4.4%
Rate of compensation increase	**2.9%**	3.0%	**–**	–
Future pension increases [1]	**1.3%**	1.4%	**–**	–
To determine defined benefit obligation:				
Discount rate – past service liabilities	**2.1%**	2.6%	**2.5%**	3.1%
Rate of compensation increase	**2.9%**	2.9%	**–**	–
Future pension increases [1]	**1.0%**	1.3%	**–**	–
Medical cost trend rates:				
Initial medical cost trend rate			**4.7%**	4.7%
Ultimate medical cost trend rate			**4.1%**	4.1%
Year ultimate trend rate is reached			**2039**	2039

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

(ii) Sample Life Expectancies Based on Mortality Assumptions

	Defined benefit pension plans		Other post-employment benefits	
	2020	2019	**2020**	2019
Sample life expectancies based on mortality assumption:				
Male				
Age 65 in fiscal year	**22.7**	22.6	**22.5**	22.4
Age 65 for those age 35 in the fiscal year	**24.7**	24.6	**24.0**	23.9
Female				
Age 65 in fiscal year	**24.8**	24.7	**24.7**	24.7
Age 65 for those age 35 in the fiscal year	**26.7**	26.7	**26.2**	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 $269 for the defined benefit pension plans and $14 for other post-employment benefits.

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

	1% increase		1% decrease	
	2020	2019	**2020**	2019
Defined benefit pension plans:				
Impact of a change to the discount rate	**$ (1,350)**	$ (1,242)	**$ 1,784**	$ 1,630
Impact of a change to the rate of compensation increase	**329**	311	**(291)**	(284)
Impact of a change to the rate of inflation	**662**	598	**(569)**	(541)
Other post-employment benefits:				
Impact of a change to assumed medical cost trend rates	**31**	27	**(26)**	(23)
Impact of a change to the discount rate	**(44)**	(41)	**53**	50

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

	2020								
	Unrealized foreign exchange gains (losses) on translation of foreign operations	Unrealized foreign exchange gains (losses) on euro debt designated as hedge of the net investment in foreign operations	Unrealized gains (losses) on available-for-sale assets	Unrealized gains on cash flow hedges	Re-measurements on defined benefit pension and other post-employment benefit plans	Revaluation surplus on transfer to investment properties	Total	Non-controlling interest	Shareholders
Balance, beginning of year	**$ 1,236**	**$ (57)**	**$ 154**	**$ 13**	**$ (849)**	**$ –**	**$ 497**	**$ (2)**	**$ 495**
Other comprehensive income (loss)	**105**	**(90)**	**146**	**15**	**(169)**	**11**	**18**	**(54)**	**(36)**
Income tax	**(2)**	**12**	**(34)**	**(4)**	**40**	**(1)**	**11**	**17**	**28**
	103	**(78)**	**112**	**11**	**(129)**	**10**	**29**	**(37)**	**(8)**
Balance, end of year	**$ 1,339**	**$ (135)**	**$ 266**	**$ 24**	**$ (978)**	**$ 10**	**$ 526**	**$ (39)**	**$ 487**

	2019							
	Unrealized foreign exchange gains (losses) on translation of foreign operations	Unrealized foreign exchange gains (losses) on euro debt designated as hedge of the net investment in foreign operations	Unrealized gains (losses) on available-for-sale assets	Unrealized gains on cash flow hedges	Re-measurements on defined benefit pension and other post-employment benefit plans	Total	Non-controlling interest	Shareholders
Balance, beginning of year	$ 1,797	$ (143)	$ 22	$ 11	$ (670)	$ 1,017	$ 28	$ 1,045
Other comprehensive income (loss)	(561)	100	163	2	(226)	(522)	(33)	(555)
Income tax	–	(14)	(31)	–	47	2	3	5
	(561)	86	132	2	(179)	(520)	(30)	(550)
Balance, end of year	$ 1,236	$ (57)	$ 154	$ 13	$ (849)	$ 497	$ (2)	$ 495

25. Related Party Transactions

Power Corporation, 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 Corporation group of companies including IGM, a company in the financial services sector along with its subsidiaries IG Wealth Management, Mackenzie Financial and Investment Planning Council and Pargesa, a holding company with substantial holdings in a diversified industrial group based in Europe.

(a) Principal subsidiaries

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

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

(1) Lifeco holds 100% of the voting shares and 96.31% of the total outstanding shares.

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

In the normal course of business, Canada 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 Corporation group of companies. In all cases, transactions were at market terms and conditions.

During the year, Canada Life provided to and received from IGM and its subsidiaries, a member of the Power Corporation group of companies, certain administrative and information technology services. During the year, IGM notified the Company that it intends to terminate its long-term technology infrastructure related sharing agreement with the Company in the first quarter of 2021 (note 4). Canada Life also provided life insurance, annuity and disability insurance products under a distribution agreement with IGM. In addition, Canada Life provided distribution services to IGM. All transactions were provided at market terms and conditions.

The Company owns 9,200,518 shares, held through Canada Life, representing a 3.86% ownership interest in IGM. The Company uses the equity method to account for its investment in IGM as it exercises significant influence. In 2020, the Company recognized $25 for the equity method share of IGM net earnings and received dividends of $21 from its investment in IGM (note 6).

During the year, the Company completed the sale of GLC to Mackenzie. The Company recorded a gain on disposal of $143 after-tax, net of restructuring and other one-time costs of $16 after-tax ($22 pre-tax) (note 3).

During the year, GWL&A completed the acquisition of 100% of the equity of Personal Capital. Prior to the completion of the acquisition, IGM held a 24.8% interest in Personal Capital (approximately 21.7% after giving effect to dilution). The transaction resulted from an auction process conducted by Personal Capital and shareholders other than IGM (note 3).

During the year, the Company and Mackenzie jointly acquired a non-controlling interest in Northleaf, a premier global private equity, private credit and infrastructure fund manager (note 3).

Segregated funds of the Company were invested in funds managed by IG Wealth Management and Mackenzie Investments. The Company also has interests in mutual funds, open-ended investment companies and unit trusts. Some of these funds are managed by related parties of the Company and the Company receives management fees related to these services. All transactions were provided at market terms and conditions (note 14).

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

	2020	2019
3.44%, matures January 26, 2027	$ 22	$ 21
6.65%, matures December 13, 2027	17	16
7.45%, matures May 9, 2031	14	14
7.00%, matures December 31, 2032	14	13
4.56%, matures January 25, 2047	25	22
4.115%, matures December 9, 2047	12	10
4.174%, matures July 13, 2048	6	5
Total	**$ 110**	$ 101

During 2020, the Company purchased residential mortgages of $21 from IGM ($11 in 2019).

