

GREAT-WEST
LIFECO INC.

Consolidated Financial Statements

For the year ended December 31, 2020

CONSOLIDATED STATEMENTS OF EARNINGS

(in Canadian \$ millions except per share amounts)

	For the years ended December 31	
	2020	2019
Income		
Premium income		
Gross premiums written	\$ 47,754	\$ 43,266
Ceded premiums	(4,735)	(18,756)
Total net premiums	43,019	24,510
Net investment income (note 6)		
Regular net investment income	5,963	6,161
Changes in fair value through profit or loss	5,699	6,946
Total net investment income	11,662	13,107
Fee and other income	5,902	7,081
	60,583	44,698
Benefits and expenses		
Policyholder benefits		
Gross	39,605	37,769
Ceded	(2,946)	(2,916)
Total net policyholder benefits	36,659	34,853
Changes in insurance and investment contract liabilities		
Gross	12,079	10,155
Ceded	(1,751)	(13,479)
Total net changes in insurance and investment contract liabilities	10,328	(3,324)
Policyholder dividends and experience refunds	1,500	1,562
Total paid or credited to policyholders	48,487	33,091
Commissions	2,396	2,429
Operating and administrative expenses (note 27)	5,492	5,231
Premium taxes	480	506
Financing charges (note 16)	284	285
Amortization of finite life intangible assets (note 10)	238	224
Restructuring and integration expenses (note 4)	134	52
Earnings before income taxes	3,072	2,880
Income taxes (note 26)	(82)	373
Net earnings before non-controlling interests	3,154	2,507
Attributable to non-controlling interests (note 18)	78	15
Net earnings	3,076	2,492
Preferred share dividends (note 20)	133	133
Net earnings - common shareholders	\$ 2,943	\$ 2,359
Earnings per common share (note 20)		
Basic	\$ 3.173	\$ 2.494
Diluted	\$ 3.172	\$ 2.493

CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME

(in Canadian \$ millions)

	For the years ended December 31	
	2020	2019
Net earnings	\$ 3,076	\$ 2,492
Other comprehensive income		
Items that may be reclassified subsequently to Consolidated Statements of Earnings		
Unrealized foreign exchange gains (losses) on translation of foreign operations	105	(561)
Income tax (expense) benefit	(2)	—
Unrealized foreign exchange gains (losses) on euro debt designated as hedges of the net investment in foreign operations	(90)	100
Income tax (expense) benefit	12	(14)
Unrealized gains (losses) on available-for-sale assets	287	232
Income tax (expense) benefit	(49)	(37)
Realized (gains) losses on available-for-sale assets	(141)	(69)
Income tax expense (benefit)	15	6
Unrealized gains (losses) on cash flow hedges	36	2
Income tax (expense) benefit	(10)	—
Realized (gains) losses on cash flow hedges	(21)	—
Income tax expense (benefit)	6	—
Non-controlling interests	(69)	(46)
Income tax (expense) benefit	21	7
Total items that may be reclassified	100	(380)
Items that will not be reclassified to Consolidated Statements of Earnings		
Re-measurements on defined benefit pension and other post-employment benefit plans (note 23)	(169)	(226)
Income tax (expense) benefit	40	47
Revaluation surplus on transfer to investment properties (note 9)	11	—
Income tax (expense) benefit	(1)	—
Non-controlling interests	15	13
Income tax (expense) benefit	(4)	(4)
Total items that will not be reclassified	(108)	(170)
Total other comprehensive income (loss)	(8)	(550)
Comprehensive income	\$ 3,068	\$ 1,942

CONSOLIDATED BALANCE SHEETS

(in Canadian \$ millions)

	December 31	
	2020	2019
Assets		
Cash and cash equivalents (note 5)	\$ 7,946	\$ 4,628
Bonds (note 6)	137,592	115,028
Mortgage loans (note 6)	27,803	24,268
Stocks (note 6)	11,000	10,375
Investment properties (note 6)	6,270	5,887
Loans to policyholders	8,387	8,601
	198,998	168,787
Funds held by ceding insurers (note 7)	18,383	8,714
Reinsurance assets (note 13)	22,121	20,707
Goodwill (note 10)	10,106	6,505
Intangible assets (note 10)	4,285	3,879
Derivative financial instruments (note 28)	829	451
Owner occupied properties (note 11)	741	727
Fixed assets (note 11)	426	455
Other assets (note 12)	3,347	3,110
Premiums in course of collection, accounts and interest receivable	6,102	5,881
Current income taxes	145	236
Deferred tax assets (note 26)	975	693
Investments on account of segregated fund policyholders (note 14)	334,032	231,022
Total assets	\$ 600,490	\$ 451,167
Liabilities		
Insurance contract liabilities (note 13)	\$ 208,902	\$ 174,521
Investment contract liabilities (note 13)	9,145	1,656
Debentures and other debt instruments (note 15)	9,693	5,993
Funds held under reinsurance contracts	1,648	1,433
Derivative financial instruments (note 28)	1,221	1,381
Accounts payable	2,698	3,352
Other liabilities (note 17)	5,147	4,689
Current income taxes	343	461
Deferred tax liabilities (note 26)	646	1,116
Investment and insurance contracts on account of segregated fund policyholders (note 14)	334,032	231,022
Total liabilities	573,475	425,624
Equity		
Non-controlling interests (note 18)		
Participating account surplus in subsidiaries	2,871	2,759
Non-controlling interests in subsidiaries	116	107
Shareholders' equity		
Share capital (note 19)		
Preferred shares	2,714	2,714
Common shares	5,651	5,633
Accumulated surplus	14,990	13,660
Accumulated other comprehensive income (note 24)	487	495
Contributed surplus	186	175
Total equity	27,015	25,543
Total liabilities and equity	\$ 600,490	\$ 451,167

Approved by the Board of Directors:



Jeffrey Orr
Chair of the Board



Paul Mahon
President and Chief Executive Officer

CONSOLIDATED STATEMENTS OF CASH FLOWS

(in Canadian \$ millions)

	For the years ended December 31	
	2020	2019
Operations		
Earnings before income taxes	\$ 3,072	\$ 2,880
Income taxes paid, net of refunds received	(367)	(235)
Adjustments:		
Change in insurance and investment contract liabilities	14,476	10,412
Change in funds held by ceding insurers	467	570
Change in funds held under reinsurance contracts	201	81
Change in reinsurance assets	(1,629)	(900)
Changes in fair value through profit or loss	(5,699)	(6,946)
Other	(911)	248
	<u>9,610</u>	<u>6,110</u>
Financing Activities		
Issue of common shares (note 19)	18	39
Purchased and cancelled common shares (note 19)	—	(2,066)
Substantial issuer bid transaction costs (note 19)	—	(3)
Issue of debentures and senior notes (note 15)	3,713	—
Repayment of debentures (note 15)	(500)	(232)
Increase (decrease) in line of credit of subsidiaries	539	(28)
Increase (decrease) in debentures and other debt instruments	(1)	1
Dividends paid on common shares	(1,626)	(1,559)
Dividends paid on preferred shares (note 20)	(133)	(133)
	<u>2,010</u>	<u>(3,981)</u>
Investment Activities		
Bond sales and maturities	22,650	25,155
Mortgage loan repayments	2,339	2,532
Stock sales	3,859	2,814
Investment property sales	73	5
Change in loans to policyholders	84	16
Business acquisitions, net of cash and cash equivalents acquired (note 3)	(1,403)	—
Sale of businesses, net of cash and cash equivalents in subsidiaries (note 3)	281	—
Cash and cash equivalents related to transfer of business	—	(4)
Investment in bonds	(27,942)	(25,087)
Investment in mortgage loans	(3,377)	(3,816)
Investment in stocks	(4,285)	(2,510)
Investment in investment properties	(481)	(644)
	<u>(8,202)</u>	<u>(1,539)</u>
Effect of changes in exchange rates on cash and cash equivalents	(100)	(130)
Increase in cash and cash equivalents	3,318	460
Cash and cash equivalents, beginning of year	4,628	4,168
Cash and cash equivalents, end of year	\$ 7,946	\$ 4,628
Supplementary cash flow information		
Interest income received	\$ 4,589	\$ 5,112
Interest paid	286	301
Dividend income received	333	299

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

(in Canadian \$ millions except per share amounts)

1. Corporate Information

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

Lifeco is a financial services holding company with interests in the life insurance, health insurance, retirement savings, investment management and reinsurance businesses, primarily in Canada, the United States and Europe through its operating subsidiaries including The Canada Life Assurance Company (Canada Life), Great-West Life & Annuity Insurance Company (GWL&A) and Putnam Investments, LLC (Putnam).

The consolidated financial statements (financial statements) of the Company as at and for the year ended December 31, 2020 were approved by the Board of Directors on February 10, 2021.

2. Basis of Presentation and Summary of Accounting Policies

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

Changes in Accounting Policies

The Company adopted the narrow scope amendments to International Financial Reporting Standards (IFRS) for IFRS 3, *Business Combinations*; IAS 1, *Presentation of Financial Statements* and IAS 8, *Accounting Policies, Changes in Accounting Estimates and Errors*; and IAS 39, *Financial Instruments: Recognition and Measurement* and IFRS 7, *Financial Instruments: Disclosures*, effective January 1, 2020. The adoption of these narrow scope amendments did not have a significant impact on the Company's financial statements.

Basis of Consolidation

The consolidated financial statements of the Company were prepared as at and for the year ended December 31, 2020 with comparative information as at and for the year ended December 31, 2019. Subsidiaries are fully consolidated from the date of acquisition, being the date on which the Company obtains control, and continue to be consolidated until the date that such control ceases. The Company has control when it has the power to direct the relevant activities, has significant exposure to variable returns from these activities and has the ability to use its power to affect the variable returns. All intercompany balances and transactions, including income and expenses, profits or losses and dividends, are eliminated on consolidation.

Impact of COVID-19 on Significant Judgments, Estimates and Assumptions

Beginning in January 2020, the outbreak of a virus known as COVID-19 and ensuing global pandemic have resulted in travel and border restrictions, quarantines, supply chain disruptions, lower consumer demand and significant market uncertainty. In the first quarter of 2020, global financial markets experienced material and rapid declines and significant volatility; however, following March 31, 2020, the markets have experienced recoveries. Governments and central banks have reacted with significant monetary and fiscal interventions designed to stabilize economic conditions. The duration and impact of the COVID-19 pandemic continues to be unknown at this time, as is the efficacy of the government and central bank interventions.

The results of the Company reflect management's judgments regarding the impact of prevailing market conditions related to global credit, equities, investment properties and foreign exchange, as well as prevailing health and mortality experience.

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

The provision for future credit losses within the Company's insurance contract liabilities relies upon investment credit ratings. The Company's practice is to use third party independent credit ratings where available. Management judgment is required when setting credit ratings for instruments that do not have a third party credit rating. Given rapid market changes, third party credit rating changes may lag developments in the current environment.

The fair value of portfolio investments (note 6), the valuation of goodwill and other intangible assets (note 10), the valuation of insurance contract liabilities (note 13) and the recoverability of deferred tax asset carrying values (note 26) reflect management's judgment.

Given the uncertainty surrounding the current environment, the actual financial results could differ from the estimates made in preparation of these financial statements.

