GREAT-WEST LIFECO INC.

Quarterly Report to Shareholders

Second Quarter Results

For the period ended June 30, 2022

E1138 6/22)-8/22

Quarterly Report to Shareholders

For cautionary notes regarding forward-looking information and non-IFRS financial measures, see page 1.

Copies of this report are available at www.greatwestlifeco.com or by contacting the Corporate Secretary's Office at 204-946-4388.

GREAT-WEST LIFECO INC.

QUARTERLY REPORT TO THE SHAREHOLDERS

January 1 to June 30, 2022 Six Months Results

The condensed consolidated interim unaudited financial statements including notes at June 30, 2022 were approved by the Board of Directors at a meeting held today.

Great-West Lifeco Inc. (Lifeco or the Company) today announced its second quarter 2022 results. Net earnings of $735 million were down by 6% and base earnings[1] of $830 million were slightly up compared to the same period in 2021.

Key Financial Highlights

	Base earnings		Net earnings	
Common Shareholders	**Q2 2022**	**Q2 2021**	**Q2 2022**	**Q2 2021**
Segment earnings				
Canada	**$ 296**	$ 293	**$ 301**	$ 288
United States	**143**	190	**29**	150
Europe	**208**	184	**229**	185
Capital and Risk Solutions	**174**	150	**167**	152
Lifeco Corporate	**9**	9	**9**	9
Total earnings	**$ 830**	$ 826	**$ 735**	$ 784
EPS[2]	**$ 0.89**	$ 0.89	**$ 0.79**	$ 0.84
Return on equity[2,3]	**14.5%**	13.9%	**13.7%**	15.0%

In the second quarter of 2022, equity markets in the regions where the Company operates exhibited heightened volatility and ended 5% to 16% lower than March 31, 2022 levels. Interest rates increased 80-105bps in response to elevated, broad based levels of inflation which are impacting business and consumer confidence. In addition, the Canadian dollar strengthened notably against the British pound and the Euro, although weakened somewhat against the U.S. dollar.

Base earnings per share (EPS) for the second quarter of 2022 of $0.89 was consistent with $0.89 a year ago. This reflected strong insurance and investment results in all geographies which more than offset reduced net fee income from wealth management businesses and negative currency movement impacts. Base earnings grew year-over-year in the Canada, Europe and Capital and Risk Solutions segments. The U.S. segment base earnings were the most impacted by market conditions resulting in lower year-over-year base earnings notwithstanding the addition of Prudential business related base earnings of $45 million (US$35 million).

Reported net EPS for the second quarter of 2022 was $0.79, down from $0.84 a year ago, primarily due to higher acquisition related costs largely from the Prudential acquisition. Also, the second quarter of 2021 included a revaluation of deferred taxes resulting in an increase in taxes in the Europe segment; there was no revaluation in 2022.

Return on equity of 13.7% and base return on equity of 14.5% in the second quarter of 2022 continued to be solid in light of the macroeconomic challenges and remain within our target range.

1 Base earnings is a non-GAAP financial measure. Refer to the "Non-GAAP Financial Measures and Ratios" section of this document for additional details.

2 Base EPS and base return on equity are non-GAAP ratios. Refer to the "Non-GAAP Financial Measures and Ratios" section of this document for additional details.

3 Base return on equity and return on equity are calculated using the trailing four quarters of applicable earnings and common shareholders' equity.

GREAT-WEST LIFECO INC.

Business Highlights

Strategic acquisition of the full-service retirement business of Prudential Financial, Inc. closed

- On April 1, 2022, a Lifeco subsidiary, Great-West Life & Annuity Insurance Company (GWL&A), which operates primarily as "Empower", closed the previously announced acquisition of the full-service retirement business of Prudential Financial, Inc. (Prudential). With the close of the acquisition, Empower's reach in the U.S. has expanded to more than 17.4 million retirement plan participants and assets under administration (AUA) to US$1.3 trillion on behalf of approximately 71,000 workplace savings plans as of June 30, 2022.

  The Company funded the total transaction value of US$3,480 million with US$1,193 million of limited recourse capital notes and US$823 million of short-term debt, in addition to existing resources.

  The Prudential acquisition added $116 billion in total on balance sheet assets, $1 billion in other assets under management[4] and $250 billion in other assets under administration[4] to the U.S. segment as at June 30, 2022.

  On August 1, 2022, Great-West Life & Annuity Insurance Company changed its legal name to Empower Annuity Insurance Company of America.

Capital strength and financial flexibility maintained

- The Company's capital position remained strong at June 30, 2022, with a LICAT Ratio[5] for Canada Life, Lifeco's major Canadian operating subsidiary, of 117% which is near the high end of the Company's internal target range and above the supervisory target. The LICAT Ratio reduced by two points in the quarter mainly due to the material in-quarter increase in interest rates.
- On July 21, 2022, OSFI released the 2023 LICAT Guideline. The Company will first report under this guideline in its March 31, 2023 LICAT filing. Based on an initial review of the guideline under the current market and economic conditions, the Company expects a positive impact to the March 31, 2023 LICAT Ratio[6] on transition.

Consolidated assets of $670 billion and assets under administration[7] of $2.3 trillion

- Consolidated assets were approximately $670 billion and AUA were approximately $2.3 trillion as at June 30, 2022, an increase of 6% and 2%, respectively, from December 31, 2021.

Other Developments

- On June 28, 2022, the Company hosted an analyst discussion on the expected impacts of the upcoming implementation of IFRS 17[8]. The Company does not expect the new standard to have a material financial impact or to change the Company's underlying business strategy[9].
- The Company participated in the International Sustainability Standards Board (ISSB) consultation on two new draft standards which will help facilitate consistent, comparable and timely sustainability information for the good of the capital markets and, more importantly, our planet and our communities. The Company is a proud supporter of the ISSB as a member of the Coalition of Canadian Champions.

---

4 Refer to the "Glossary" section of the Company's second quarter of 2022 interim MD&A for additional details on the composition of other assets under management and other assets under administration.

5 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. The LICAT Ratio is calculated in accordance with the Office of Superintendent of Financial Institutions (OSFI)' guideline - Life Insurance Capital Adequacy Test. Refer to the "Capital Management and Adequacy" section of the Company's second quarter of 2022 interim MD&A for additional details.

6 Actual impact will depend on market and economic conditions and the Company's operating results at the time of transition.

7 Assets under administration is a non-GAAP financial measure. Refer to the "Non-GAAP Financial Measures and Ratios" section of this document for additional details.

8 IFRS 17, *Insurance Contracts* (IFRS 17) will replace IFRS 4, *Insurance Contracts* effective January 1, 2023. The new standard will change the recognition and measurement of insurance contracts and the corresponding presentation and disclosures in the Company's financial statements.

9 Refer to the "Update on transition to IFRS 17 and IFRS 9" section of the Company's second quarter of 2022 interim MD&A for additional details.

SEGMENTED OPERATING RESULTS

For reporting purposes, Lifeco's consolidated operating results are grouped into five reportable segments – Canada, United States, Europe, Capital and Risk Solutions and Lifeco Corporate – reflecting the management and corporate structure of the Company. For more information, refer to the Company's second quarter of 2022 interim MD&A.

CANADA

- **Q2 Canada segment base earnings of $296 million and net earnings of $301 million** – Base earnings for the second quarter of 2022 were $296 million, up 1% compared to the second quarter of 2021. The increase was primarily due to favourable morbidity and investment experience in Group Customer, partially offset by lower fee income and unfavourable experience in Individual Customer.
- **Canada Life announced 2022 dividend scale for participating life insurance** – On May 12, 2022, Canada Life announced the dividend scale interest rate will increase for the policies in the combined open participating account effective July 1, 2022 to 5.25%.
- **Significant joint sale with ClaimSecure Inc. (ClaimSecure)** – Canada Life Group Customer and ClaimSecure had their first significant joint sale in the second quarter of 2022. Integration is going well and quoting momentum is strong. Partnering with ClaimSecure has enhanced Canada Life's ability to provide leading workplace benefits solutions to Canadians.

UNITED STATES

- **Q2 United States (U.S.) Financial Services base earnings of US$123 million ($156 million) and net earnings of US$84 million ($107 million)** – U.S. Financial Services base earnings for the second quarter of 2022 were US$123 million ($156 million), down US$16 million or 12% from the second quarter of 2021. The decrease was primarily due to lower Empower net fee income and higher operating expenses to support participant growth. These items were partially offset by base earnings of US$35 million ($45 million) related to the Prudential acquisition as well as higher contributions from investment experience.

  Transaction costs of US$42 million ($53 million) related to the Prudential acquisition were included in the U.S. Corporate results.
- **Run-rate cost synergies are on track** – Annualized run rate cost synergies of US$88 million pre-tax have been achieved as of June 30, 2022 related to the Company's acquisition of MassMutual's retirement services business compared to US$80 million as of March 31, 2022. The Company remains on track to achieve run rate cost synergies of US$160 million pre-tax at the end of integration in 2022.

  Empower anticipates realizing cost synergies through the migration of Prudential's retirement services business onto Empower's recordkeeping platform. Estimated run-rate cost synergies of US$180 million are expected to be phased in over 24 months primarily when systems migrations are completed. As of June 30, 2022, annualized run rate cost synergies of US$25 million pre-tax have been achieved.
- **Empower growth in AUA and participant accounts** – Empower AUA increased to US$1.3 trillion at June 30, 2022 from US$1.1 trillion at December 31, 2021. Empower participant accounts have grown to 17.4 million at June 30, 2022, up from 13.0 million at December 31, 2021. The increases in AUA and participants were primarily the result of the Prudential acquisition.
- **Q2 Putnam net loss of US$9 million ($12 million)** – Putnam's net loss for the second quarter of 2022 was US$9 million ($12 million), compared to net earnings of US$17 million ($21 million) in the second quarter of 2021, primarily due to lower asset based fee revenue and lower net investment income, partially offset by lower expenses. For Putnam, there were no differences between net and base earnings (loss).

- **Putnam continues to sustain strong investment performance** – As of June 30, 2022, approximately 65% and 79% of Putnam's fund assets performed at levels above the Lipper median on a three-year and five-year basis, respectively. In addition, 42% and 64% of Putnam's fund assets were in the Lipper top quartile on a three-year and five-year basis, respectively. Putnam has 23 funds currently rated 4 or 5 stars by Morningstar Ratings.
- **Putnam launched new sustainable investment options** – During the second quarter of 2022, Putnam made a series of product-related announcements to meet evolving market demand for sustainable investment options, which are expected to launch over the coming months.

EUROPE

- **Q2 Europe segment base earnings of $208 million and net earnings of $229 million** – Base earnings for the second quarter of 2022 were $208 million, up 13% compared to the second quarter of 2021, primarily due to favourable investment experience in the U.K, favourable morbidity experience in Ireland as well as favourable mortality experience in the U.K. and Ireland, partially offset by the impact of currency movement. In addition, the Company had a revaluation of deferred taxes resulting in an increase in taxes in the second quarter of 2021; there was no revaluation in 2022. Net earnings for the second quarter of 2022 were $229 million, up $44 million or 24% from the second quarter of 2021, primarily due to an increase in base earnings as well as favourable market-related impacts driven by property cash flows in the U.K. in 2022 and unfavourable U.K. tax legislation changes in 2021. The increase was partially offset by lower actuarial assumption changes.
- **Strong Insurance and Annuity sales[10]** – In the second quarter of 2022, Insurance and Annuity sales increased by 21% over the second quarter of 2021.
- **Irish Life invested in a minority shareholding in Multiply.AI (Multiply)** – In the second quarter of 2022, Irish Life invested in a minority shareholding in U.K.-based financial technology company Multiply. Multiply helps clients achieve their financial goals by connecting them through an automated digital advice service to their own individual financial plans with recommended next steps and access to their chosen advisor. This investment allows Irish Life to build on its existing digital capabilities by designing and building compliant digital customer journeys specific to the Irish market.
- **Canada Life U.K. recognized as leading provider** – The recent group protection industry survey 'Group Watch 2022' from Swiss Re confirmed Canada Life U.K. as the leading provider by in-force premium, policies and lives insured.
- **Canada Life's Credit Rating improved in Germany** – In the second quarter of 2022, ASSEKURATA Assekuranz Rating-Agentur GmbH, a German financial strength rating agency, raised the credit rating of Canada Life Assurance Europe plc, a subsidiary of Canada Life, from AA- to AA, making Canada Life one of the highest rated life insurance companies in Germany.

[10] Refer to the "Glossary" section of the Company's second quarter of 2022 interim MD&A for additional details on the composition of sales.

CAPITAL AND RISK SOLUTIONS

- **Q2 Capital and Risk Solutions segment base earnings of $174 million and net earnings of $167 million** Base earnings for the second quarter of 2022 were $174 million, up 16% compared to the second quarter of 2021, primarily due to growth in business in-force, favourable claims experience in the U.S. life business and the commutation of a reinsurance treaty, partially offset by the impact of currency movement.

- **Continue growing presence in the global reinsurance market** – In the second quarter of 2022, Capital and Risk Solutions continued growing its international presence in Asia, Europe and the U.S. The Company entered into another reinsurance transaction in Israel, completed new longevity contracts in the U.K. and added new structured transactions in the U.S. during the quarter.

QUARTERLY DIVIDENDS

The Board of Directors approved a quarterly dividend of $0.4900 per share on the common shares of Lifeco payable September 29, 2022 to shareholders of record at the close of business September 1, 2022.

In addition, the Directors approved quarterly dividends on Lifeco's first preferred shares payable September 29, 2022 to shareholders of record at the close of business September 1, 2022, as follows:

First Preferred Shares	Amount, per share
Series G	$0.3250
Series H	$0.30313
Series I	$0.28125
Series L	$0.353125
Series M	$0.3625
Series N	$0.109313
Series P	$0.3375
Series Q	$0.321875
Series R	$0.3000
Series S	$0.328125
Series T	$0.321875
Series Y	$0.28125

For purposes of the Income Tax Act (Canada), and any similar provincial legislation, the dividends referred to above are eligible dividends.

P. A. Mahon
President and Chief Executive Officer

August 3, 2022

MANAGEMENT'S DISCUSSION AND ANALYSIS

FOR THE PERIOD ENDED JUNE 30, 2022

DATED: AUGUST 3, 2022

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 six months ended June 30, 2022 and includes a comparison to the corresponding periods in 2021, to the three months ended March 31, 2022, and to the Company's financial condition as at December 31, 2021, as applicable. 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.

TABLE OF CONTENTS

Basis of Presentation and Summary of Accounting Policies
1 Cautionary Note Regarding Forward-Looking Information
2 Cautionary Note Regarding Non-GAAP Financial Measures and Ratios

Consolidated Operating Results
3 Financial Highlights
4 Developments
6 Base and Net Earnings
9 Income Taxes
10 Total Net Premiums, Premiums and Deposits and Sales
11 Net Investment Income
12 Fee and Other Income
13 Net Policyholder Benefits, Dividends and Experience Refunds

Consolidated Financial Position
14 Assets
17 Liabilities
18 Lifeco Capital Structure

Liquidity and Capital Management and Adequacy
19 Liquidity
20 Cash Flows
20 Commitments/Contractual Obligations
21 Capital Management and Adequacy
24 Return on Equity
24 Ratings

Segmented Operating Results
25 Canada
28 United States
35 Europe
38 Capital and Risk Solutions
40 Lifeco Corporate

Risk Management
40 Risk Management and Control Practices

Accounting Policies
40 International Financial Reporting Standards

Other Information
41 Non-GAAP Financial Measures and Ratios
47 Glossary
49 Disclosure Controls and Procedures
49 Internal Control Over Financial Reporting
49 Transactions with Related Parties
50 Quarterly Financial Information
51 Translation of Foreign Currency
51 Additional Information

BASIS OF PRESENTATION AND SUMMARY OF ACCOUNTING POLICIES

The condensed consolidated interim unaudited 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) as issued by the International Accounting Standards Board (IASB) 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 condensed consolidated interim unaudited financial statements for the period ended June 30, 2022. Also refer to the 2021 Annual MD&A and audited consolidated financial statements in the Company's 2021 Annual Report.

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 expected impact (or lack of impact) of IFRS 17, *Insurance Contracts* and IFRS 9*, Financial Instruments* on the Company's business strategy, financial strength, deployable capital, Life Insurance Capital Adequacy Test (LICAT) ratio, base and net earnings, shareholders' equity, ratings and leverage ratios. Forward-looking information also includes statements about the Company's operations, business (including business mix), financial condition, expected financial performance (including revenues, earnings or growth rates), ongoing business strategies or prospects, climate-related goals, 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 timing and extent of revenue and expense synergies of acquisitions and divestitures, including but not limited to the acquisitions of the full-service retirement business of Prudential Financial Inc. (Prudential), 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, estimates of risk sensitivities affecting capital adequacy ratios, expected dividend levels, expected cost reductions and savings, expected expenditures or investments (including but not limited to investment in technology infrastructure and digital capabilities and solutions), the timing and completion of the joint venture between Allied Irish Banks plc (AIB) and Canada Life Irish Holding Company Limited, 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 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. In particular, statements about the expected impact of IFRS 17 on the Company (including statements about the impact on base and net earnings and the Canada Life Assurance Company LICAT Ratio) are based on the Company's expected 2022 IFRS 4, *Insurance Contracts*, earnings mix and composition as at the start of 2022, adjusted to reflect fully synergized earnings from the acquisitions of MassMutual's and Prudential's retirement businesses, and on current market and economic conditions. In all cases, 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 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), the duration of COVID-19 impacts and the availability and adoption of vaccines, the effectiveness of vaccines, the emergence of COVID-19 variants, geopolitical tensions and related economic impacts, 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 and Prudential, the ability to leverage Empower's, Personal Capital's and MassMutual's and Prudential'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), 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, changes in actuarial standards, 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. In addition, as we work to advance our climate goals, external factors outside of Lifeco's reasonable control may act as constraints on their achievement, including varying decarbonization efforts across economies, the need for thoughtful climate policies around the world, more and better data, reasonably supported methodologies, technological advancements, the evolution of consumer behavior, the challenges of balancing interim emissions goals with an orderly and just transition, and other significant considerations such as legal and regulatory obligations.

The reader is cautioned that the foregoing list of assumptions and factors is not exhaustive, and there may be other factors listed in other filings with securities regulators, including factors set out in the Company's 2021 Annual MD&A under "Risk Management and Control Practices" and "Summary of Critical Accounting Estimates" and in the Company's annual information form dated February 9, 2022 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-GAAP FINANCIAL MEASURES AND RATIOS

This MD&A contains some non-Generally Accepted Accounting Principles (GAAP) financial measures and non-GAAP ratios as defined in National Instrument 52-112 “Non-GAAP and Other Financial Measures Disclosure”. Terms by which non-GAAP financial measures are identified include, but are not limited to, "base earnings (loss)", "base earnings (loss) (US$)", "core net earnings (loss)", "premiums and deposits", "assets under management" and "assets under administration". Terms by which non-GAAP ratios are identified include, but are not limited to, “base earnings per common share (EPS)”, “base return on equity (ROE)”, "base dividend payout ratio", “effective income tax rate – base earnings – common shareholders “and “effective income tax rate – base earnings – total Lifeco”. Non-GAAP financial measures and ratios are used to provide management and investors with additional measures of performance to help assess results where no comparable GAAP (IFRS) measure exists. However, non-GAAP financial measures and ratios do not have standard meanings prescribed by GAAP (IFRS) and are not directly comparable to similar measures used by other companies. Refer to the "Non-GAAP Financial Measures and Ratios" section in this MD&A for the appropriate reconciliations of these non-GAAP financial measures to measures prescribed by GAAP as well as additional details on each measure and ratio.

CONSOLIDATED OPERATING RESULTS

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

	As at or for the three months ended			For the six months ended	
	June 30 2022	March 31 2022	June 30 2021	**June 30 2022**	June 30 2021
Earnings					
Base earnings[1]	**$ 830**	$ 809	$ 826	**$ 1,639**	$ 1,565
Net earnings - common shareholders	**735**	770	784	**1,505**	1,491
Per common share					
Basic:					
Base earnings[2]	**0.893**	0.869	0.889	**1.762**	1.685
Net earnings	**0.789**	0.827	0.844	**1.616**	1.605
Diluted net earnings	**0.788**	0.825	0.842	**1.613**	1.604
Dividends paid	**0.490**	0.490	0.438	**0.980**	0.876
Book value[3]	**25.00**	24.57	23.70		
Base return on equity[2]	**14.5 %**	14.7 %	13.9 %		
Return on equity[3]	**13.7 %**	14.1 %	15.0 %		
Total net premiums	**$ 16,305**	$ 14,051	$ 11,751	**$ 30,356**	$ 24,903
Total premiums and deposits[1]	**41,591**	44,158	36,804	**85,749**	81,867
Fee and other income	**1,909**	1,813	1,800	**3,722**	3,551
Net policyholder benefits, dividends and experience refunds	**15,030**	12,747	12,162	**27,777**	24,096
Total assets per financial statements	**$ 670,305**	$ 600,459	$ 604,176		
Total assets under management[1]	**988,986**	954,395	962,473		
Total assets under administration[1,4]	**2,342,296**	2,187,706	2,167,107		
Total equity	**$ 30,550**	$ 30,387	$ 27,956		
The Canada Life Assurance Company consolidated LICAT Ratio[5]	**117 %**	119 %	126 %		

1 This metric is a non-GAAP financial measure. Refer to the "Non-GAAP Financial Measures and Ratios" section of this document for additional details.
2 This metric is a non-GAAP ratio. Refer to the "Non-GAAP Financial Measures and Ratios" section of this document for additional details.
3 Refer to the "Glossary" section of this document for additional details on the composition of this measure.
4 2021 comparative figures have been restated to include Financial Horizons Group and Excel Private Wealth Inc. assets under administration in the Canada segment.
5 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. The LICAT Ratio is calculated in accordance with the Office of Superintendent of Financial Institutions' guideline - Life Insurance Capital Adequacy Test. Refer to the "Capital Management and Adequacy" section of this document for additional details.

DEVELOPMENTS

In the second quarter of 2022, equity markets in the regions where the Company operates exhibited heightened volatility and ended 5% to 16% lower than March 31, 2022 levels. In addition, interest rates increased 80-105bps in response to elevated, broad based levels of inflation which are impacting business and consumer confidence. In addition, the Canadian dollar strengthened notably against the British pound and the Euro, although weakened somewhat against the U.S. dollar.

Accordingly, in the context of the market movements discussed above, net fee income in all segments from the Company’s wealth management businesses, which is driven by asset levels, was negatively impacted as expected. However, the benefits of the Company’s diversified business portfolio were demonstrated as its insurance businesses in all geographies performed well in the quarter. In addition, certain compensation and tax related items impacted the in-quarter year-over-year base earnings comparison, positively in the Europe segment and negatively in Canada.

Overall, base earnings increased modestly year-over-year despite negative impacts of currency movements. Net earnings decreased year-over-year mainly due to increased acquisition related costs in the U.S. segment resulting from the Prudential acquisition which closed at the beginning of the quarter.

Strategic Transactions

On April 1, 2022, a Lifeco subsidiary, Great-West Life & Annuity Insurance Company (GWL&A), which operates primarily as "Empower", completed the previously announced acquisition of the full-service retirement business of Prudential Financial, Inc. (Prudential). With the completion of the acquisition, Empower's reach in the U.S. has expanded to more than 17.4 million retirement plan participants and assets under administration to US$1.3 trillion on behalf of approximately 71,000 workplace savings plans as of June 30, 2022.

The Company funded the total transaction value of US$3,480 million with US$1,193 million of limited recourse capital notes and US$823 million of short-term debt, in addition to existing resources.

Empower anticipates realizing cost synergies through the migration of Prudential's retirement services business onto Empower's recordkeeping platform. Estimated run-rate cost synergies of US$180 million are expected to be phased in over 24 months primarily when systems migrations are completed. As of June 30, 2022, US$25 million of pre-tax run rate cost synergies have been achieved. Revenue synergies of US$20 million are expected on a run-rate basis by the end of 2024 and are expected to grow to US$50 million by 2026.