The Company holds investments in Portag3 Ventures Limited Partnership, Portag3 Ventures II Limited Partnership, Wealthsimple Europe S.a.r.l. and other entities which invest in the FinTech sector. These investments were made in partnership with Power Corporation, IGM and, in certain circumstances, outside investors.

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 material loans or guarantees issued to or from related parties during 2020 or 2019. There were no significant outstanding loans or guarantees with related parties at December 31, 2020 or December 31, 2019. There were no provisions for uncollectible amounts with related parties at December 31, 2020 or December 31, 2019.

As part of the substantial issuer bid completed in 2019 (note 19), Power Financial and IGM participated in the Offer. IGM tendered its Lifeco shares proportionately. Power Financial tendered a portion of its Lifeco common shares on a proportionate basis and all remaining Lifeco common shares on a non-proportionate basis and this did not impact Power Financial's voting control of the Company. Power Financial and IGM effected their tender offers through a Qualifying Holdco Alternative, which the Company also offered to other shareholders, to assist them in achieving certain Canadian tax objectives.

25. Related Party Transactions (cont'd)

(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:

	2020	2019
Salary	$ **20**	$ 20
Share-based awards	**17**	14
Option-based awards	**6**	6
Annual non-equity incentive plan compensation	**24**	24
Pension value	**1**	1
Total	$ **68**	$ 65

26. Income Taxes

(a) Components of the income tax expense

(i) Income tax recognized in Consolidated Statements of Earnings

Current income tax

	2020	2019
Total current income tax	$ **271**	$ 196

Deferred income tax

	2020	2019
Origination and reversal of temporary differences	$ **(168)**	$ (29)
Effect of changes in tax rates or imposition of new income taxes	**7**	(11)
Tax expense (recovery) arising from unrecognized tax losses, tax credits or temporary differences	**(192)**	217
Total deferred income tax	$ **(353)**	$ 177
Total income tax expense (recovery)	$ **(82)**	$ 373

(ii) Income tax recognized in other comprehensive income (note 24)

	2020	2019
Current income tax expense	$ **28**	$ 7
Deferred income tax recovery	**(39)**	(9)
Total	$ **(11)**	$ (2)

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

	2020	2019
Current income tax expense	$ **–**	$ 78
Deferred income tax expense	**–**	23
Total	$ **–**	$ 101

(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 26.5% for the following items:

	2020		2019	
Earnings before income taxes	**$ 3,072**		$ 2,880	
Combined basic Canadian federal and provincial tax rate	**814**	**26.50%**	778	27.00%
Increase (decrease) in the income tax rate resulting from:				
Non-taxable investment income (1)	**(332)**	**(10.81)**	(166)	(5.76)
Operations outside of Canada subject to a lower average foreign tax rate	**(375)**	**(12.21)**	(315)	(10.93)
Impact of rate changes on deferred income taxes	**7**	**0.23**	(11)	(0.38)
(Recognition) de-recognition of deferred tax assets associated with prior year tax losses	**(197)**	**(6.41)**	199	6.91
Other (2)	**1**	**0.03**	(112)	(3.89)
Total income tax expense (recovery) and effective income tax rate	**$ (82)**	**(2.67)%**	$ 373	12.95%

(1) In 2020, a $64 tax benefit from the non-taxable gains on the sale of the shares of GLC and IPSI reduced the effective income tax rate by 2.08 points (note 3).

(2) In 2019, a $101 tax benefit due to the resolution of an outstanding issue with a foreign tax authority reduced the effective income tax rate by 3.51 points.

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

2020	Insurance and investment contract liabilities	Portfolio investments	Losses carried forward	Intangible assets	Tax credits	Other	Total
Balance, beginning of year	**$ (999)**	**$ (536)**	**$ 1,056**	**$ (542)**	**$ 311**	**$ 287**	**$ (423)**
Recognized in Statements of Earnings	**375**	**(237)**	**238**	**(63)**	**(25)**	**65**	**353**
Recognized in Statements of Comprehensive Income	**–**	**(12)**	**–**	**–**	**–**	**51**	**39**
Recognized in Statements of Changes in Equity	**–**	**–**	**–**	**–**	**–**	**–**	**–**
Acquired in business acquisitions	**300**	**–**	**107**	**(73)**	**–**	**7**	**341**
Foreign exchange rate changes and other	**4**	**19**	**10**	**8**	**(1)**	**(21)**	**19**
Balance, end of year	**$ (320)**	**$ (766)**	**$ 1,411**	**$ (670)**	**$ 285**	**$ 389**	**$ 329**

2019 (1)	Insurance and investment contract liabilities	Portfolio investments	Losses carried forward	Intangible assets	Tax credits	Other	Total
Balance, beginning of year	$ (1,379)	$ (350)	$ 1,357	$ (496)	$ 364	$ 275	$ (229)
Recognized in Statements of Earnings	352	(164)	(245)	(59)	(45)	(16)	(177)
Recognized in Statements of Comprehensive Income	–	(24)	–	–	–	33	9
Recognized in Statements of Changes in Equity	(20)	–	–	–	–	(3)	(23)
Acquired in business acquisitions	–	–	(1)	(1)	–	–	(2)
Foreign exchange rate changes and other	48	2	(55)	14	(8)	(2)	(1)
Balance, end of year	$ (999)	$ (536)	$ 1,056	$ (542)	$ 311	$ 287	$ (423)

(1) Due to a change in presentation, the Company reclassified the composition of net deferred income tax assets. The reclassifications had no impact on the equity or net earnings of the Company (note 32).

26. Income Taxes (cont'd)

	2020	2019
Recorded on Consolidated Balance Sheets:		
Deferred tax assets	$ **975**	$ 693
Deferred tax liabilities	**(646)**	(1,116)
Total	$ **329**	$ (423)

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, 2020 are recoverable.

At December 31, 2020, the Company has recognized a deferred tax asset of $1,411 ($1,056 at December 31, 2019) on tax loss carryforwards totaling $8,264, of which $6,579 expire between 2021 and 2040 while $1,685 have no expiry date. The Company will realize this benefit in future years through a reduction in current income taxes payable.