Use of Significant Judgments, Estimates and Assumptions

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

- Management uses judgment to determine the fair value of assets acquired and liabilities assumed in a business combination.
- Management uses independent qualified appraisal services to determine the fair value of investment properties, which utilize judgments and estimates. These appraisals are adjusted by applying management judgments and estimates for material changes in property cash flows, capital expenditures or general market conditions (note 6).
- Management uses internal valuation models which utilize judgments and estimates to determine the fair value of equity release mortgages. These valuations are adjusted by applying management judgments and estimates for material changes in projected asset cash flows, and discount rates (note 6).
- In the determination of the fair value of financial instruments, the Company's management exercises judgment in the determination of fair value inputs, particularly those items categorized within level 3 of the fair value hierarchy (note 9).
- Cash generating units for indefinite life intangible assets and cash generating unit groupings for goodwill have been determined by management as the lowest level that the assets are monitored for internal reporting purposes, which requires management judgment in the determination of the lowest level of monitoring (note 10).
- Management evaluates the future benefit for initial recognition and measurement of goodwill and intangible assets as well as testing the recoverable amounts. The determination of the carrying value and recoverable amounts of the cash generating unit groupings for goodwill and cash generating units for intangible assets relies upon the determination of fair value or value-in-use using valuation methodologies (note 10).
- Judgments are used by management in determining whether deferred acquisition costs and deferred income reserves can be recognized on the Consolidated Balance Sheets. Deferred acquisition costs are recognized if management determines the costs meet the definition of an asset and are incremental and related to the issuance of the investment contract. Deferred income reserves are amortized on a straight-line basis over the term of the policy (notes 12 and 17).
- Management uses judgment to evaluate the classification of insurance and reinsurance contracts to determine whether these arrangements should be accounted for as insurance, investment or service contracts.
- The actuarial assumptions, such as interest rates, inflation, policyholder behaviour, mortality and morbidity of policyholders, used in the valuation of insurance and certain investment contract liabilities under the Canadian Asset Liability Method require significant judgment and estimation (note 13).

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

- The actuarial assumptions used in determining the expense and benefit obligations for the Company's defined benefit pension plans and other post-employment benefits requires significant judgment and estimation. Management reviews previous experience of its plan members and market conditions including interest rates and inflation rates in evaluating the assumptions used in determining the expense for the current year (note 23).
- The Company operates within various tax jurisdictions where significant management judgments and estimates are required when interpreting the relevant tax laws, regulations and legislation in the determination of the Company's tax provisions and the carrying amounts of its tax assets and liabilities (note 26).
- Management applies judgment in assessing the recoverability of the deferred income tax asset carrying values based on future years' taxable income projections (note 26).
- Legal and other provisions are recognized resulting from a past event which, in the judgment of management, has resulted in a probable outflow of economic resources which would be passed to a third-party to settle the obligation. Management uses judgment to evaluate the possible outcomes and risks in determining the best estimate of the provision at the balance sheet date (note 29).
- The operating segments of the Company are the segments reviewed by the Company's Chief Executive Officer to assess performance and allocate resources within the Company. Management applies judgment in the aggregation of the business units into the Company's operating segments (note 31).
- The Company consolidates all subsidiaries and entities which management determines that the Company controls. Control is evaluated on the ability of the Company to direct the activities of the subsidiary or entity to derive variable returns and management uses judgment in determining whether control exists. Judgment is exercised in the evaluation of the variable returns and in determining the extent to which the Company has the ability to exercise its power to generate variable returns.
- Management uses judgments, such as the determination of whether the Company retains the primary obligation with a client in sub-advisor arrangements. Where the Company retains the primary obligation to the client, revenue and expenses are recorded on a gross basis.
- Within the Consolidated Statements of Cash Flows, purchases and sales of portfolio investments are recorded within investment activities due to management's judgment that these investing activities are long-term in nature.
- The results of the Company reflect management's judgments regarding the impact of prevailing global credit, equity and foreign exchange market conditions. The provision for future credit losses within the Company's insurance contract liabilities relies upon investment credit ratings. The Company's practice is to use third-party independent credit ratings where available. Management judgment is required when setting credit ratings for instruments that do not have a third-party rating.

The significant accounting policies are as follows:

(a) Portfolio Investments

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

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

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

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

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

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

Fair Value Measurement

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

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

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

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

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

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

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

Bonds and Mortgages - Loans and Receivables

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

Equity Release Mortgages - Fair Value Through Profit or Loss

There are no market observable prices for equity release mortgages; therefore an internal valuation model is used discounting expected future cash flows and includes consideration of the embedded no-negative equity guarantee. Inputs to the model include market observable inputs such as benchmark yields and risk-adjusted spreads. Non market observable inputs include property growth and volatility rates, expected rates of voluntary redemptions, death, moving to long term care and interest cessation assumptions and the value of the no negative equity guarantee.

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

Fair values for stocks traded on an active market are generally determined by the last bid price for the security from the exchange where it is principally traded. Fair values for stocks for which there is no active market is typically based upon alternative valuation techniques such as discounted cash flow analysis, review of price movement relative to the market and utilization of information provided by the underlying investment manager. The Company maximizes the use of observable inputs when measuring fair value. The Company obtains quoted prices in active markets, when available, for identical assets at the balance sheet date to measure stocks at fair value in its fair value through profit or loss and available-for-sale portfolios.

Investment Properties

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

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

Impairment

Investments are reviewed regularly on an individual basis to determine impairment status. The Company considers various factors in the impairment evaluation process, including, but not limited to, the financial condition of the issuer, specific adverse conditions affecting an industry or region, decline in fair value not related to interest rates, bankruptcy or defaults, and delinquency in payments of interest or principal.

Investments are deemed to be impaired when there is objective evidence that timely collection of future cash flows can no longer be reliably estimated. The fair value of an investment is not a definitive indicator of impairment, as it may be significantly influenced by other factors including the remaining term to maturity and liquidity of the asset; however, market price is taken into consideration when evaluating impairment.

For impaired mortgages and bonds classified as loans and receivables, provisions are established or write-offs made to adjust the carrying value to the net realizable amount. Wherever possible, the fair value of collateral underlying the loans or observable market price is used to establish the net realizable value. For impaired available-for-sale bonds recorded at fair value, the accumulated loss recorded in accumulated other comprehensive income is reclassified to net investment income. Impairments on available-for-sale debt instruments are reversed if there is objective evidence that a permanent recovery has occurred. All gains and losses on bonds classified or designated as fair value through profit or loss are recorded in net investment income, therefore, in the event of an impairment, the reduction will be recorded in net investment income.

Securities Lending

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

(b) Transaction Costs

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

(c) Cash and Cash Equivalents

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

(d) Trading Account Assets

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

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

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

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

(f) Other Assets and Other Liabilities

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

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

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

(g) Disposal Group Classified As Held For Sale

Disposal groups are classified as held for sale when the carrying amount will be recovered through a sale transaction rather than continuing use. The fair value of a disposal group is measured at the lower of its carrying amount and fair value less costs to sell. Individual assets and liabilities in a disposal group not subject to these measurement requirements include financial assets, investment properties and insurance contract liabilities. These assets and liabilities are measured in accordance with the relevant accounting policies described for those assets and liabilities included in this note before the disposal group as a whole is measured to the lower of its carrying amount and fair value less cost to sell. Any impairment loss for the disposal group is recognized as a reduction to the carrying amount for the portion of the disposal group under the measurement requirements for IFRS 5, *Non-Current Assets Held for Sale and Discontinued Operations*.

Disposal group assets and liabilities classified as held for sale are presented separately on the Company's Consolidated Balance Sheets. Gains and losses from disposal groups held for sale are presented separately in the Company's Consolidated Statements of Earnings.

(h) Derivative Financial Instruments

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

The Company includes disclosure of the maximum credit risk, future credit exposure, credit risk equivalent and risk weighted equivalent in note 28 as prescribed by the Office of the Superintendent of Financial Institutions (OSFI) in Canada.

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

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

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

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

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

Derivatives not designated as hedges for accounting purposes

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

Fair value hedges

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

The Company currently uses foreign exchange forward contracts designated as fair value hedges.

Cash flow hedges

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

The Company currently uses interest rate swaps and equity total return swaps designated as cash flow hedges.

Net investment hedges

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

The Company currently uses foreign exchange forward contracts and debt instruments designated as net investment hedges.

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

(i) Embedded Derivatives

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

(j) Foreign Currency Translation

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

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

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

(k) Loans to Policyholders

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

(l) Reinsurance Contracts

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

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

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

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

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

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

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

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

(n) Business Combinations, Goodwill and Intangible Assets

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

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

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

Impairment Testing

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

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

Goodwill has been allocated to cash generating unit groupings, representing the lowest level that the assets are monitored for internal reporting purposes. Goodwill is tested for impairment by comparing the carrying value of each cash generating unit grouping to its recoverable amount. An impairment loss is recognized for the amount by which the asset's carrying amount exceeds its recoverable amount.

Intangible assets have been allocated to cash generating units, representing the lowest level that the assets are monitored for internal reporting purposes.

Intangible assets with an indefinite useful life are reviewed annually to determine if there are indicators of impairment. If indicators of impairment have been identified, a test for impairment is performed and recognized as necessary. Impairment is assessed by comparing the carrying values of the assets to their recoverable amounts. An impairment loss is recognized for the amount by which the asset's carrying amount exceeds its recoverable amount.

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

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

(o) Revenue Recognition

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

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

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

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

Fee income includes fees earned from management of segregated fund assets, proprietary mutual fund assets, record-keeping, fees earned on administrative services only Group health contracts, commissions and fees earned from management services. Fee and other income is recognized on the transfer of services to customers for the amount that reflects the consideration expected to be received in exchange for those services promised.

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

(p) Owner Occupied Properties and Fixed Assets

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

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

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

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

(q) Deferred Acquisition Costs

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

(r) Segregated Funds

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

(s) Insurance and Investment Contract Liabilities

Contract Classification

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

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

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

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

Measurement

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

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

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

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

(t) Deferred Income Reserves

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

(u) Income Taxes

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

Current Income Tax

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

A provision for tax treatment uncertainties which meet the probable threshold for recognition is measured using either the most likely amount or the expected value, depending upon which method provides the better prediction of the resolution of the uncertainty. The provision for tax uncertainties will be classified as current or deferred based on how a disallowance of the underlying uncertain tax treatment would impact the tax provision accrual as of the balance sheet date.

Deferred Income Tax

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

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

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

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

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

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

(v) Policyholder Benefits

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

(w) Repurchase Agreements

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

(x) Pension Plans and Other Post-Employment Benefits

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

The present value of the defined benefit obligations and the related current service cost is determined using the projected unit credit method (note 23). Pension plan assets are recorded at fair value.

For the defined benefit plans of the Company's subsidiaries, service costs and net interest costs are recognized in the Consolidated Statements of Earnings. Service costs include current service cost, administration expenses, past service costs and the impact of curtailments and settlements. To determine the net interest costs (income) recognized in the Consolidated Statements of Earnings, the Company's subsidiaries apply a discount rate to the net benefit liability (asset), where the discount rate is determined by reference to market yields at the beginning of the year on high quality corporate bonds.

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

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

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

(y) Equity

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

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

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

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

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

(z) Share-Based Payments

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

The Company follows the fair value based method of accounting for the valuation of compensation expense for shares and share options granted to employees under its stock option plans (note 22). This share-based payment expense is recognized in operating and administrative expenses in the Consolidated Statements of Earnings and as an increase to contributed surplus over the vesting period of the granted options. When options are exercised, the proceeds received, along with the amount in contributed surplus, are transferred to share capital.

The Company and certain of its subsidiaries have Deferred Share Unit Plans (DSU Plans) in which the Directors and certain employees of the Company participate. Units issued to Directors under the DSU Plans vest when granted. Units issued to certain employees under the DSU Plans primarily vest over a three year period. The Company recognizes an increase in operating and administrative expenses for the units granted under the DSU Plans. The Company recognizes a liability for units granted under the DSU Plans which is remeasured at each reporting period based on the market value of the Company's common shares.