COVID-19 Pandemic and Geopolitical Tensions Impacts

The COVID-19 pandemic continues to cause material disruption to businesses globally, resulting in continued economic pressures. While governments in different regions have now moved to ease restrictions put in place, many factors continue to extend economic uncertainty, including but not limited to: the availability, adoption and uncertainty around the effectiveness of vaccines; the emergence of COVID-19 variants; and the extent and timing of related government and central bank actions.

The Company's financial outlook for the remainder of 2022 will depend in part on the duration and intensity of the COVID-19 pandemic impacts as discussed above. The impact of the pandemic on mortality, longevity, disability and other claims experience in future periods remains uncertain and may differ by region and business line. The Company continues to actively monitor events and information, and to date, net impacts have been modest, reflecting the Company's diversified business. The Company continues to manage risks of changes to mortality and longevity rates by issuing a diversified range of insurance, annuity and fee income products along with using reinsurance and capital market solutions where appropriate.

Global financial markets continued to be volatile in the second quarter of 2022, in part due to Russia's military invasion of Ukraine and the related sanctions and economic fallout. The outlook for financial markets over the short and medium-term remains highly uncertain and vulnerable to continued geopolitical tensions.

The Company continues to monitor potential impacts of the conflict including: financial impacts, which may complicate efforts by central banks to counter already elevated levels of inflation due, in part, to supply chain disruptions related to the pandemic; heightened cyber risks; and risks related to the global supply chain. All of these impacts could negatively affect the Company's financial outlook, results and operations.

The Company’s well-diversified businesses, combined with business strength, resilience and experience, put 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.

Update on Transition to IFRS 17 and IFRS 9

As noted in the "Accounting Policies" section of this document, IFRS 17, *Insurance Contracts* (IFRS 17) will replace IFRS 4, *Insurance Contracts* (IFRS 4) effective January 1, 2023. While the new standard will change the recognition and measurement of insurance contracts and the corresponding presentation and disclosures in the Company's financial statements, it is not expected to have a material financial impact or to change the Company's underlying business strategy. IFRS 9, *Financial Instruments* (IFRS 9) will replace IAS 39, *Financial Instruments: Recognition and Measurement* effective January 1, 2023. Upon adoption of IFRS 9, the Company does not expect a material change in the level of invested assets or a material increase in earnings volatility; however, the Company continues to evaluate the impact of the adoption of this standard with IFRS 17. The expected impacts of the adoption of IFRS 17 include:

- Businesses representing over 70% of base earnings[1,2] are expected to experience limited or no impact;
- The January 1, 2022 shareholders' equity is expected to decrease by 10-15% on the retroactive application of IFRS 17 on January 1, 2023, primarily due to the establishment of the contractual service margin;
- Low-single digit percentage decrease in proforma base earnings[1,2] is expected as a result of transition with no material change to base earnings trajectory;
- Medium-term financial objectives for base EPS[3] growth and base dividend payout ratio[3] are expected to be unchanged;
- Medium-term financial objective for base ROE[3] is expected to increase by 2% to 16-17% reflecting the change in shareholders' equity; and
- Financial strength will be maintained and a positive impact to the March 31, 2023 Canada Life Assurance Company consolidated LICAT Ratio is expected[4] based on the Company's initial review of the 2023 LICAT Guideline released on July 21, 2022.

1 This metric is a non-GAAP financial measure. Refer to the "Non-GAAP Financial Measures and Ratios" section of this document for additional details.

2 Proforma base and net earnings are calculated based on the expected 2022 IFRS 4 earnings mix and composition as at the start of 2022, adjusted to reflect fully synergized earnings from the acquisitions of MassMutual's and Prudential's retirement businesses. Many of these assumptions are based on factors and events that are not within the control of the Company's management and there is no assurance that they will prove to be correct. Refer to "Cautionary Note regarding Forward-looking Information" and "Cautionary Note regarding Non-GAAP Financial Measures and Ratios" section at the beginning of this document.

3 This metric is a non-GAAP ratio. Refer to the "Non-GAAP Financial Measures and Ratios" section of this document for additional details.

4 Actual impact will depend on market and economic conditions and the Company's operating results at the time of transition.

BASE AND NET EARNINGS

Consolidated base earnings and net earnings of Lifeco include the base earnings and net earnings of Canada Life and its operating subsidiaries, Great-West Life & Annuity Insurance Company (GWL&A) and Putnam, together with Lifeco's Corporate operating results.

Base earnings[1] and net earnings - common shareholders

	For the three months ended			For the six months ended	
	June 30 2022	March 31 2022	June 30 2021	**June 30 2022**	June 30 2021
Base earnings[1]					
Canada	**$ 296**	$ 272	$ 293	**$ 568**	$ 591
United States	**143**	120	190	**263**	294
Europe	**208**	245	184	**453**	385
Capital and Risk Solutions	**174**	170	150	**344**	295
Lifeco Corporate	**9**	2	9	**11**	—
Lifeco base earnings[1]	**$ 830**	$ 809	$ 826	**$ 1,639**	$ 1,565
Items excluded from base earnings					
Actuarial assumption changes and other management actions[2]	**$ 21**	$ (9)	$ 37	**$ 12**	$ 42
Market-related impacts on liabilities[2]	**(15)**	(11)	(19)	**(26)**	(43)
Transaction costs related to acquisitions[3]	**(57)**	(7)	(24)	**(64)**	(25)
Restructuring and integration costs	**(44)**	(12)	(15)	**(56)**	(27)
Tax legislative changes impact on liabilities	**—**	—	(21)	**—**	(21)
Items excluded from Lifeco base earnings	**$ (95)**	$ (39)	$ (42)	**$ (134)**	$ (74)
Net earnings - common shareholders					
Canada	**$ 301**	$ 275	$ 288	**$ 576**	$ 575
United States	**29**	105	150	**134**	239
Europe	**229**	219	185	**448**	380
Capital and Risk Solutions	**167**	169	152	**336**	297
Lifeco Corporate	**9**	2	9	**11**	—
Lifeco net earnings - common shareholders	**$ 735**	$ 770	$ 784	**$ 1,505**	$ 1,491

1 This metric is a non-GAAP financial measure. Refer to the "Non-GAAP Financial Measures and Ratios" section of this document for additional details.
2 Refer to the "Glossary" section of this document for additional details on the composition of this measure.
3 The transaction costs relate to acquisitions in the U.S. segment (the full-service retirement business of Prudential, Personal Capital and the retirement services business of MassMutual) as well as acquisitions in the Europe segment.

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

Base Earnings

Base earnings for the second quarter of 2022 of $830 million ($0.893 per common share) increased by $4 million from $826 million ($0.889 per common share) a year ago. The modest increase reflected the benefits of the Company's diversified business portfolio as increased insurance business earnings in all geographies more than offset reduced net fee income in all segments from wealth management businesses and negative currency movement impacts. In addition, certain compensation and tax related items impacted the in-quarter year-over-year base earnings comparison, positively in the Europe segment and negatively in Canada. This resulted in base earnings growth year-over-year in the Canada, Europe and Capital and Risk Solutions segments. The U.S. segment base earnings were reduced year-over-year and included Prudential business related base earnings of $45 million (US$35 million).

For the six months ended June 30, 2022, Lifeco's base earnings were $1,639 million ($1.762 per common share) compared to $1,565 million ($1.685 per common share) a year ago. The increase was due to the reasons discussed for the in-quarter results, however the reduction in fee income business earnings year-over-year was less pronounced in the six month period.

Net Earnings

Lifeco's net earnings for the three month period ended June 30, 2022 of $735 million ($0.789 per common share) decreased by $49 million or 6% compared to $784 million ($0.844 per common share) a year ago. The decrease was primarily due to higher acquisition related costs largely from the Prudential acquisition in the U.S. segment in the second quarter of 2022. In addition, the Company had less favourable actuarial assumption changes. The decrease was partially offset by an increase in base earnings and a revaluation of deferred taxes in the Europe segment resulting in an increase in taxes in the second quarter of 2021; there was no revaluation in 2022.

For the six months ended June 30, 2022, Lifeco's net earnings were $1,505 million ($1.616 per common share) compared to $1,491 million ($1.605 per common share) a year ago. The increase was primarily due to an increase in base earnings. Also, the Europe segment included a revaluation of deferred taxes resulting in an increase in taxes in the second quarter of 2021; there was no revaluation in 2022. The base earnings increase was partially offset by higher restructuring and integration costs as well as higher acquisition related costs from the Prudential acquisition in the U.S. segment in the second quarter of 2022, as well as less favourable actuarial assumption changes.

Lifeco's net earnings for the three month period ended June 30, 2022 of $735 million ($0.789 per common share) decreased by $35 million or 5% compared to $770 million ($0.827 per common share) in the previous quarter. The decrease was primarily due to higher transaction, restructuring and integration costs related to acquisitions in the U.S. segment as well as unfavourable market-related impacts on liabilities. In addition, the Company had lower investment gains in the Europe segment. These items were mostly offset by favourable actuarial assumption changes, favourable morbidity experience in the Canada segment and Prudential business related base earnings of $45 million (US$35 million).

Actuarial Assumption Changes and Other Management Actions

For the three months ended June 30, 2022, actuarial assumption changes and other management actions resulted in a positive net earnings impact of $21 million. This compares to a positive impact of $37 million for the same quarter last year and a negative impact of $9 million for the previous quarter.

In the Europe segment, net earnings were positively impacted by $19 million in the second quarter of 2022, primarily due to updated policyholder behaviour assumptions. In the Canada and Capital and Risk Solutions segments, net earnings were each positively impacted by $1 million in the second quarter of 2022, primarily due to model refinements.

For the six months ended June 30, 2022, actuarial assumption changes and other management actions, resulted in a positive net earnings impact of $12 million, compared to a positive impact of $42 million for the same period in 2021.

In the Europe segment, net earnings were positively impacted by $11 million for the six months ended June 30, 2022, primarily due to updated policyholder behaviour assumptions, partially offset by annuitant mortality updates. In the Canada segment, net earnings were positively impacted by $1 million for the six months ended June 30, 2022, primarily due to model refinements.

Market-Related Impacts

In the regions where the Company operates, average equity market indices for the three months ended June 30, 2022 were 8% lower in broader Europe (as measured by EURO STOXX 50), 6% higher in the United Kingdom (U.K.) (as measured by FTSE 100), 5% higher in Canada (as measured by S&P TSX) and 2% lower in the U.S. (as measured by S&P 500) compared to the same period in 2021. The major equity indices finished the second quarter of 2022 down by 16% in the U.S., 14% in Canada, 10% in broader Europe and 5% in the U.K. compared to March 31, 2022. The ending levels of major equity indices finished lower than the average for the quarter, which will impact asset-based fee income going forward. For the six months ended June 30, 2022, average equity market levels were lower in Canada, the U.S. and broader Europe and higher in the U.K. compared to the same period in 2021.

Market-related impacts on liabilities negatively impacted net earnings by $15 million in the second quarter of 2022 (negative impact of $19 million in the second quarter of 2021), primarily reflecting the negative impact of equity market movements on the value of segregated fund and variable annuity guarantees, including hedge ineffectiveness. This was partially offset by the positive impact of updated cash flow projections for real estate which support insurance contract liabilities in the Europe segment. The negative impact of $19 million in the second quarter of 2021 primarily reflected updated cash flow projections for real estate which support insurance contract liabilities. In addition, equity markets had an unfavourable impact of $61 million on asset-based fee income and on seed money investments primarily held in the U.S. and Canada segments in the second quarter of 2022 (positive impact of $28 million in the second quarter of 2021).

For the six months ended June 30, 2022, market-related impacts on liabilities negatively impacted net earnings by $26 million (negative impact of $43 million year-to-date in 2021), primarily due to the same reasons discussed for the in-quarter results. In addition, equity markets had an unfavourable impact of $95 million year-to-date in 2022 on asset-based fee income and on seed money investments primarily held in the U.S. and Canada segments (positive impact of $31 million year-to-date in 2021).

In countries where the Company operates, interest rates increased during 2022, resulting in a modest positive impact on net earnings. 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, with the impact of changes in fair values of bonds backing insurance contract liabilities 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 6 to the Company's condensed consolidated interim unaudited financial statements for the period ended June 30, 2022.

Foreign Currency

The average currency translation rate for the second quarter of 2022 decreased for the British pound and the euro and increased for the U.S. dollar compared to the second quarter of 2021. The overall impact of currency movement on the Company's net earnings for the three months ended June 30, 2022 was a decrease of $22 million (decrease of $38 million year-to-date) compared to translation rates a year ago.

From March 31, 2022 to June 30, 2022, the market rates at the end of the reporting period used to translate the British pound and the euro assets and liabilities to the Canadian dollar decreased while the U.S. dollar increased. The movements in end-of-period exchange rates impact the translation of foreign operations, including related hedge activities, resulting in post-tax unrealized foreign exchange gains of $100 million in-quarter ($389 million net unrealized loss year-to-date) recorded in other comprehensive income.

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

INCOME TAXES

The Company's effective income tax rates on earnings attributable to common shareholders and total Lifeco earnings are presented below.

Effective income tax rate

	For the three months ended			For the six months ended	
	June 30 2022	March 31 2022	June 30 2021	**June 30 2022**	June 30 2021
Base earnings - Common shareholders[1]	**9.8 %**	9.8 %	9.2 %	**9.9 %**	9.5 %
Net earnings - Common shareholders	**7.5 %**	9.3 %	12.1 %	**8.4 %**	10.9 %
Base earnings - Total Lifeco[1]	**8.8 %**	6.6 %	7.3 %	**7.7 %**	7.3 %
Net earnings - Total Lifeco	**6.3 %**	5.9 %	9.5 %	**6.1 %**	8.4 %

1 This metric is a non-GAAP ratio. Refer to the "Non-GAAP Financial Measures and Ratios" section of this document for additional details.

The Company's effective income tax rates are generally lower than the statutory income tax rate of 26.5% due to benefits related to non-taxable investment income and lower income tax in certain foreign jurisdictions.

In the second quarter of 2022, the Company had an effective income tax rate on base earnings for the shareholder account of 9.8%, comparable to 9.2% in the second quarter of 2021. In the second quarter of 2022, the effective income tax rate on base earnings for the total Company of 8.8% was higher than 7.3% in the second quarter of 2021, primarily due to lower non-taxable investment income, partially offset by jurisdictional mix of earnings.

In the second quarter of 2022, the overall effective income tax rate on net earnings of 6.3% was down from 9.5% in the second quarter of 2021, primarily due to jurisdictional mix of earnings and the impact of the revaluation of deferred tax liabilities in the Europe segment in the second quarter of 2021. These items were partially offset by lower non-taxable investment income.

The Company had an effective income tax rate on base earnings of 7.7% for the six months ended June 30, 2022, comparable to 7.3% for the same period last year. The Company had an effective income tax rate on net earnings of 6.1% for the six months ended June 30, 2022, down from 8.4% for the same period last year, primarily due to jurisdictional mix of earnings.

Refer to note 14 to the Company's condensed consolidated interim unaudited financial statements for the period ended June 30, 2022 for further details.

On April 7, 2022, the Canadian Federal Government announced its 2022 budget, which to date has not been substantively enacted. The budget included a permanent 1.5% tax rate increase on the taxable income of Canadian banks and insurance companies on earnings over $100 million and a Canada Recovery Dividend of 15% on 2021 Canadian taxable income in excess of $1 billion payable in equal installments over 5 years. The Company does not expect these budget announcements to have a material impact on its financial position.

TOTAL NET PREMIUMS, PREMIUMS AND DEPOSITS AND SALES

	For the three months ended			For the six months ended	
	June 30 2022	March 31 2022	June 30 2021	**June 30 2022**	June 30 2021
Total net premiums					
Canada	**$ 3,507**	$ 3,417	$ 3,290	**$ 6,924**	$ 6,486
United States	**3,162**	2,051	1,245	**5,213**	2,791
Europe	**880**	1,271	934	**2,151**	1,878
Capital and Risk Solutions	**8,756**	7,312	6,282	**16,068**	13,748
Total net premiums	**$ 16,305**	$ 14,051	$ 11,751	**$ 30,356**	$ 24,903
Premiums and deposits[1]					
Canada	**$ 7,288**	$ 8,091	$ 6,819	**$ 15,379**	$ 14,494
United States	**19,129**	19,764	17,207	**38,893**	38,695
Europe	**6,418**	8,991	6,496	**15,409**	14,930
Capital and Risk Solutions	**8,756**	7,312	6,282	**16,068**	13,748
Total premiums and deposits[1]	**$ 41,591**	$ 44,158	$ 36,804	**$ 85,749**	$ 81,867
Sales[2,3]					
Canada	**$ 3,219**	$ 4,304	$ 3,345	**$ 7,523**	$ 8,078
United States	**26,329**	62,807	36,368	**89,136**	135,307
Europe	**5,901**	8,359	5,926	**14,260**	13,152
Total sales[2,3]	**$ 35,449**	$ 75,470	$ 45,639	**$ 110,919**	$ 156,537

1 This metric is a non-GAAP financial measure. Refer to the "Non-GAAP Financial Measures and Ratios" section of this document for additional details.
2 Sales is not a relevant measure for the Capital and Risk Solutions segment due to the nature of operations.
3 Refer to the "Glossary" section of this document for additional details on the composition of this measure.

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

NET INVESTMENT INCOME

Net investment income

	For the three months ended			For the six months ended	
	June 30 2022	March 31 2022	June 30 2021	**June 30 2022**	June 30 2021
Investment income earned (net of investment properties expenses)	**$ 2,225**	$ 1,675	$ 1,651	**$ 3,900**	$ 3,224
Net allowances for credit losses on loans and receivables	**(11)**	—	(26)	**(11)**	(32)
Net realized gains (losses)	**1**	(2)	35	**(1)**	65
Regular investment income	**2,215**	1,673	1,660	**3,888**	3,257
Investment expenses	**(62)**	(52)	(49)	**(114)**	(90)
Regular net investment income	**2,153**	1,621	1,611	**3,774**	3,167
Changes in fair value through profit or loss assets	**(11,179)**	(8,455)	2,793	**(19,634)**	(2,758)
Total net investment income	**$ (9,026)**	$ (6,834)	$ 4,404	**$ (15,860)**	$ 409

Total net investment income in the second quarter of 2022 decreased by $13.4 billion compared to the same quarter last year. The changes in fair value in the second quarter of 2022 were a decrease of $11.2 billion compared to an increase of $2.8 billion for the second quarter of 2021. In the second quarter of 2022, the net decrease to fair value was primarily due to an increase in bond yields across all geographies driven by higher interest rates resulting from elevated inflation and also due to a decline in Canadian equity markets. In the second quarter of 2021, the net increase to fair value was primarily due to a decline in bond yields across all geographies and an increase in Canadian equity markets.

Regular net investment income in the second quarter of 2022 of $2.2 billion increased by $0.5 billion compared to the same quarter last year. The increase was primarily due to income earned on bonds and mortgages acquired through the Prudential acquisition, partially offset by lower net realized gains. Net realized gains (losses) include gains on available-for-sale securities of $1 million for the second quarter of 2022 which were comparable to the same quarter last year.

For the six months ended June 30, 2022, net investment income decreased by $16.3 billion compared to the same period last year. The changes in fair value for the six month period in 2022 were a decrease of $19.6 billion compared to $2.8 billion during the same period in 2021. The changes in fair value were primarily due to a greater increase in bond yields across all geographies driven by higher interest rates resulting from elevated inflation and also due to a decline in Canadian equity markets in the first half of 2022, compared to a smaller increase in bond yields across all geographies, partially offset by an increase in Canadian equity markets during the first half of 2021.

Regular net investment income for the six months ended June 30, 2022 of $3.8 billion increased by $0.6 billion compared to the same period last year. The increase was primarily due to the same reasons discussed for the in-quarter results. Net realized gains (losses) include losses on available-for-sale securities of $2 million for the six months ended June 30, 2022 compared to gains of $11 million for the same period last year.

Credit Markets

In the second quarter of 2022, the impact to common shareholders' net earnings from impaired investments, including dispositions, was negligible ($10 million net negative impact in the second quarter of 2021). 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. Separately, related to non-impaired invested assets, changes in credit ratings in the Company's fixed income portfolio resulted in a net decrease in provisions for future credit losses in insurance contract liabilities, which positively impacted common shareholders' net earnings by $7 million ($4 million net positive impact in the second quarter of 2021), primarily due to upgrades of various corporate bond and commercial mortgage holdings.

For the six months ended June 30, 2022, the impact to common shareholders' net earnings from impaired investments including dispositions, was negligible ($11 million net negative impact year-to-date in 2021). Separately, related to non-impaired invested assets, changes in credit ratings in the Company's fixed income portfolio resulted in a net decrease in provisions for future credit losses in insurance contract liabilities, which positively impacted common shareholders' net earnings by $5 million year-to-date ($4 million net negative impact year-to-date in 2021), primarily due to the same reasons discussed for the in-quarter results.

There could be a negative impact from downgrades in future periods if economies that are currently open are shut down or restricted due to a resurgence of COVID-19 cases or if economies are materially affected by geopolitical tensions.

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 six months ended	
	June 30 2022	March 31 2022	June 30 2021	**June 30 2022**	June 30 2021
Canada					
Segregated funds, mutual funds and other	**$ 429**	$ 444	$ 440	**$ 873**	$ 856
Administrative services only (ASO) contracts	**69**	64	52	**133**	105
	498	508	492	**1,006**	961
United States					
Segregated funds, mutual funds and other	**1,071**	949	960	**2,020**	1,887
Europe					
Segregated funds, mutual funds and other	**340**	354	346	**694**	699
Capital and Risk Solutions					
Reinsurance and other	**—**	2	2	**2**	4
Total fee and other income	**$ 1,909**	$ 1,813	$ 1,800	**$ 3,722**	$ 3,551

The information in the table above is a summary of gross fee and other income for the Company. Additional commentary regarding fee and other income is included, as applicable, 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 six months ended	
	June 30 2022	March 31 2022	June 30 2021	**June 30 2022**	June 30 2021
Canada	**$ 2,370**	$ 2,487	$ 2,530	**$ 4,857**	$ 5,163
United States	**3,668**	1,977	2,145	**5,645**	4,312
Europe	**829**	902	1,026	**1,731**	1,962
Capital and Risk Solutions	**8,163**	7,381	6,461	**15,544**	12,659
Total	**$ 15,030**	$ 12,747	$ 12,162	**$ 27,777**	$ 24,096

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 June 30, 2022, net policyholder benefits, dividends and experience refunds were $15.0 billion, an increase of $2.9 billion from the same quarter last year, 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 the addition of the Prudential business in the U.S. segment.

For the six months ended June 30, 2022, net policyholder benefits, dividends and experience refunds were $27.8 billion, an increase of $3.7 billion from the same period last year driven by higher net policyholder benefits. The increase in benefit payments was primarily due to the same reasons discussed for the in-quarter results.

CONSOLIDATED FINANCIAL POSITION

ASSETS

Assets under administration[1]

	As at June 30, 2022				
	Canada	**United States**	**Europe**	**Capital and Risk Solutions**	**Total**
Assets					
Invested assets	**$ 86,870**	**$ 97,516**	**$ 40,459**	**$ 7,809**	**$ 232,654**
Goodwill and intangible assets	**5,742**	**7,789**	**2,954**	**—**	**16,485**
Other assets	**4,684**	**28,169**	**8,991**	**7,818**	**49,662**
Investments on account of segregated fund policyholders	**90,741**	**163,845**	**116,918**	**—**	**371,504**
Total assets	**188,037**	**297,319**	**169,322**	**15,627**	**670,305**
Other assets under management[2]	**4,050**	**264,380**	**50,251**	**—**	**318,681**
Total assets under management[1]	**192,087**	**561,699**	**219,573**	**15,627**	**988,986**
Other assets under administration[2]	**25,800**	**1,316,811**	**10,699**	**—**	**1,353,310**
Total assets under administration[1]	**$ 217,887**	**$ 1,878,510**	**$ 230,272**	**$ 15,627**	**$ 2,342,296**

	As at December 31, 2021				
	Canada	United States	Europe	Capital and Risk Solutions	Total
Assets					
Invested assets	$ 92,400	$ 55,376	$ 48,669	$ 9,359	$ 205,804
Goodwill and intangible assets	5,722	5,826	3,047	—	14,595
Other assets	4,323	30,090	10,220	8,037	52,670
Investments on account of segregated fund policyholders	101,537	116,919	138,963	—	357,419
Total assets	203,982	208,211	200,899	17,396	630,488
Other assets under management[2]	5,742	310,933	60,480	—	377,155
Total assets under management[1]	209,724	519,144	261,379	17,396	1,007,643
Other assets under administration[2,3]	29,615	1,241,974	12,360	—	1,283,949
Total assets under administration[1,3]	$ 239,339	$ 1,761,118	$ 273,739	$ 17,396	$ 2,291,592

1 This metric is a non-GAAP financial measure. Refer to the "Non-GAAP Financial Measures and Ratios" section of this document for additional details.
2 Refer to the "Glossary" section of this document for additional details on the composition of this measure.
3 2021 comparative figures have been restated to include Financial Horizons Group and Excel Private Wealth Inc. assets under administration in the Canada segment.