One U.S. subsidiary has had a history of losses. The subsidiary has a net deferred income tax asset balance of $561 (U.S. $442) as at December 31, 2020, comprised principally of net operating losses and future deductions related to goodwill. During the year ended December 31, 2020, management revised its estimates of future taxable profits to reflect the impact of the completion of the U.S. acquisitions of Personal Capital and MassMutual (note 3) and as a result, recognized a deferred tax asset of $192 (U.S. $151) related to losses that had previously been de-recognized in 2019. The deferred income tax asset increase resulted in a recovery to income tax expense of $196 (U.S. $151) in the Consolidated Statements of Earnings. In 2019, the deferred income tax asset decrease resulted in a charge to income tax expense of $199 (U.S. $151). 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 to utilize the unused U.S. losses and deductions.

The Company has not recognized a deferred tax asset of $37 ($231 in 2019) on tax loss carryforwards totaling $188 ($1,252 in 2019). Of this amount, $92 expire between 2021 and 2040 while $96 have no expiry date. In addition, the Company has not recognized a deferred tax asset of $21 ($16 in 2019) on other temporary differences of $99 ($78 in 2019) associated with investments in subsidiaries, branches, and associates.

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.

27. Operating and Administrative Expenses

	2020	2019
Salaries and other employee benefits	$ **3,716**	$ 3,474
General and administrative	**1,554**	1,541
Interest expense on leases	**22**	22
Amortization of fixed assets	**129**	125
Depreciation of right-of-use assets	**71**	69
Total	$ **5,492**	$ 5,231

28. Derivative Financial Instruments

In the normal course of managing exposure to fluctuations in interest and foreign exchange rates, and to market risks, the Company is an end-user of various derivative financial instruments. It is the Company's policy to transact in derivatives only with the most creditworthy financial intermediaries. Note 8 discloses 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 $211 as at December 31, 2020 ($156 at December 31, 2019).

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

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

	2020				
	Notional amount	**Maximum credit risk**	**Future credit exposure**	**Credit risk equivalent**	**Risk weighted equivalent**
Interest rate contracts					
Swaps	**$ 3,688**	**$ 331**	**$ 43**	**$ 333**	**$ 90**
Futures – long	**9**	**–**	**–**	**–**	**–**
Futures – short	**194**	**–**	**–**	**–**	**–**
Options purchased	**221**	**–**	**1**	**1**	**–**
	4,112	**331**	**44**	**334**	**90**
Foreign exchange contracts					
Cross-currency swaps	**15,186**	**388**	**1,004**	**1,237**	**315**
Forward contracts	**5,079**	**57**	**72**	**125**	**10**
	20,265	**445**	**1,076**	**1,362**	**325**
Other derivative contracts					
Equity contracts	**727**	**43**	**46**	**86**	**7**
Futures – long	**17**	**–**	**–**	**–**	**–**
Futures – short	**682**	**1**	**–**	**–**	**–**
Other forward contracts	**4,318**	**9**	**394**	**403**	**38**
	5,744	**53**	**440**	**489**	**45**
Total	**$ 30,121**	**$ 829**	**$ 1,560**	**$ 2,185**	**$ 460**

	2019				
	Notional amount	Maximum credit risk	Future credit exposure	Credit risk equivalent	Risk weighted equivalent
Interest rate contracts					
Swaps	$ 3,179	$ 197	$ 38	$ 206	$ 60
Futures – long	12	–	–	–	–
Futures – short	17	–	–	–	–
Options purchased	244	–	1	1	–
	3,452	197	39	207	60
Foreign exchange contracts					
Cross-currency swaps	13,039	209	899	997	266
Forward contracts	2,573	43	47	76	7
	15,612	252	946	1,073	273
Other derivative contracts					
Equity contracts	74	–	4	4	–
Futures – long	13	–	–	–	–
Futures – short	774	–	–	–	–
Other forward contracts	1,709	2	94	94	9
	2,570	2	98	98	9
Total	$ 21,634	$ 451	$ 1,083	$ 1,378	$ 342

28. 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:

	2020				
	Notional Amount				Total estimated fair value
	1 year or less	Over 1 year to 5 years	Over 5 years	Total	
Derivatives not designated as accounting hedges					
Interest rate contracts					
Swaps	$ 325	$ 770	$ 2,565	$ 3,660	$ 281
Futures – long	6	3	–	9	–
Futures – short	190	4	–	194	–
Options purchased	41	166	14	221	–
	562	943	2,579	4,084	281
Foreign exchange contracts					
Cross-currency swaps	896	3,068	11,222	15,186	(783)
Forward contracts	3,689	–	–	3,689	32
	4,585	3,068	11,222	18,875	(751)
Other derivative contracts					
Equity contracts	626	–	–	626	18
Futures – long	17	–	–	17	–
Futures – short	682	–	–	682	(4)
Other forward contracts	4,318	–	–	4,318	8
	5,643	–	–	5,643	22
Fair value hedges					
Foreign exchange forward contracts	74	–	–	74	3
Cash flow hedges					
Interest rate contracts					
Swaps	–	–	28	28	14
Other derivative contracts					
Equity contracts	–	101	–	101	24
Net investment hedges					
Foreign exchange forward contracts	786	530	–	1,316	15
Total	$ 11,650	$ 4,642	$ 13,829	$ 30,121	$ (392)

	2019				
	Notional Amount				Total estimated fair value
	1 year or less	Over 1 year to 5 years	Over 5 years	Total	
Derivatives not designated as accounting hedges					
Interest rate contracts					
Swaps	$ 185	$ 653	$ 2,312	$ 3,150	$ 161
Futures – long	9	3	–	12	–
Futures – short	10	7	–	17	–
Options purchased	35	184	25	244	–
	239	847	2,337	3,423	161
Foreign exchange contracts					
Cross-currency swaps	299	2,395	10,345	13,039	(1,135)
Forward contracts	1,334	–	–	1,334	15
	1,633	2,395	10,345	14,373	(1,120)
Other derivative contracts					
Equity contracts	74	–	–	74	–
Futures – long	13	–	–	13	–
Futures – short	774	–	–	774	(2)
Other forward contracts	1,709	–	–	1,709	2
	2,570	–	–	2,570	–
Fair value hedges					
Foreign exchange forward contracts	74	–	–	74	2
Cash flow hedges					
Interest rate contracts					
Swaps	–	–	29	29	10
Net investment hedges					
Foreign exchange forward contracts	641	524	–	1,165	17
Total	$ 5,157	$ 3,766	$ 12,711	$ 21,634	$ (930)

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.

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.

Equity total return swaps are used to manage exposure to fluctuations in the total return of common shares related to deferred compensation arrangements. Total return swaps require the exchange of net contractual payments periodically or at maturity without the exchange of the notional principal amounts on which the payments are based. Certain of these instruments are not designated as hedges.