Certain employees of the Company are entitled to participate in the Performance Share Unit Plan (PSU Plan). Units issued under the PSU Plan vest over a three year period. The Company uses the fair value method to recognize compensation expense for the units granted under the plan over the vesting period, net of related hedges. The liability is remeasured at fair value at each reporting period.

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

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

(aa) Earnings Per Common Share

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

(ab) Leases

Where the Company is the lessee, a right-of-use asset and a lease liability are recognized on the Consolidated Balance Sheets as at the lease commencement date.

Right-of-use assets are initially measured based on the initial amount of lease liability adjusted for any lease payments made at or before the commencement date, plus any initial direct costs incurred and an estimate of costs to dismantle and remove the underlying asset or to restore the underlying asset or the site on which it is located, less any lease incentive received. Right-of-use assets are included within other assets with the exception of right-of-use assets which meet the definition of investment property which are presented within investment properties and subject to the Company's associated accounting policy. Right-of-use assets presented within other assets are depreciated to the earlier of the useful life of the right-of-use asset or the lease term using the straight-line method. Depreciation expense on right-of-use assets is included within operating and administrative expenses.

Lease liabilities are initially measured at the present value of the lease payments that are not paid at the commencement date, discounted using the interest rate implicit in the lease or, if that rate cannot be readily determined, the Company shall use the lessee's incremental borrowing rate. Generally, the Company uses the lessee's incremental borrowing rate as its discount rate. The lease liability is measured at amortized cost using the effective interest method and is included within other liabilities. Interest expense on lease liabilities is included within operating and administrative expenses.

The Company has elected to apply a practical expedient not to recognize right-of-use assets and lease liabilities for short-term leases that have a lease term of 12 months or less and leases of low-value assets.

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

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

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

(ac) Operating Segments

Operating segments have been identified based on internal reports that are regularly reviewed by the Company's Chief Executive Officer to allocate resources and assess performance of segments and for which discrete financial information is available. The Company's operating segments include Canada, United States, Europe, Capital and Risk Solutions, and Lifeco Corporate. Effective January 1, 2020, as a result of strategic operational changes, the Company has divided the Europe segment into two separate reporting segments - Europe and Capital and Risk Solutions. The realignment resulted in a change to comparative figures within these operating segments (note 31). The Company's other reportable segments - Canada, United States and Lifeco Corporate - are unchanged. The Canada segment comprises the Individual Customer and Group Customer business units. GWL&A (financial services) and Putnam (asset management) are included in the United States segment. The Europe segment comprises United Kingdom, Ireland, and Germany. Reinsurance, which had previously been reported as part of the Europe segment, is reported in the Capital and Risk Solutions segment. The Lifeco Corporate segment represents activities and transactions that are not directly attributable to the measurement of the operating segments of the Company.

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

(ad) Future Accounting Policies

Standard	Summary of Future Changes
IFRS 17 - <i>Insurance Contracts</i>	<p>In May 2017, the IASB issued IFRS 17, Insurance Contracts (IFRS 17), which will replace IFRS 4, Insurance Contracts. On June 26, 2019 the IASB issued an exposure draft covering targeted amendments to the IFRS 17 standard, including a proposed amendment to defer the effective date of the standard. In June 2020, the IASB finalized the amendments to IFRS 17, which included confirmation of the effective date for the standard of January 1, 2023. In addition, the IASB confirmed the extension to January 1, 2023 of the exemption for insurers to apply the financial instruments standard, IFRS 9, Financial Instruments (IFRS 9), keeping the alignment of the effective dates for IFRS 9 and IFRS 17.</p> <p>The adoption of IFRS 17 is a significant initiative for the Company supported by a formal governance framework and project plan, for which substantial resources are being dedicated. The Company has assembled a project team that is working on implementation which involves preparing the financial reporting systems and processes for reporting under IFRS 17, policy development and operational and change management. The project team is also monitoring developments from the IASB and various industry groups that the Company has representation on. The Company continues to make progress in implementing its project plan, with key policy decisions well advanced as well as significant progress on the technology solution.</p> <p>IFRS 17 sets out the requirements for the recognition, measurement, presentation and disclosures of insurance contracts a company issues and reinsurance contracts it holds. IFRS 17 introduces three new measurement models depending on the nature of the insurance contracts: the General Measurement Model, the Premium Allocation Approach and the Variable Fee Approach. For the General Measurement Model and Variable Fee Approach, IFRS 17 requires entities to measure insurance contract liabilities on the balance sheet as the total of:</p> <p>(a) the fulfilment cash flows - the current estimates of amounts that a company expects to collect from premiums and pay out for claims, benefits and expenses, including an adjustment for the timing and risk of those amounts; and</p> <p>(b) the contractual service margin - the future profit for providing insurance coverage.</p> <p>Under IFRS 17, the discount rate used to reflect the time value of money in the fulfilment cash flows must be based on the characteristics of the liability. This is a significant change from IFRS 4 and the Canadian Asset Liability Method, where the discount rate was based on the yield curves of the assets supporting those liabilities (refer to the Company's significant accounting policies in note 2 of these financial statements).</p>

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

Standard	Summary of Future Changes
IFRS 17 - <i>Insurance Contracts</i> , continued	<p>The future profit for providing insurance coverage (including impacts of new business) is reflected in the initial recognition of insurance contract liabilities and then recognized into profit or loss over time as the insurance services are provided. IFRS 17 also requires the Company to distinguish between groups of contracts expected to be profit making and groups of contracts expected to be onerous. The Company is required to update the fulfilment cash flows at each reporting date, using current estimates of the amount, timing and uncertainty of cash flows and discount rates. As a result of the new valuation methodologies required under IFRS 17, the Company expects its insurance contract liabilities to increase upon adoption.</p> <p>IFRS 17 will affect how the Company accounts for its insurance contracts and how it reports financial performance in the Consolidated Statements of Earnings, in particular the timing of earnings recognition for insurance contracts. The adoption of IFRS 17 will also have a significant impact on how insurance contract results are presented and disclosed in the consolidated financial statements and on regulatory and tax regimes that are dependent upon IFRS accounting values. The Company is also actively monitoring potential impacts on regulatory capital and the associated ratios and disclosures. The Company continues to assess all these impacts through its global implementation plan.</p>
IFRS 9 - <i>Financial Instruments</i>	<p>In July 2014, the IASB issued a final version of IFRS 9, <i>Financial Instruments</i> to replace IAS 39, <i>Financial Instruments: Recognition and Measurement</i>. The standard provides changes to financial instruments accounting for the following:</p> <ul style="list-style-type: none"> • 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.

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

Standard	Summary of Future Changes
IFRS 9 - <i>Financial Instruments</i> , continued	<p>In September 2016, the IASB issued an amendment to IFRS 4, <i>Insurance Contracts</i> (IFRS 4). The amendment “Applying IFRS 9, <i>Financial Instruments</i> with IFRS 4, <i>Insurance Contracts</i>” provides qualifying insurance companies with two options to address the potential volatility associated with implementing the IFRS 9 standard before the new proposed insurance contract standard is effective. The two options are as follows:</p> <ul style="list-style-type: none"> • <i>Deferral Approach</i> - provides the option to defer implementation of IFRS 9 until the effective date of the new insurance contract standard; or • <i>Overlay Approach</i> - provides the option to recognize the volatility that could arise when IFRS 9 is applied within other comprehensive income, rather than profit or loss. <p>The Company qualifies for the amendment and is applying the deferral approach to allow adoption of both IFRS 9 and IFRS 17 simultaneously.</p> <p>The disclosure for the measurement and classification of the Company's portfolio investments provides most of the information required by IFRS 9. The Company continues to evaluate the impact of the adoption of this standard with the adoption of IFRS 17.</p>
IAS 37 - <i>Provisions, Contingent Liabilities, and Contingent Assets</i>	<p>In May 2020, the IASB issued amendments to IAS 37, <i>Provisions, Contingent Liabilities, and Contingent Assets</i>. The amendments specify which costs should be included when assessing whether a contract will be loss-making.</p> <p>These amendments are effective for annual reporting periods beginning on or after January 1, 2022, with earlier application permitted. The Company is evaluating the impact of the adoption of these amendments.</p>
<i>Annual Improvements 2018-2020 Cycle</i>	<p>In May 2020, the IASB issued <i>Annual Improvements 2018-2020 Cycle</i> as part of its ongoing process to efficiently deal with non-urgent narrow scope amendments to IFRS. Two amendments were included in this issue that are applicable for the Company relating to IFRS 9, <i>Financial Instruments</i> and IFRS 16, <i>Leases</i>.</p> <p>The amendments are effective January 1, 2022. The Company is evaluating the impact of the adoption of these amendments.</p>
IFRS 16 - <i>Leases</i>	<p>In May 2020, the IASB published amendments to IFRS 16, <i>Leases</i> amending the standard to provide lessees with an optional exemption from assessing whether a COVID-19-related rent concession is a lease modification.</p> <p>The amendments are effective for annual reporting periods beginning on or after June 1, 2020, with earlier application permitted. The Company does not anticipate a significant impact on its consolidated financial statements as a result of this amendment.</p>

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

Standard	Summary of Future Changes
<p>IFRS 9 - <i>Financial Instruments</i>, IAS 39 - <i>Financial Instruments: Recognition and Measurement</i>, IFRS 7 - <i>Financial Instruments: Disclosures</i>, IFRS 4 - <i>Insurance Contracts</i> and IFRS 16 - <i>Leases</i></p>	<p>In August 2020, the IASB published <i>Interest Rate Benchmark Reform – Phase 2</i> which issued amendments to IFRS 9, IAS 39, IFRS 7, IFRS 4 and IFRS 16. The amendments provide relief from remeasurement impacts on financial instruments, and discontinuation of hedge relationships arising from reform of an interest rate benchmark, including its replacement with alternative benchmark rates.</p> <p>The amendments are effective for annual periods beginning on or after January 1, 2021, with earlier application permitted. The Company is monitoring the interest rate benchmark reform process and has established an internal program to fully transition to alternative reference rates by the end of 2021. The transition to alternative reference rates is not expected to impact the Company’s risk management strategy. The adoption of these amendments is not expected to have a significant impact on the consolidated financial statements.</p>

3. Business Acquisitions and Other Transactions

(a) Acquisition of MassMutual Retirement Services Business

On December 31, 2020, GWL&A completed the purchase, via indemnity reinsurance, of the retirement services business of Massachusetts Mutual Life Insurance Company (MassMutual). The acquisition strengthens the Company's position as a leader in the U.S. retirement market. The Company anticipates realizing cost synergies through the migration of MassMutual's retirement services business onto the Company's recordkeeping platform. The Company assumed the economics and risks associated with the reinsured business.

The Company paid a ceding commission of \$2,937 (U.S. \$2,312) net of working capital adjustments to MassMutual, and funded the transaction with existing cash, short-term debt and \$1,973 (U.S. \$1,500) in long-term debt issued on September 17, 2020 (note 15). The assets acquired, liabilities assumed and ceding commission paid at the closing of this transaction are subject to future adjustments.