Total assets under administration (AUA) at June 30, 2022 increased by $51 billion to $2.3 trillion compared to December 31, 2021, primarily due to the Prudential acquisition during the second quarter of 2022, partially offset by the impacts of market and currency movements. The Prudential acquisition during the second quarter of 2022 added $116 billion in total assets, $1 billion in other assets under management and $250 billion in other assets under administration to the U.S. segment as at June 30, 2022.

For additional details on assets acquired through business acquisitions, refer to "Business Acquisitions", note 3 in the Company's condensed consolidated interim unaudited financial statements for the period ended June 30, 2022.

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's investment policies are designed to be prudent and conservative, 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.

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 $156.2 billion or 67% of invested assets at June 30, 2022 compared to $140.6 billion or 68% at December 31, 2021. The increase in the bond portfolio was primarily due to $35.1 billion of bonds acquired through the Prudential acquisition, partially offset by a decline in fair values resulting from an increase in bond yields across all geographies. The overall quality of the bond portfolio remained high, with 99% of the portfolio rated investment grade and 71% rated A or higher.

Bond credit ratings reflect bond rating agency activity up to June 30, 2022. Management continues to closely monitor bond rating agency activity and general market conditions as economies emerge from the pandemic and are now being impacted by geopolitical tensions.

Bond portfolio quality

	As at June 30, 2022		As at Dec. 31, 2021	
AAA	**$ 23,389**	**15 %**	$ 20,254	14 %
AA	**32,325**	**21**	35,460	25
A	**54,467**	**35**	48,764	35
BBB	**43,968**	**28**	35,098	25
BB or lower	**2,077**	**1**	1,036	1
Total	**$ 156,226**	**100 %**	$ 140,612	100 %

At June 30, 2022, non-investment grade bonds were $2.1 billion or 1.3% of the bond portfolio compared to $1.0 billion or 0.7% of the bond portfolio at December 31, 2021. The increase in non-investment grade bonds was primarily due to bonds acquired through the Prudential acquisition.

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 the Canada, Europe and Capital and Risk Solutions 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

	As at June 30, 2022				As at Dec. 31, 2021	
Mortgage loans by type	Insured[1]	Non-insured	Total		Total	
Single family residential	**$ 443**	**$ 1,473**	**$ 1,916**	**5 %**	$ 1,979	7 %
Multi-family residential	**2,741**	**7,229**	**9,970**	**26**	7,601	26
Equity release	**—**	**2,544**	**2,544**	**7**	2,609	9
Commercial	**155**	**23,200**	**23,355**	**62**	16,663	58
Total	**$ 3,339**	**$ 34,446**	**$ 37,785**	**100 %**	$ 28,852	100 %

[1] Insured mortgages include mortgages where insurance is provided by a third party and protects the Company in the event that the borrower is unable to fulfill their mortgage obligations.

The total mortgage portfolio was $37.8 billion or 16% of invested assets at June 30, 2022, compared to $28.9 billion or 14% of invested assets at December 31, 2021. The increase in the mortgage portfolio was primarily related to $8.0 billion of mortgages acquired through the Prudential acquisition. At June 30, 2022, total insured loans were $3.3 billion or 9% of the mortgage portfolio, compared to $3.6 billion or 13% at December 31, 2021.

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 June 30, 2022, the total actuarial provision for future credit losses in insurance contract liabilities was $3,386 million compared to $3,271 million at December 31, 2021, an increase of $115 million, primarily due to the acquisition of Prudential, partially offset by interest rate movements and the impacts of currency movements.

The aggregate of impairment provisions of $44 million ($33 million at December 31, 2021) and actuarial provision for future credit losses in insurance contract liabilities of $3,386 million ($3,271 million at December 31, 2021) represents 1.7% of bond and mortgage assets, including funds held by ceding insurers, at June 30, 2022 (1.8% at December 31, 2021).

Derivative Financial Instruments

During the second quarter of 2022, there were no major changes to the Company's policies and procedures with respect to the use of derivative financial instruments. The Company’s derivative transactions are generally governed by the International Swaps and Derivatives Association (ISDA) Master Agreement, 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 Agreement may include Credit Support Annex provisions, which require both the pledging and accepting of collateral in connection with its derivative transactions.

At June 30, 2022, total financial collateral, including initial margin and overcollateralization, received on derivative assets was $970 million ($318 million at December 31, 2021) and pledged on derivative liabilities was $1,025 million ($480 million at December 31, 2021). The increase in collateral received on derivatives assets was primarily driven by the impact of the U.S. dollar strengthening against the British pound and euro on cross-currency swaps that pay British pounds and euros and receive U.S. dollars. The increase in collateral pledged on derivatives liabilities was primarily driven by the impact of increases to market interest rates on interest rate swaps that receive fixed and pay floating rates.

During the six month period ended June 30, 2022, the outstanding notional amount of derivative contracts increased by $9.1 billion to $45.7 billion, primarily due to increases to cross-currency swaps related to the Prudential acquisition and regular hedging activities.

The Company's exposure to derivative counterparty credit risk, which reflects the current fair value of those instruments in a gain position, increased to $1,596 million at June 30, 2022 from $967 million at December 31, 2021. The increase was primarily driven by the impact of the U.S. dollar strengthening against the British pound and euro on cross-currency swaps that pay British pounds and euros and receive U.S. dollars. There were no changes to derivative counterparty ratings during the second quarter of 2022 and all had investment grade ratings as of June 30, 2022.

LIABILITIES

Total liabilities

	As at June 30, 2022	As at Dec. 31, 2021
Insurance and investment contract liabilities	**$ 244,282**	$ 220,833
Other general fund liabilities	**23,969**	21,753
Investment and insurance contracts on account of segregated fund policyholders	**371,504**	357,419
Total	**$ 639,755**	$ 600,005

Total liabilities increased by $39.8 billion to $639.8 billion at June 30, 2022 from December 31, 2021.

Insurance and investment contract liabilities increased by $23.4 billion. The increase was primarily due to $44.3 billion acquired through the Prudential acquisition, partially offset by fair value adjustments.

Investment and insurance contracts on account of segregated fund policyholders increased by $14.1 billion, primarily due to the segregated fund policyholders acquired through the Prudential acquisition of $79.5 billion. The increase was partially offset by net market value declines on investments of $61.9 billion, negative impacts of currency movement of $5.1 billion and net withdrawals of $3.0 billion.

Other general fund liabilities increased by $2.2 billion, primarily resulting from the Prudential acquisition and related financing.

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 the 2021 Annual MD&A for further details.

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 tied to the market values of the investment funds.

Guaranteed minimum withdrawal benefit (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 Company has a hedging program in place to manage a portion of the market and interest rate risk associated with options embedded in its GMWB products. At June 30, 2022, the amount of GMWB product in-force in Canada, the U.S., Ireland and Germany was $6,857 million ($3,316 million at December 31, 2021). The increase in the in-force amount was primarily a result of the Prudential acquisition in the U.S. segment.

Segregated fund and variable annuity guarantee exposure

		June 30, 2022			
		Investment deficiency by benefit type			
	Market Value	Income	Maturity	Death	Total[1]
Canada	$ 32,424	$ —	$ 34	$ 612	$ 612
United States	22,772	736	—	24	760
Europe	9,917	21	—	1,084	1,084
Capital and Risk Solutions[2]	686	192	—	—	192
Total	**$ 65,799**	**$ 949**	**$ 34**	**$ 1,720**	**$ 2,648**

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 June 30, 2022.
2 Capital and Risk Solutions exposure is to markets in Canada and the U.S.

Investment deficiency at June 30, 2022 of $2,648 million increased by $1,686 million compared to December 31, 2021, primarily as a result of a decrease in market values and the Prudential acquisition in the U.S. segment. The investment deficiency measures the point-in-time exposure to a trigger event (i.e., income election, maturity or death) assuming it occurred on June 30, 2022 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 $2 million in-quarter ($2 million for the second quarter of 2021) and $4 million year-to-date ($5 million year-to-date for 2021), with the majority arising in the Capital and Risk Solutions segment related to a legacy block of business.

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 June 30, 2022, debentures and other debt instruments increased by $962 million to $9,766 million compared to December 31, 2021.

On March 30, 2022, Great-West Lifeco U.S LLC, a subsidiary of the Company, established a 2-year US$500 million non-revolving credit facility. The facility is fully and unconditionally guaranteed by the Company. As at June 30, 2022, the $645 million (US$500 million) facility was fully drawn, along with $416 million (US$323 million) from an existing revolving credit facility, to finance a portion of the Prudential retirement service business acquisition. Subsequent to the second quarter of 2022, on July 1, 2022, Great-West Lifeco U.S. LLC made a payment of US$150 million on its revolving credit facility.

Share Capital and Surplus

Share capital outstanding at June 30, 2022 was $10,008 million, which comprises $5,788 million of common shares and $2,720 million of preferred shares, and $1,500 million Limited Recourse Capital Notes (LRCN Series 1). Preferred shares included $2,470 million of non-cumulative First Preferred Shares and $250 million of 5-year rate reset First Preferred Shares.

The Company renewed its normal course issuer bid (NCIB) effective January 27, 2022 for one year to purchase and cancel up to but not more than 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 six months ended June 30, 2022, the Company did not purchase any common shares under the current NCIB (nil during the six months ended June 30, 2021 under the previous NCIB).

LIQUIDITY AND CAPITAL MANAGEMENT AND ADEQUACY

LIQUIDITY

Total Liquid Assets

	As at June 30, 2022		
	On-balance sheet assets	**Non-liquid/ Pledged**	**Net liquid assets**
Cash, cash equivalents and short-term bonds			
Cash and cash equivalents[1]	**$ 7,924**	**$ 96**	**$ 7,828**
Short-term bonds[2]	**2,998**	**28**	**2,970**
Sub-total	**$ 10,922**	**$ 124**	**$ 10,798**
Other assets and marketable securities			
Government bonds[2]	**$ 40,286**	**$ 11,460**	**$ 28,826**
Corporate bonds[2]	**112,942**	**53,963**	**58,979**
Stocks[1]	**13,836**	**2,421**	**11,415**
Mortgage loans[1]	**37,785**	**34,601**	**3,184**
Sub-total	**$ 204,849**	**$ 102,445**	**$ 102,404**
Total	**$ 215,771**	**$ 102,569**	**$ 113,202**

	As at December 31, 2021		
	On-balance sheet assets	Non-liquid/ Pledged	Net liquid assets
Cash, cash equivalents and short-term bonds			
Cash and cash equivalents[1]	$ 6,075	$ 32	$ 6,043
Short-term bonds[3]	5,671	1,923	3,748
Sub-total	$ 11,746	$ 1,955	$ 9,791
Other assets and marketable securities			
Government bonds[3]	$ 47,126	$ 11,795	$ 35,331
Corporate bonds[3]	87,815	37,324	50,491
Stocks[1]	14,183	1,759	12,424
Mortgage loans[1]	28,852	25,446	3,406
Sub-total	$ 177,976	$ 76,324	$ 101,652
Total	$ 189,722	$ 78,279	$ 111,443

1 Refer to the consolidated balance sheet in the Company's condensed consolidated interim unaudited financial statements for the period ended June 30, 2022 for on-balance sheet amounts.
2 Total short-term bonds, government bonds and corporate bonds as at June 30, 2022 was $156.2 billion. Refer to the consolidated balance sheet in the Company's condensed consolidated interim unaudited financial statements for the period ended June 30, 2022 for on-balance sheet bonds amounts.
3 Refer to note 8(ii) in the Company's 2021 annual consolidated financial statements for on-balance sheet amounts.

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 June 30, 2022, the Company and its operating subsidiaries held liquid cash, cash equivalents and short-term bonds of $10.8 billion ($9.8 billion at December 31, 2021) and other liquid assets and marketable securities of $102.4 billion ($101.7 billion at December 31, 2021). Included in the cash, cash equivalents and short-term bonds at June 30, 2022 was $0.8 billion ($0.6 billion at December 31, 2021) held at the Lifeco holding company level which includes cash at Great-West Lifeco U.S. LLC, the Company's U.S. holding company. 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. The Company maintains a target dividend payout ratio range of 45% to 55% of base earnings that is considered in dividend decisions. 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.

CASH FLOWS

Cash flows

	For the three months ended June 30		For the six months ended June 30	
	2022	2021	**2022**	2021
Cash flows relating to the following activities:				
Operations	**$ 2,543**	$ 1,062	**$ 3,959**	$ 2,855
Financing	**(547)**	(477)	**5**	(1,006)
Investment	**(3,436)**	556	**(2,055)**	(2,975)
	(1,440)	1,141	**1,909**	(1,126)
Effects of changes in exchange rates on cash and cash equivalents	**107**	(49)	**(60)**	(112)
Increase (decrease) in cash and cash equivalents in the period	**(1,333)**	1,092	**1,849**	(1,238)
Cash and cash equivalents, beginning of period	**9,257**	5,616	**6,075**	7,946
Cash and cash equivalents, end of period	**$ 7,924**	$ 6,708	**$ 7,924**	$ 6,708

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 second quarter of 2022, cash and cash equivalents decreased by $1.3 billion from March 31, 2022. Cash flows provided by operations during the second quarter of 2022 were $2.5 billion, an increase of $1.5 billion compared to the second quarter of 2021. Cash flows used by financing of $0.5 billion were primarily due to payments of dividends to common and preferred shareholders. For the three months ended June 30, 2022, net cash outflows of $3.4 billion were used by the Company for the Prudential acquisition and to acquire investment assets.

For the six months ended June 30, 2022, cash and cash equivalents increased by $1.8 billion from December 31, 2021. Cash flows provided by operations were $4.0 billion, an increase of $1.1 billion compared to the same period in 2021. Cash flows used in financing were primarily used for the payment of dividends to common and preferred shareholders of $1.0 billion, mostly offset by an increase in the line of credit of a subsidiary of $1.0 billion. For the six months ended June 30, 2022, cash outflows of $2.1 billion were used by the Company for the Prudential acquisition.

COMMITMENTS/CONTRACTUAL OBLIGATIONS

Commitments/contractual obligations have not changed materially from December 31, 2021.

CAPITAL MANAGEMENT AND ADEQUACY

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

In Canada, OSFI has established a 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 is calculated in accordance with OSFI guidelines.

The LICAT Ratio compares the regulatory capital resources of a company to its required capital. The required capital is calibrated so that a life insurer can both withstand severe stress events and support the continuity of existing business. The LICAT guideline uses a risk-based approach for measuring specific life insurer risks and for aggregating the results to calculate the amount of a life insurer's capital requirements.

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 subsidiary, Canada Life, is 110% to 120% (on a consolidated basis).

Canada Life's consolidated LICAT Ratio at June 30, 2022 was 117% (124% at December 31, 2021). The LICAT Ratio does not take into account any impact from $0.8 billion of liquidity at the Lifeco holding company level at June 30, 2022 ($0.6 billion at December 31, 2021).

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

LICAT Ratio	**June 30 2022**	Dec. 31 2021
Tier 1 Capital	**$ 11,991**	$ 12,584
Tier 2 Capital	**4,554**	4,417
Total Available Capital	**16,545**	17,001
Surplus Allowance & Eligible Deposits	**10,626**	13,225
Total Capital Resources	**$ 27,171**	$ 30,226
Required Capital	**$ 23,285**	$ 24,323
Total LICAT Ratio (OSFI Supervisory Target = 100%)[1]	**117 %**	124 %

[1] Total Ratio (%) = (Total Capital Resources / Required Capital)

The LICAT Ratio reduced by two points in the quarter from 119% at March 31, 2022 to 117% at June 30, 2022 driven by the material increase in interest rates. This resulted in a reduction in the fair value of actuarial margins (PfADs) within the Surplus Allowance component of LICAT total capital resources. This reduction was partially offset by the impact of earnings less dividends, refinement to asset liability management strategies and the phasing in of the impact of the LICAT interest rate scenario shift in North America. The interest rate scenario shift occurred during the fourth quarter of 2021, leading to a six point benefit which is being smoothed in at positive one point impact per quarter over six quarters.

LICAT Interest Rate Scenario Shift

The LICAT interest rate risk capital 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 shift in the interest rate scenario applied in the LICAT calculation can result in a discontinuity where capital requirements can change materially. OSFI prescribes a calculation to smooth potential volatility in the interest rate risk capital requirement for participating insurance products. The smoothing calculation averages the participating interest rate risk capital requirements over the trailing six quarters, thereby reducing unwarranted volatility.

The Company last experienced a shift in the interest rate scenario in North America during the fourth quarter of 2021. As a result of the scenario change, a smoothing of the impact of reduced requirements for participating interest rate risk will continue to occur over the next three quarters. Assuming the Company remains on the current scenario, the smoothing calculation is expected to increase the Canada Life LICAT Ratio by approximately one point per quarter for the next three quarters.

LICAT Sensitivities

Caution Related to Sensitivities

This section includes estimates of Canada Life consolidated LICAT Ratio 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;
- 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. 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.

LICAT sensitivities are rounded to the nearest point.

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 June 30, 2022. 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

	June 30, 2022			
	20% increase	**10% increase**	**10% decrease**	**20% decrease**
Potential increase (decrease) on LICAT Ratio	(1 point)	0 point	(1 point)	(3 points)

Interest Rates

Canada Life's consolidated LICAT Ratio will generally reduce in an environment of rising interest rates and benefit from declining rates. Higher interest rates will decrease the fair value of the Company’s surplus assets and other regulatory capital resources including actuarial margins within the Surplus Allowance. However, LICAT uses static interest rates for the calculation of insurance risk capital requirements, and hence these capital requirements do not change with interest rate movements. This means that while rising interest rates are generally favourable for the Company, they will lead to a decrease in the calculated LICAT ratio.

The sensitivity estimates shown here are illustrative. The impacts shown are based on a parallel shift in the interest rate yield curve. Actual movement in credit spreads or government treasury rates may produce different movements in Canada Life's consolidated LICAT Ratio. Sensitivity to interest rates is dependent on many factors and may result in non-linear impacts to the LICAT Ratio. These sensitivities do not include a change in the ultimate interest rates outlined in Actuarial Standards or the impact of a LICAT interest rate risk scenario shift.

Immediate parallel shift in yield curve	**June 30, 2022**	
	50 bps increase	**50 bps decrease**
Potential increase (decrease) on LICAT Ratio	(3 points)	3 points

OSFI Regulatory Capital Initiatives

The International Accounting Standards Board (IASB) has issued IFRS 17, which will replace IFRS 4 with an effective date of January 1, 2023. Refer to the "Accounting Policies - International Financial Reporting Standards" section of the Company's 2021 Annual MD&A for further details.

Subsequent to the second quarter of 2022, on July 21, 2022, OSFI released the 2023 LICAT Guideline. The Company will first report under this guideline in its March 31, 2023 LICAT filing. Based on an initial review of the guideline under the current market and economic conditions, the Company expects a positive impact to the March 31, 2023 LICAT Ratio[1]. If the new LICAT guideline had been in effect, the estimated proforma LICAT ratio as at June 30, 2022 would have been in the mid 120s[1].

OSFI is developing a new approach, to be implemented in 2025, to determine capital requirements for Segregated Fund Guarantee Risk. The Company will continue to participate in future public consultations relating to these developments.

[1] Actual impact will depend on market and economic conditions and the Company's operating results at the time of transition.

RETURN ON EQUITY (ROE)[1]

	June 30 2022	March 31 2022	June 30 2021
Base Return on Equity[2]			
Canada	**16.1 %**	16.5 %	17.4 %
U.S. Financial Services	**10.1 %**	10.4 %	8.6 %
U.S. Asset Management (Putnam)	**3.1 %**	5.0 %	3.4 %
Europe	**16.1 %**	15.0 %	13.0 %
Capital and Risk Solutions	**34.5 %**	36.6 %	38.9 %
Total Lifeco Base Earnings Basis[2]	**14.5 %**	14.7 %	13.9 %
Return on Equity[1]			
Canada	**16.0 %**	16.3 %	16.5 %
U.S. Financial Services	**5.9 %**	7.6 %	6.0 %
U.S. Asset Management (Putnam)	**3.1 %**	4.8 %	14.2 %
Europe	**18.7 %**	17.1 %	16.2 %
Capital and Risk Solutions	**33.0 %**	35.6 %	42.7 %
Total Lifeco Net Earnings Basis[1]	**13.7 %**	14.1 %	15.0 %

1 Refer to the "Glossary" section of this document for additional details on the composition of this measure.
2 This metric is a non-GAAP ratio. Refer to the "Non-GAAP Financial Measures and Ratios" section of this document for additional details.

The Company has a capital allocation methodology, which allocates financing costs in proportion to allocated capital. For the Canada, Europe 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 consistent with the consolidated Company.

RATINGS

Lifeco maintains ratings from five independent ratings companies. Credit ratings[1] are intended to provide investors with an independent measure of the credit quality of a corporation and 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 the second quarter of 2022, the existing credit ratings for Lifeco and its major operating subsidiaries were unchanged[1]. 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.

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.

1 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.

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	A (low)	AA (low)		
Fitch Ratings	Insurer Financial Strength		AA	AA	AA
	Senior Debt	A			
	Subordinated Debt	BBB+	A+		
Moody's Investors Service	Insurance Financial Strength		Aa3		Aa3
S&P Global Ratings	Insurer Financial Strength		AA		AA
	Senior Debt	A+			
	Subordinated Debt	A-	AA-		

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 subsidiaries, GWL&A (Financial Services) and Putnam (Asset Management), together with Lifeco's corporate results. The following sections analyze the performance of Lifeco's four major reportable segments: Canada, United States (U.S.), Europe, and Capital and Risk Solutions.

TRANSLATION OF FOREIGN CURRENCY

For the United States, Europe and Capital and Risk Solutions segments, 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.

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, disability, critical illness, health and dental protection, creditor insurance as well as retirement savings and income and annuity products and other specialty products to group clients in Canada.

Developments

- On May 12, 2022, Canada Life announced the dividend scale interest rate will increase for the policies in the combined open participating account effective July 1, 2022 to 5.25%.
- Canada Life Group Customer and ClaimSecure Inc. (ClaimSecure) had their first significant joint sale in the second quarter of 2022. Integration is going well and quoting momentum is strong.