The ineffective portion of the cash flow hedges during 2020, which includes interest rate contracts, foreign exchange contracts, and equity total return swap contracts, and the anticipated net gains (losses) reclassified out of accumulated other comprehensive income within the next twelve months is nil. The maximum time frame for which variable cash flows are hedged is 50 years.

29. Legal Provisions and Contingent Liabilities

The Company and its subsidiaries are from time-to-time subject to legal actions, including arbitrations and class actions. Provisions are established if, in management's judgment, it is probable a payment will be required and the amount of the payment can be reliably estimated. 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.

Subsidiaries of the Company in the United States are defendants in legal actions relating to the costs and features of certain of their retirement or fund products. Management believes the claims are without merit and will be vigorously 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.

30. 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. $2,107 of which U.S. $1,791 were issued as of December 31, 2020.

The Capital and Risk Solutions segment 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 $1,990 as at December 31, 2020, with $1,874 maturing within one year, $95 maturing within two years and $21 maturing within three years.

(c) Pledged Assets

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

(i) The amount of assets included in the Company's balance sheet which have a security interest by way of pledging is $1,421 ($1,456 at December 31, 2019) 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, $75 ($75 at December 31, 2019) of assets of the Company for the purpose of providing collateral for the counterparty.

31. Segmented Information

The operating segments of the Company are Canada, United States, Europe, Capital and Risk Solutions and Lifeco Corporate. These segments reflect the Company's management structure and internal financial reporting. 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.

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

	2020					
	Canada	United States	Europe	Capital and Risk Solutions	Lifeco Corporate	Total
Income						
Total net premiums	$ 13,188	$ 6,773	$ 3,651	$ 19,407	$ –	$ 43,019
Net investment income						
Regular net investment income	3,050	1,278	1,313	320	2	5,963
Changes in fair value through profit or loss	2,633	938	1,669	459	–	5,699
Total net investment income	5,683	2,216	2,982	779	2	11,662
Fee and other income	1,756	2,769	1,366	11	–	5,902
	20,627	11,758	7,999	20,197	2	60,583
Benefits and expenses						
Paid or credited to policyholders	15,572	8,413	5,184	19,318	–	48,487
Other [(1)]	3,545	2,870	1,686	239	28	8,368
Financing charges	127	110	25	12	10	284
Amortization of finite life intangible assets	104	83	51	–	–	238
Restructuring and integration expenses	92	42	–	–	–	134
Earnings (loss) before income taxes	1,187	240	1,053	628	(36)	3,072
Income taxes	54	(158)	33	(1)	(10)	(82)
Net earnings (loss) before non-controlling interests	1,133	398	1,020	629	(26)	3,154
Non-controlling interests	76	7	1	(6)	–	78
Net earnings (loss)	1,057	391	1,019	635	(26)	3,076
Preferred share dividends	114	–	19	–	–	133
Net earnings (loss) before capital allocation	943	391	1,000	635	(26)	2,943
Impact of capital allocation	127	(11)	(87)	(21)	(8)	–
Net earnings (loss) – common shareholders	$ 1,070	$ 380	$ 913	$ 614	$ (34)	$ 2,943

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

31. Segmented Information (cont'd)

	2019					
	Canada	United States	Europe [1]	Capital and Risk Solutions [1]	Lifeco Corporate	Total
Income						
Total net premiums	$ 13,505	$ (9,659)	$ 3,198	$ 17,466	$ –	$ 24,510
Net investment income						
Regular net investment income	2,785	1,785	1,285	306	–	6,161
Changes in fair value through profit or loss	3,157	1,371	1,851	567	–	6,946
Total net investment income	5,942	3,156	3,136	873	–	13,107
Fee and other income	1,766	3,767	1,539	9	–	7,081
	21,213	(2,736)	7,873	18,348	–	44,698
Benefits and expenses						
Paid or credited to policyholders	16,268	(5,932)	5,026	17,729	–	33,091
Other [2]	3,510	2,780	1,637	217	22	8,166
Financing charges	128	118	24	12	3	285
Amortization of finite life intangible assets	92	85	47	–	–	224
Restructuring expenses	–	52	–	–	–	52
Earnings (loss) before income taxes	1,215	161	1,139	390	(25)	2,880
Income taxes	149	205	31	(6)	(6)	373
Net earnings (loss) before non-controlling interests	1,066	(44)	1,108	396	(19)	2,507
Non-controlling interests	13	3	(1)	–	–	15
Net earnings (loss)	1,053	(47)	1,109	396	(19)	2,492
Preferred share dividends	114	–	19	–	–	133
Net earnings (loss) before capital allocation	939	(47)	1,090	396	(19)	2,359
Impact of capital allocation	112	(14)	(86)	(10)	(2)	–
Net earnings (loss) – common shareholders	$ 1,051	$ (61)	$ 1,004	$ 386	$ (21)	$ 2,359

(1) See comparative figures (note 32).
(2) Includes commissions, operating and administrative expenses, and premium taxes.

The revenue by source currency for Capital and Risk Solutions:

	Capital and Risk Solutions	
	2020	2019
Revenue		
United States	**$ 16,118**	$ 16,227
United Kingdom	**1,807**	1,376
Other	**2,272**	745
Total revenue	**$ 20,197**	$ 18,348

(b) Consolidated Total Assets and Liabilities

	2020				
	Canada	**United States**	**Europe**	**Capital and Risk Solutions**	**Total**
Assets					
Invested assets	**$ 87,732**	**$ 54,522**	**$ 50,793**	**$ 5,951**	**$ 198,998**
Goodwill and intangible assets	**5,625**	**5,729**	**3,037**	**–**	**14,391**
Other assets	**3,661**	**30,347**	**10,151**	**8,910**	**53,069**
Investments on account of segregated fund policyholders	**90,680**	**117,982**	**125,370**	**–**	**334,032**
Total	**$ 187,698**	**$ 208,580**	**$ 189,351**	**$ 14,861**	**$ 600,490**

	2020				
	Canada	**United States**	**Europe**	**Capital and Risk Solutions**	**Total**
Liabilities					
Insurance and investment contract liabilities	**$ 81,556**	**$ 76,793**	**$ 48,243**	**$ 11,455**	**$ 218,047**
Other liabilities	**7,731**	**8,004**	**4,767**	**894**	**21,396**
Investment and insurance contracts on account of segregated fund policyholders	**90,680**	**117,982**	**125,370**	**–**	**334,032**
Total	**$ 179,967**	**$ 202,779**	**$ 178,380**	**$ 12,349**	**$ 573,475**