The initial amounts assigned to the assets acquired, goodwill, and liabilities assumed and reported as at December 31, 2020 are as follows:

Assets acquired and goodwill

Cash and cash equivalents	\$	2,594
Bonds		12,006
Mortgage Loans		2,326
Funds held by ceding insurers		9,928
Goodwill		2,827
Other assets		231
Premiums in the course of collection, accounts and interest receivable		172
Deferred tax assets		300
Investments on account of segregated fund policyholders		84,785
Total assets acquired and goodwill		<u><u>\$ 115,169</u></u>

Liabilities assumed

Insurance contract liabilities	\$	22,316
Investment contract liabilities		4,984
Accounts payable		31
Other liabilities		116
Investment and insurance contracts on account of segregated fund policyholders		84,785
Total liabilities assumed		<u><u>\$ 112,232</u></u>

As at December 31, 2020, the accounting for the acquisition is not finalized pending completion of a comprehensive valuation of the net assets acquired. The financial statements at December 31, 2020 reflect management's current best estimate of the purchase price allocation. Final valuation of the assets acquired and liabilities assumed and the completion of the purchase price allocation are expected to occur during 2021. As at December 31, 2020, provisional amounts for intangible assets have not been separately identified and valued within the assets of the purchase price allocation pending completion of the valuation exercise.

As a result, the excess of the purchase price over the fair value of net assets acquired, representing goodwill of \$2,827 (U.S. \$2,226) on the date of acquisition, will be adjusted in future periods.

The goodwill represents the excess of the purchase price over the fair value of the net assets, representing the synergies or future economic benefits arising from other assets acquired that are not individually identified and separately recognized in the acquisition of the MassMutual retirement services business.

3. *Business Acquisitions and Other Transactions (cont'd)*

These synergies represent meaningful expense and revenue opportunities which are expected to be accretive to earnings.

During the year ended December 31, 2020, the Company incurred acquisition expenses of \$66 (U.S. \$51) which are included within operating and administrative expenses in the Consolidated Statements of Earnings.

As the acquisition occurred on December 31, 2020, the reinsured business did not contribute to 2020 earnings.

Supplemental pro-forma revenue and net earnings for the combined entity, as though the acquisition date for this business combination had been as of the beginning of the annual reporting period, has not been included as it is impracticable as MassMutual had a different financial reporting basis than the Company.

(b) Acquisition of Personal Capital Corporation

On August 17, 2020, GWL&A completed the acquisition of 100% of the equity of Personal Capital Corporation (Personal Capital), a hybrid wealth manager that combines a digital experience with personalized advice delivered by human advisors. Prior to the completion of the acquisition, IGM, an affiliated company controlled by Power Corporation, held a 24.8% interest in Personal Capital (approximately 21.7% after giving effect to dilution). The transaction resulted from an auction process conducted by Personal Capital and shareholders other than IGM (note 25).

The amounts assigned to the assets acquired, goodwill, and liabilities assumed on August 17, 2020, reported as at December 31, 2020 are as follows:

Assets acquired and goodwill

Cash and cash equivalents	\$	36
Goodwill		718
Intangible assets		294
Deferred tax assets		43
Other assets		40

Total assets acquired and goodwill	\$	1,131
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Liabilities assumed and contingent consideration

Other liabilities	\$	33
Contingent consideration		26

Total liabilities assumed and contingent consideration	\$	59
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During the fourth quarter of 2020, the Company completed its comprehensive evaluation of the fair value of the net assets acquired from Personal Capital and the purchase price allocation. As a result, initial goodwill of \$954 recognized upon the acquisition of Personal Capital on August 17, 2020 and presented in the September 30, 2020 consolidated interim unaudited financial statements has been adjusted in the fourth quarter of 2020. Adjustments were made to the provisional amounts disclosed in the September 30, 2020 consolidated interim unaudited financial statements primarily for the recognition and measurement of intangible assets, contingent consideration and adjustments to the deferred tax assets acquired.

3. *Business Acquisitions and Other Transactions (cont'd)*

The following provides the change in carrying value from September 30, 2020 to December 31, 2020 of the goodwill on acquisition:

Goodwill previously reported at September 30, 2020	\$	954
Recognition and measurement of intangible assets		(294)
Recognition and measurement of contingent consideration		26
Adjustment to deferred tax assets and other adjustments		32
Goodwill reported at December 31, 2020	\$	<u>718</u>

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

Intangible assets include customer relationships, brand name and internally developed software (note 10).

The purchase consideration was adjusted from \$1,097 to \$1,072 (U.S. \$825 to U.S. \$813). The contingent consideration earn-out value of \$26 (U.S. \$20) represents management's best estimate, which could increase up to \$231 (U.S. \$175) based on the achievement of growth in assets under management metrics defined in the Merger Agreement, payable following measurements through December 31, 2021 and December 31, 2022. Future changes in the fair value of the contingent consideration measured in accordance with the Merger Agreement will be recognized in the Consolidated Statements of Earnings.

Supplemental pro-forma revenue and net earnings for the combined entity, as though the acquisition date for this business combination had been as of the beginning of the annual reporting period, have not been included as the results were not significant to the results of the Company.

During the year ended December 31, 2020, the Company incurred transaction expenses of \$29 (U.S. \$22) which are included within operating and administrative expenses in the Consolidated Statements of Earnings.

(c) U.S. Individual Life Insurance and Annuity Business Reinsurance Agreement

On January 24, 2019, GWL&A announced that it had entered into an agreement with Protective Life Insurance Company (Protective Life) to sell, via indemnity reinsurance, substantially all of its individual life insurance and annuity business in its United States segment. The transaction was completed on June 1, 2019.

The liabilities transferred and ceding commission received at the closing of this transaction were subject to future adjustments. In October 2019, Protective Life provided the Company with its listing of proposed adjustments with respect to the liabilities transferred, which the Company formally objected to in December 2019. In November 2020, the parties reached resolution and settled cash for adjustments which did not have a material effect on the consolidated financial position of the Company and no further adjustments are expected.

(d) Sale of Irish Progressive Services International Limited

On August 4, 2020, Irish Life Group Limited (Irish Life), an indirect wholly-owned subsidiary of the Company, completed the sale of Irish Progressive Services International Limited (IPSI), a wholly-owned subsidiary whose principal activity is the provision of outsourced administration services for life assurance companies, to a member of the FNZ group of companies. The Company recognized a net gain of \$94 after-tax in the Consolidated Statements of Earnings that includes a curtailment gain and other restructuring and transaction costs. The carrying value and earnings of the business are immaterial to the Company.

3. *Business Acquisitions and Other Transactions (cont'd)*

(e) Sale of GLC Asset Management Group Ltd.

During the fourth quarter of 2020, the Company completed the sale of GLC Asset Management Group Ltd. (GLC) to Mackenzie Financial Corporation (Mackenzie), an affiliate of the Company. GLC was a wholly-owned subsidiary of Canada Life whose principal activity is the provision of investment management services to Canada Life.

The Company recorded a gain on disposal of \$143 after-tax, net of restructuring and other one-time costs of \$16 after-tax (\$22 pre-tax) (note 4). The carrying value and earnings of the business are immaterial to the Company. This is a related party transaction (note 25), and the board of directors of each of the Company and Canada Life established a committee of directors independent of management and Mackenzie to assess, review and consider the proposed terms of the transaction and to make recommendations regarding the transaction to its board of directors.

(f) Northleaf Capital Partners Ltd.

On October 29, 2020, the Company and Mackenzie jointly acquired a non-controlling interest in Northleaf Capital Partners Ltd. (Northleaf), a premier global private equity, private credit and infrastructure fund manager, through an acquisition vehicle 80% owned by Mackenzie and 20% owned by Lifeco. The Company and Mackenzie acquired a 49.9% non-controlling interest and a 70% economic interest in Northleaf for consideration that includes a payment on closing of \$245 as well as contingent consideration at the end of five years. The Company has also committed as part of the transaction to make a minimum investment through 2022 in Northleaf's product offerings. Mackenzie and Lifeco have an obligation and right to purchase an additional equity and voting interest in the firm commencing in approximately five years and extending into future periods. The revenue and net earnings of Northleaf are not expected to be significant to the results of the Company.

4. Restructuring and Integration Expenses

(a) Canada Restructuring

In addition to the sale of GLC by the Company (note 3), two initiatives impacting the Company's operations were announced in the fourth quarter of 2020:

1. The Company announced changes to its Canadian distribution strategy and vision for advisor-based distribution, and
2. IGM has notified the Company that it intends to terminate its long-term technology infrastructure related sharing agreement in the first quarter of 2021.

These initiatives, together with the sale of GLC will result in staff reductions, exit costs for certain facilities lease agreements and decommit activities related to technology and other assets.

As a result, the Company has recorded a restructuring provision of \$92, which includes the restructuring costs associated with the GLC disposition (\$68 in the shareholder account and \$24 in the participating account). The after-tax impact of the restructuring provision is \$68 (\$50 in the shareholder account and \$18 in the participating account). Changes relating to these initiatives are expected to be implemented by the end of 2022 and are not expected to have a significant impact on the Company's financial results.

At December 31, 2020, the Company has a restructuring provision of \$86 remaining in other liabilities. The Company expects to pay out substantially all of these amounts by December 31, 2022.

	2020
Balance, beginning of year	\$ —
Restructuring expenses	92
Amounts used	(6)
Balance, end of year	\$ 86

(b) GWL&A Restructuring

Upon acquisition of MassMutual, GWL&A recorded restructuring expenses of \$42 pre-tax (\$33 after-tax) associated with the acquisition of the MassMutual retirement services business. These expenses are recorded in restructuring and integration expenses in the Consolidated Statement of Earnings and include a restructuring provision of \$37 and integration costs of \$5.

This restructuring is primarily attributed to the reduction of MassMutual staff not retained. In addition, expenses were incurred for the early termination of certain MassMutual vendor contracts. The Company expects to pay out a significant portion of these amounts during 2021. The Company expects to incur further restructuring and integration expenses associated with the acquisition over the following 18 months.

At December 31, 2020, the Company has a restructuring provision of \$37 remaining in other liabilities.

(c) United Kingdom Business Transformation

In 2018, the Company recorded a restructuring provision in the European segment in respect of activities aimed at achieving planned expense reductions and an organizational realignment. Despite delays due to COVID-19, the Company had achieved most of the planned benefits by December 31, 2020 and the restructuring has been substantially completed. At December 31, 2020, the Company has a restructuring provision of \$23 (\$39 at December 31, 2019) remaining in other liabilities.

4. *Restructuring and Integration Expenses (cont'd)*

(d) Putnam Restructuring

In 2019, Putnam recorded a restructuring provision of \$52 pre-tax (\$36 after-tax), which is recorded in restructuring expenses in the Consolidated Statements of Earnings. This restructuring is in respect of expense reductions and a realignment of its resources to best position itself for current and future opportunities. The expense reductions will be achieved through a reduction in staff, consolidation of certain mutual funds, digital technology modernization and facilities downsizing.

The Putnam restructuring activities are substantially completed. At December 31, 2020, the Company has a restructuring provision of \$4 (\$37 at December 31, 2019) remaining in other liabilities.

5. Cash and Cash Equivalents

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

	2020	2019
Cash	\$ 2,978	\$ 2,860
Short-term deposits	4,968	1,768
Total	\$ 7,946	\$ 4,628

At December 31, 2020, cash of \$508 was restricted for use by the Company (\$574 at December 31, 2019) in respect of cash held in trust for reinsurance agreements or with regulatory authorities, cash held under certain indemnity arrangements, client monies held by brokers and cash held in escrow.