Selected Financial Information - Canada

	For the three months ended			For the six months ended	
	June 30 2022	March 31 2022	June 30 2021	**June 30 2022**	June 30 2021
Base earnings (loss)[1]					
Individual Customer	**$ 96**	$ 124	$ 162	**$ 220**	$ 300
Group Customer	**207**	138	189	**345**	343
Canada Corporate	**(7)**	10	(58)	**3**	(52)
Base earnings[1]	**$ 296**	$ 272	$ 293	**$ 568**	$ 591
Items excluded from base earnings					
Actuarial assumption changes and other management actions[2]	**$ 1**	$ —	$ (6)	**$ 1**	$ (19)
Market-related impacts on liabilities[2]	**4**	3	1	**7**	3
Net earnings - common shareholders	**$ 301**	$ 275	$ 288	**$ 576**	$ 575
Sales[2]					
Individual Insurance	**$ 97**	$ 93	$ 99	**$ 190**	$ 208
Individual Wealth	**2,364**	2,947	2,549	**5,311**	5,792
Group Insurance	**101**	255	101	**356**	377
Group Wealth	**657**	1,009	596	**1,666**	1,701
Sales[2]	**$ 3,219**	$ 4,304	$ 3,345	**$ 7,523**	$ 8,078
Wealth Management net cash flows[2]					
Individual Customer	**$ (412)**	$ 173	$ 222	**$ (239)**	$ 545
Group Customer	**86**	541	(198)	**627**	(502)
Wealth Management net cash flows[2]	**$ (326)**	$ 714	$ 24	**$ 388**	$ 43
Fee and other income					
Individual Customer	**$ 284**	$ 292	$ 284	**$ 576**	$ 550
Group Customer	**206**	208	192	**414**	380
Canada Corporate	**8**	8	16	**16**	31
Fee and other income	**$ 498**	$ 508	$ 492	**$ 1,006**	$ 961
Total assets	**$ 188,037**	$ 199,781	$ 194,528		
Other assets under management[2,3]	**4,050**	4,721	5,852		
Total assets under management[1]	**192,087**	204,502	200,380		
Other assets under administration[2,4]	**25,800**	28,527	31,521		
Total assets under administration[1,4]	**$ 217,887**	$ 233,029	$ 231,901		

1 This metric is a non-GAAP financial measure. Refer to the "Non-GAAP Financial Measures and Ratios" section of this document for additional details.
2 Refer to the "Glossary" section of this document for additional details on the composition of this measure.
3 At June 30, 2022, other assets under management excluded $2.9 billion in proprietary mutual funds accounted for as investments on account of segregated fund policyholders ($3.1 billion at March 31, 2022 and $1.9 billion at June 30, 2021). Excluding this consolidation adjustment, other assets under management were $6.9 billion at June 30, 2022 ($7.8 billion at March 31, 2022 and $7.8 billion at June 30, 2021).
4 2021 comparative figures have been restated to include Financial Horizons Group and Excel Private Wealth Inc. assets under administration.

Base and net earnings

In the second quarter of 2022, the Canada segment's net earnings of $301 million increased by $13 million compared to the same quarter last year. Base earnings of $296 million increased by $3 million compared to the same quarter last year, primarily due to favourable morbidity and investment experience in Group Customer, partially offset by lower fee income and unfavourable experience in Individual Customer.

Items excluded from base earnings were positive $5 million compared to negative $5 million for the same quarter last year. Actuarial assumption changes and other management actions were positive $1 million compared to negative $6 million for the same quarter last year. Market-related impacts were positive $4 million compared to positive $1 million for the same quarter last year.

For the six months ended June 30, 2022, net earnings increased by $1 million to $576 million compared to the same period last year. Base earnings of $568 million decreased by $23 million compared to the same period last year, primarily due to lower fee income, unfavourable impacts of new business and experience in Individual Customer, and lower surplus investment income on seed money, partially offset by higher investment experience in Group Customer.

For the six months ended June 30, 2022, items excluded from base earnings were positive $8 million compared to negative $16 million for the same period last year. Actuarial assumption changes and other management actions were positive $1 million compared to negative $19 million for the same period last year. Market-related impacts were positive $7 million compared to positive $3 million for the same period last year.

For the second quarter of 2022, the net loss attributable to the participating account was $4 million compared to net earnings of $195 million for the same quarter last year, primarily due to less favourable actuarial assumption changes and other management actions.

For the six months ended June 30, 2022, net earnings attributable to the participating account were $23 million compared to net earnings of $221 million for the same period last year, primarily due to the same reason discussed for the in-quarter result.

Sales

Sales for the second quarter of 2022 of $3.2 billion decreased by $0.1 billion compared to the same quarter last year, primarily due to lower individual mutual fund and segregated fund sales.

For the six months ended June 30, 2022, sales decreased by $0.6 billion to $7.5 billion compared to the same period last year, primarily due to the same reason discussed for the in-quarter results.

In the second quarter of 2022, wealth management net cash outflows were $326 million compared to net inflows of $24 million for the same quarter last year. The decrease was primarily due to higher mutual fund withdrawals in Individual Customer.

Net cash inflows for the six months ended June 30, 2022 were $388 million compared to $43 million for the same period last year, primarily due to the loss of an institutional mandate in 2021 that did not recur.

Fee and other income

Fee and other income for the second quarter of 2022 of $498 million increased by $6 million compared to the same quarter last year. The increase was primarily due to an increase in fee income in Group Customer as a result of the acquisition of ClaimSecure in the third quarter of 2021, partially offset by a decrease in fee income from wealth management businesses as a result of lower market levels and in Canada Corporate as a result of the sale of EverWest Real Estate Investors, LLC and EverWest Advisors, LLC (EverWest) in the fourth quarter of 2021.

For the six months ended June 30, 2022, fee and other income increased by $45 million to $1,006 million compared to the same period last year, primarily due to higher Individual Customer and Group Customer fee income as a result of higher average assets under administration driven by higher average equity market levels as well as the same reasons discussed for the in-quarter results.

UNITED STATES

The United States segment operating results for Lifeco include the results of GWL&A (which operates primarily as 'Empower'), Putnam Investments (Putnam) and the results of the insurance businesses in the U.S. branch of Canada Life, together with an allocation of a portion of Lifeco's corporate results. Subsequent to the second quarter of 2022, Great-West Life & Annuity Insurance Company changed its legal name to Empower Annuity Insurance Company of America.

Through its Financial Services business unit, and specifically the Empower 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. In addition, 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 are also included in the Financial Services business unit.

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

Developments

Financial Services Developments

- Empower assets under administration (AUA) increased to US$1.3 trillion at June 30, 2022 from US$1.1 trillion at December 31, 2021. Empower participant accounts have grown to 17.4 million at June 30, 2022, up from 13.0 million at December 31, 2021. The increases in AUA and participants were primarily the result of the Prudential acquisition.
- On April 1, 2022, Empower completed the previously announced acquisition of the full-service retirement services business of Prudential Financial, Inc. (Prudential). With the completion of the acquisition, Empower's reach in the U.S. has expanded to approximately 71,000 workplace savings plans.

  The Company funded the total transaction value of US$3,480 million with US$1,193 million of limited recourse capital notes and US$823 million of short-term debt, in addition to existing resources.

  Empower anticipates realizing cost synergies through the migration of Prudential's retirement services business onto Empower's recordkeeping platform. Estimated run-rate cost synergies of US$180 million are expected to be phased in over 24 months primarily when systems migrations are completed. As of June 30, 2022, US$25 million of pre-tax run rate cost synergies have been achieved. Revenue synergies of US$20 million are expected on a run-rate basis by the end of 2024 and are expected to grow to US$50 million by 2026.

  Empower expects to incur one-time integration and restructuring expenses of US$170 million pre-tax related to the Prudential acquisition, US$35 million pre-tax of which were incurred in the second quarter of 2022. The integration is expected to be completed in the first half of 2024.

(in US$ millions)	**For the three months ended**		**For the six months ended**	**Total incurred to date**
	June 30 2022	March 31 2022	**June 30 2022**	**June 30 2022**
Restructuring and integration (pre-tax)	**$ 35**	$ —	**$ 35**	**$ 35**
Restructuring and integration (post-tax)	**26**	—	**26**	**26**
Transaction costs (pre-tax)	**52**	2	**54**	**61**
Transaction costs (post-tax)	**42**	1	**43**	**49**

- As of June 30, 2022, US$88 million of pre-tax run rate cost synergies have been achieved related to Empower's acquisition of MassMutual's retirement services business compared to US$80 million pre-tax as of March 31, 2022. Empower remains on track to achieve run rate cost synergies of US$160 million pre-tax at the end of integration in 2022 and to achieve run rate revenue synergies of US$30 million in 2023 and continue to grow beyond 2023.

  Empower expects to incur restructuring and integration expenses of US$125 million pre-tax related to the MassMutual acquisition. The integration remains on track to be completed in the second half of 2022.

(in US$ millions)	For the three months ended			For the six months ended	Total incurred to date
	June 30 2022	March 31 2022	June 30 2021	**June 30 2022**	**June 30 2022**
Restructuring and integration (pre-tax)	**$ 10**	$ 7	$ 8	**$ 17**	**$ 91**
Restructuring and integration (post-tax)	**7**	6	6	**13**	**69**

- As a result of the acquisition of Personal Capital in the third quarter of 2020, Empower expects to incur total integration expenses of US$57 million pre-tax. The integration is expected to be completed in the second half of 2022. At June 30, 2022, Empower has recognized total pre-tax contingent consideration transaction expense of US$102 million (nil during the six months ended June 30, 2022), primarily based on a higher best estimate of net new assets above the amount assumed in the purchase price.

(in US$ millions)	For the three months ended			For the six months ended	Total incurred to date
	June 30 2022	March 31 2022	June 30 2021	**June 30 2022**	**June 30 2022**
Restructuring and integration (pre-tax)	**$ 3**	$ 6	$ 5	**$ 9**	**$ 35**
Restructuring and integration (post-tax)	**2**	4	3	**6**	**25**
Transaction costs (pre-tax)	**—**	—	17	**—**	**102**
Transaction costs (post-tax)	**—**	—	17	**—**	**96**

Asset Management Developments

- Putnam’s ending other assets under management (AUM) at June 30, 2022 of US$167.0 billion decreased by 13% compared to March 31, 2022, while average AUM for the three months ended June 30, 2022 of US$177.9 billion decreased 10% compared to the same quarter last year.

- Putnam continues to sustain strong investment performance relative to its peers. As of June 30, 2022, approximately 65% and 79% of Putnam's fund assets performed at levels above the Lipper median on a three-year and five-year basis, respectively. In addition, 42% and 64% of Putnam's fund assets were in the Lipper top quartile on a three-year and five-year basis, respectively. Putnam has 23 funds currently rated 4 or 5 stars by Morningstar Ratings.

- During the second quarter of 2022, Putnam made a series of product-related announcements to meet evolving market demand for sustainable investment options, which are expected to launch over the coming months:

  - The launching of three actively managed, transparent exchange traded funds (ETFs), each with a distinct investment focus.

  - The repositioning of Putnam's RetirementReady Funds target-date series as the Putnam Sustainable Retirement Funds, employing sustainability-focused or environmental, social and governance (ESG) principles and strategies.

- The launching of three active fixed income and two active quantitative equity ETFs with an ESG focus. These fixed income and quantitative equity ESG ETFs, along with the existing Putnam Sustainable Leaders ETF and Putnam Sustainable Future ETF, will serve as underlying investment components within the Putnam Sustainable Retirement Funds.

Selected Financial Information - United States

	For the three months ended			For the six months ended	
	June 30 2022	March 31 2022	June 30 2021	**June 30 2022**	June 30 2021
Base earnings[1]	**$ 143**	$ 120	$ 190	**$ 263**	$ 294
Items excluded from base earnings					
Market-related impacts on liabilities[2]	**(17)**	(2)	(1)	**(19)**	(3)
Restructuring and integration costs	**(44)**	(12)	(15)	**(56)**	(27)
Transaction costs related to acquisitions	**(53)**	(1)	(24)	**(54)**	(25)
Net earnings - common shareholders	**$ 29**	$ 105	$ 150	**$ 134**	$ 239
Sales[2]	**$ 26,329**	$ 62,807	$ 36,368	**$ 89,136**	$ 135,307
Fee and other income	**1,071**	949	960	**2,020**	1,887
Base earnings (US$)[1]	**$ 113**	$ 95	$ 155	**$ 208**	$ 236
Items excluded from base earnings (US$)					
Market-related impacts on liabilities[2]	**(13)**	(2)	—	**(15)**	(1)
Restructuring and integration costs	**(35)**	(10)	(13)	**(45)**	(22)
Transaction costs related to acquisitions	**(42)**	(1)	(20)	**(43)**	(21)
Net earnings - common shareholders (US$)	**$ 23**	$ 82	$ 122	**$ 105**	$ 192
Sales (US$)[2]	**$ 20,570**	$ 49,454	$ 29,568	**$ 70,024**	$ 107,473
Fee and other income (US$)	**837**	747	781	**1,584**	1,511
Total assets (US$)[3]	**$ 230,480**	$ 157,947	$ 165,027		
Other assets under management[2,3]	**204,946**	233,699	234,508		
Total assets under management[1,3]	**435,426**	391,646	399,535		
Other assets under administration[2,3]	**1,020,783**	954,489	936,245		
Total assets under administration (US$)[1,3]	**$ 1,456,209**	$ 1,346,135	$ 1,335,780		
Total assets under administration (C$)[1,3]	**$ 1,878,510**	$ 1,682,669	$ 1,656,368		

[1] This metric is a non-GAAP financial measure. Refer to the "Non-GAAP Financial Measures and Ratios" section of this document for additional details.

[2] Refer to the "Glossary" section of this document for additional details on the composition of this measure.

[3] The Prudential acquisition during the second quarter of 2022 added US$90 billion (C$116 billion) in total assets, US$1 billion (C$1 billion) in other assets under management and US$193 billion (C$250 billion) in other assets under administration as at June 30, 2022.

Financial Services Operating Results

	For the three months ended			For the six months ended	
	June 30 2022	March 31 2022	June 30 2021	**June 30 2022**	June 30 2021
Base earnings[1]	**$ 156**	$ 134	$ 171	**$ 290**	$ 278
Items excluded from base earnings					
Market-related impact on liabilities[2]	**(17)**	(2)	(1)	**(19)**	(3)
Restructuring and integration costs	**(32)**	(12)	(11)	**(44)**	(23)
Net earnings - common shareholders	**$ 107**	$ 120	$ 159	**$ 227**	$ 252
Sales[2]	**$ 14,783**	$ 49,686	$ 23,921	**$ 64,469**	$ 106,765
Fee and other income	**797**	653	660	**1,450**	1,287
Base earnings (US$)[1]	**$ 123**	$ 106	$ 139	**$ 229**	$ 223
Items excluded from base earnings (US$)					
Market-related impact on liabilities[2]	**(13)**	(2)	—	**(15)**	(1)
Restructuring and integration costs	**(26)**	(10)	(9)	**(36)**	(18)
Net earnings - common shareholders (US$)	**$ 84**	$ 94	$ 130	**$ 178**	$ 204
Sales (US$)[2]	**$ 11,549**	$ 39,123	$ 19,448	**$ 50,672**	$ 84,679
Fee and other income (US$)	**623**	514	537	**1,137**	1,030

1 This metric is a non-GAAP financial measure. Refer to the "Non-GAAP Financial Measures and Ratios" section of this document for additional details.
2 Refer to the "Glossary" section of this document for additional details on the composition of this measure.

Base and net earnings

In the second quarter of 2022, net earnings of US$84 million decreased by US$46 million compared to the same quarter last year. Base earnings of US$123 million decreased by US$16 million compared to the same quarter last year, primarily due to lower Empower net fee income and higher operating expenses to support participant growth. These items were partially offset by base earnings of US$35 million related to the Prudential acquisition as well as higher contributions from investment experience.

Items excluded from base earnings for the second quarter of 2022 were negative US$39 million compared to negative US$9 million for the same quarter last year, primarily due to market volatility resulting in hedge ineffectiveness related to Prudential guaranteed lifetime withdrawal benefit products and higher integration costs related to the Prudential acquisition.

For the six months ended June 30, 2022, net earnings decreased by US$26 million to US$178 million compared to the same period last year. Base earnings of US$229 million increased by US$6 million compared to the same period last year, primarily due to base earnings of US$35 million related to the Prudential acquisition as well as higher contributions from investment experience, partially offset by lower Empower net fee income as well as higher operating expenses to support participant growth.

For the six months ended June 30, 2022, items excluded from base earnings were negative US$51 million compared to negative US$19 million for the same period last year, primarily due to the same reasons discussed for the in-quarter results.

Sales

Sales in the second quarter of 2022 of US$11.5 billion decreased by US$7.9 billion compared to the same quarter last year. The decrease was primarily due to lower Empower large plan sales. Included in sales for the second quarter of 2021 was one Empower large plan sale. Large plan sales can be highly variable from period to period and tend to be lower margin; however, contribute to covering fixed overhead costs.

For the six months ended June 30, 2022, sales decreased by US$34.0 billion to US$50.7 billion compared to the same period last year, primarily due to the same reason discussed for the in-quarter results. Included in sales for the first quarter of 2021 was one Empower large plan sale relating to a new client with approximately 316,000 participants.

Fee and other income

Fee income is derived primarily from assets under management, assets under administration, shareholder servicing fees, administration and recordkeeping services, investment advisory services, investment management fees, performance fees, transfer agency and other service fees, as well as underwriting and distribution fees.

Fee and other income for the second quarter of 2022 of US$623 million increased by US$86 million compared to the same quarter last year. The increase was primarily due to Prudential fee income of US$148 million, partially offset by lower Empower fee income driven by lower AUA and transaction volumes.

For the six months ended June 30, 2022, fee and other income increased by US$107 million to US$1,137 million compared to the same period last year, primarily for the same reasons discussed for the in-quarter results.

Asset Management Operating Results

	For the three months ended			For the six months ended	
	June 30 2022	March 31 2022	June 30 2021	**June 30 2022**	June 30 2021
Core net earnings (loss)[1]	**$ (9)**	$ 1	$ 30	**$ (8)**	$ 37
Non-core net earnings (loss)[1]	**(3)**	(6)	(9)	**(9)**	(19)
Net earnings (loss)[2]	**$ (12)**	$ (5)	$ 21	**$ (17)**	$ 18
Sales[3]	**$ 11,546**	$ 13,121	$ 12,447	**$ 24,667**	$ 28,542
Fee income					
Investment management fees	**$ 195**	$ 208	$ 208	**$ 403**	$ 415
Performance fees	**(3)**	—	1	**(3)**	2
Service fees	**35**	36	36	**71**	72
Underwriting & distribution fees	**47**	52	55	**99**	111
Fee income	**$ 274**	$ 296	$ 300	**$ 570**	$ 600
Core net earnings (loss) (US$)[1]	**$ (7)**	$ 1	$ 25	**$ (6)**	$ 30
Non-core net earnings (loss) (US$)[1]	**(2)**	(5)	(8)	**(7)**	(16)
Net earnings (loss) (US$)[2]	**$ (9)**	$ (4)	$ 17	**$ (13)**	$ 14
Sales (US$)[3]	**$ 9,021**	$ 10,331	$ 10,120	**$ 19,352**	$ 22,794
Fee income (US$)					
Investment management fees	**$ 152**	$ 164	$ 169	**$ 316**	$ 332
Performance fees	**(2)**	—	1	**(2)**	2
Service fees	**27**	28	29	**55**	58
Underwriting & distribution fees	**37**	41	45	**78**	89
Fee income (US$)	**$ 214**	$ 233	$ 244	**$ 447**	$ 481
Core margin (pre-tax)[4]	**(4.5)%**	0.4 %	13.1 %	**(2.0)%**	8.2 %

1 This metric is a non-GAAP financial measure. Refer to the "Non-GAAP Financial Measures and Ratios" 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.
3 Refer to the "Glossary" section of this document for additional details on the composition of this measure.
4 This metric is a non-GAAP ratio. Refer to the "Non-GAAP Financial Measures and Ratios" section of this document for additional details.

Net earnings

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

The net loss for the second quarter of 2022 was US$9 million compared to net earnings of US$17 million for the same period last year, primarily driven by lower other AUM-based fee revenue and lower net investment income, partially offset by lower expenses.

The net loss for the six months ended June 30, 2022 was US$13 million compared to net earnings of US$14 million for the same period last year, primarily due to the same reasons discussed for the in-quarter results.

Sales

Sales in the second quarter of 2022 decreased by US$1.1 billion to US$9.0 billion compared to the same quarter last year, primarily due to a decrease in institutional sales of US$1.0 billion.

For the six months ended June 30, 2022, sales decreased by US$3.4 billion to US$19.4 billion compared to the same period last year, primarily due to a US$2.0 billion decrease in institutional sales and a US$1.4 billion decrease in mutual fund sales.

Fee income

Fee income is derived primarily from investment management fees, performance fees, transfer agency and other service fees, as well as underwriting and distribution fees. Generally, fees are earned based on AUM and may depend on financial markets, the relative performance of Putnam's investment products, the number of retail accounts and sales. 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 second quarter of 2022 decreased by US$30 million to US$214 million compared to the same quarter last year. The decrease was primarily due to lower investment management fees and underwriting and distribution fees driven by lower other AUM as a result of lower equity markets. The decrease in underwriting and distribution fees was partially offset by lower distribution expenses.

For the six months ended June 30, 2022, fee income decreased by US$34 million to US$447 million compared to the same period last year, primarily due to the same reasons discussed for the in-quarter results.

Other Assets Under Management (AUM) - Putnam (US$)[1,2]

	For the three months ended			For the six months ended	
	June 30 2022	March 31 2022	June 30 2021	**June 30 2022**	June 30 2021
Beginning other AUM	**$ 192,328**	$ 202,532	$ 193,470	**$ 202,532**	$ 191,554
Sales - Mutual funds and ETFs[1]	**$ 5,396**	$ 5,584	$ 5,525	**$ 10,980**	$ 12,394
Redemptions - Mutual funds and ETFs	**(7,185)**	(7,312)	(6,992)	**(14,497)**	(14,106)
Net asset flows - Mutual funds and ETFs[1]	**(1,789)**	(1,728)	(1,467)	**(3,517)**	(1,712)
Sales - Institutional[1]	**$ 3,625**	$ 4,747	$ 4,595	**$ 8,372**	$ 10,400
Redemptions - Institutional	**(6,210)**	(5,454)	(6,811)	**(11,664)**	(14,347)
Net asset flows - Institutional[1]	**(2,585)**	(707)	(2,216)	**(3,292)**	(3,947)
Net asset flows - Total[1]	**$ (4,374)**	$ (2,435)	$ (3,683)	**$ (6,809)**	$ (5,659)
Impact of market/performance	**(20,989)**	(7,769)	8,784	**(28,758)**	12,676
Ending other AUM[3]	**$ 166,965**	$ 192,328	$ 198,571	**$ 166,965**	$ 198,571
Average other AUM[1]					
Mutual funds and ETFs	**$ 85,250**	$ 92,643	$ 97,139	**$ 88,946**	$ 95,763
Institutional assets	**92,658**	101,195	100,088	**96,926**	99,845
Total average other AUM[1]	**$ 177,908**	$ 193,838	$ 197,227	**$ 185,872**	$ 195,608

1 Refer to the "Glossary" section of this document for additional details on the composition of this measure.

2 Other assets under management excluded US$707 million at June 30, 2022 in assets for which Putnam provides investment recommendations, but has no control over implementation of investment decisions and no trading authority, including model portfolios and model-only separately managed accounts, and Putnam-designed custom indices that serve as the reference benchmark for third-party insurance investment products (US$602 million at March 31, 2022 and US$208 million at June 30, 2021).

3 At June 30, 2022, ending other AUM included US$20.7 billion of assets managed for other business units within the Lifeco group of companies (US$22.1 billion at March 31, 2022 and US$21.0 billion at June 30, 2021).

Putnam's average other AUM for the three months ended June 30, 2022 were US$177.9 billion, a decrease of US$19.3 billion compared to the same quarter last year, primarily due to the impact of lower equity markets. Net asset outflows for the second quarter of 2022 were US$4.4 billion compared to net asset outflows of US$3.7 billion in the same quarter last year.

United States Corporate Operating Results

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.

	For the three months ended			For the six months ended	
	June 30 2022	March 31 2022	June 30 2021	**June 30 2022**	June 30 2021
Base earnings (loss)[1]	**$ (1)**	$ (9)	$ (2)	**$ (10)**	$ (2)
Items excluded from base earnings (loss)					
Transaction costs related to acquisitions	**(53)**	(1)	(24)	**(54)**	(25)
Restructuring and integration costs	**(12)**	—	(4)	**(12)**	(4)
Net earnings (loss) - common shareholders	**$ (66)**	$ (10)	$ (30)	**$ (76)**	$ (31)
Base earnings (loss) (US$)[1]	**$ (1)**	$ (7)	$ (1)	**$ (8)**	$ (1)
Items excluded from base earnings (loss) (US$)					
Transaction costs related to acquisitions	**(42)**	(1)	(20)	**(43)**	(21)
Restructuring and integration costs	**(9)**	—	(4)	**(9)**	(4)
Net earnings (loss) - common shareholders (US$)	**$ (52)**	$ (8)	$ (25)	**$ (60)**	$ (26)

1 This metric is a non-GAAP financial measure. Refer to the "Non-GAAP Financial Measures and Ratios" section of this document for additional details.