	2019				
	Canada	United States	Europe (1)	Capital and Risk Solutions (1)	Total
Assets					
Invested assets	$ 81,179	$ 32,768	$ 48,845	$ 5,995	$ 168,787
Goodwill and intangible assets	5,560	1,990	2,834	–	10,384
Other assets	3,953	19,421	8,465	9,135	40,974
Investments on account of segregated fund policyholders	85,612	31,433	113,977	–	231,022
Total	$ 176,304	$ 85,612	$ 174,121	$ 15,130	$ 451,167

	2019				
	Canada	United States	Europe (1)	Capital and Risk Solutions (1)	Total
Liabilities					
Insurance and investment contract liabilities	$ 74,939	$ 43,689	$ 45,662	$ 11,887	$ 176,177
Other liabilities	8,448	5,035	3,653	1,289	18,425
Investment and insurance contracts on account of segregated fund policyholders	85,612	31,433	113,977	–	231,022
Total	$ 168,999	$ 80,157	$ 163,292	$ 13,176	$ 425,624

(1) See comparative figures (note 32).

The assets by source currency for Capital and Risk Solutions:

	Capital and Risk Solutions	
	2020	2019
Assets		
United Kingdom	**$ 7,572**	$ 8,261
United States	**6,667**	6,365
Other	**622**	504
Total assets	**$ 14,861**	$ 15,130

32. Comparative Figures

Effective January 1, 2020, the Company divided its Europe operating segment into two operating segments: Europe, and Capital and Risk Solutions. The adjustment had no impact on the net earnings or cash flows of the Company. The realignment resulted in a change to comparative figures within these operating segments (notes 8, 11, 13 and 31).

During the year, the Company reclassified certain comparative figures for presentation adjustments (note 26). The reclassifications had no impact on the equity or net earnings of the Company.

Independent Auditor's Report

To the Shareholders of Great-West Lifeco Inc.

Opinion

We have audited the consolidated financial statements of Great-West Lifeco Inc. (the "Company"), which comprise the consolidated balance sheets as at December 31, 2020 and 2019, and the consolidated statements of earnings, comprehensive income, changes in equity and cash flows for the years then ended, and notes to the consolidated financial statements, including a summary of significant accounting policies (collectively referred to as the "financial statements").

In our opinion, the accompanying financial statements present fairly, in all material respects, the financial position of the Company as at December 31, 2020 and 2019, and its financial performance and its cash flows for the years then ended in accordance with International Financial Reporting Standards ("IFRS").

Basis for Opinion

We conducted our audit in accordance with Canadian generally accepted auditing standards ("Canadian GAAS"). Our responsibilities under those standards are further described in the *Auditor's Responsibilities for the Audit of the Financial Statements* section of our report. We are independent of the Company in accordance with the ethical requirements that are relevant to our audit of the financial statements in Canada, and we have fulfilled our other ethical responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Key Audit Matters

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the consolidated financial statements for the year ended December 31, 2020. These matters were addressed in the context of our audit of the consolidated financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters.

Insurance Contract Liabilities – Refer to Notes 2 and 13 to the financial statements

Key Audit Matter Description

The Company has insurance contract liabilities representing a significant portion of its total liabilities. Insurance contract liabilities are determined in accordance with generally accepted actuarial practices established by the Canadian Institute of Actuaries using the Canadian Asset Liability Method (CALM). This method requires the use of complex valuation models incorporating projections of cash inflows and outflows using the best estimate of future experience together with a margin for adverse deviation.

While there are many assumptions which management makes, the assumptions with the greatest estimation uncertainty are those related to mortality, including the impact, if any, of the COVID-19 pandemic, and policyholder behaviour. These assumptions required significant auditor attention in specific circumstances where (i) there is limited Company and industry experience data, and (ii) the historical experience may not be a good indicator of the future. Auditing of certain valuation models, mortality and policyholder behaviour assumptions required a high degree of auditor judgment and an increased extent of audit effort, including the need to involve actuarial specialists.

How the Key Audit Matter was Addressed in the Audit

Our audit procedures related to certain valuation models, mortality and policyholder behaviour assumptions included the following, among others:

- With the assistance of actuarial specialists, tested the appropriateness of certain valuation models used in the estimation process by:
  - Calculating an independent estimate of the insurance contract liability for a sample of insurance policies and comparing the results to the Company's estimate.
  - Testing the accuracy of certain valuation models for changes in key assumptions.
- With the assistance of actuarial specialists, tested the reasonableness of mortality and policyholder behaviour assumptions, by:
  - Evaluating whether management's assumptions were determined in accordance with actuarial principles and practices under the Canadian actuarial standards of practice.
  - Testing experience studies and other inputs used in the determination of the mortality and policyholder behaviour assumptions.
  - Analyzing management's interpretation and judgment of its experience study results and emerging claims experience, evaluating triggers and drivers for revisions of assumptions, assessing reasonable possible alternative assumptions, and considering industry and other external sources of benchmarking where applicable.

Income Taxes – Refer to Notes 2 and 26 to the financial statements

Key Audit Matter Description

The Company recognizes deferred income taxes for the tax expected to be payable or recoverable on differences arising between the financial statement and tax basis of assets and liabilities, and is recorded at enacted or substantively enacted tax rates in effect for the years in which the differences are expected to be realized. The Company applies judgment in assessing the recoverability of the deferred income tax asset carrying values based on future years' taxable income projections. Certain of the Company's subsidiaries have had a history of losses and have a deferred income tax asset comprised principally of net operating losses. The Company has concluded that through the use of certain tax planning opportunities, it is probable that sufficient taxable income will be generated to utilize certain of the unused losses.

The determination of the recoverability of the Company's deferred tax assets in the Company's subsidiaries required management to make judgements related to the assessment of management's planned implementation of tax strategies. In addition, management makes significant estimates and assumptions in projecting future taxable income, specifically the revenue growth rates and projected expense margins and in the determination of whether the deferred tax asset will be realized. Auditing these judgements required a high degree of auditor judgment as the estimations made by management contain significant measurement uncertainty. This resulted in an increased extent of audit effort, including the need to involve income tax and other specialists.