6. Portfolio Investments

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

	2020		2019	
	Carrying value	Fair value	Carrying value	Fair value
Bonds				
Designated fair value through profit or loss ⁽¹⁾	\$ 100,839	\$ 100,839	\$ 84,229	\$ 84,229
Classified fair value through profit or loss ⁽¹⁾	2,053	2,053	1,717	1,717
Available-for-sale	11,352	11,352	11,710	11,710
Loans and receivables	23,348	26,545	17,372	19,344
	137,592	140,789	115,028	117,000
Mortgage loans				
Residential				
Designated fair value through profit or loss ⁽¹⁾	2,020	2,020	1,314	1,314
Loans and receivables	9,416	10,024	9,073	9,347
	11,436	12,044	10,387	10,661
Commercial	16,367	17,589	13,881	14,485
	27,803	29,633	24,268	25,146
Stocks				
Designated fair value through profit or loss ⁽¹⁾	10,335	10,335	9,752	9,752
Available-for-sale	20	20	16	16
Available-for-sale, at cost ⁽²⁾	163	163	189	189
Equity method	482	445	418	410
	11,000	10,963	10,375	10,367
Investment properties	6,270	6,270	5,887	5,887
Total	\$ 182,665	\$ 187,655	\$ 155,558	\$ 158,400

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

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

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

6. Portfolio Investments (cont'd)

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

	2020			
	Term to maturity			Total
	1 year or less	Over 1 year to 5 years	Over 5 years	
Bonds ⁽¹⁾	\$ 10,690	\$ 28,312	\$ 98,555	\$ 137,557
Mortgage loans ⁽²⁾	1,727	9,523	16,530	27,780
Total	\$ 12,417	\$ 37,835	\$ 115,085	\$ 165,337

	2019			
	Term to maturity			Total
	1 year or less	Over 1 year to 5 years	Over 5 years	
Bonds ⁽¹⁾	\$ 12,142	\$ 25,989	\$ 76,860	\$ 114,991
Mortgage loans ⁽²⁾	941	8,180	15,118	24,239
Total	\$ 13,083	\$ 34,169	\$ 91,978	\$ 139,230

⁽¹⁾ Excludes the carrying value of impaired bonds as the ultimate timing of collectability is uncertain.

⁽²⁾ Excludes the carrying value of impaired mortgage loans as the ultimate timing of collectability is uncertain. Mortgage loans include equity release mortgages which do not have a fixed redemption date. The maturity profile of the portfolio has therefore been estimated based on previous redemption experience.

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

The majority of the Company's equity method investments relate to the Company's investment, held through Canada Life, in an affiliated company, IGM, a member of the Power Corporation group of companies, over which it exerts significant influence but does not control. The Company's proportionate share of IGM's earnings is recorded in net investment income in the Consolidated Statements of Earnings. The Company owns 9,200,518 shares of IGM at December 31, 2020 (9,200,505 at December 31, 2019) representing a 3.86% ownership interest (3.86% at December 31, 2019). The Company uses the equity method to account for its investment in IGM as it exercises significant influence. Significant influence arises from several factors, including, but not limited to the following: common control of the Company and IGM by Power Corporation, shared representation on the Boards of Directors of the Company and IGM, interchange of managerial personnel, and certain shared strategic alliances, significant intercompany transactions and service agreements that influence the financial and operating policies of both companies.

	2020	2019
Carrying value, beginning of year	\$ 350	\$ 346
Equity method share of IGM net earnings	25	25
Dividends received	(21)	(21)
Carrying value, end of year	\$ 354	\$ 350
Share of equity, end of year	\$ 190	\$ 171
Fair value, end of year	\$ 317	\$ 342

6. Portfolio Investments (cont'd)

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

IGM's financial information as at December 31, 2020 can be obtained in its publicly available information.

At December 31, 2020, IGM owned 37,337,133 (37,337,133 at December 31, 2019) common shares of the Company.

(d) Included in portfolio investments are the following:

- (i) Carrying amount of impaired investments

	2020	2019
Impaired amounts by classification		
Fair value through profit or loss	\$ 20	\$ 21
Available-for-sale	17	16
Loans and receivables	23	29
Total	\$ 60	\$ 66

The carrying amount of impaired investments includes \$35 bonds, \$23 mortgage loans and \$2 stocks at December 31, 2020 (\$37 bonds and \$29 mortgage loans at December 31, 2019). The above carrying values for loans and receivables are net of allowances of \$57 at December 31, 2020 and \$51 at December 31, 2019.

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

	2020			2019		
	Bonds	Mortgage loans	Total	Bonds	Mortgage loans	Total
Balance, beginning of year	\$ —	\$ 51	\$ 51	\$ —	\$ 20	\$ 20
Net provision for credit losses - in year	—	16	16	—	50	50
Write-offs, net of recoveries	—	(10)	(10)	—	(19)	(19)
Balance, end of year	\$ —	\$ 57	\$ 57	\$ —	\$ 51	\$ 51

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

6. Portfolio Investments (cont'd)

(e) Net investment income comprises the following:

	2020					
	Bonds	Mortgage loans	Stocks	Investment properties	Other	Total
Regular net investment income:						
Investment income earned	\$ 3,589	\$ 877	\$ 357	\$ 397	\$ 571	\$ 5,791
Net realized gains (losses)						
Available-for-sale	146	—	(5)	—	—	141
Other classifications ⁽¹⁾	33	47	245	—	—	325
Net allowances for credit losses on loans and receivables	—	(16)	—	—	—	(16)
Other income (expenses)	—	—	—	(127)	(151)	(278)
	<u>3,768</u>	<u>908</u>	<u>597</u>	<u>270</u>	<u>420</u>	<u>5,963</u>
Changes in fair value through profit or loss assets:						
Classified fair value through profit or loss	78	—	—	—	—	78
Designated fair value through profit or loss	5,154	157	77	—	307	5,695
Recorded at fair value through profit or loss	—	—	—	(74)	—	(74)
	<u>5,232</u>	<u>157</u>	<u>77</u>	<u>(74)</u>	<u>307</u>	<u>5,699</u>
Total	<u>\$ 9,000</u>	<u>\$ 1,065</u>	<u>\$ 674</u>	<u>\$ 196</u>	<u>\$ 727</u>	<u>\$ 11,662</u>

⁽¹⁾ Includes the realized gains on the sale of the shares of GLC and IPSI (note 3).

	2019					
	Bonds	Mortgage loans	Stocks	Investment properties	Other	Total
Regular net investment income:						
Investment income earned	\$ 3,948	\$ 906	\$ 301	\$ 374	\$ 553	\$ 6,082
Net realized gains						
Available-for-sale	57	—	19	—	—	76
Other classifications	164	172	—	—	—	336
Net allowances for credit losses on loans and receivables	—	(50)	—	—	—	(50)
Other income (expenses)	—	—	—	(117)	(166)	(283)
	<u>4,169</u>	<u>1,028</u>	<u>320</u>	<u>257</u>	<u>387</u>	<u>6,161</u>
Changes in fair value through profit or loss assets:						
Classified fair value through profit or loss	45	—	—	—	—	45
Designated fair value through profit or loss	5,740	107	1,405	—	(388)	6,864
Recorded at fair value through profit or loss	—	—	—	37	—	37
	<u>5,785</u>	<u>107</u>	<u>1,405</u>	<u>37</u>	<u>(388)</u>	<u>6,946</u>
Total	<u>\$ 9,954</u>	<u>\$ 1,135</u>	<u>\$ 1,725</u>	<u>\$ 294</u>	<u>\$ (1)</u>	<u>\$ 13,107</u>

6. Portfolio Investments (cont'd)

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

(f) Transferred Financial Assets

The Company engages in securities lending to generate additional income. The Company's securities custodians are used as lending agents. Collateral, which exceeds the fair value of the loaned securities, is deposited by the borrower with the Company's lending agent and maintained by the lending agent until the underlying security has been returned. The fair value of the loaned securities is monitored on a daily basis by the lending agent who obtains or refunds additional collateral as the fair value of the loaned securities fluctuates. Included in the collateral deposited with the Company's lending agent is cash collateral of \$267 at December 31, 2020 (\$398 at December 31, 2019). In addition, the securities lending agent indemnifies the Company against borrower risk, meaning that the lending agent agrees contractually to replace securities not returned due to a borrower default. As at December 31, 2020, the Company had loaned securities (which are included in invested assets) with a fair value of \$8,921 (\$7,023 at December 31, 2019).

7. Funds Held by Ceding Insurers

At December 31, 2020, the Company had amounts on deposit of \$18,383 (\$8,714 at December 31, 2019) for funds held by ceding insurers on the Consolidated Balance Sheets. Income and expenses arising from the agreements are included in net investment income in the Consolidated Statements of Earnings.

As part of the MassMutual acquisition (note 3), GWL&A assumed, by way of indemnity reinsurance, a block of retirement plan service contracts from a previous reinsurance agreement held by MassMutual. Under the agreement, GWL&A is required to put amounts in trust with MassMutual and GWL&A retains the credit risk on the portfolio of assets included in the amounts on deposit.

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

(a) Carrying values and estimated fair values:

	2020		2019	
	Carrying value	Fair value	Carrying value	Fair value
Cash and cash equivalents	\$ 245	\$ 245	\$ 216	\$ 216
Bonds	15,365	15,365	6,445	6,445
Mortgages	578	578	—	—
Other assets	137	137	80	80
Total	\$ 16,325	\$ 16,325	\$ 6,741	\$ 6,741
Supporting:				
Reinsurance liabilities	\$ 16,094	\$ 16,094	\$ 6,537	\$ 6,537
Surplus	231	231	204	204
Total	\$ 16,325	\$ 16,325	\$ 6,741	\$ 6,741

7. Funds Held by Ceding Insurers (cont'd)

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

	2020	2019
Bonds issued or guaranteed by:		
Treasuries	\$ 843	\$ 624
Government related	1,760	1,275
Agency securitized	287	—
Non-agency securitized	1,870	763
Financials	2,989	1,412
Communications	503	154
Consumer products	2,141	438
Energy	589	176
Industrials	1,420	234
Technology	344	72
Transportation	466	170
Utilities	2,101	1,127
Total long-term bonds	15,313	6,445
Short-term bonds	52	—
Total	\$ 15,365	\$ 6,445

(c) The following provides details of the carrying value of mortgages included in the funds on deposit by property type:

	2020	2019
Multi-family residential	\$ 122	\$ —
Commercial	456	—
Total	\$ 578	\$ —

(d) Asset quality

Bond Portfolio By Credit Rating

	2020	2019
AAA	\$ 1,508	\$ 601
AA	3,848	2,670
A	5,597	2,264
BBB	4,165	822
BB and lower	247	88
Total	\$ 15,365	\$ 6,445

8. Financial Instruments Risk Management

The Company has policies relating to the identification, measurement, management, monitoring and reporting of risks associated with financial instruments. The key risks related to financial instruments are credit risk, liquidity risk and market risk (currency, interest rate and equity). The Risk Committee of the Board of Directors is responsible for the oversight of the Company's key risks.

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

(a) Credit Risk

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

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

- Investment policies aim to minimize undue concentration within issuers, connected companies, industries or individual geographies.
- Investment limits specify minimum and maximum limits for each asset class.
- Identification of credit risk through an internal credit risk rating system which includes a detailed assessment of an obligor's creditworthiness. Internal credit risk ratings cannot be higher than the highest rating provided by certain independent ratings companies.
- Portfolios are monitored continuously, and reviewed regularly with the Risk Committee and the Investment Committee of the Board of Directors.
- Credit risk associated with derivative instruments is evaluated quarterly based on conditions that existed at the balance sheet date, using practices that are at least as conservative as those recommended by regulators. The Company manages derivative credit risk by including derivative exposure to aggregate credit exposures measured against rating based obligor limits and through collateral arrangements where possible.
- Counterparties providing reinsurance to the Company are reviewed for financial soundness as part of an ongoing monitoring process. The minimum financial strength of reinsurers is outlined in the Reinsurance Risk Management Policy. The Company seeks to minimize reinsurance credit risk by setting rating based limits on net ceded exposure by counterparty as well as seeking protection in the form of collateral or funds withheld arrangements where possible.
- Investment guidelines also specify collateral requirements.