Net earnings

In the second quarter of 2022, the net loss was US$52 million compared to a net loss of US$25 million for the same quarter last year, primarily due to higher restructuring and transaction costs related to the Prudential acquisition.

For the six months ended June 30, 2022, the net loss increased by US$34 million to US$60 million compared to the same period last year, primarily due to the same reasons discussed for the in-quarter results.

EUROPE

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

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.

The core products offered by Irish Life Group Limited (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 clients including pension schemes, insurance companies, wealth managers, fiduciary managers and sovereign wealth funds across Europe and North America. Setanta Asset Management, a subsidiary of the Company, manages assets for third-party institutional clients and a number of companies in the Lifeco group. The Company also owns a number of employee benefits and wealth consultancy businesses in Ireland.

The core products offered by the Germany business unit are individual and group pensions and life insurance products. These products are distributed through independent brokers and multi-tied agents.

Developments

- In the second quarter of 2021, a 50:50 joint venture agreement was reached by Allied Irish Banks plc (AIB) and Canada Life Irish Holding Company Limited to form a new life assurance company. The new life assurance company is working towards being fully licensed and ready for launch by the end of 2022. In the second quarter of 2022, the Company incurred transaction costs of $4 million ($10 million incurred to date) related to this agreement. The joint venture agreement is subject to customary regulatory approval and authorization processes.
- In the second quarter of 2022, Irish Life invested in a minority shareholding in U.K.-based financial technology company Multiply.AI (Multiply). Multiply helps clients achieve their financial goals by connecting them through an automated digital advice service to their own individual financial plans with recommended next steps and access to their chosen advisor. This investment allows Irish Life to build on its existing digital capabilities by designing and building compliant digital customer journeys specific to the Irish market.
- The recent group protection industry survey 'Group Watch 2022' from Swiss Re confirmed Canada Life U.K. as the leading provider by in-force premium, policies and lives insured.
- In the second quarter of 2022, ASSEKURATA Assekuranz Rating-Agentur GmbH, a German financial strength rating agency, raised the credit rating of Canada Life Assurance Europe plc, a subsidiary of Canada Life, from AA- to AA, making Canada Life one of the highest rated life insurance companies in Germany.
- Beginning April 2022, Canada Life’s Potters Bar and London offices are being supplied with 100% renewable REGO-certified electricity (Renewable Energy Guarantees of Origin), making the carbon emissions from electricity in these offices effectively zero.

Selected Financial Information - Europe

	For the three months ended			For the six months ended	
	June 30 2022	March 31 2022	June 30 2021	**June 30 2022**	June 30 2021
Base earnings (loss)[1]					
United Kingdom	**$ 101**	$ 138	$ 53	**$ 239**	$ 173
Ireland	**74**	69	68	**143**	111
Germany	**40**	42	72	**82**	112
Europe Corporate	**(7)**	(4)	(9)	**(11)**	(11)
Base earnings[1]	**$ 208**	$ 245	$ 184	**$ 453**	$ 385
Items excluded from base earnings					
Actuarial assumption changes and other management actions[2]	**19**	(8)	41	**11**	59
Market-related impact on liabilities[2]	**6**	(12)	(19)	**(6)**	(43)
Transaction costs related to acquisitions	**(4)**	(6)	—	**(10)**	—
Tax legislative changes impact on liabilities	**—**	—	(21)	**—**	(21)
Net earnings - common shareholders	**$ 229**	$ 219	$ 185	**$ 448**	$ 380
Sales[2]					
Insurance	**$ 924**	$ 1,198	$ 766	**$ 2,122**	$ 1,363
Wealth Management	**4,977**	7,161	5,160	**12,138**	11,789
Sales[2]	**$ 5,901**	$ 8,359	$ 5,926	**$ 14,260**	$ 13,152
Wealth and investment only net cash flows[2]					
United Kingdom	**$ 236**	$ 203	$ 172	**$ 439**	$ 197
Ireland	**(360)**	2,402	95	**2,042**	598
Germany	**194**	282	219	**476**	433
Wealth and investment only net cash flows[2]	**$ 70**	$ 2,887	$ 486	**$ 2,957**	$ 1,228
Fee and other income					
United Kingdom	**$ 47**	$ 42	$ 39	**$ 89**	$ 85
Ireland	**186**	193	192	**379**	383
Germany	**107**	119	115	**226**	231
Fee and other income	**$ 340**	$ 354	$ 346	**$ 694**	$ 699
Total assets	**$ 169,322**	$ 187,178	$ 189,839		
Other assets under management[2]	**50,251**	57,091	61,655		
Total assets under management[1]	**219,573**	244,269	251,494		
Other assets under administration[2,3]	**10,699**	11,673	12,169		
Total assets under administration[2]	**$ 230,272**	$ 255,942	$ 263,663		

1 This metric is a non-GAAP financial measure. Refer to the "Non-GAAP Financial Measures and Ratios" section of this document for additional details.
2 Refer to the "Glossary" section of this document for additional details on the composition of this measure.
3 At June 30, 2022, other assets under administration excluded $9.6 billion of assets managed for other business units within the Lifeco group of companies ($10.3 billion at March 31, 2022 and $7.8 billion at June 30, 2021).

Base and net earnings

In the second quarter of 2022, the Europe segment's net earnings of $229 million increased by $44 million compared to the same quarter last year. Base earnings of $208 million increased by $24 million compared to the same quarter last year, primarily due to favourable investment experience in the U.K., favourable morbidity experience in Ireland as well as favourable mortality experience in the U.K. and Ireland, partially offset by the impact of currency movement. In addition, the Company had a revaluation of deferred taxes resulting in an increase in taxes in the second quarter of 2021; there was no revaluation in 2022.

Items excluded from base earnings for the second quarter of 2022 were positive $21 million compared to positive $1 million for the same quarter last year. The increase was primarily due to favourable market-related impacts driven by property cash flows in the U.K. in the second quarter of 2022 and unfavourable U.K. tax legislative changes in the second quarter of 2021. The increase was partially offset by lower actuarial assumption changes as well as transaction costs related to the joint venture agreement with AIB in Ireland.

For the six months ended June 30, 2022, net earnings increased by $68 million to $448 million compared to the same period last year. Base earnings of $453 million increased by $68 million compared to the same period last year. The increase was primarily due to higher fee income and favourable morbidity experience in Ireland, favourable investment experience in the U.K. and favourable mortality experience in Ireland and the U.K. The six months ended June 30, 2021 included a revaluation of deferred taxes discussed for the in-quarter results. The increase was partially offset by less favourable annuitant experience in the U.K. and the impact of currency movement.

For the six months ended June 30, 2022, items excluded from base earnings of negative $5 million were comparable to the same period last year. Less unfavourable market-related impacts on liabilities, transaction costs and contingent consideration provisions related to recent acquisitions in Ireland as well as unfavourable U.K. tax legislative changes in the second quarter of 2021 were offset by lower actuarial assumption changes.

Sales

Sales for the second quarter of 2022 decreased by $25 million to $5.9 billion compared to the same quarter last year. Higher wealth management sales in the U.K. and Ireland as well as growth in equity release mortgage sales in the U.K. were more than offset by the negative impact of currency movement.

For the six months ended June 30, 2022, sales increased by $1.1 billion to $14.3 billion compared to the same period last year, primarily due to higher wealth management sales across all business units as well as growth in equity release mortgage and bulk annuity sales in the U.K., partially offset by the impact of currency movement.

In the second quarter of 2022, wealth and investment only net cash inflows were $70 million compared to $486 million for the same quarter last year. The decrease was primarily due to higher fund management outflows in Ireland and lower wealth management sales in Germany, partially offset by higher wealth management sales in the U.K. For the six months ended June 30, 2022, net cash inflows were $2,957 million compared to $1,228 million for the same period last year, primarily due to higher wealth management sales across all business units.

Fee and other income

Fee and other income for the second quarter of 2022 decreased by $6 million to $340 million compared to the same quarter last year, primarily due to the impact of currency movement, partially offset by higher management fees on segregated fund assets across all business units.

For the six months ended June 30, 2022, fee and other income decreased by $5 million to $694 million compared to the same period last year, primarily due to the same reasons discussed for the in-quarter results.

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 includes the results for the segment's legacy international businesses.

Developments

- In the second quarter of 2022, Capital and Risk Solutions continued growing its international presence in Asia, Europe and the U.S. The Company entered into a second mortgage reinsurance agreement with an insurance company in Israel, completed new longevity contracts in the U.K. and added new structured transactions in the U.S. during the quarter.

Selected Financial Information - Capital and Risk Solutions

	For the three months ended			For the six months ended	
	June 30 2022	March 31 2022	June 30 2021	**June 30 2022**	June 30 2021
Base earnings (loss)[1]					
Reinsurance	**$ 176**	$ 171	$ 151	**$ 347**	$ 297
Capital and Risk Solutions Corporate	**(2)**	(1)	(1)	**(3)**	(2)
Base earnings[1]	**$ 174**	$ 170	$ 150	**$ 344**	$ 295
Items excluded from base earnings					
Actuarial assumption changes and other management actions[2]	**1**	(1)	2	**—**	2
Market-related impact on liabilities[2]	**(8)**	—	—	**(8)**	—
Net earnings - common shareholder	**$ 167**	$ 169	$ 152	**$ 336**	$ 297
Total net premiums					
Reinsurance	**$ 8,752**	$ 7,308	$ 6,278	**$ 16,060**	$ 13,740
Capital and Risk Solutions Corporate	**4**	4	4	**8**	8
Total net premiums	**$ 8,756**	$ 7,312	$ 6,282	**$ 16,068**	$ 13,748
Total assets[3]	**$ 15,627**	$ 16,066	$ 15,175		

1 This metric is a non-GAAP financial measure. Refer to the "Non-GAAP Financial Measures and Ratios" section of this document for additional details.
2 Refer to the "Glossary" section of this document for additional details on the composition of this measure.
3 The Capital and Risk Solutions segment does not have other assets under management or other assets under administration.

Base and net earnings

In the second quarter of 2022, the Capital and Risk Solutions segment's net earnings of $167 million increased by $15 million compared to the same quarter last year. Base earnings of $174 million increased by $24 million compared to the same quarter last year. The increase was primarily due to growth in business in-force, favourable claims experience in the U.S. life business and the commutation of a reinsurance treaty, partially offset by the impact of currency movement.

Items excluded from base earnings were negative $7 million compared to positive $2 million for the same quarter last year. The second quarter of 2022 included an increase in actuarial liabilities on a legacy block of business with investment performance guarantees, reflecting negative market-related experience during the quarter.

For the six months ended June 30, 2022, net earnings increased by $39 million to $336 million compared to the same period last year. Base earnings of $344 million increased by $49 million compared to the same period last year, primarily due to the same reasons discussed for the in-quarter results.

For the six months ended June 30, 2022, items excluded from base earnings were negative $8 million compared to positive $2 million for the same period last year, primarily due to the same reason discussed for the in-quarter results.

Total net premiums
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.

Total net premiums for the second quarter of 2022 of $8.8 billion increased by $2.5 billion compared to the same quarter last year, primarily due to new reinsurance agreements.

For the six months ended June 30, 2022, total net premiums increased by $2.3 billion to $16.1 billion compared to the same period last year, primarily due to the same reason 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.

In the second quarter of 2022, Lifeco Corporate net earnings of $9 million were comparable to the same quarter last year.

For the six months ended June 30, 2022, Lifeco Corporate net earnings were $11 million compared to nil for the same period last year, primarily due to higher net investment income, partially offset by lower operating expenses. There were no differences between Lifeco Corporate net earnings and base earnings in the periods presented.

RISK MANAGEMENT AND CONTROL PRACTICES
The Company’s Enterprise Risk Management (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 potential losses and risk. The Company’s Risk Function is responsible for developing and maintaining the Risk Appetite Framework (RAF), the supporting risk policies and risk limit structure, and provides independent risk oversight across the Company’s operations. The Board of Directors is ultimately accountable and responsible for the Company's risk governance and associated risk policies. These include the ERM Policy, which establishes the guiding principles of risk management, and the RAF, which reflects the levels and types of risk that the Company is willing to accept to achieve its business objectives.

During the second quarter of 2022, there were no significant changes to the Company's risk management and control practices, including the risks (financial, operational, regulatory and other risks) related to the COVID-19 pandemic and geopolitical tensions.

Refer to the Company's 2021 Annual MD&A for a detailed description of the Company's risk management and control practices.

ACCOUNTING POLICIES

INTERNATIONAL FINANCIAL REPORTING STANDARDS
There were IFRS changes in 2022 which did not have a significant impact on the Company. As well, due to the evolving nature of IFRS, there are changes to 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 amendments to IFRS for IAS 37, *Provisions, Contingent Liabilities and Contingent Assets* and *Annual Improvements 2018-2020 Cycl*e for the amendment to IFRS 16, *Leases* effective January 1, 2022. The adoption of these amendments did not have a significant impact on the Company’s financial statements.

There have been no other significant changes to the future accounting policies, including IFRS 17, *Insurance Contracts*, and IFRS 9, *Financial Instruments*, that are expected to impact the Company, in addition to the disclosure in the Company's December 31, 2021 Annual MD&A.

IFRS 17, *Insurance Contracts* (IFRS 17), will replace IFRS 4, *Insurance Contracts* effective January 1, 2023. 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 expects its insurance contract liabilities, including the contractual service margin, to increase upon adoption. The January 1, 2022 shareholders' equity is expected to decrease by 10% to 15% on the retroactive application of IFRS 17 on January 1, 2023, primarily due to the establishment of the contractual service margin. The Company continues to assess the impacts through its global implementation plan, however the accounting policy change will not impact the economics of the affected businesses or the Company's business model. The Company continues to make progress in implementing its project plan and will be compliant with the standard effective January 1, 2023.

IFRS 9, *Financial Instruments* (IFRS 9) will replace IAS 39, *Financial Instruments: Recognition and Measurement* effective January 1, 2023. 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.

The disclosure for the measurement and classification of the Company's portfolio investments provides most of the information required by IFRS 9. Upon adoption of IFRS 9 on January 1, 2023, the Company does not expect a material change in the level of invested assets, nor a material increase in earnings volatility. The Company anticipates electing the option of presenting comparative information about a financial asset as if the classification and measurement requirements of IFRS 9 had been applied to that financial asset in the comparative period, as permitted by the amendment to IFRS 17 published by the IASB in December 2021. The Company continues to evaluate the impact of the adoption of this standard with the adoption of IFRS 17.

For a further description of accounting policies, including future accounting standard changes, refer to note 2 of the Company's condensed consolidated interim unaudited financial statements for the period ended June 30, 2022.

OTHER INFORMATION

NON-GAAP FINANCIAL MEASURES AND RATIOS

Non-GAAP Financial Measures

The Company uses several non-GAAP financial measures to measure overall performance of the Company and to assess each of its business units. A financial measure is considered a non-GAAP measure for Canadian securities law purposes if it is presented other than in accordance with GAAP 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 International Accounting Standards Board (IASB). Non-GAAP financial measures do not have a standardized meaning under GAAP and may not be comparable to similar financial measures presented by other issuers. Investors may find these financial measures useful in understanding how management views the underlying business performance of the Company.

Base earnings (loss)

Base earnings (loss) reflect management's view of the underlying business performance of the Company and provide an alternate measure to understand the underlying business performance compared to IFRS net earnings (loss). Base earnings (loss) exclude the following items:

- 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, when removed, assist in explaining the Company's underlying business performance 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.

Lifeco[1]

	For the three months ended			For the six months ended	
	June 30 2022	March 31 2022	June 30 2021	**June 30 2022**	June 30 2021
Base earnings	**$ 830**	$ 809	$ 826	**$ 1,639**	$ 1,565
Items excluded from Lifeco base earnings					
Actuarial assumption changes and other management actions (pre-tax)	**$ 24**	$ (9)	$ 42	**$ 15**	$ 46
Income tax (expense) benefit	**(3)**	—	(5)	**(3)**	(4)
Market-related impacts on liabilities (pre-tax)	**(19)**	(14)	(14)	**(33)**	(39)
Income tax (expense) benefit	**4**	3	(5)	**7**	(4)
Transaction costs related to acquisitions (pre-tax)	**(71)**	(8)	(25)	**(79)**	(27)
Income tax (expense) benefit	**14**	1	1	**15**	2
Restructuring and integration costs (pre-tax)	**(60)**	(17)	(21)	**(77)**	(37)
Income tax (expense) benefit	**16**	5	6	**21**	10
Tax legislative changes impact on liabilities	**—**	—	(21)	**—**	(21)
Total pre-tax items excluded from base earnings	**$ (126)**	$ (48)	$ (18)	**$ (174)**	$ (57)
Impact of items excluded from base earnings on income taxes	**31**	9	(24)	**40**	(17)
Net earnings - common shareholders	**$ 735**	$ 770	$ 784	**$ 1,505**	$ 1,491

[1] There is no difference between base earnings and net earnings for Lifeco Corporate in the periods presented.

Canada

	For the three months ended			For the six months ended	
	June 30 2022	March 31 2022	June 30 2021	**June 30 2022**	June 30 2021
Base earnings	**$ 296**	$ 272	$ 293	**$ 568**	$ 591
Items excluded from base earnings					
Actuarial assumption changes and other management actions (pre-tax)	**$ 1**	$ 1	$ (7)	**$ 2**	$ (25)
Income tax (expense) benefit	**—**	(1)	1	**(1)**	6
Market-related impacts on liabilities (pre-tax)	**6**	4	1	**10**	3
Income tax (expense) benefit	**(2)**	(1)	—	**(3)**	—
Net earnings - common shareholders	**$ 301**	$ 275	$ 288	**$ 576**	$ 575

United States

	For the three months ended			For the six months ended	
	June 30 2022	March 31 2022	June 30 2021	**June 30 2022**	June 30 2021
Base earnings	**$ 143**	$ 120	$ 190	**$ 263**	$ 294
Items excluded from base earnings					
Market-related impacts on liabilities (pre-tax)	**$ (21)**	$ (3)	$ (1)	**$ (24)**	$ (3)
Income tax (expense) benefit	**4**	1	—	**5**	—
Restructuring and integration costs (pre-tax)	**(60)**	(17)	(21)	**(77)**	(37)
Income tax (expense) benefit	**16**	5	6	**21**	10
Transaction costs related to acquisitions (pre-tax)	**(67)**	(2)	(25)	**(69)**	(27)
Income tax (expense) benefit	**14**	1	1	**15**	2
Net earnings - common shareholders	**$ 29**	$ 105	$ 150	**$ 134**	$ 239

Europe

	For the three months ended			For the six months ended	
	June 30 2022	March 31 2022	June 30 2021	**June 30 2022**	June 30 2021
Base earnings	**$ 208**	$ 245	$ 184	**$ 453**	385
Items excluded from base earnings					
Actuarial assumption changes and other management actions (pre-tax)	**$ 22**	$ (9)	48	**$ 13**	$ 70
Income tax (expense) benefit	**(3)**	1	(7)	**(2)**	(11)
Market-related impacts on liabilities (pre-tax)	**4**	(15)	(14)	**(11)**	(39)
Income tax (expense) benefit	**2**	3	(5)	**5**	(4)
Transaction costs related to acquisitions (pre-tax)	**(4)**	(6)	—	**(10)**	—
Income tax (expense) benefit	**—**	—	—	**—**	—
Tax legislative changes impact on liabilities	**—**	—	(21)	**—**	(21)
Net earnings - common shareholders	**$ 229**	$ 219	$ 185	**$ 448**	$ 380

Capital and Risk Solutions					
	For the three months ended			For the six months ended	
	June 30 2022	March 31 2022	June 30 2021	**June 30 2022**	June 30 2021
Base earnings	**$ 174**	$ 170	$ 150	**$ 344**	$ 295
Items excluded from base earnings					
Actuarial assumption changes and other management actions (pre-tax)	**$ 1**	$ (1)	$ 1	**$ —**	$ 1
Income tax (expense) benefit	**—**	—	1	**—**	1
Market-related impact on liabilities (pre-tax)	**(8)**	—	—	**(8)**	—
Income tax (expense) benefit	**—**	—	—	**—**	—
Net earnings - common shareholder	**$ 167**	$ 169	$ 152	**$ 336**	$ 297

Premiums and deposits

Total premiums and deposits include premiums on risk-based insurance and annuity products net of ceded reinsurance (as defined under IFRS as net premium income), 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. This measure provides an indicator of top-line growth.

Premiums and deposits					
	For the three months ended			For the six months ended	
	June 30 2022	March 31 2022	June 30 2021	**June 30 2022**	June 30 2021
Total net premiums	**$ 16,305**	$ 14,051	$ 11,751	**$ 30,356**	$ 24,903
Policyholder deposits (segregated funds)[1]	**6,847**	8,273	6,634	**15,120**	14,587
Self-funded premium equivalents (ASO contracts) and other	**2,739**	2,893	2,021	**5,632**	3,724
Proprietary mutual funds and institutional deposits	**15,700**	18,941	16,398	**34,641**	38,653
Total premiums and deposits	**$ 41,591**	$ 44,158	$ 36,804	**$ 85,749**	$ 81,867

1 Refer to note 9(b) of the Company's condensed interim unaudited financial statements for the period ended June 30, 2022 for further details.

Assets under management (AUM) and assets under administration (AUA)

Assets under management and assets under administration are non-GAAP measures that provide an indicator of the size and volume of the Company's overall business. 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, other assets under management and other assets under administration.

Assets under administration				
	As at			
	June 30 2022	March 31 2022	Dec. 31 2021	June 30 2021
Total assets per financial statements	**$ 670,305**	$ 600,459	$ 630,488	$ 604,176
Other AUM	**318,681**	353,936	377,155	358,297
Total AUM	**988,986**	954,395	1,007,643	962,473
Other AUA[1]	**1,353,310**	1,233,311	1,283,949	1,204,634
Total AUA[1]	**$ 2,342,296**	$ 2,187,706	$ 2,291,592	$ 2,167,107

1 2021 comparative figures have been restated to include Financial Horizons Group and Excel Private Wealth Inc. assets under administration in the Canada segment.

Canada

	As at		
	June 30 2022	March 31 2022	June 30 2021
Canada wealth fee business AUA[1]			
Segregated fund assets	**$ 90,741**	$ 99,522	$ 96,953
Other AUM	**4,050**	4,721	5,852
Wealth fee business other AUA[1]	**23,443**	26,248	24,895
Total Canada wealth fee business AUA[1]	**$ 118,234**	$ 130,491	$ 127,700
Add: Other balance sheet assets	**$ 97,296**	$ 100,259	$ 97,575
Add: Other AUA	**2,357**	2,279	6,626
Consolidated Canada balance sheet assets	**$ 188,037**	$ 199,781	$ 194,528
Consolidated Canada other AUM	**4,050**	4,721	5,852
Consolidated Canada other AUA[1]	**25,800**	28,527	31,521
Total Canada AUA[1]	**$ 217,887**	$ 233,029	$ 231,901

[1] 2021 comparative figures have been restated to include Financial Horizons Group and Excel Private Wealth Inc. assets under administration.

United States

	As at		
	June 30 2022	March 31 2022	June 30 2021
Financial Services			
Personal Capital other AUM	**$ 27,439**	$ 29,034	$ 24,625
Empower AUA			
General account	**$ 96,352**	$ 47,457	$ 43,776
Segregated fund assets	**157,695**	98,391	110,301
Other AUM	**48,295**	50,262	45,970
Other AUA	**1,316,811**	1,193,111	1,160,944
Empower AUA	**$ 1,619,153**	$ 1,389,221	$ 1,360,991
Putnam other AUM	**$ 215,385**	$ 240,410	$ 246,228
Subtotal	**$ 1,861,977**	$ 1,658,665	$ 1,631,844
Add: Other AUM consolidation adjustment	**$ (26,739)**	$ (27,583)	$ (26,033)
Add: Other balance sheet assets	**43,272**	51,587	50,557
Consolidated United States balance sheet assets	**$ 297,319**	$ 197,434	$ 204,634
Consolidated United States other AUM	**264,380**	292,124	290,790
Consolidated United States other AUA	**1,316,811**	1,193,111	1,160,944
Total United States AUA	**$ 1,878,510**	$ 1,682,669	$ 1,656,368

Europe

	As at		
	June 30 2022	March 31 2022	June 30 2021
Europe wealth and investment only AUA			
Segregated fund assets	**$ 116,918**	$ 129,496	$ 129,342
Other AUM	**50,251**	57,091	61,655
Other AUA	**10,699**	11,673	12,169
Total Europe wealth and investment only AUA	**$ 177,868**	$ 198,260	$ 203,166
Add: Other balance sheet assets	**$ 52,404**	$ 57,682	$ 60,497
Consolidated Europe balance sheet assets	**$ 169,322**	$ 187,178	$ 189,839
Consolidated Europe other AUM	**50,251**	57,091	61,655
Consolidated Europe other AUA	**10,699**	11,673	12,169
Total Europe AUA	**$ 230,272**	$ 255,942	$ 263,663

Core net earnings (loss)

For its Asset Management (Putnam) 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) include the impact of dealer commissions and software amortization and exclude the impact of certain corporate financing charges and allocations, certain tax adjustments and other non-recurring transactions.