How the Key Audit Matter was Addressed in the Audit

Our audit procedures related to the tax strategies, revenue growth rates and projected expense margins, and the determination of whether the deferred tax assets in the Company's subsidiaries will be realized included the following, among others:

- With the assistance of income tax specialists, analyzed the reasonableness of management's projected future taxable income available to determine whether the models properly factored in the impact of the tax planning strategies.
- Tested the reasonableness of the revenue growth rates and projected expense margins used to project future taxable income that was available to realize the deferred tax asset by:
  - Assessing the key factors influencing management's revenue growth rates and projected expense margins used in the projections through both market and internally entity specific driven evidence.
  - Performing a retrospective analysis of projected future taxable income against actual results from prior years.
- With the assistance of income tax and other specialists, evaluated the proposed tax planning strategies considered in the recoverability analysis to assess whether the deferred tax asset will be realized.

Massachusetts Mutual Life Insurance Acquisition - Insurance Contract Liabilities – Refer to Notes 2 and 3 to the financial statements

Key Audit Matter Description

The Company purchased the retirement services business of Massachusetts Mutual Life Insurance Company ("MassMutual") via indemnity reinsurance and recognized an estimate of the initial fair value of net assets acquired, including insurance contract liabilities. The estimate of the assumed insurance contract liabilities required the use of complex valuation models incorporating projections of cash inflows and outflows using the best estimate of future experience together with a margin for adverse deviation.

While there were a number of estimates and assumptions required to determine the initial fair value of the insurance contract liabilities, the assumptions with the greatest estimation uncertainty are those related to the policyholder behaviour assumptions. Auditing of the valuation models and policyholder behaviour assumptions required a high degree of auditor judgment and an increased extent of audit effort, including the need to involve actuarial specialists.

How the Key Audit Matter Was Addressed in the Audit

Our audit procedures related the valuation models and policyholder behaviour assumptions as it relates to the acquired insurance contract liabilities included the following, among others:

- With the assistance of actuarial specialists, tested the appropriateness of the valuation models used in the estimation process by calculating an independent estimate of the insurance contract liability for a sample of insurance policies and comparing the results to the Company's estimate.
- With the assistance of actuarial specialists, tested the reasonableness of policyholder behaviour assumptions, by:
  - Evaluating whether management's assumptions were determined in accordance with actuarial principles and practices.
  - Analyzing management's interpretation and judgments based on the relative inputs, considering reasonable possible alternative assumptions, and considering industry and other external sources of benchmarking where applicable.
  - Testing the inputs used in the determination of the policyholder behaviour assumptions, including an assessment of the use of experience studies and other data from the Company's comparable lines of business in the determination of the MassMutual assumptions.

Personal Capital Corporation Acquisition - Intangible Assets – Refer to Notes 2 and 3 to the financial statements

Key Audit Matter Description

The Company acquired 100% of the equity of Personal Capital Corporation ("Personal Capital") and recognized the assets acquired and the liabilities assumed based on the estimated fair value, including customer relationships and brand intangible assets. The transaction includes a contingent consideration earn-out which is based on the achievement of growth in assets under management ("AUM"). The determination of the fair value of the customer relationships and brand is based on a discounted cash flow model and required management to make significant estimates and assumptions related to forecasted future revenue and earnings before interest, taxes, depreciation and amortization ("EBITDA") margins, and discount rates.

While there are several estimates and assumptions that are required to determine the fair value of the contingent consideration earn-out and the customer relationships and brand, the estimates and assumptions with the highest degree of subjectivity are forecasted future revenue and EBITDA margins, forecasted growth in AUM and discount rates. This required a high degree of auditor judgment and an increased extent of audit effort, including the need to involve fair value specialists.

How the Key Audit Matter Was Addressed in the Audit

Our audit procedures related to forecasted future revenue and EBITDA margins, forecasted growth in AUM, and discount rates used to determine the fair value of the contingent consideration and of the customer relationships and brand intangible assets included the following, among others:

- Evaluated the reasonableness of forecasted revenue and EBITDA margin, and forecasted growth in AUM by comparing the forecasts to:
  - Actual historical results of the acquired entity.
  - Actual results of the acquired entity after acquisition.
  - Underlying analyses detailing business strategies and growth plans.
- Evaluated the reasonableness of forecasted future revenue and forecasted growth in AUM based on reputable third-party reports, comparable company performance, internal and external customer data, and comparing those to the estimates used by management.
- With the assistance of fair value specialists, evaluated the reasonableness of the discount rates used by testing the source information underlying the determination of the discount rates and developing a range of independent estimates and comparing those to the discount rate selected by management.

Other Information

Management is responsible for the other information. The other information comprises:

- Management's Discussion and Analysis
- The information, other than the financial statements and our auditor's report thereon, in the Annual Report.

Our opinion on the financial statements does not cover the other information and we do not and will not express any form of assurance conclusion thereon. In connection with our audit of the financial statements, our responsibility is to read the other information identified above and, in doing so, consider whether the other information is materially inconsistent with the financial statements or our knowledge obtained in the audit, or otherwise appears to be materially misstated.

We obtained Management's Discussion and Analysis prior to the date of this auditor's report. If, based on the work we have performed on this other information, we conclude that there is a material misstatement of this other information, we are required to report that fact in this auditor's report. We have nothing to report in this regard.

The Annual Report is expected to be made available to us after the date of the auditor's report. If, based on the work we will perform on this other information, we conclude that there is a material misstatement of this other information, we are required to report that fact to those charged with governance.

Responsibilities of Management and Those Charged with Governance for the Financial Statements

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

In preparing the financial statements, management is responsible for assessing the Company's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate the Company or to cease operations, or has no realistic alternative but to do so.

Those charged with governance are responsible for overseeing the Company's financial reporting process.

Auditor's Responsibilities for the Audit of the Financial Statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with Canadian GAAS will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

As part of an audit in accordance with Canadian GAAS, we exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit 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 Company's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Company's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Company to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the financial statements, including the disclosures, and whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation.
- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Company to express an opinion on the financial statements. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our audit opinion.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We also provide those charged with governance with a statement that we have complied with relevant ethical requirements regarding independence, and to communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, related safeguards.

From the matters communicated with those charged with governance, we determine those matters that were of most significance in the audit of the consolidated financial statements of the current period and are therefore the key audit matters. We describe these matters in our auditor's report unless law or regulation precludes public disclosure about the matter or when, in extremely rare circumstances, we determine that a matter should not be communicated in our report because the adverse consequences of doing so would reasonably be expected to outweigh the public interest benefits of such communication.

The engagement partner on the audit resulting in this independent auditor's report is Paul Stauch.

/s/ **Deloitte LLP**

Chartered Professional Accountants

Winnipeg, Manitoba
February 10, 2021

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 2020 and 2019.