8. Financial Instruments Risk Management (cont'd)

(i) Maximum Exposure to Credit Risk

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

	2020	2019
Cash and cash equivalents	\$ 7,946	\$ 4,628
Bonds		
Fair value through profit or loss	102,892	85,946
Available-for-sale	11,352	11,710
Loans and receivables	23,348	17,372
Mortgage loans	27,803	24,268
Loans to policyholders	8,387	8,601
Funds held by ceding insurers ⁽¹⁾	18,383	8,714
Reinsurance assets	22,121	20,707
Interest due and accrued	1,320	1,196
Accounts receivable	3,080	3,256
Premiums in course of collection	1,702	1,429
Trading account assets	713	1,092
Finance leases receivable	404	405
Other assets ⁽²⁾	965	444
Derivative assets	829	451
Total	\$ 231,245	\$ 190,219

⁽¹⁾ Includes \$16,325 (\$6,741 at December 31, 2019) of funds held by ceding insurers where the Company retains the credit risk of the assets supporting the liabilities ceded (note 7).

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

Credit risk is also mitigated by entering into collateral agreements. The amount and type of collateral required depends on an assessment of the credit risk of the counterparty. Guidelines are implemented regarding the acceptability of types of collateral and the valuation parameters. Management monitors the value of the collateral, requests additional collateral when needed and performs an impairment valuation when applicable. The Company has \$211 of collateral received from counterparties as at December 31, 2020 (\$156 at December 31, 2019) relating to derivative assets.

As at December 31, 2020, \$15,690 of the \$22,121 of reinsurance assets are ceded to Protective (\$14,848 of \$20,707 at December 31, 2019). This concentration risk is mitigated by funds held in trust of \$16,389 as at December 31, 2020 (\$15,948 at December 31, 2019).

(ii) Concentration of Credit Risk

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

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8. Financial Instruments Risk Management (cont'd)

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

	2020				
	Canada	United States	Europe	Capital and Risk Solutions	Total
Bonds issued or guaranteed by:					
Treasuries	\$ 586	\$ 272	\$ 10,282	\$ 1,372	\$ 12,512
Government related	20,555	2,308	9,287	316	32,466
Agency securitized	178	926	—	17	1,121
Non-agency securitized	2,057	6,550	1,402	136	10,145
Financials	4,361	6,022	5,880	572	16,835
Communications	1,142	1,338	1,124	98	3,702
Consumer products	4,197	6,127	2,816	762	13,902
Energy	2,453	2,450	675	270	5,848
Industrials	2,022	4,585	1,329	406	8,342
Technology	557	1,324	299	263	2,443
Transportation	3,409	1,394	977	154	5,934
Utilities	10,091	4,485	4,811	553	19,940
Total long-term bonds	51,608	37,781	38,882	4,919	133,190
Short-term bonds	2,332	557	1,066	447	4,402
Total	\$ 53,940	\$ 38,338	\$ 39,948	\$ 5,366	\$ 137,592

	2019				
	Canada	United States	Europe ⁽¹⁾	Capital and Risk Solutions ⁽¹⁾	Total
Bonds issued or guaranteed by:					
Treasuries	\$ 479	\$ 72	\$ 10,118	\$ 1,068	\$ 11,737
Government related	19,307	1,795	8,521	293	29,916
Agency securitized	110	1,111	—	10	1,231
Non-agency securitized	2,159	4,664	1,573	165	8,561
Financials	4,119	3,011	5,786	560	13,476
Communications	888	617	991	129	2,625
Consumer products	3,761	2,738	2,649	855	10,003
Energy	2,173	1,071	640	266	4,150
Industrials	1,764	2,057	1,281	454	5,556
Technology	552	727	302	265	1,846
Transportation	2,897	546	1,017	180	4,640
Utilities	9,145	2,377	4,426	527	16,475
Total long-term bonds	47,354	20,786	37,304	4,772	110,216
Short-term bonds	2,680	720	1,049	363	4,812
Total	\$ 50,034	\$ 21,506	\$ 38,353	\$ 5,135	\$ 115,028

⁽¹⁾ See comparative figures (note 32).

8. Financial Instruments Risk Management (cont'd)

The following provides details of the carrying value of mortgage loans by operating segment:

	2020				
	Canada	United States	Europe	Capital and Risk Solutions	Total
Single family residential	\$ 2,063	\$ —	\$ —	\$ —	\$ 2,063
Multi-family residential	4,331	2,297	684	41	7,353
Equity release	759	—	1,261	—	2,020
Commercial	8,883	3,660	3,801	23	16,367
Total	\$ 16,036	\$ 5,957	\$ 5,746	\$ 64	\$ 27,803

	2019				
	Canada	United States	Europe ⁽¹⁾	Capital and Risk Solutions ⁽¹⁾	Total
Single family residential	\$ 2,069	\$ —	\$ —	\$ —	\$ 2,069
Multi-family residential	4,496	1,798	661	49	7,004
Equity release	374	—	940	—	1,314
Commercial	7,871	2,198	3,787	25	13,881
Total	\$ 14,810	\$ 3,996	\$ 5,388	\$ 74	\$ 24,268

⁽¹⁾ See comparative figures (note 32).

(iii) Asset Quality

Bond Portfolio By Credit Rating

	2020	2019
AAA	\$ 21,820	\$ 22,083
AA	35,530	33,272
A	45,673	37,233
BBB	33,382	21,922
BB and lower	1,187	518
Total	\$ 137,592	\$ 115,028

Derivative Portfolio By Credit Rating

	2020	2019
Over-the-counter contracts (counterparty ratings):		
AA	\$ 424	\$ 271
A	369	146
BBB	35	34
Exchange-traded	1	—
Total	\$ 829	\$ 451

8. Financial Instruments Risk Management (cont'd)

(iv) Loans Past Due, But Not Impaired

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

	2020	2019
Less than 30 days	\$ 17	\$ 28
30 - 90 days	28	1
Greater than 90 days	10	4
Total	\$ 55	\$ 33

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

	2020	2019
Participating	\$ 1,183	\$ 1,175
Non-participating	2,185	1,400
Total	\$ 3,368	\$ 2,575

(b) Liquidity Risk

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

- The Company closely manages operating liquidity through cash flow matching of assets and liabilities and forecasting earned and required yields, to ensure consistency between policyholder requirements and the yield of assets. Approximately 48% (approximately 57% in 2019) of insurance and investment contract liabilities are non-cashable prior to maturity or claim, with a further 26% (approximately 14% in 2019) of insurance and investment contract liabilities subject to fair value adjustments under certain conditions.
- Management closely monitors the solvency and capital positions of its principal subsidiaries opposite liquidity requirements at the holding company. Additional liquidity is available through established lines of credit or via capital market transactions. At December 31, 2020, the Company maintains \$350 of liquidity at the Lifeco level through committed lines of credit with Canadian chartered banks. As well, the Company maintains a \$150 liquidity facility at Canada Life, a U.S. \$500 revolving credit agreement at Great-West Lifeco U.S. LLC, a U.S. \$500 revolving credit agreement with a syndicate of banks for use by Putnam, and a U.S. \$50 line of credit at GWL&A.

8. Financial Instruments Risk Management (cont'd)

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

	Payments due by period						
	Total	1 year	2 years	3 years	4 years	5 years	Over 5 years
Debentures and other debt instruments	\$ 8,639	\$ —	\$ —	\$ 775	\$ —	\$ 635	\$ 7,229
Capital trust securities ⁽¹⁾	150	—	—	—	—	—	150
Purchase obligations	261	113	65	23	13	10	37
Pension contributions	316	316	—	—	—	—	—
Total	\$ 9,366	\$ 429	\$ 65	\$ 798	\$ 13	\$ 645	\$ 7,416

⁽¹⁾ Payments due have not been reduced to reflect that the Company held capital trust securities of \$37 principal amount (\$55 carrying value).

(c) Market Risk

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

Caution Related to Risk Sensitivities

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

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

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

(i) Currency Risk

Currency risk relates to the Company operating and holding financial instruments in different currencies. For the assets backing insurance and investment contract liabilities that are not matched by currency, changes in foreign exchange rates can expose the Company to the risk of foreign exchange losses not offset by liability decreases. The Company has net investments in foreign operations. The Company's debt obligations are denominated in Canadian dollars, euros, and U.S. dollars. In accordance with IFRS, foreign currency translation gains and losses from net investments in foreign operations, net of related hedging activities and tax effects, are recorded in accumulated other comprehensive income. Strengthening or weakening of the Canadian dollar spot rate compared to the U.S. dollar, British pound and euro spot rates impacts the Company's total equity. Correspondingly, the Company's book value per share and capital ratios monitored by rating agencies are also impacted.

8. Financial Instruments Risk Management (cont'd)

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

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

(ii) Interest Rate Risk

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

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

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

8. Financial Instruments Risk Management (cont'd)

estimate assumptions and provide reasonable assurance that insurance contract liabilities cover a range of possible outcomes. Margins are reviewed periodically for continued appropriateness.

Projected cash flows from fixed income assets used in actuarial calculations are reduced to provide for potential asset default losses. The net effective yield rate reduction averaged 0.11% in 2020 (0.10% in 2019). The calculation for future credit losses on assets is based on the credit quality of the underlying asset portfolio.

Testing under a number of interest rate scenarios (including increasing, decreasing and fluctuating rates) is done to assess reinvestment risk. The total provision for interest rates is sufficient to cover a broader or more severe set of risks than the minimum arising from the current Canadian Institute of Actuaries prescribed scenarios.

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

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

- At December 31, 2020 and December 31, 2019, the effect of an immediate 1% parallel increase in the yield curve on the prescribed scenarios results in interest rate changes to assets and liabilities that will offset each other with no impact to net earnings.
- At December 31, 2020 and December 31, 2019, the effect of an immediate 1% parallel decrease in the yield curve on the prescribed scenarios results in interest rate changes to assets and liabilities that will offset each other with no impact to net earnings.

The total provision for interest rates is sufficient to cover a broader or more severe set of risks than the minimum arising from the current Canadian Institute of Actuaries prescribed scenarios. The range of interest rates covered by these provisions is set in consideration of long-term historical results and is monitored quarterly with a full review annually.

An immediate 1% parallel shift in the yield curve would not have a material impact on the Company's view of the range of interest rates to be covered by the provisions.

If sustained however, the parallel shift could impact the Company's range of scenarios covered. The following table provides information on the impact to the value of liabilities net of changes in the value of assets supporting liabilities of an immediate 1% increase or 1% decrease in the interest rates at both the low and high end of the range of interest rates recognized in the provisions. For some products, interest rate risk is modelled stochastically in determining the insurance contract liabilities, and for those products, the sensitivities reflect the estimated impact of an immediate 1% increase and 1% decrease in interest rates on the liability.

8. Financial Instruments Risk Management (cont'd)

The sensitivities in the table include the impact of a parallel shift in ultimate interest rates outlined in actuarial standards.

	2020		2019	
	1% increase	1% decrease	1% increase	1% decrease
Change in interest rates				
Increase (decrease) in non-participating insurance and investment contract liabilities	\$ (289)	\$ 1,185	\$ (230)	\$ 811
Increase (decrease) in net earnings	\$ 224	\$ (920)	\$ 175	\$ (619)

As at December 31, 2020, the accounting for the acquisition of MassMutual is not finalized pending completion of a comprehensive valuation of the net assets acquired (note 3). As such, the impact of the acquired business included in the sensitivities above reflects management's current best estimate of the sensitivities.