Core net earnings (loss)[1]
(In US$ million, unless otherwise noted)

	For the three months ended			For the six months ended	
	June 30 2022	March 31 2022	June 30 2021	**June 30 2022**	June 30 2021
Fee and net investment income	**$ 204**	$ 229	$ 255	**$ 433**	$ 486
Less: Expenses	**213**	228	221	**441**	446
Core earnings (loss)	**(9)**	1	34	**(8)**	40
Less: Income taxes	**(2)**	—	9	**(2)**	10
Core net earnings (loss)	**$ (7)**	$ 1	$ 25	**$ (6)**	$ 30
Non-core net earnings (loss)	**(2)**	(5)	(8)	**(7)**	(16)
Net earnings (loss)	**$ (9)**	$ (4)	$ 17	**$ (13)**	$ 14
Net earnings (loss) (C$)	**$ (12)**	$ (5)	$ 21	**$ (17)**	$ 18

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

Non-GAAP Ratios

A non-GAAP ratio is a financial measure in the form of a ratio, fraction, percentage or similar representation that is not disclosed in the consolidated financial statements of the Company and has a non-GAAP financial measure as one or more of its components. These financial measures do not have a standardized definition under GAAP and might not be comparable to similar financial measures presented by other issuers.

The non-GAAP ratios disclosed by the Company each use base earnings (loss) or core earnings (loss) as the non-GAAP component. Base earnings (loss) reflect management's view of the underlying business performance of the Company and provide an alternate measure to understand the underlying business performance compared to IFRS net earnings.

- **Base dividend payout ratio** - Dividends paid to common shareholders are divided by base earnings (loss).

- **Base earnings per share** - Base earnings (loss) for the period is divided by the number of average common shares outstanding for the period.
- **Base earnings per share (diluted)** - Base earnings (loss) for the period is divided by the number of average common shares outstanding on a diluted basis for the period.
- **Base return on equity** - Base 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.
- **Core margin (pre-tax)** - The metrics relates to the Asset Management (Putnam) business unit in the United States segment and is calculated by dividing core earnings (loss) by fee and net investment income.
- **Effective income tax rate - base earnings - common shareholders** - Calculated by adjusting the Company's reported income taxes and net earnings before income taxes attributable to common shareholders to remove the impact of items excluded from base earnings, to calculate the effective tax rates for common shareholders.
- **Effective income tax rate - base earnings - total Lifeco** - Calculated by adjusting the Company's reported income taxes and net earnings before income taxes to remove the impact of items excluded from base earnings, to calculate the effective tax rates for total Lifeco.

GLOSSARY

- **Actuarial assumption changes and other management actions** - In accordance with the OSFI "Source of Earnings Disclosure (Life Insurance Company)" Guideline D-9, actuarial assumption changes and other management actions represent 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. Within the Source of Earnings Disclosure, management actions include the net gain or charge on business dispositions and transactions costs related to acquisition. The reconciliation between net earnings (loss) - common shareholders and base earnings (loss) presents the net gain or charge on business dispositions and transactions costs related to acquisition separately from actuarial assumption changes and other management actions.
- **Book value per common share** - Calculated by dividing Lifeco's common shareholder's equity by the number of average common shares outstanding for the period.
- **Common shareholder's equity** - A financial measure that comprises the following items from Lifeco's consolidated balance sheets: share capital - common shares, accumulated surplus, accumulated other comprehensive income and contributed surplus.
- **Dividend payout ratio** - Dividends paid to common shareholders are divided by net earnings - common shareholders.
- **Impact of currency movement (constant currency basis)** - 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. These measures highlight the impact of changes in currency translation rates on Canadian dollar equivalent IFRS results and have been calculated using the average rates, as shown below, in effect at the date of the comparative period. These measures provide useful information as they facilitate the comparability of results between periods.

	Period ended	
	June 30, 2022	June 30, 2021
United States dollar	**1.28**	1.23
British pound	**1.60**	1.72
Euro	**1.36**	1.48

- **Market-related impacts on liabilities** - 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.
- **Office of the Superintendent of Financial Institutions Canada (OSFI)** - An independent Canadian federal government agency that regulates and supervises federally regulated financial institutions and pension plans to determine whether they are in sound financial condition and meeting their requirements.
- **Return on common shareholder's equity (ROE)** - 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.
- **Sales** - 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.
- **Segmented common shareholder's equity** - The Company has a capital allocation methodology, which allocates financing costs in proportion to allocated capital. For the Canada, Europe 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.
- **Other assets under management** - Includes external client funds where the Company has oversight of the investment policies. Services provided in respect of proprietary mutual funds, exchange traded funds (ETFs) and institutional assets 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.
- **Net cash flows and net asset flows** - Indicator of the Company's ability to attract and retain business. Net cash flows and net asset flows are measured by the following:
  - Canada wealth management net cash flows include cash inflows and outflows related to segregated fund assets and proprietary and non-proprietary mutual funds.
  - Europe wealth and investment only net cash flows include cash inflows and outflows related to segregated fund assets, other assets under management as well as other assets under administration.
  - Empower net cash flows include cash inflows and outflows related to segregated fund assets, general fund assets, other assets under management as well as other assets under management.
  - Putnam net asset flows include other assets under management sales and redemptions.

DISCLOSURE CONTROLS AND PROCEDURES

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

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.

There have been no changes during the six month period ended June 30, 2022 that have materially affected, or are reasonably likely to materially affect, 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 June 30, 2022, 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 the Prudential's full-service retirement services business, which the Company acquired on April 1, 2022.

For the three months ended June 30, 2022, the acquired Prudential retirement services business had revenue of $962 million, net earnings of $8 million post-tax (base earnings of $45 million post-tax excluding negative market-related impact on liabilities of $16 million and integration costs of $21 million post-tax) and other comprehensive loss of $27 million. The initial amounts assigned to the assets acquired, goodwill and intangible assets on April 1, 2022 and reported as at June 30, 2022 were $126,849 million. The initial amounts assigned to the liabilities assumed on April 1, 2022 and reported as at June 30, 2022 were $124,105 million with the final valuation of the assets acquired and liabilities assumed expected to occur by the end of the first quarter of 2023.

TRANSACTIONS WITH RELATED PARTIES

Related party transactions have not changed materially from December 31, 2021.

QUARTERLY FINANCIAL INFORMATION

Quarterly financial information
(in Canadian $ millions, except per share amounts)

	2022		2021				2020	
	Q2	Q1	Q4	Q3	Q2	Q1	Q4	Q3
Total revenue	**$ 9,188**	$ 9,030	$ 18,122	$ 17,432	$ 17,955	$ 10,908	$ 16,860	$ 13,740
Common shareholders								
Base earnings								
Total[2]	**$ 830**	$ 809	$ 825	$ 870	$ 826	$ 739	$ 741	$ 679
Basic - per share[1]	**0.893**	0.869	0.887	0.934	0.889	0.796	0.799	0.732
Diluted - per share[1]	**0.892**	0.868	0.885	0.932	0.888	0.796	0.799	0.732
Net earnings								
Total	**$ 735**	$ 770	$ 765	$ 872	$ 784	$ 707	$ 912	$ 826
Basic - per share	**0.789**	0.827	0.822	0.938	0.844	0.762	0.983	0.891
Diluted - per share	**0.788**	0.825	0.820	0.936	0.842	0.761	0.983	0.891

[1] This metric is a non-GAAP ratio. Refer to the "Non-GAAP Financial Measures and Ratios" section of this document for additional details.
[2] This metric is a non-GAAP financial measure. The following items were excluded from base earnings in each quarter:

Items excluded from base earnings

	2022		2021				2020	
	Q2	Q1	Q4	Q3	Q2	Q1	Q4	Q3
Actuarial assumption changes and other management actions (pre-tax)	**$ 24**	$ (9)	$ 28	$ 74	$ 42	$ 4	$ (71)	$ 73
Income tax (expense) benefit	**(3)**	—	(5)	(5)	(5)	1	48	(7)
Market-related impacts on liabilities (pre-tax)	**(19)**	(14)	22	52	(14)	(25)	(21)	13
Income tax (expense) benefit	**4**	3	(2)	(5)	(5)	1	(10)	5
Transaction costs related to acquisitions (pre-tax)	**(71)**	(8)	(76)	(104)	(25)	(2)	(59)	(36)
Income tax (expense) benefit	**14**	1	2	14	1	1	12	5
Restructuring and integration costs (pre-tax)	**(60)**	(17)	(21)	(32)	(21)	(16)	(88)	—
Income tax (expense) benefit	**16**	5	6	8	6	4	21	—
Net gain/charge on business dispositions (pre-tax)	**—**	—	(14)	—	—	—	137	95
Income tax (expense) benefit	**—**	—	—	—	—	—	6	(1)
Tax legislative changes impact on liabilities	**—**	—	—	—	(21)	—	—	—
Revaluation of deferred tax asset	**—**	—	—	—	—	—	196	—
Total post-tax items excluded from base earnings	**$ (95)**	$ (39)	$ (60)	$ 2	$ (42)	$ (32)	$ 171	$ 147

Lifeco's consolidated net earnings attributable to common shareholders were $735 million for the second quarter of 2022 compared to $784 million reported a year ago. On a per share basis, this represents $0.789 per common share ($0.788 diluted) for the second quarter of 2022 compared to $0.844 per common share ($0.842 diluted) a year ago.

Total revenue for the second quarter of 2022 was $9,188 million and comprises premium income of $16,305 million, regular net investment income of $2,153 million, a negative change in fair value through profit or loss on investment assets of $11,179 million and fee and other income of $1,909 million.

TRANSLATION OF FOREIGN CURRENCY

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

Translation of foreign currency **Period ended**	**June 30 2022**	Mar. 31 2022	Dec. 31 2021	Sept. 30 2021	June 30 2021	Mar. 31 2021
United States dollar						
Balance sheet	**$ 1.29**	$ 1.25	$ 1.27	$ 1.27	$ 1.24	$ 1.26
Income and expenses	**$ 1.28**	$ 1.27	$ 1.26	$ 1.26	$ 1.23	$ 1.27
British pound						
Balance sheet	**$ 1.57**	$ 1.64	$ 1.71	$ 1.71	$ 1.71	$ 1.73
Income and expenses	**$ 1.60**	$ 1.70	$ 1.70	$ 1.74	$ 1.72	$ 1.75
Euro						
Balance sheet	**$ 1.35**	$ 1.38	$ 1.44	$ 1.47	$ 1.47	$ 1.47
Income and expenses	**$ 1.36**	$ 1.42	$ 1.44	$ 1.48	$ 1.48	$ 1.53

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.

GREAT-WEST LIFECO INC.

CONSOLIDATED STATEMENTS OF EARNINGS *(unaudited)*

(in Canadian $ millions except per share amounts)

	For the three months ended		For the six months ended	
	June 30 2022	June 30 2021	**June 30 2022**	June 30 2021
Income				
Premium income				
Gross premiums written	**$ 17,076**	$ 12,811	**$ 32,283**	$ 27,202
Ceded premiums	**(771)**	(1,060)	**(1,927)**	(2,299)
Total net premiums	**16,305**	11,751	**30,356**	24,903
Net investment income (note 5)				
Regular net investment income	**2,153**	1,611	**3,774**	3,167
Changes in fair value through profit or loss	**(11,179)**	2,793	**(19,634)**	(2,758)
Total net investment income (loss)	**(9,026)**	4,404	**(15,860)**	409
Fee and other income	**1,909**	1,800	**3,722**	3,551
	9,188	17,955	**18,218**	28,863
Benefits and expenses				
Policyholder benefits				
Gross	**15,377**	12,565	**28,538**	25,197
Ceded	**(676)**	(819)	**(1,467)**	(1,858)
Total net policyholder benefits	**14,701**	11,746	**27,071**	23,339
Changes in insurance and investment contract liabilities				
Gross	**(11,048)**	2,130	**(19,564)**	(3,616)
Ceded	**1,524**	29	**2,849**	1,427
Total net changes in insurance and investment contract liabilities	**(9,524)**	2,159	**(16,715)**	(2,189)
Policyholder dividends and experience refunds	**329**	416	**706**	757
Total paid or credited to policyholders	**5,506**	14,321	**11,062**	21,907
Commissions	**652**	655	**1,332**	1,316
Operating and administrative expenses	**1,855**	1,559	**3,455**	3,092
Premium taxes	**114**	121	**235**	244
Financing charges	**96**	77	**186**	156
Amortization of finite life intangible assets	**94**	86	**179**	165
Restructuring and integration expenses (note 4)	**60**	21	**77**	37
Earnings before income taxes	**811**	1,115	**1,692**	1,946
Income taxes (note 14)	**51**	106	**103**	163
Net earnings before non-controlling interests	**760**	1,009	**1,589**	1,783
Attributable to non-controlling interests	**(8)**	192	**19**	226
Net earnings	**768**	817	**1,570**	1,557
Preferred share dividends (note 11)	**33**	33	**65**	66
Net earnings - common shareholders	**$ 735**	$ 784	**$ 1,505**	$ 1,491
Earnings per common share (note 11)				
Basic	**$ 0.789**	$ 0.844	**$ 1.616**	$ 1.605
Diluted	**$ 0.788**	$ 0.842	**$ 1.613**	$ 1.604

CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME *(unaudited)*

(in Canadian $ millions)

	For the three months ended		For the six months ended	
	June 30 2022	June 30 2021	**June 30 2022**	June 30 2021
Net earnings	**$ 768**	$ 817	**$ 1,570**	$ 1,557
Other comprehensive income (loss)				
Items that may be reclassified subsequently to Consolidated Statements of Earnings				
Unrealized foreign exchange gains (losses) on translation of foreign operations	**4**	(186)	**(603)**	(532)
Income tax (expense) benefit	**—**	1	**—**	—
Unrealized gains (losses) on hedges of the net investment in foreign operations	**91**	(36)	**221**	44
Income tax (expense) benefit	**5**	(1)	**(7)**	(12)
Unrealized gains (losses) on available-for-sale assets	**(329)**	152	**(699)**	(50)
Income tax (expense) benefit	**68**	(24)	**142**	17
Realized (gains) losses on available-for-sale assets	**(1)**	(1)	**2**	(11)
Income tax expense (benefit)	**(2)**	1	**(2)**	3
Unrealized gains (losses) on cash flow hedges	**(43)**	25	**(51)**	44
Income tax (expense) benefit	**12**	(7)	**14**	(12)
Realized (gains) losses on cash flow hedges	**13**	(15)	**6**	(26)
Income tax expense (benefit)	**(4)**	4	**(2)**	7
Non-controlling interests	**96**	(15)	**270**	86
Income tax (expense) benefit	**(26)**	3	**(71)**	(21)
Total items that may be reclassified	**(116)**	(99)	**(780)**	(463)
Items that will not be reclassified to Consolidated Statements of Earnings				
Re-measurements on defined benefit pension and other post-employment benefit plans (note 13)	**150**	33	**562**	664
Income tax (expense) benefit	**(32)**	(7)	**(143)**	(165)
Non-controlling interests	**(12)**	(4)	**(45)**	(59)
Income tax (expense) benefit	**3**	—	**12**	15
Total items that will not be reclassified	**109**	22	**386**	455
Total other comprehensive income (loss)	**(7)**	(77)	**(394)**	(8)
Comprehensive income	**$ 761**	$ 740	**$ 1,176**	$ 1,549

GREAT-WEST
LIFECO INC.

CONSOLIDATED BALANCE SHEETS *(unaudited)*

(in Canadian $ millions)

	June 30 2022	December 31 2021
Assets		
Cash and cash equivalents	**$ 7,924**	$ 6,075
Bonds (note 5)	**156,226**	140,612
Mortgage loans (note 5)	**37,785**	28,852
Stocks (note 5)	**13,836**	14,183
Investment properties (note 5)	**8,387**	7,763
Loans to policyholders	**8,496**	8,319
	232,654	205,804
Funds held by ceding insurers	**15,389**	17,194
Reinsurance assets (note 8)	**17,663**	21,138
Goodwill	**10,212**	9,081
Intangible assets	**6,273**	5,514
Derivative financial instruments	**1,596**	967
Owner occupied properties	**728**	736
Fixed assets	**399**	422
Other assets	**5,418**	4,522
Premiums in course of collection, accounts and interest receivable	**7,029**	6,366
Current income taxes	**321**	268
Deferred tax assets	**1,119**	1,057
Investments on account of segregated fund policyholders (note 9)	**371,504**	357,419
Total assets	**$ 670,305**	$ 630,488
Liabilities		
Insurance contract liabilities (note 8)	**$ 231,522**	$ 208,378
Investment contract liabilities (note 8)	**12,760**	12,455
Debentures and other debt instruments	**9,766**	8,804
Funds held under reinsurance contracts	**1,240**	1,542
Derivative financial instruments	**1,539**	1,030
Accounts payable	**3,221**	3,032
Other liabilities	**6,931**	6,063
Current income taxes	**223**	193
Deferred tax liabilities	**1,049**	1,089
Investment and insurance contracts on account of segregated fund policyholders (note 9)	**371,504**	357,419
Total liabilities	**639,755**	600,005
Equity		
Non-controlling interests		
Participating account surplus in subsidiaries	**2,990**	3,138
Non-controlling interests in subsidiaries	**48**	129
Shareholders' equity		
Share capital		
Limited recourse capital notes	**1,500**	1,500
Preferred shares	**2,720**	2,720
Common shares (note 10)	**5,788**	5,748
Accumulated surplus	**17,069**	16,424
Accumulated other comprehensive income	**238**	632
Contributed surplus	**197**	192
Total equity	**30,550**	30,483
Total liabilities and equity	**$ 670,305**	$ 630,488

CONSOLIDATED STATEMENTS OF CHANGES IN EQUITY *(unaudited)*

(in Canadian $ millions)

	June 30, 2022					
	Share capital	**Contributed surplus**	**Accumulated surplus**	**Accumulated other comprehensive income**	**Non-controlling interests**	**Total equity**
Balance, beginning of year	**$ 9,968**	**$ 192**	**$ 16,424**	**$ 632**	**$ 3,267**	**$ 30,483**
Net earnings	**—**	**—**	**1,570**	**—**	**19**	**1,589**
Other comprehensive income (loss)	**—**	**—**	**—**	**(394)**	**(166)**	**(560)**
	9,968	**192**	**17,994**	**238**	**3,120**	**31,512**
Dividends to shareholders						
Preferred shareholders (note 11)	**—**	**—**	**(65)**	**—**	**—**	**(65)**
Common shareholders	**—**	**—**	**(913)**	**—**	**—**	**(913)**
Shares exercised and issued under share-based payment plans (note 10)	**40**	**(32)**	**—**	**—**	**28**	**36**
Share-based payment plans expense	**—**	**36**	**—**	**—**	**—**	**36**
Equity settlement of Putnam share-based plans	**—**	**—**	**—**	**—**	**(53)**	**(53)**
Shares cancelled under Putnam share-based plans	**—**	**1**	**—**	**—**	**(1)**	**—**
Preferred share redemption costs	**—**	**—**	**(3)**	**—**	**—**	**(3)**
Dilution gain on non-controlling interests	**—**	**—**	**56**	**—**	**(56)**	**—**
Balance, end of period	**$ 10,008**	**$ 197**	**$ 17,069**	**$ 238**	**$ 3,038**	**$ 30,550**

	June 30, 2021					
	Share capital	Contributed surplus	Accumulated surplus	Accumulated other comprehensive income	Non-controlling interests	Total equity
Balance, beginning of year	$ 8,365	$ 186	$ 14,990	$ 487	$ 2,987	$ 27,015
Net earnings	—	—	1,557	—	226	1,783
Other comprehensive income (loss)	—	—	—	(8)	(21)	(29)
	8,365	186	16,547	479	3,192	28,769
Dividends to shareholders						
Preferred shareholders (note 11)	—	—	(66)	—	—	(66)
Common shareholders	—	—	(814)	—	—	(814)
Shares exercised and issued under share-based payment plans (note 10)	62	(44)	—	—	35	53
Share-based payment plans expense	—	36	—	—	—	36
Equity settlement of Putnam share-based plans	—	—	—	—	(22)	(22)
Shares cancelled under Putnam share-based plans	—	1	—	—	(1)	—
Dilution loss on non-controlling interests	—	—	(7)	—	7	—
Balance, end of period	$ 8,427	$ 179	$ 15,660	$ 479	$ 3,211	$ 27,956

CONSOLIDATED STATEMENTS OF CASH FLOWS *(unaudited)*

(in Canadian $ millions)

	For the six months ended June 30	
	2022	2021
Operations		
Earnings before income taxes	**$ 1,692**	$ 1,946
Income taxes paid, net of refunds received	**(169)**	(248)
Adjustments:		
Change in insurance and investment contract liabilities	**(19,059)**	(3,286)
Change in funds held by ceding insurers	**(587)**	396
Change in funds held under reinsurance contracts	**(205)**	(49)
Change in reinsurance assets	**3,298**	1,418
Changes in fair value through profit or loss	**19,634**	2,758
Other	**(645)**	(80)
	3,959	2,855
Financing Activities		
Issue of common shares (note 10)	**40**	62
Increase (decrease) in credit line of subsidiaries	**965**	(188)
Decrease in debentures and other debt instruments	**(19)**	—
Preferred share redemption costs	**(3)**	—
Dividends paid on common shares	**(913)**	(814)
Dividends paid on preferred shares	**(65)**	(66)
	5	(1,006)
Investment Activities		
Bond sales and maturities	**16,638**	14,788
Mortgage loan repayments	**1,646**	1,611
Stock sales	**1,882**	2,004
Investment property sales	**5**	10
Change in loans to policyholders	**(95)**	55
Business acquisition, net of cash and cash equivalents acquired (note 3)	**(2,149)**	—
Investment in bonds	**(14,155)**	(15,902)
Investment in mortgage loans	**(3,466)**	(2,526)
Investment in stocks	**(1,903)**	(2,571)
Investment in investment properties	**(458)**	(444)
	(2,055)	(2,975)
Effect of changes in exchange rates on cash and cash equivalents	**(60)**	(112)
Increase (decrease) in cash and cash equivalents	**1,849**	(1,238)
Cash and cash equivalents, beginning of period	**6,075**	7,946
Cash and cash equivalents, end of period	**$ 7,924**	$ 6,708
Supplementary cash flow information		
Interest income received	**$ 2,549**	$ 2,522
Interest paid	**195**	171
Dividend income received	**183**	159

CONDENSED NOTES TO CONSOLIDATED INTERIM FINANCIAL STATEMENTS *(unaudited)*

(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). Subsequent to the reporting date, Great-West Life & Annuity Insurance Company changed its legal name to Empower Annuity Insurance Company of America.

The condensed consolidated interim unaudited financial statements (financial statements) of the Company as at and for the three and six months ended June 30, 2022 were approved by the Board of Directors on August 3, 2022.

2. Basis of Presentation and Summary of Accounting Policies

These financial statements should be read in conjunction with the Company's December 31, 2021 consolidated annual audited financial statements and notes thereto.

The financial statements of the Company at June 30, 2022 have been prepared in compliance with the requirements of International Accounting Standard (IAS) 34, *Interim Financial Reporting* as issued by the International Accounting Standards Board (IASB) using the same accounting policies and methods of computation followed in the consolidated annual audited financial statements for the year ended December 31, 2021 except as described below.