Sources of Earnings
(in Canadian $ millions)

	Shareholders net earnings					
For the year ended December 31, 2020	Canada	United States	Europe	Capital and Risk Solutions	Lifeco Corporate	Total
Expected profit on in-force business	$ 1,241	$ 447	$ 808	$ 628	$ (18)	$ 3,106
Impact of new business	(43)	(164)	(71)	(29)	–	(307)
Experience gains and losses	183	(5)	(59)	(77)	(10)	32
Management actions and changes in assumptions	(106)	(43)	304	65	–	220
Other	(68)	(42)	–	–	–	(110)
Earnings on surplus	86	39	(15)	26	(16)	120
Net earnings before tax	1,293	232	967	613	(44)	3,061
Taxes	(109)	157	(33)	1	10	26
Net earnings before non-controlling interests	1,184	389	934	614	(34)	3,087
Non-controlling interests	–	(9)	(2)	–	–	(11)
Net earnings – shareholders	1,184	380	932	614	(34)	3,076
Preferred share dividends	(114)	–	(19)	–	–	(133)
Net earnings – common shareholders	$ 1,070	$ 380	$ 913	$ 614	$ (34)	$ 2,943

Sources of Earnings
(in Canadian $ millions)

For the year ended December 31, 2019	Shareholders net earnings: Canada	United States	Europe	Capital and Risk Solutions	Lifeco Corporate	Total
Expected profit on in-force business	$ 1,230	$ 450	$ 778	$ 512	$ (18)	$ 2,952
Impact of new business	29	(137)	20	(20)	–	(108)
Experience gains and losses	226	63	(93)	(84)	(4)	108
Management actions and changes in assumptions	(166)	(15)	326	(41)	–	104
Other	–	(254)	–	–	–	(254)
Earnings on surplus	86	41	22	15	(5)	159
Net earnings before tax	1,405	148	1,053	382	(27)	2,961
Taxes	(240)	(206)	(28)	4	6	(464)
Net earnings before non-controlling interests	1,165	(58)	1,025	386	(21)	2,497
Non-controlling interests	–	(3)	(2)	–	–	(5)
Net earnings – shareholders	1,165	(61)	1,023	386	(21)	2,492
Preferred share dividends	(114)	–	(19)	–	–	(133)
Net earnings – common shareholders	$ 1,051	$ (61)	$ 1,004	$ 386	$ (21)	$ 2,359

Analysis of Results

Expected profit on in-force business is the major driver of earnings. The expected profit on in-force business of $3,106 in 2020 was $154 higher than 2019. The increase year-over-year is primarily a result of business growth in Capital and Risk Solutions and higher profitability in Ireland.

The strain on new sales of $307 in 2020 was $199 higher than 2019 primarily due to lower gains on UK annuity sales and lower profitability in Individual Customer Canada arising from lower interest rates.

Experience gains of $32 in 2020 were $76 lower than 2019. The gains in 2020 were primarily a result of positive investment experience, favorable annuity mortality experience across Canada, Europe and Capital and Risk Solutions and favourable morbidity experience in Canada and Europe. This was partially offset by unfavorable life mortality and expense and fee-based experience across Canada, Europe and Capital and Risk Solutions, and unfavourable policyholder behaviour experience across all segments. The gains in 2019 were primarily a result of investment experience in Canada. These gains were partially offset by morbidity results in Canada and Europe, policyholder behaviour results in Canada and Europe, and expense and fee-based experience in Europe.

Management actions and changes in assumptions contributed $220 to pre-tax earnings in 2020 compared to $104 in 2019.

The assumption changes and management actions were $(106) in Canada, $(43) in the U.S., $304 in Europe and $65 in Capital and Risk Solutions.

In Canada, strengthening of policyholder behavior, and economic and asset related assumptions were partially offset by the gain on the sale of GLC, and favourable life mortality assumption updates.

In the U.S., transaction costs related to the acquisitions of MassMutual and Personal Capital were partially offset by favourable economic assumptions updates.

In Europe, favourable updates to longevity, morbidity, policyholder behaviour, and economic and asset related assumptions, modeling refinements, and the net gain on the sale of IPSI were partially offset by the strengthening of expense and tax assumptions.

In Capital and Risk Solutions, updates to longevity and economic assumptions and modeling refinements were partially offset by the strengthening of life mortality, expense and tax, and policyholder behavior assumptions.

Other of $(110) in 2020 were due to restructuring and integration costs in Canada and the U.S.

Earnings on surplus of $120 in 2020 was $39 lower than 2019 primarily due to lower investment income in Europe.

Taxes of $26 in 2020 included the recovery of a deferred tax asset of $196 in the U.S.

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

At December 31	**2020**	2019	2018	2017	2016
Total assets under administration	**$1,975,847**	$1,629,681	$1,398,873	$1,349,913	$1,248,239
For the Year Ended December 31					
Premiums and deposits:					
Net premium income					
(Life insurance, guaranteed annuities and insured health products)	**$ 43,019**	$ 24,510	$ 35,461	$ 33,902	$ 31,125
Self-funded premium equivalents (Administrative services only contracts)	**6,123**	3,295	3,068	2,827	2,751
Segregated funds deposits:					
Individual products	**15,034**	16,947	16,668	17,037	13,512
Group products	**6,882**	7,738	7,807	7,848	7,846
Proprietary mutual funds and institutional deposits	**100,287**	84,259	76,258	61,490	62,232
Add back: U.S. Individual Life Insurance & Annuity Business – initial reinsurance ceded premiums	**–**	13,889	–	–	–
Total premiums and deposits	**$ 171,345**	$ 150,638	$ 139,262	$ 123,104	$ 117,466
Condensed Statements of Earnings					
Income					
Total net premiums	**$ 43,019**	$ 24,510	$ 35,461	$ 33,902	$ 31,125
Net investment income					
Regular net investment income	**5,963**	6,161	6,358	6,141	6,252
Changes in fair value through profit or loss	**5,699**	6,946	(3,606)	1,466	3,903
Total net investment income	**11,662**	13,107	2,752	7,607	10,155
Fee and other income	**5,902**	7,081	5,819	5,608	5,101
Total income	**60,583**	44,698	44,032	47,117	46,381
Benefits and expenses					
Paid or credited to policyholders	**48,487**	33,091	32,068	35,643	34,675
Other	**8,652**	8,451	8,223	8,115	8,114
Amortization of finite life intangible assets	**238**	224	212	168	177
Restructuring and integration expenses	**134**	52	67	259	63
Loss on assets held for sale	**–**	–	–	202	–
Earnings before income taxes	**3,072**	2,880	3,462	2,730	3,352
Income taxes	**(82)**	373	387	422	396
Net earnings before non-controlling interests	**3,154**	2,507	3,075	2,308	2,956
Non-controlling interests	**78**	15	(19)	30	192
Net earnings – shareholders	**3,076**	2,492	3,094	2,278	2,764
Preferred share dividends	**133**	133	133	129	123
Net earnings – common shareholders	**$ 2,943**	$ 2,359	$ 2,961	$ 2,149	$ 2,641
Earnings per common share	**$ 3.173**	$ 2.494	$ 2.996	$ 2.173	$ 2.668
Return on common shareholders' equity	**14.1%**	11.7%	14.0%	10.9%	13.8%
Book value per common share	**$ 22.97**	$ 21.53	$ 22.08	$ 20.11	$ 19.76
Dividends to common shareholders – per share	**$ 1.752**	$ 1.652	$ 1.556	$ 1.468	$ 1.384