(iii) Equity Risk

Equity risk is the uncertainty associated with the valuation of assets and liabilities arising from changes in equity markets and other pricing risk. To mitigate pricing risk, the Company has investment policy guidelines in place that provide for prudent investment in equity markets within clearly defined limits. The risks associated with segregated fund guarantees on lifetime Guaranteed Minimum Withdrawal Benefits have been mitigated through a hedging program using equity futures, currency forwards, and interest rate derivatives.

Some insurance and investment contract liabilities with long-tail cash-flows are supported by publicly traded common stocks and investments in other non-fixed income assets, primarily comprised of investment properties, real estate funds, private stocks, and equity release mortgages. The value of the liabilities may fluctuate with changes in the value of the supporting assets. The liabilities for other products such as segregated fund products with guarantees also fluctuate with equity values.

There may be additional market and liability impacts as a result of changes in the value of publicly traded common stocks and other non-fixed income assets that will cause the liabilities to fluctuate differently than the equity values. This means that there is a greater impact on net earnings from larger falls in equity values, relative to the change in equity values. Falls in equity values beyond those shown in the table below would have a greater impact on net earnings, relative to the change in equity values.

8. Financial Instruments Risk Management (cont'd)

The following table provides information on the expected impacts of an immediate 10% or 20% increase or decrease in the value of publicly traded common stocks on insurance and investment contract liabilities and on the shareholders' net earnings of the Company. The expected impacts take into account the expected changes in the value of assets supporting liabilities and hedge assets.

	2020				2019			
	20% increase	10% increase	10% decrease	20% decrease	20% increase	10% increase	10% decrease	20% decrease
Change in publicly traded common stock values								
Increase (decrease) in non-participating insurance and investment contract liabilities	\$ (34)	\$ (18)	\$ 62	\$ 264	\$ (63)	\$ (33)	\$ 45	\$ 223
Increase (decrease) in net earnings	\$ 28	\$ 15	\$ (51)	\$ (208)	\$ 54	\$ 27	\$ (39)	\$ (182)

The following table provides information on the expected impacts of an immediate 5% or 10% increase or decrease in the value of other non-fixed income assets on insurance and investment contract liabilities and on the shareholders' net earnings of the Company. The expected impacts take into account the expected changes in the value of assets supporting liabilities.

	2020				2019			
	10% increase	5% increase	5% decrease	10% decrease	10% increase	5% increase	5% decrease	10% decrease
Change in other non-fixed income asset values								
Increase (decrease) in non-participating insurance and investment contract liabilities	\$ (41)	\$ (8)	\$ 88	\$ 138	\$ (74)	\$ (32)	\$ 35	\$ 117
Increase (decrease) in net earnings	\$ 34	\$ 6	\$ (69)	\$ (108)	\$ 60	\$ 25	\$ (28)	\$ (90)

The Canadian Institute of Actuaries Standards of Practice for the valuation of insurance contract liabilities establish limits on the investment return assumptions for publicly traded common stocks and other non-fixed income assets which are generally based on historical returns on market indices. The sensitivities shown in the tables above allow for the impact of changes in these limits following market falls.

The best estimate return assumptions for publicly traded common stocks and other non-fixed income assets are primarily based on long-term historical averages. The following provides information on the expected impacts of a 1% increase or 1% decrease in the best estimate assumptions:

	2020		2019	
	1% increase	1% decrease	1% increase	1% decrease
Change in best estimate return assumptions				
Increase (decrease) in non-participating insurance contract liabilities	\$ (691)	\$ 861	\$ (645)	\$ 752
Increase (decrease) in net earnings	\$ 556	\$ (682)	\$ 509	\$ (585)

8. *Financial Instruments Risk Management (cont'd)*

The Company sponsors a number of deferred compensation arrangements for employees where payments to participants are deferred and linked to the performance of the common shares of Lifeco. The Company hedges its exposure to the equity risk associated with its PSU Plan through the use of total return swaps.

(d) Enforceable Master Netting Arrangements or Similar Agreements

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

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

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

8. Financial Instruments Risk Management (cont'd)

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

	2020				
	Gross amount of financial instruments presented in the Balance Sheet	Related amounts not set-off in the Balance Sheet			Net exposure
		Offsetting counterparty position ⁽¹⁾	Financial collateral received/pledged ⁽²⁾		
Financial instruments - assets					
Derivative financial instruments	\$ 829	\$ (596)	\$ (154)	\$ 79	
Reverse repurchase agreements ⁽³⁾	4	—	(4)	—	
Total financial instruments - assets	\$ 833	\$ (596)	\$ (158)	\$ 79	
Financial instruments - liabilities					
Derivative financial instruments	\$ 1,221	\$ (596)	\$ (361)	\$ 264	
Total financial instruments - liabilities	\$ 1,221	\$ (596)	\$ (361)	\$ 264	
	2019				
	Gross amount of financial instruments presented in the Balance Sheet	Related amounts not set-off in the Balance Sheet			Net exposure
		Offsetting counterparty position ⁽¹⁾	Financial collateral received/pledged ⁽²⁾		
Financial instruments - assets					
Derivative financial instruments	\$ 451	\$ (309)	\$ (107)	\$ 35	
Reverse repurchase agreements ⁽³⁾	4	—	(4)	—	
Total financial instruments - assets	\$ 455	\$ (309)	\$ (111)	\$ 35	
Financial instruments - liabilities					
Derivative financial instruments	\$ 1,381	\$ (309)	\$ (556)	\$ 516	
Total financial instruments - liabilities	\$ 1,381	\$ (309)	\$ (556)	\$ 516	

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

⁽²⁾ Financial collateral presented above excludes overcollateralization and, for exchange-traded derivatives, initial margin. Financial collateral received on reverse repurchase agreements is held by a third party. At December 31, 2020, total financial collateral, including initial margin and overcollateralization, received on derivative assets was \$211 (\$156 at December 31, 2019), received on reverse repurchase agreements was \$4 (\$4 at December 31, 2019), and pledged on derivative liabilities was \$560 (\$634 at December 31, 2019).

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

9. Fair Value Measurement

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

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

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

Level 3: Fair value measurements utilize one or more significant inputs that are not based on observable market inputs and include situations where there is little, if any, market activity for the asset or liability. The values of the majority of Level 3 securities were obtained from single broker quotes, internal pricing models, or external appraisers. Assets and liabilities utilizing Level 3 inputs generally include certain bonds, certain asset-backed securities, some private equities, investments in mutual and segregated funds where there are redemption restrictions, certain over-the-counter derivatives, investment properties and equity release mortgages.

9. 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:

Assets measured at fair value	2020			
	Level 1	Level 2	Level 3	Total
Cash and cash equivalents	\$ 7,946	\$ —	\$ —	\$ 7,946
Financial assets at fair value through profit or loss				
Bonds	—	102,819	73	102,892
Mortgage loans	—	—	2,020	2,020
Stocks	8,773	188	1,374	10,335
Total financial assets at fair value through profit or loss	8,773	103,007	3,467	115,247
Available-for-sale financial assets				
Bonds	—	11,352	—	11,352
Stocks	3	1	16	20
Total available-for-sale financial assets	3	11,353	16	11,372
Investment properties	—	—	6,270	6,270
Funds held by ceding insurers	245	15,943	—	16,188
Derivatives ⁽¹⁾	1	828	—	829
Reinsurance assets	—	130	—	130
Other assets:				
Trading account assets	302	353	58	713
Other ⁽²⁾	79	188	—	267
Total assets measured at fair value	\$ 17,349	\$ 131,802	\$ 9,811	\$ 158,962
Liabilities measured at fair value				
Derivatives ⁽³⁾	\$ 5	\$ 1,216	\$ —	\$ 1,221
Investment contract liabilities	—	9,145	—	9,145
Other liabilities	79	188	—	267
Total liabilities measured at fair value	\$ 84	\$ 10,549	\$ —	\$ 10,633

⁽¹⁾ Excludes collateral received from counterparties of \$210.

⁽²⁾ Includes collateral received under securities lending arrangements.

⁽³⁾ Excludes collateral pledged to counterparties of \$442.

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

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9. Fair Value Measurement (cont'd)

Assets measured at fair value	2019			
	Level 1	Level 2	Level 3	Total
Cash and cash equivalents	\$ 4,628	\$ —	\$ —	\$ 4,628
Financial assets at fair value through profit or loss				
Bonds	—	85,879	67	85,946
Mortgage loans	—	—	1,314	1,314
Stocks	8,956	118	678	9,752
Total financial assets at fair value through profit or loss	8,956	85,997	2,059	97,012
Available-for-sale financial assets				
Bonds	—	11,710	—	11,710
Stocks	12	—	4	16
Total available-for-sale financial assets	12	11,710	4	11,726
Investment properties	—	—	5,887	5,887
Funds held by ceding insurers	216	6,445	—	6,661
Derivatives ⁽¹⁾	—	451	—	451
Reinsurance assets	—	127	—	127
Other assets:				
Trading account assets	332	760	—	1,092
Other ⁽²⁾	43	355	—	398
Total assets measured at fair value	\$ 14,187	\$ 105,845	\$ 7,950	\$ 127,982
Liabilities measured at fair value				
Derivatives ⁽³⁾	\$ 3	\$ 1,378	\$ —	\$ 1,381
Investment contract liabilities	—	1,656	—	1,656
Other liabilities	43	355	—	398
Total liabilities measured at fair value	\$ 46	\$ 3,389	\$ —	\$ 3,435

⁽¹⁾ Excludes collateral received from counterparties of \$155.

⁽²⁾ Includes collateral received under securities lending arrangements.

⁽³⁾ Excludes collateral pledged to counterparties of \$580.

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

9. Fair Value Measurement (cont'd)

The following presents additional information about assets and liabilities measured at fair value on a recurring basis which the Company classifies as Level 3 in the fair value hierarchy:

	2020						
	Fair value through profit or loss bonds	Fair value through profit or loss mortgage loans	Fair value through profit or loss stocks ⁽⁴⁾	Available for-sale stocks	Investment properties	Trading account assets	Total Level 3 assets
Balance, beginning of year	\$ 67	\$ 1,314	\$ 678	\$ 4	\$ 5,887	\$ —	\$ 7,950
Total gains (losses)							
Included in net earnings income ⁽¹⁾	2	156	16	—	(74)	—	100
income ⁽¹⁾	4	15	—	1	21	—	41
Purchases	—	—	406	11	481	—	898
Issues	—	622	—	—	—	—	622
Sales	—	—	(83)	—	(73)	—	(156)
Settlements properties ⁽²⁾	—	(87)	—	—	—	—	(87)
Transfers into Level 3 ⁽³⁾	—	—	357	—	—	58	415
Transfers out of Level 3 ⁽³⁾	—	—	—	—	—	—	—
Balance, end of year	\$ 73	\$ 2,020	\$ 1,374	\$ 16	\$ 6,270	\$ 58	\$ 9,811
Total gains (losses) for the year included in net investment income	\$ 2	\$ 156	\$ 16	\$ —	\$ (74)	\$ —	\$ 100
Change in unrealized gains (losses) for the year included in earnings for assets held at December 31, 2020	\$ 2	\$ 145	\$ 17	\$ —	\$ (73)	\$ —	\$ 91

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

⁽²⁾ As a result of the sale of IPSI, a property with a fair value of \$28 was reclassified from owner occupied properties to investment properties. The reclassification resulted in the recognition of revaluation surplus on the transfer to investment properties of \$11 and income tax expense of \$(1) in the Consolidated Statements of Comprehensive Income.