<u>Changes in Accounting Policies</u>
The Company adopted the amendments to International Financial Reporting Standards (IFRS) for IAS 37, *Provisions, Contingent Liabilities and Contingent Assets* and *Annual Improvements 2018-2020 Cycl*e for the amendment to IFRS 16, *Leases* effective January 1, 2022. The adoption of these amendments did not have a significant impact on the Company’s financial statements.

The Company actively monitors changes in IFRS, both proposed and released, by the IASB for potential impact on the Company. No standards have been released since the year ended December 31, 2021 that impact the Company's financial reporting. The following sets out significant standards that will be adopted on January 1, 2023:

Standard	Summary of Future Changes
IFRS 17 - *Insurance Contracts*	IFRS 17, *Insurance Contracts* (IFRS 17), will replace IFRS 4, *Insurance Contracts* effective January 1, 2023. 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 continues to make progress in implementing its project plan, and will be compliant with the standard effective January 1, 2023. IFRS 17 sets out the requirements for the recognition, measurement, presentation and disclosures of insurance contracts a company issues and reinsurance contracts it holds. 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. As a result of the new valuation methodologies required under IFRS 17, the Company expects its insurance contract liabilities, including the contractual service margin, to increase upon adoption. The January 1, 2022 shareholders' equity is expected to decrease by 10% to 15% on the retroactive application of IFRS 17 on January 1, 2023, primarily due to the establishment of the contractual service margin. 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 Office of the Superintendent of Financial Institutions (OSFI) has stated that it intends to maintain capital frameworks consistent with current capital policies and minimizing potential industry-wide capital impacts. The Company continues to assess all these impacts through its global implementation plan, however the change will not impact the economics of the affected businesses or our business model.

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

Standard	**Summary of Future Changes**
IFRS 9 - *Financial Instruments*	IFRS 9, *Financial Instruments* (IFRS 9) will replace IAS 39, *Financial Instruments: Recognition and Measurement* effective January 1, 2023. 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. The disclosure for the measurement and classification of the Company's portfolio investments provides most of the information required by IFRS 9. Upon adoption of IFRS 9 on January 1, 2023, the Company does not expect a material change in the level of invested assets, nor a material increase in earnings volatility. The Company anticipates electing the option of presenting comparative information about a financial asset as if the classification and measurement requirements of IFRS 9 had been applied to that financial asset in the comparative period, as permitted by the amendment to IFRS 17 published by the IASB in December 2021. The Company continues to evaluate the impact of the adoption of this standard with the adoption of IFRS 17.

Use of Significant Judgments, Estimates and Assumptions

In preparation of these financial statements, management is required to make significant judgments, estimates and assumptions that affect the reported amounts of assets, liabilities, net earnings and related disclosures. Although some uncertainty is inherent in these judgments and estimates, management believes that the amounts recorded are reasonable. Key sources of estimation uncertainty and areas where significant judgments have been made are further described in the relevant accounting policies as described in note 2 of the Company's December 31, 2021 consolidated annual audited financial statements and notes thereto.

Impact of COVID-19 and the Conflict Between Russia and Ukraine on Significant Judgments, Estimates and Assumptions

The COVID-19 pandemic has continued to result in uncertainty in global financial markets and the economic environment in which the Company operates. The duration and impact of the COVID-19 pandemic continues to be unknown at this time, as is the efficacy of the associated fiscal and monetary interventions by governments and central banks.

Global financial markets continued to be volatile during 2022, in part due to Russia's military invasion of Ukraine and the related sanctions and economic fallout. The Company continues to monitor potential impacts of the conflict, including financial impacts, heightened cyber risks, and risks related to the global supply chain.

The results of the Company reflect management's judgments regarding the impact of prevailing market conditions related to global credit, equities, investment properties, foreign exchange and inflation, 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. In addition to its own credit assessments, 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 5), the valuation of goodwill and other intangible assets, the valuation of insurance contract liabilities (note 8) and the recoverability of deferred tax asset carrying values 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.

3. Business Acquisitions

(a) Acquisition of Personal Capital Corporation

On August 17, 2020, GWL&A completed the acquisition of 100% of the equity of Personal Capital Corporation. Upon completion of the purchase price allocation in the fourth quarter of 2020, a contingent consideration earn-out provision of $26 (U.S. $20) was recognized, representing management's best estimate of growth in assets under management metrics defined in the Merger Agreement. The contingent consideration provision was increased by $101 (U.S. $80) in 2021 for a total contingent consideration provision of $127 (U.S. $100) at December 31, 2021. The increase in 2021 was due to growth in net new assets above the amount assumed at the date of acquisition.

The Merger Agreement allows for contingent consideration of up to $226 (U.S. $175) based on the achievement of growth in assets under management metrics, payable following measurements through December 31, 2021 and December 31, 2022. Changes in the fair value of the contingent consideration measured in accordance with the Merger Agreement subsequent to the completion of the purchase price allocation are recognized in operating and administrative expenses in the Consolidated Statements of Earnings. During the first quarter of 2022, the Company made its first payment of U.S. $59 based on assets under management metrics achieved through December 31, 2021. The remaining contingent consideration provision is $53 (U.S. $41) at June 30, 2022.

(b) Acquisition of Prudential Retirement Services Business

On April 1, 2022, GWL&A completed the purchase, through a share purchase and a reinsurance transaction, of the full-service retirement business of Prudential Financial, Inc. (Prudential). The acquisition further solidifies the Company's position as a leader in the U.S. retirement market. The Company assumed the economics and risks associated with the business, while Prudential continues to retain the obligation to the contract holders of the reinsured portion. The Company acquired the business for $4,350 (U.S. $3,480) of total value which includes purchase consideration of $2,744 (U.S. $2,195) including the base purchase price, ceding commission and working capital adjustments and $1,606 (U.S. $1,285) of required capital to support the business. The assets acquired, liabilities assumed and purchase consideration paid are subject to future adjustments.

The transaction was funded with $1,500 (U.S. $1,193) of limited recourse capital notes and U.S. $823 of short-term debt, in addition to existing resources. On March 30, 2022, Great-West Lifeco U.S. LLC, a subsidiary of the Company, established a 2-year U.S. $500 non-revolving credit facility with interest on the drawn balance equal to a floating rate based on Adjusted Term Secured Overnight Financing Rate (SOFR). The facility is fully and unconditionally guaranteed by the Company. As at June 30, 2022, the $645 (U.S. $500) facility was fully drawn, along with $416 (U.S. $323) from an existing revolving credit facility, to finance a portion of the acquisition. The existing revolving credit facility incurs interest on the drawn balance equal to a floating rate based on Adjusted Term SOFR. On July 1, 2022, Great-West Lifeco U.S. LLC made a payment of U.S. $150 on its revolving credit facility.

3. Business Acquisitions (cont'd)

The initial amounts assigned to the assets acquired, goodwill, intangible assets and liabilities assumed on April 1, 2022, and reported as at June 30, 2022 are as follows:

Assets acquired and goodwill		
Cash and cash equivalents	$	**484**
Bonds		**36,288**
Mortgage loans		**8,029**
Stocks		**381**
Goodwill		**1,109**
Intangible assets		**735**
Other assets		**100**
Premiums in the course of collection, accounts and interest receivable		**268**
Investments on account of segregated fund policyholders		**79,455**
Total assets acquired and goodwill	**$**	**126,849**
Liabilities assumed		
Insurance contract liabilities	$	**43,571**
Investment contract liabilities		**690**
Accounts payable		**13**
Other liabilities		**376**
Investment and insurance contracts on account of segregated fund policyholders		**79,455**
Total liabilities assumed	**$**	**124,105**

Accounting for the acquisition is not finalized, and there remains some measurement uncertainty on the acquisition and June 30, 2022 balances, pending completion of a comprehensive evaluation of the net assets acquired. The financial statements at June 30, 2022 reflect management's current best estimate of the purchase price allocation. The Company has identified and allocated provisional amounts for intangible assets within the purchase price allocation, net of $13 (U.S. $10) of amortization. Final valuation of the assets acquired and liabilities assumed and the completion of the purchase price allocation will occur by the end of the first quarter of 2023.

As a result, the excess of the purchase price over the fair value of net assets acquired, representing goodwill of $1,109 (U.S. $887) as at June 30, 2022, 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. These synergies represent meaningful expense and revenue opportunities which are expected to be accretive to earnings. The goodwill is deductible for tax purposes.

During the three and six months ended June 30, 2022, the Company incurred acquisition expenses of $67 (U.S. $52) and $69 (U.S. $54) respectively, which are included within operating and administrative expenses in the Consolidated Statements of Earnings.

The Company completed the acquisition on April 1, 2022. From April 2, 2022 to June 30, 2022, Prudential contributed revenue of $962 (U.S. $751), net earnings of $8 (U.S. $6) and an other comprehensive loss of $27 (U.S. $21). These amounts are included in the Consolidated Statements of Earnings and Comprehensive Income for the three and six months ended June 30, 2022.

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 Prudential had a different financial reporting basis than the Company.

(c) Acquisition of Ark Life Assurance Company

On November 1, 2021, Irish Life Group Limited (Irish Life), an indirect wholly-owned subsidiary of the Company, completed the acquisition of Ark Life Assurance Company dac (Ark Life) from Phoenix Group Holdings plc for total cash consideration of $332 (€230). Ark Life is closed to new business and manages a range of pensions, savings and protection policies for its customers in the Irish market.

The initial amounts assigned to the assets acquired, goodwill and liabilities assumed on November 1, 2021, reported as at June 30, 2022 are as follows:

Assets acquired and goodwill		
Cash and cash equivalents	**$**	**17**
Bonds		**333**
Goodwill		**21**
Reinsurance assets		**1,238**
Premiums in the course of collection, accounts and interest receivable		**89**
Investments on account of segregated fund policyholders		**2,844**
Total assets acquired and goodwill	**$**	**4,542**
Liabilities assumed		
Insurance contract liabilities	**$**	**1,257**
Investment contract liabilities		**43**
Other liabilities		**66**
Investment and insurance contracts on account of segregated fund policyholders		**2,844**
Total liabilities assumed	**$**	**4,210**

As at June 30, 2022, the accounting for the acquisition is not finalized pending completion of a comprehensive valuation of the net assets acquired. The financial statements at June 30, 2022 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 the second half of 2022. As at June 30, 2022, 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 $21 (€15) 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. These synergies represent meaningful expense and revenue opportunities which are expected to be accretive to earnings.

4. Restructuring and Integration Expenses

(a) Canada Restructuring

At June 30, 2022, the Company has a restructuring provision of $39 remaining in other liabilities. The change in the restructuring provision for the Canada restructuring is set out below:

	June 30 2022	December 31 2021
Balance, beginning of year	**$ 56**	$ 86
Amounts used	**(17)**	(30)
Balance, end of period	**$ 39**	$ 56

The Company expects to pay out a significant portion of these amounts during the year.

(b) GWL&A Restructuring and Integration

The Company recorded integration expenses in the Consolidated Statements of Earnings of $44 for the three months ended June 30, 2022 ($15 for the three months ended June 30, 2021) and $61 for the six months ended June 30, 2022 ($31 for the six months ended June 30, 2021). The Company recorded restructuring expenses in the Consolidated Statements of Earnings of $16 for the three and six months ended June 30, 2022 (nil for the three and six months ended June 30, 2021). The restructuring is primarily attributable to staff reductions and other exit costs related to the Company's acquisitions of the retirement services businesses of Massachusetts Mutual Life Insurance Company (MassMutual) and Prudential (note 3). At June 30, 2022, the Company has a restructuring provision of $32 remaining in other liabilities. The change in the restructuring provision for the GWL&A restructuring is set out below:

	June 30 2022	December 31 2021
Balance, beginning of year	**$ 19**	$ 37
Restructuring expenses	**16**	10
Amounts used	**(4)**	(28)
Changes in foreign exchange rates	**1**	—
Balance, end of period	**$ 32**	$ 19

The Company expects to pay out a significant portion of these amounts during the year. The Company expects to incur further restructuring and integration expenses associated with the MassMutual and Prudential acquisitions during the year.

5. Portfolio Investments

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

	June 30, 2022		December 31, 2021	
	Carrying value	**Fair value**	Carrying value	Fair value
Bonds				
Designated fair value through profit or loss [1]	**$ 112,129**	**$ 112,129**	$ 103,645	$ 103,645
Classified fair value through profit or loss [1]	**339**	**339**	168	168
Available-for-sale	**10,913**	**10,913**	12,123	12,123
Loans and receivables	**32,845**	**30,912**	24,676	26,717
	156,226	**154,293**	140,612	142,653
Mortgage loans				
Residential				
Designated fair value through profit or loss [1]	**2,544**	**2,544**	2,609	2,609
Loans and receivables	**11,886**	**11,262**	9,580	9,860
	14,430	**13,806**	12,189	12,469
Commercial	**23,355**	**22,105**	16,663	17,189
	37,785	**35,911**	28,852	29,658
Stocks				
Designated fair value through profit or loss [1]	**12,866**	**12,866**	13,269	13,269
Available-for-sale	**238**	**238**	209	209
Available-for-sale, at cost [2]	**120**	**120**	124	124
Equity method	**612**	**556**	581	633
	13,836	**13,780**	14,183	14,235
Investment properties	**8,387**	**8,387**	7,763	7,763
Total	**$ 216,234**	**$ 212,371**	$ 191,410	$ 194,309

[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.

5. Portfolio Investments (cont'd)

(b) Included in portfolio investments are the following:
Carrying amount of impaired investments

	June 30 2022	December 31 2021
Impaired amounts by classification		
Fair value through profit or loss	$ 13	$ 14
Available-for-sale	3	7
Loans and receivables	86	71
Total	$ 102	$ 92

The carrying amount of impaired investments includes $16 bonds and $86 mortgage loans at June 30, 2022 ($18 bonds, $71 mortgage loans and $3 stocks at December 31, 2021). The above carrying values for loans and receivables are net of allowances of $38 at June 30, 2022 and $28 at December 31, 2021.

(c) Net investment income comprises the following:

For the three months ended June 30, 2022	Bonds	Mortgage loans	Stocks	Investment properties	Other	Total
Regular net investment income:						
Investment income earned	$ 1,537	$ 311	$ 103	$ 112	$ 199	$ 2,262
Net realized gains (losses)						
Available-for-sale	(13)	—	14	—	—	1
Other classifications	(4)	2	—	—	2	—
Net allowances for credit losses on loans and receivables	—	(11)	—	—	—	(11)
Other income (expenses)	—	—	—	(37)	(62)	(99)
	1,520	302	117	75	139	2,153
Changes in fair value through profit or loss assets:						
Classified fair value through profit or loss	(22)	—	—	—	—	(22)
Designated fair value through profit or loss	(9,232)	(304)	(1,242)	—	(471)	(11,249)
Recorded at fair value through profit or loss	—	—	—	92	—	92
	(9,254)	(304)	(1,242)	92	(471)	(11,179)
Total	$ (7,734)	$ (2)	$ (1,125)	$ 167	$ (332)	$ (9,026)

5. Portfolio Investments (cont'd)

For the three months ended June 30, 2021		Bonds		Mortgage loans		Stocks		Investment properties		Other		Total
Regular net investment income:												
Investment income earned	$	1,094	$	227	$	84	$	101	$	177	$	1,683
Net realized gains												
Available-for-sale		1		—		—		—		—		1
Other classifications		1		20		6		—		7		34
Net allowances for credit losses on loans and receivables		—		(26)		—		—		—		(26)
Other income (expenses)		—		—		—		(32)		(49)		(81)
		1,096		221		90		69		135		1,611
Changes in fair value through profit or loss assets:												
Classified fair value through profit or loss		2		—		—		—		—		2
Designated fair value through profit or loss		1,665		46		738		—		193		2,642
Recorded at fair value through profit or loss		—		—		—		149		—		149
		1,667		46		738		149		193		2,793
Total	$	2,763	$	267	$	828	$	218	$	328	$	4,404

For the six months ended June 30, 2022		**Bonds**		**Mortgage loans**		**Stocks**		**Investment properties**		**Other**		**Total**
Regular net investment income:												
Investment income earned	**$**	**2,623**	**$**	**543**	**$**	**190**	**$**	**221**	**$**	**399**	**$**	**3,976**
Net realized gains (losses)												
Available-for-sale		**(25)**		**—**		**23**		**—**		**—**		**(2)**
Other classifications		**(4)**		**10**		**—**		**—**		**(5)**		**1**
Net allowances for credit losses on loans and receivables		**—**		**(11)**		**—**		**—**		**—**		**(11)**
Other income (expenses)		**—**		**—**		**—**		**(76)**		**(114)**		**(190)**
		2,594		**542**		**213**		**145**		**280**		**3,774**
Changes in fair value through profit or loss assets:												
Classified fair value through profit or loss		**(22)**		**—**		**—**		**—**		**—**		**(22)**
Designated fair value through profit or loss		**(17,578)**		**(528)**		**(866)**		**—**		**(1,052)**		**(20,024)**
Recorded at fair value through profit or loss		**—**		**—**		**—**		**412**		**—**		**412**
		(17,600)		**(528)**		**(866)**		**412**		**(1,052)**		**(19,634)**
Total	**$**	**(15,006)**	**$**	**14**	**$**	**(653)**	**$**	**557**	**$**	**(772)**	**$**	**(15,860)**

5. Portfolio Investments (cont'd)

For the six months ended June 30, 2021	Bonds	Mortgage loans	Stocks	Investment properties	Other	Total
Regular net investment income:						
Investment income earned	$ 2,116	$ 455	$ 161	$ 204	$ 355	$ 3,291
Net realized gains						
Available-for-sale	11	—	—	—	—	11
Other classifications	6	31	6	—	11	54
Net allowances for credit losses on loans and receivables	—	(32)	—	—	—	(32)
Other income (expenses)	—	—	—	(67)	(90)	(157)
	2,133	454	167	137	276	3,167
Changes in fair value through profit or loss assets:						
Classified fair value through profit or loss	(46)	—	—	—	—	(46)
Designated fair value through profit or loss	(3,978)	(88)	1,360	—	(224)	(2,930)
Recorded at fair value through profit or loss	—	—	—	218	—	218
	(4,024)	(88)	1,360	218	(224)	(2,758)
Total	$ (1,891)	$ 366	$ 1,527	$ 355	$ 52	$ 409

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 Financial Inc. 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.

6. 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 Company's approach to risk management has not substantially changed from that described in the Company's 2021 Annual Report. Certain risks have been outlined below. For a discussion of the Company's risk governance structure and risk management approach, see the "Financial Instruments Risk Management" note in the Company's December 31, 2021 consolidated annual audited financial statements.

The Company has also 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 Board of Directors reviews and approves all capital transactions undertaken by management.

(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.

<u>Concentration of Credit Risk</u>
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. No significant changes have occurred from the year ended December 31, 2021.

(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.
- Management closely monitors the solvency and capital positions of its principal subsidiaries opposite liquidity requirements at the holding company. Additional liquidity is available through established lines of credit or via capital market transactions. The Company maintains committed lines of credit with Canadian chartered banks.

(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.

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

- Assessment of the circumstances that led to the scenario may lead to changes in (re)investment approaches and interest rate scenarios considered,
- Changes in actuarial, investment return and future investment activity assumptions,
- Actual experience differing from the assumptions,

- Changes in business mix, effective income tax rates and other market factors,
- Interactions among these factors and assumptions when more than one changes, and
- The general limitations of the Company's internal models.

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

(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.

- 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 immediate 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 immediate change in net earnings.

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.

(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.

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.

Testing under a number of interest rate scenarios (including increasing, decreasing and fluctuating rates) is done to assess reinvestment risk because the Company's sensitivity to interest rate movements varies at different terms.

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.

The impact to the value of liabilities from an immediate parallel 1% increase or 1% decrease in the interest rates would be largely offset by changes in the value of assets supporting the liabilities. Actual movements in interest rates may produce different impacts on the value of liabilities, net of changes in the value of assets supporting liabilities, depending on the extent of the change in interest rates in different geographies and at different durations. An immediate 1% increase in interest rates in Canada could lead to an increase in the value of liabilities, net of changes in the value of assets supporting liabilities, and a decrease in net earnings, but the impact would not be expected to be material.

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 parallel 1% increase or 1% decrease in the interest rates as well as a corresponding parallel shift in the ultimate reinvestment rates, as defined in the actuarial standards.

	June 30, 2022		December 31, 2021	
	1% increase	**1% decrease [1]**	1% increase	1% decrease [1]
Change in interest rates				
Increase (decrease) in non-participating insurance and investment contract liabilities	**$ (150)**	**$ 488**	$ (219)	$ 678
Increase (decrease) in net earnings	**$ 128**	**$ (382)**	$ 197	$ (555)

[1] For the 1% decrease, initial risk-free yields are floored at zero, wherever risk-free yields are not currently negative.

(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.

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.

	June 30, 2022				December 31, 2021			
	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	**$ (58)**	**$ (38)**	**$ 52**	**$ 218**	$ (26)	$ (16)	$ 22	$ 76
Increase (decrease) in net earnings	**$ 51**	**$ 34**	**$ (46)**	**$ (180)**	$ 21	$ 13	$ (19)	$ (66)

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.

	June 30, 2022				December 31, 2021			
	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	**$ (97)**	**$ (49)**	**$ 34**	**$ 135**	$ (92)	$ (46)	$ 38	$ 144
Increase (decrease) in net earnings	**$ 83**	**$ 42**	**$ (28)**	**$ (107)**	$ 79	$ 39	$ (30)	$ (112)

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:

	June 30, 2022		December 31, 2021	
	1% increase	**1% decrease**	1% increase	1% decrease
Change in best estimate return assumptions				
Increase (decrease) in non-participating insurance contract liabilities	**$ (698)**	**$ 819**	$ (715)	$ 829
Increase (decrease) in net earnings	**$ 551**	**$ (640)**	$ 567	$ (649)

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 Performance Share Unit Plan through the use of total return swaps.

7. 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.

7. Fair Value Measurement (cont'd)

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

	June 30, 2022			
Assets measured at fair value	**Level 1**	**Level 2**	**Level 3**	**Total**
Cash and cash equivalents	$ 7,924	$ —	$ —	$ 7,924
Financial assets at fair value through profit or loss				
Bonds	—	112,370	98	112,468
Mortgage loans	—	—	2,544	2,544
Stocks	10,607	11	2,248	12,866
Total financial assets at fair value through profit or loss	10,607	112,381	4,890	127,878
Available-for-sale financial assets				
Bonds	—	10,913	—	10,913
Stocks	7	23	208	238
Total available-for-sale financial assets	7	10,936	208	11,151
Investment properties	—	—	8,387	8,387
Funds held by ceding insurers	153	12,135	—	12,288
Derivatives [1]	4	1,592	—	1,596
Reinsurance assets	—	87	—	87
Other assets:				
Trading account assets	272	762	863	1,897
Other [2]	49	180	—	229
Total assets measured at fair value	$ 19,016	$ 138,073	$ 14,348	$ 171,437
Liabilities measured at fair value				
Derivatives [3]	$ 1	$ 1,538	$ —	$ 1,539
Investment contract liabilities	—	12,760	—	12,760
Other liabilities	49	180	—	229
Total liabilities measured at fair value	$ 50	$ 14,478	$ —	$ 14,528

[1] Excludes collateral received from counterparties of $970.
[2] Includes collateral received under securities lending agreements.
[3] Excludes collateral pledged to counterparties of $781.