Directors and Senior Officers

As of February 11, 2021

Board of Directors

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

Michael R. Amend [6]
President, Online,
Lowe's Companies, Inc.

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Corporate Director

Robin A. Bienfait [1, 6]
Chief Executive Officer,
Emnovate

Heather E. Conway [6]
Corporate Director

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

André Desmarais, O.C., O.Q. [3, 4, 6]
Deputy Chairman,
Power Corporation of Canada

Paul Desmarais, Jr., O.C., O.Q. [3, 4, 5]
Chairman,
Power Corporation of Canada

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

David G. Fuller [2, 5, 7]
Operating Partner,
Searchlight Capital Partners

Claude Généreux [4, 5]
Executive Vice-President,
Power Corporation of Canada

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

Elizabeth C. Lempres [1, 2, 6, 7]
Corporate Director

Paula B. Madoff [5, 7]
Corporate Director

Paul A. Mahon [7]
President and Chief Executive Officer,
Lifeco

Susan J. McArthur [4, 5]
Corporate Director

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

Jerome J. Selitto [2, 5]
President,
Better Mortgage Corporation

James M. Singh, CPA, CMA, FCMA(UK) [1, 2, 6]
Chairman of the Advisory Board,
CSM Bakery Solutions Limited

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

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

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

Committees

1. **Audit Committee**
   Chair: Siim A. Vanaselja
2. **Conduct Review Committee**
   Chair: James M. Singh
3. **Governance and Nominating Committee**
   Chair: R. Jeffrey Orr
4. **Human Resources Committee**
   Chair: Claude Généreux
5. **Investment Committee**
   Chair: Paula B. Madoff
6. **Risk Committee**
   Chair: Gregory D. Tretiak
7. **Reinsurance Committee**
   Chair: Gregory D. Tretiak

Senior Officers

Paul A. Mahon
President and Chief Executive Officer

Arshil Jamal
President and Group Head,
Strategy, Investments, Reinsurance
and Corporate Development

David M. Harney
President and Chief Operating Officer,
Europe

Jeffrey F. Macoun
President and Chief Operating Officer,
Canada

Edmund F. Murphy III
President and Chief Executive Officer,
Empower Retirement

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

Philip Armstrong
Executive Vice-President and
Global Chief Information Officer

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

Sharon C. Geraghty
Executive Vice-President and
General Counsel

Garry MacNicholas
Executive Vice-President and
Chief Financial Officer

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

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

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

Raman Srivastava
Executive Vice-President and
Global Chief Investment Officer

Dervla M. Tomlin
Executive Vice-President and
Chief Actuary

Jeremy W. Trickett
Senior Vice-President and
Chief Governance Officer

Shareholder Information

Registered Office

100 Osborne Street North
Winnipeg, Manitoba, Canada R3C 1V3
Phone: 204-946-1190
Website: greatwestlifeco.com

Stock Exchange Listings

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

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

Shareholder Services

For information or assistance regarding your registered share account, including dividends, changes of address or ownership, share certificates, direct registration, to eliminate duplicate mailings or to receive shareholder material electronically, please contact our transfer agent 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.**

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)
100 University Avenue, 8th Floor, Toronto, Ontario M5J 2Y1
800, 324 8th Avenue S.W., Calgary, Alberta T2P 2Z2
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, P, Q, R, S and T are only transferable at the Toronto office of Computershare Investor Services Inc.

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

United States Offices

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

United Kingdom Office

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

Ireland Office

Computershare Investor Services (Ireland) Limited
Phone: 353 1 447 5566
3100 Lake Drive, Citywest, Business Campus, Dublin 24, D24 AK82

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

Dividends

Common Shares and First Preferred Shares Series F, G, H, I, L, M, N, P, Q, R, S and T – Dividend record dates are usually between the 1st and 3rd of March, June, September and December. Dividends are usually paid the last business day of each quarter.

Investor Information

Financial analysts, portfolio managers and other investors requiring information may contact Investor Relations by calling 416-552-3208 or emailing investorrelations@canadalife.com. Financial information may also be accessed at greatwestlifeco.com.

For copies of our annual or quarterly reports, visit greatwestlifeco.com or contact the Corporate Secretary's Office at corporate.secretary@canadalife.com.

Common Share (GWO) Investment Information

	Market price per common share ($)			Dividends	Dividend	Dividend
	High	Low	Close	paid ($)	payout ratio [1]	yield [2]
2020	**35.30**	**19.16**	**30.35**	**1.752**	**55.2%**	**6.4%**
2019	34.38	27.59	33.26	1.652	66.2%	5.3%
2018	35.51	27.10	28.18	1.556	51.9%	5.0%
2017	37.74	33.32	35.10	1.468	67.6%	4.1%
2016	37.03	31.01	35.17	1.384	51.9%	4.1%

1 Ratio based on IFRS net earnings

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

OUR BRANDS

GREAT-WEST LIFECO INC.

canada life™

Irish Life

EMPOWER RETIREMENT™

Putnam INVESTMENTS

canada life Asset Management

canada life™ Investment Management

Canada Life™ Reinsurance

EverWest

FINANCIAL HORIZONS GROUP

Freedom 55 Financial™

GWL REALTY ADVISORS

ILIM

PanAgora

personal CAPITAL AN EMPOWER COMPANY

Setanta ASSET MANAGEMENT

QUADRUS Quadrus Investment Services Ltd.

On behalf of Great-West Lifeco, thank you to all frontline health care and essential workers. Your commitment and dedication is an inspiration to us all.

GREAT-WEST LIFECO INC.

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Winnipeg Manitoba Canada R3C 1V3
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