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

7. Fair Value Measurement (cont'd)

	December 31, 2021			
Assets measured at fair value	Level 1	Level 2	Level 3	Total
Cash and cash equivalents	$ 6,075	$ —	$ —	$ 6,075
Financial assets at fair value through profit or loss				
Bonds	—	103,713	100	103,813
Mortgage loans	—	—	2,609	2,609
Stocks	11,577	12	1,680	13,269
Total financial assets at fair value through profit or loss	11,577	103,725	4,389	119,691
Available-for-sale financial assets				
Bonds	—	12,123	—	12,123
Stocks	4	1	204	209
Total available-for-sale financial assets	4	12,124	204	12,332
Investment properties	—	—	7,763	7,763
Funds held by ceding insurers	336	14,663	—	14,999
Derivatives [1]	1	966	—	967
Reinsurance assets	—	106	—	106
Other assets:				
Trading account assets	307	833	531	1,671
Other [2]	76	93	—	169
Total assets measured at fair value	$ 18,376	$ 132,510	$ 12,887	$ 163,773
Liabilities measured at fair value				
Derivatives [3]	$ 3	$ 1,027	$ —	$ 1,030
Investment contract liabilities	—	12,455	—	12,455
Other liabilities	76	93	—	169
Total liabilities measured at fair value	$ 79	$ 13,575	$ —	$ 13,654

[1] Excludes collateral received from counterparties of $317.
[2] Includes collateral received under securities lending arrangements.
[3] Excludes collateral pledged to counterparties of $370.

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

7. 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:

	June 30, 2022						
	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**	**Trading account assets**	**Total Level 3 assets**
Balance, beginning of year	$ 100	$ 2,609	$ 1,680	$ 204	$ 7,763	$ 531	$ 12,887
Total gains (losses)							
Included in net earnings	(4)	(600)	94	23	412	(32)	(107)
Included in other comprehensive income [1]	(5)	(126)	4	(7)	(226)	6	(354)
Purchases	7	—	509	13	458	446	1,433
Issues	—	741	—	—	—	—	741
Sales	—	—	(39)	(25)	(5)	(38)	(107)
Settlements	—	(80)	—	—	—	—	(80)
Other	—	—	—	—	(15)	—	(15)
Transfers into Level 3 [2]	—	—	—	—	—	—	—
Transfers out of Level 3 [2]	—	—	—	—	—	(50)	(50)
Balance, end of period	$ 98	$ 2,544	$ 2,248	$ 208	$ 8,387	$ 863	$ 14,348
Total gains (losses) for the period included in net investment income	$ (4)	$ (600)	$ 94	$ 23	$ 412	$ (32)	$ (107)
Change in unrealized gains (losses) for the period included in earnings for assets held at June 30, 2022	$ (4)	$ (597)	$ 94	$ —	$ 412	$ (32)	$ (127)

1 Amount of other comprehensive income for fair value through profit or loss bonds, mortgage loans and stocks, investment properties and trading account assets 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 investments in mutual and segregated funds.

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

7. Fair Value Measurement (cont'd)

	December 31, 2021						
	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 account assets	Total Level 3 assets
Balance, beginning of year	$ 73	$ 2,020	$ 1,374	$ 16	$ 6,270	$ 58	$ 9,811
Total gains (losses)							
Included in net earnings	4	(121)	164	7	615	16	685
Included in other comprehensive income [1,2]	(5)	(21)	—	117	(52)	—	39
Purchases	28	—	798	31	970	597	2,424
Issues	—	896	—	—	—	—	896
Sales	—	—	(199)	(7)	(40)	(140)	(386)
Settlements	—	(165)	—	—	—	—	(165)
Transfers into Level 3 [2,3]	—	—	—	40	—	—	40
Transfers out of Level 3 [3,5]	—	—	(457)	—	—	—	(457)
Balance, end of year	$ 100	$ 2,609	$ 1,680	$ 204	$ 7,763	$ 531	$ 12,887
Total gains (losses) for the year included in net investment income	$ 4	$ (121)	$ 164	$ 7	$ 615	$ 16	$ 685
Change in unrealized gains (losses) for the year included in earnings for assets held at December 31, 2021	$ 4	$ (115)	$ 161	$ —	$ 621	$ 16	$ 687

1 Amount of other comprehensive income for fair value through profit or loss bonds, mortgage loans and stocks, investment properties and trading account assets represents the unrealized gains (losses) on foreign exchange.

2 During 2021, certain stocks previously classified as available-for-sale, at cost were remeasured at a fair value of $147, are now classified as available-for-sale, and have been transferred into Level 3 as reliable measure of fair value was identified during the period. The carrying value of $40 was transferred into Level 3 and the difference between the carrying value and fair value of $107 was recognized as an unrealized gain on available-for-sale assets with an income tax expense of $15 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.

5 On January 11, 2021, Canada Life lifted the temporary suspension on contributions to and transfers into its Canadian real estate investment funds, and on April 19, 2021, the temporary suspension on redemptions and transfers out was fully lifted, as confidence over the valuation of the underlying properties returned as a result of increased market activity. As a result of the lifting of these temporary suspensions, the Company's investment in these funds with a fair value of $457 was transferred on April 19, 2021 from Level 3 to Level 1.

7. Fair Value Measurement (cont'd)

The following sets out information about significant unobservable inputs used at period-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	Range of 3.3% - 11.6%	A decrease in the discount rate would result in an increase in fair value. An increase in the discount rate would result in a decrease in fair value.
		Reversionary rate	Range of 3.5% - 10.0%	A decrease in the reversionary rate would result in an increase in fair value. An increase in the reversionary rate would result in a decrease in fair value.
		Vacancy rate	Weighted average of 1.9%	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 4.6% - 6.7%	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.

8. Insurance and Investment Contract Liabilities

	June 30, 2022		
	Gross liability	**Reinsurance assets**	**Net**
Insurance contract liabilities	**$ 231,522**	**$ 17,576**	**$ 213,946**
Investment contract liabilities	**12,760**	**87**	**12,673**
Total	**$ 244,282**	**$ 17,663**	**$ 226,619**

	December 31, 2021		
	Gross liability	Reinsurance assets	Net
Insurance contract liabilities	$ 208,378	$ 21,032	$ 187,346
Investment contract liabilities	12,455	106	12,349
Total	$ 220,833	$ 21,138	$ 199,695

9. Segregated Funds

The following presents 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

	June 30 2022	December 31 2021
Cash and cash equivalents	$ **14,738**	$ 12,500
Bonds	**66,652**	60,647
Mortgage loans	**2,202**	2,377
Stocks and units in unit trusts	**110,964**	134,568
Mutual funds	**162,330**	133,916
Investment properties	**13,122**	12,776
	370,008	356,784
Accrued income	**590**	442
Other liabilities	**(2,746)**	(2,932)
Non-controlling mutual funds interest	**3,652**	3,125
Total [1]	$ **371,504**	$ 357,419

[1] At June 30, 2022, $65,394 of investments on account of segregated fund policyholders are reinsured by the Company on a modified coinsurance basis ($83,754 at December 31, 2021). Included in this amount are $131 of cash and cash equivalents, $12,665 of bonds, $15 of stocks and units in unit trusts, $52,523 of mutual funds, $89 of accrued income and $(29) of other liabilities.

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

	For the six months ended June 30	
	2022	2021
Balance, beginning of year	$ **357,419**	$ 334,032
Additions (deductions):		
Policyholder deposits	**15,120**	14,587
Net investment income	**1,258**	966
Net realized capital gains on investments	**2,826**	7,548
Net unrealized capital gains (losses) on investments	**(61,881)**	13,668
Unrealized losses due to changes in foreign exchange rates	**(5,109)**	(8,070)
Policyholder withdrawals	**(18,169)**	(20,124)
Business acquisition [1]	**79,455**	—
Change in Segregated Fund investment in General Fund	**63**	(54)
Change in General Fund investment in Segregated Fund	**(14)**	(14)
Net transfer from General Fund	**9**	16
Non-controlling mutual funds interest	**527**	1,124
Total	**14,085**	9,647
Balance, end of period	$ **371,504**	$ 343,679

[1] Investment and insurance contracts on account of segregated fund policyholders acquired through the Prudential acquisition (note 3).

(c) Investments on account of segregated fund policyholders by fair value hierarchy level (note 7)

	June 30, 2022			
	Level 1	**Level 2**	**Level 3**	**Total**
Investments on account of segregated fund policyholders [1]	**$ 258,953**	**$ 102,539**	**$ 14,054**	**$ 375,546**

[1] Excludes other liabilities, net of other assets, of $4,042.

	December 31, 2021			
	Level 1	Level 2	Level 3	Total
Investments on account of segregated fund policyholders [1]	$ 249,543	$ 96,575	$ 13,822	$ 359,940

[1] Excludes other liabilities, net of other assets, of $2,521.

During the first six months of 2022, certain foreign stock holdings valued at $620 have been transferred from Level 2 to Level 1 ($2,137 were transferred from Level 2 to Level 1 during the year ended December 31, 2021) primarily based on the Company's change in use of inputs in addition to quoted prices in active markets for certain foreign stock holdings. 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.

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:

	June 30 2022	December 31 2021
Balance, beginning of year	**$ 13,822**	$ 13,556
Total gains included in segregated fund investment income	**5**	415
Purchases	**355**	333
Sales	**(128)**	(482)
Transfers into Level 3	**—**	5
Transfers out of Level 3	**—**	(5)
Balance, end of period	**$ 14,054**	$ 13,822

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.

10. Share Capital

Common Shares

	For the six months ended June 30			
	2022		2021	
	Number	**Carrying value**	Number	Carrying value
Common shares				
Balance, beginning of year	**930,620,338**	**$ 5,748**	927,853,106	$ 5,651
Exercised and issued under stock option plan	**1,156,072**	**40**	1,791,000	62
Balance, end of period	**931,776,410**	**$ 5,788**	929,644,106	$ 5,713

During the six months ended June 30, 2022, 1,156,072 common shares were exercised under the Company's stock plan with a carrying value of $40, including $4 from contributed surplus transferred upon exercise (1,791,000 with a carrying value of $62, including $8 from contributed surplus transferred upon exercise during the six months ended June 30, 2021).

On January 25, 2022, the Company announced the renewal of its normal course issuer bid (NCIB) commencing January 27, 2022 and terminating January 26, 2023 to purchase for cancellation up to but not more than 20,000,000 of its common shares at market prices.

During the six months ended June 30, 2022, the Company did not purchase any common shares under the current NCIB (nil during the six months ended June 30, 2021 under the previous NCIB).

11. Earnings per Common Share

	For the three months ended June 30		For the six months ended June 30	
	2022	2021	**2022**	2021
Earnings				
Net earnings	**$ 768**	$ 817	**$ 1,570**	$ 1,557
Preferred share dividends	**(33)**	(33)	**(65)**	(66)
Net earnings - common shareholders	**$ 735**	$ 784	**$ 1,505**	$ 1,491
Number of common shares				
Average number of common shares outstanding	**931,775,201**	929,067,870	**931,547,619**	928,603,750
Add: Potential exercise of outstanding stock options	**693,769**	1,608,286	**1,319,106**	865,344
Average number of common shares outstanding - diluted basis	**932,468,970**	930,676,156	**932,866,725**	929,469,094
Basic earnings per common share	**$ 0.789**	$ 0.844	**$ 1.616**	$ 1.605
Diluted earnings per common share	**$ 0.788**	$ 0.842	**$ 1.613**	$ 1.604
Dividends per common share	**$ 0.490**	$ 0.438	**$ 0.980**	$ 0.876

12. 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 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.

(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:

	June 30 2022	December 31 2021
Tier 1 Capital	**$ 11,991**	$ 12,584
Tier 2 Capital	**4,554**	4,417
Total Available Capital	**16,545**	17,001
Surplus Allowance & Eligible Deposits	**10,626**	13,225
Total Capital Resources	**$ 27,171**	$ 30,226
Required Capital	**$ 23,285**	$ 24,323
Total LICAT Ratio (OSFI Supervisory Target = 100%) [1]	**117 %**	124 %

[1] Total Ratio (%) = (Total Capital Resources / Required Capital)

Other foreign operations and foreign subsidiaries of the Company are required to comply with local capital or solvency requirements in their respective jurisdictions.

13. Pension Plans and Other Post-Employment Benefits

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

	For the three months ended June 30		For the six months ended June 30	
	2022	2021	**2022**	2021
Pension plans				
Service costs	**$ 68**	$ 67	**$ 137**	$ 138
Net interest costs	**1**	5	**2**	11
Curtailments	**(1)**	(1)	**(1)**	—
	68	71	**138**	149
Other post-employment benefits				
Service costs	**—**	1	**1**	2
Net interest costs	**3**	3	**6**	5
	3	4	**7**	7
Pension plans and other post-employment benefits (income) expense - Consolidated Statements of Earnings	**71**	75	**145**	156
Pension plans - re-measurements (gain) loss				
Actuarial (gain) loss	**(1,164)**	190	**(2,009)**	(498)
Return on assets (greater) less than assumed	**868**	(229)	**1,335**	(148)
Change in the asset ceiling	**181**	(1)	**192**	11
Pension plans re-measurement (gain) loss	**(115)**	(40)	**(482)**	(635)
Other post-employment benefits - re-measurements				
Actuarial (gain) loss	**(35)**	7	**(80)**	(29)
Pension plans and other post-employment benefits re-measurements - other comprehensive (income) loss	**(150)**	(33)	**(562)**	(664)
Total pension plans and other post-employment benefits (income) expense including re-measurements	**$ (79)**	$ 42	**$ (417)**	$ (508)

The following sets out the weighted average discount rate used to re-measure the defined benefit obligation for pension plans and other post-employment benefits at the following dates:

	June 30		December 31	
	2022	2021	2021	2020
Weighted average discount rate	**4.7 %**	2.7 %	2.6 %	2.2 %

14. Income Taxes

(a) Income Tax Expense

Income tax expense (recovery) consists of the following:

	For the three months ended June 30		For the six months ended June 30	
	2022	2021	**2022**	2021
Current income taxes	**$ 107**	$ (163)	**$ 238**	$ (67)
Deferred income taxes	**(56)**	269	**(135)**	230
Total income tax expense	**$ 51**	$ 106	**$ 103**	$ 163

(b) Effective Income Tax Rate

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

The overall effective income tax rate for the three months ended June 30, 2022 was 6.3% compared to 9.5% for the three months ended June 30, 2021. The effective income tax rate for the three months ended June 30, 2022 was lower than the effective income tax rate for the three months ended June 30, 2021 primarily due to jurisdictional mix of earnings and the impact of the revaluation of deferred tax liabilities in the U.K. in the second quarter of 2021. This impact was partially offset by lower non-taxable investment income.

The overall effective income tax rate for the six months ended June 30, 2022 was 6.1% compared to 8.4% for the six months ended June 30, 2021. The effective income tax rate for the six months ended June 30, 2022 was lower than the effective income tax rate for the six months ended June 30, 2021 primarily due to jurisdictional mix of earnings.

The effective income tax rate for the shareholder account for the three months ended June 30, 2022 was 7.5% compared to 12.1% for the three months ended June 30, 2021.

The effective income tax rate for the shareholder account for the six months ended June 30, 2022 was 8.4% compared to 10.9% for the six months ended June 30, 2021.

15. Segmented Information

(a) Consolidated Net Earnings

For the three months ended June 30, 2022

	Canada	United States	Europe	Capital and Risk Solutions	Lifeco Corporate	Total
Income						
Total net premiums	$ 3,507	$ 3,162	$ 880	$ 8,756	$ —	$ 16,305
Net investment income						
Regular net investment income	797	850	421	65	20	2,153
Changes in fair value through profit or loss	(4,288)	(3,576)	(2,682)	(638)	5	(11,179)
Total net investment income (loss)	(3,491)	(2,726)	(2,261)	(573)	25	(9,026)
Fee and other income	498	1,071	340	—	—	1,909
	514	1,507	(1,041)	8,183	25	9,188
Benefits and expenses						
Paid or credited to policyholders	(854)	175	(1,753)	7,938	—	5,506
Other [1]	943	1,189	422	62	5	2,621
Financing charges	34	54	5	2	1	96
Amortization of finite life intangible assets	27	54	13	—	—	94
Restructuring and integration expenses	—	60	—	—	—	60
Earnings (loss) before income taxes	364	(25)	272	181	19	811
Income taxes	60	(43)	21	8	5	51
Net earnings before non-controlling interests	304	18	251	173	14	760
Non-controlling interests	(4)	(4)	—	—	—	(8)
Net earnings	308	22	251	173	14	768
Preferred share dividends	28	—	5	—	—	33
Net earnings before capital allocation	280	22	246	173	14	735
Impact of capital allocation	21	7	(17)	(6)	(5)	—
Net earnings - common shareholders	$ 301	$ 29	$ 229	$ 167	$ 9	$ 735

[1] Includes commissions, operating and administrative expenses, and premium taxes.

15. Segmented Information (cont'd)

For the three months ended June 30, 2021

	Canada	United States	Europe	Capital and Risk Solutions	Lifeco Corporate	Total
Income						
Total net premiums	$ 3,290	$ 1,245	$ 934	$ 6,282	$ —	$ 11,751
Net investment income						
Regular net investment income	703	481	360	71	(4)	1,611
Changes in fair value through profit or loss	1,518	822	314	138	1	2,793
Total net investment income (loss)	2,221	1,303	674	209	(3)	4,404
Fee and other income	492	960	346	2	—	1,800
	6,003	3,508	1,954	6,493	(3)	17,955
Benefits and expenses						
Paid or credited to policyholders	4,489	2,353	1,204	6,275	—	14,321
Other [1]	936	873	446	55	25	2,335
Financing charges	34	34	6	2	1	77
Amortization of finite life intangible assets	30	42	14	—	—	86
Restructuring and integration expenses	—	21	—	—	—	21
Earnings (loss) before income taxes	514	185	284	161	(29)	1,115
Income taxes	30	39	75	3	(41)	106
Net earnings before non-controlling interests	484	146	209	158	12	1,009
Non-controlling interests	195	(4)	1	—	—	192
Net earnings	289	150	208	158	12	817
Preferred share dividends	28	—	5	—	—	33
Net earnings before capital allocation	261	150	203	158	12	784
Impact of capital allocation	27	—	(18)	(6)	(3)	—
Net earnings - common shareholders	$ 288	$ 150	$ 185	$ 152	$ 9	$ 784

[1] Includes commissions, operating and administrative expenses, and premium taxes.

15. Segmented Information (cont'd)

For the six months ended June 30, 2022

	Canada	United States	Europe	Capital and Risk Solutions	Lifeco Corporate	Total
Income						
Total net premiums	$ 6,924	$ 5,213	$ 2,151	$ 16,068	$ —	$ 30,356
Net investment income						
Regular net investment income	1,555	1,304	768	117	30	3,774
Changes in fair value through profit or loss	(7,480)	(6,382)	(4,549)	(1,230)	7	(19,634)
Total net investment income (loss)	(5,925)	(5,078)	(3,781)	(1,113)	37	(15,860)
Fee and other income	1,006	2,020	694	2	—	3,722
	2,005	2,155	(936)	14,957	37	18,218
Benefits and expenses						
Paid or credited to policyholders	(717)	(311)	(2,376)	14,466	—	11,062
Other [1]	1,905	2,111	874	125	7	5,022
Financing charges	68	102	11	4	1	186
Amortization of finite life intangible assets	54	100	25	—	—	179
Restructuring and integration expenses	—	77	—	—	—	77
Earnings before income taxes	695	76	530	362	29	1,692
Income taxes	82	(39)	38	14	8	103
Net earnings before non-controlling interests	613	115	492	348	21	1,589
Non-controlling interests	23	(5)	1	—	—	19
Net earnings	590	120	491	348	21	1,570
Preferred share dividends	56	—	9	—	—	65
Net earnings before capital allocation	534	120	482	348	21	1,505
Impact of capital allocation	42	14	(34)	(12)	(10)	—
Net earnings - common shareholders	$ 576	$ 134	$ 448	$ 336	$ 11	$ 1,505

[1] Includes commissions, operating and administrative expenses, and premium taxes.

15. Segmented Information (cont'd)

For the six months ended June 30, 2021

	Canada	United States	Europe	Capital and Risk Solutions	Lifeco Corporate	Total
Income						
Total net premiums	$ 6,486	$ 2,791	$ 1,878	$ 13,748	$ —	$ 24,903
Net investment income						
Regular net investment income	1,416	964	659	136	(8)	3,167
Changes in fair value through profit or loss	(730)	(402)	(1,380)	(249)	3	(2,758)
Total net investment income (loss)	686	562	(721)	(113)	(5)	409
Fee and other income	961	1,887	699	4	—	3,551
	8,133	5,240	1,856	13,639	(5)	28,863
Benefits and expenses						
Paid or credited to policyholders	5,294	2,992	414	13,207	—	21,907
Other [1]	1,858	1,760	890	114	30	4,652
Financing charges	67	71	12	4	2	156
Amortization of finite life intangible assets	53	85	27	—	—	165
Restructuring and integration expenses	—	37	—	—	—	37
Earnings (loss) before income taxes	861	295	513	314	(37)	1,946
Income taxes	63	53	86	4	(43)	163
Net earnings before non-controlling interests	798	242	427	310	6	1,783
Non-controlling interests	221	3	2	—	—	226
Net earnings	577	239	425	310	6	1,557
Preferred share dividends	57	—	9	—	—	66
Net earnings before capital allocation	520	239	416	310	6	1,491
Impact of capital allocation	55	—	(36)	(13)	(6)	—
Net earnings - common shareholders	$ 575	$ 239	$ 380	$ 297	$ —	$ 1,491

[1] Includes commissions, operating and administrative expenses, and premium taxes.

Income by source currency for Capital and Risk Solutions:

	For the three months ended June 30		For the six months ended June 30	
	2022	2021	**2022**	2021
Income				
United States	**$ 7,741**	$ 5,458	**$ 13,922**	$ 10,470
United Kingdom	**67**	458	**179**	615
Japan [1]	**(224)**	7	**(333)**	1,453
Other	**599**	570	**1,189**	1,101
Total income	**$ 8,183**	$ 6,493	**$ 14,957**	$ 13,639

[1] The negative income in the Japanese currency in 2022 is primarily due to unrealized fair value losses through profit or loss on Japanese bonds, which are largely offset through changes in insurance contract liabilities.

(b) Consolidated Total Assets and Liabilities

	June 30, 2022				
	Canada	**United States**	**Europe**	**Capital and Risk Solutions**	**Total**
Assets					
Invested assets	**$ 86,870**	**$ 97,516**	**$ 40,459**	**$ 7,809**	**$ 232,654**
Goodwill and intangible assets	**5,742**	**7,789**	**2,954**	**—**	**16,485**
Other assets	**4,684**	**28,169**	**8,991**	**7,818**	**49,662**
Investments on account of segregated fund policyholders	**90,741**	**163,845**	**116,918**	**—**	**371,504**
Total	**$ 188,037**	**$ 297,319**	**$ 169,322**	**$ 15,627**	**$ 670,305**
Liabilities					
Insurance and investment contract liabilities	**$ 79,185**	**$ 114,128**	**$ 38,866**	**$ 12,103**	**$ 244,282**
Other liabilities	**7,551**	**11,425**	**3,894**	**1,099**	**23,969**
Investment and insurance contracts on account of segregated fund policyholders	**90,741**	**163,845**	**116,918**	**—**	**371,504**
Total	**$ 177,477**	**$ 289,398**	**$ 159,678**	**$ 13,202**	**$ 639,755**

15. Segmented Information (cont'd)

	December 31, 2021				
	Canada	United States	Europe	Capital and Risk Solutions	Total
Assets					
Invested assets	$ 92,400	$ 55,376	$ 48,669	$ 9,359	$ 205,804
Goodwill and intangible assets	5,722	5,826	3,047	—	14,595
Other assets	4,323	30,090	10,220	8,037	52,670
Investments on account of segregated fund policyholders	101,537	116,919	138,963	—	357,419
Total	$ 203,982	$ 208,211	$ 200,899	$ 17,396	$ 630,488
Liabilities					
Insurance and investment contract liabilities	$ 84,829	$ 74,632	$ 47,356	$ 14,016	$ 220,833
Other liabilities	7,752	8,800	4,309	892	21,753
Investment and insurance contracts on account of segregated fund policyholders	101,537	116,919	138,963	—	357,419
Total	$ 194,118	$ 200,351	$ 190,628	$ 14,908	$ 600,005

Assets by source currency for Capital and Risk Solutions:

	June 30 2022	December 31 2021
Assets		
United Kingdom	**$ 5,079**	$ 6,507
United States	**6,387**	5,902
Japan	**3,283**	4,102
Other	**878**	885
Total assets	**$ 15,627**	$ 17,396

GREAT-WEST LIFECO INC.

100 Osborne Street North
Winnipeg Manitoba Canada R3C 1V3
greatwestlifeco.com