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

⁽⁴⁾ Includes investments in mutual and segregated funds where there are redemption restrictions. The fair value is based on observable, quoted prices.

Since March 20, 2020, Canada Life has temporarily suspended contributions to and transfers into, as well as redemptions and transfers out of, its Canadian real estate investment funds as the COVID-19 virus has impacted the global property market and made it difficult to value the properties with the same degree of certainty as usual. As a result of these restrictions, the Company's investment in these funds with a fair value of \$357 was transferred on March 20, 2020 from Level 1 to Level 3.

Subsequent event

On January 11, 2021, Canada Life lifted the temporary suspension on contributions to and transfers into its Canadian real estate investment funds as confidence over the valuation of the underlying properties has returned as a result of increased market activity. While the temporary suspension on redemptions and transfers out of the Canadian real estate funds remains, the funds are accepting initial redemption requests for a limited period which will be processed, subject to available liquidity, on pre-specified dates.

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9. Fair Value Measurement (cont'd)

	2019									
	Fair value through profit or loss bonds	Fair value through profit or loss mortgage loans	Fair value through profit or loss stocks ⁽³⁾	Available- for-sale stocks	Investment properties	Assets held for sale	Total Level 3 assets	Liabilities held for sale	Total Level 3 liabilities	
Balance, beginning of year	\$ 67	\$ 813	\$ 404	\$ 2	\$ 5,218	\$ 29	\$ 6,533	\$ 26	\$ 26	
Change in accounting policy	—	—	—	—	29	—	29	—	—	
Revised balance, beginning of year	67	813	404	2	5,247	29	6,562	26	26	
Total gains (losses)										
Included in net earnings	4	109	40	—	37	(2)	188	—	—	
Included in other comprehensive income ⁽¹⁾	(4)	(5)	—	—	(36)	(1)	(46)	—	—	
Purchases	—	—	299	2	644	—	945	—	—	
Issues	—	469	—	—	—	—	469	—	—	
Sales	—	—	(65)	—	(5)	(26)	(96)	—	—	
Settlements	—	(72)	—	—	—	—	(72)	—	—	
Other	—	—	—	—	—	—	—	(26)	(26)	
Transfers into Level 3 ⁽²⁾	—	—	—	—	—	—	—	—	—	
Transfers out of Level 3 ⁽²⁾	—	—	—	—	—	—	—	—	—	
Balance, end of year	<u>\$ 67</u>	<u>\$ 1,314</u>	<u>\$ 678</u>	<u>\$ 4</u>	<u>\$ 5,887</u>	<u>\$ —</u>	<u>\$ 7,950</u>	<u>\$ —</u>	<u>\$ —</u>	
Total gains (losses) for the year included in net investment income	<u>\$ 4</u>	<u>\$ 109</u>	<u>\$ 40</u>	<u>\$ —</u>	<u>\$ 37</u>	<u>\$ (2)</u>	<u>\$ 188</u>	<u>\$ —</u>	<u>\$ —</u>	
Change in unrealized gains for the year included in earnings for assets held at December 31, 2019	<u>\$ 4</u>	<u>\$ 105</u>	<u>\$ 38</u>	<u>\$ —</u>	<u>\$ 37</u>	<u>\$ —</u>	<u>\$ 184</u>	<u>\$ —</u>	<u>\$ —</u>	

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

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

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

9. Fair Value Measurement (cont'd)

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

Type of asset	Valuation approach	Significant unobservable input	Input value	Inter-relationship between key unobservable inputs and fair value measurement
Investment properties	Investment property valuations are generally determined using property valuation models based on expected capitalization rates and models that discount expected future net cash flows. The determination of the fair value of investment property requires the use of estimates such as future cash flows (such as future leasing assumptions, rental rates, capital and operating expenditures) and discount, reversionary and overall capitalization rates applicable to the asset based on current market rates.	Discount rate Reversionary rate Vacancy rate	Range of 2.9% - 12.0% Range of 3.9% - 6.8% Weighted average of 3.0%	A decrease in the discount rate would result in an increase in fair value. An increase in the discount rate would result in a decrease in fair value. A decrease in the reversionary rate would result in an increase in fair value. An increase in the reversionary rate would result in a decrease in fair value. A decrease in the expected vacancy rate would generally result in an increase in fair value. An increase in the expected vacancy rate would generally result in a decrease in fair value.
Mortgage loans - equity release mortgages (fair value through profit or loss)	The valuation approach for equity release mortgages is to use an internal valuation model to determine the projected asset cash flows, including the stochastically calculated cost of the no negative-equity guarantee for each individual loan, to aggregate these across all loans and to discount those cash flows back to the valuation date. The projection is done monthly until expected redemption of the loan either voluntarily or on the death/entering into long term care of the loanholders.	Discount rate	Range of 3.2% - 4.4%	A decrease in the discount rate would result in an increase in fair value. An increase in the discount rate would result in a decrease in fair value.

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9. Fair Value Measurement (cont'd)

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

	2020				
	Level 1	Level 2	Level 3	Other assets/ liabilities not held at fair value	Total
Assets disclosed at fair value					
Loans and receivables financial assets					
Bonds	\$ —	\$ 26,488	\$ 57	\$ —	\$ 26,545
Mortgage loans	—	27,613	—	—	27,613
Loans to policyholders	—	8,387	—	—	8,387
Total loans and receivables financial assets	—	62,488	57	—	62,545
Available-for-sale financial assets					
Stocks ⁽¹⁾	—	—	—	163	163
Other stocks ⁽²⁾	317	—	—	128	445
Funds held by ceding insurers	—	—	—	137	137
Total assets disclosed at fair value	\$ 317	\$ 62,488	\$ 57	\$ 428	\$ 63,290
Liabilities disclosed at fair value					
Debentures and other debt instruments	\$ 970	\$ 9,899	\$ —	\$ —	\$ 10,869
Total liabilities disclosed at fair value	\$ 970	\$ 9,899	\$ —	\$ —	\$ 10,869

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

⁽²⁾ Other stocks include the Company's investment in IGM.

9. Fair Value Measurement (cont'd)

	2019				
	Level 1	Level 2	Level 3	Other assets/ liabilities not held at fair value	Total
Assets disclosed at fair value					
Loans and receivables financial assets					
Bonds	\$ —	\$ 19,281	\$ 63	\$ —	\$ 19,344
Mortgage loans	—	23,832	—	—	23,832
Loans to policyholders	—	8,601	—	—	8,601
Total loans and receivables financial assets	—	51,714	63	—	51,777
Available-for-sale financial assets					
Stocks ⁽¹⁾	—	—	—	189	189
Other stocks ⁽²⁾	342	—	—	68	410
Funds held by ceding insurers	—	—	—	80	80
Total assets disclosed at fair value	\$ 342	\$ 51,714	\$ 63	\$ 337	\$ 52,456
Liabilities disclosed at fair value					
Debentures and other debt instruments					
Total liabilities disclosed at fair value	\$ 429	\$ 6,450	\$ —	\$ —	\$ 6,879

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

(2) Other stocks include the Company's investment in IGM.

10. Goodwill and Intangible Assets

(a) Goodwill

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

	2020	2019
Cost		
Balance, beginning of year	\$ 7,693	\$ 7,771
Business acquisitions	3,621	33
Finite life intangible assets	(12)	(6)
Changes in foreign exchange rates	(19)	(105)
Balance, end of year	\$ 11,283	\$ 7,693
Accumulated impairment		
Balance, beginning of year	\$ (1,188)	\$ (1,223)
Impairment	(16)	(19)
Changes in foreign exchange rates	27	54
Balance, end of year	\$ (1,177)	\$ (1,188)
Net carrying amount	\$ 10,106	\$ 6,505

10. Goodwill and Intangible Assets (cont'd)

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

	2020	2019
Canada		
Group Customer	\$ 1,464	\$ 1,481
Individual Customer	2,553	2,562
Europe	2,395	2,282
United States		
Financial Services	3,694	180
Total	\$ 10,106	\$ 6,505

(b) Intangible Assets

Intangible assets of \$4,285 (\$3,879 as at December 31, 2019) include indefinite life and finite life intangible assets. The carrying value and changes in the carrying value of these intangible assets are as follows:

- (i) Indefinite life intangible assets:

	2020			
	Brands and trademarks	Customer contract related	Shareholders' portion of acquired future participating account profit	Total
Cost				
Balance, beginning of year	\$ 972	\$ 2,562	\$ 354	\$ 3,888
Additions	92	30	—	122
Changes in foreign exchange rates	(1)	(50)	—	(51)
Balance, end of year	\$ 1,063	\$ 2,542	\$ 354	\$ 3,959
Accumulated impairment				
Balance, beginning of year	\$ (133)	\$ (1,051)	\$ —	\$ (1,184)
Changes in foreign exchange rates	—	23	—	23
Balance, end of year	\$ (133)	\$ (1,028)	\$ —	\$ (1,161)
Net carrying amount	\$ 930	\$ 1,514	\$ 354	\$ 2,798

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10. Goodwill and Intangible Assets (cont'd)

	2019			
	Brands and trademarks	Customer contract related	Shareholders' portion of acquired future participating account profit	Total
Cost				
Balance, beginning of year	\$ 1,006	\$ 2,665	\$ 354	\$ 4,025
Changes in foreign exchange rates	(34)	(103)	—	(137)
Balance, end of year	\$ 972	\$ 2,562	\$ 354	\$ 3,888
Accumulated impairment				
Balance, beginning of year	\$ (140)	\$ (1,101)	\$ —	\$ (1,241)
Changes in foreign exchange rates	7	50	—	57
Balance, end of year	\$ (133)	\$ (1,051)	\$ —	\$ (1,184)
Net carrying amount	\$ 839	\$ 1,511	\$ 354	\$ 2,704

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

	2020	2019
Canada		
Group Customer	\$ 354	\$ 354
Individual Customer	649	619
Europe	233	223
United States		
Asset Management	1,473	1,508
Financial Services	89	—
Total	\$ 2,798	\$ 2,704

(iii) Finite life intangible assets:

	2020			
	Customer contract related	Distribution channels	Technology/ Software	Total
Amortization period range	7 - 30 years	30 years	3 - 10 years	
Amortization method	Straight-line	Straight-line	Straight-line	
Cost				
Balance, beginning of year	\$ 1,031	\$ 108	\$ 1,885	\$ 3,024
Additions	214	—	341	555
Changes in foreign exchange rates	3	3	(6)	—
Disposals	—	—	(35)	(35)
Balance, end of year	\$ 1,248	\$ 111	\$ 2,185	\$ 3,544
Accumulated amortization and impairment				
Balance, beginning of year	\$ (630)	\$ (60)	\$ (1,159)	\$ (1,849)
Changes in foreign exchange rates	(3)	(1)	5	1
Disposals	—	—	29	29
Amortization	(55)	(4)	(179)	(238)
Balance, end of year	\$ (688)	\$ (65)	\$ (1,304)	\$ (2,057)
Net carrying amount	\$ 560	\$ 46	\$ 881	\$ 1,487

10. Goodwill and Intangible Assets (cont'd)

	2019			
	Customer contract related	Distribution channels	Technology/ Software	Total
Amortization period range	7 - 30 years	30 years	3 - 10 years	
Amortization method	Straight-line	Straight-line	Straight-line	
Cost				
Balance, beginning of year	\$ 1,047	\$ 111	\$ 1,717	\$ 2,875
Additions	11	—	247	258
Changes in foreign exchange rates	(27)	(3)	(54)	(84)
Disposals	—	—	(25)	(25)
Balance, end of year	\$ 1,031	\$ 108	\$ 1,885	\$ 3,024
Accumulated amortization and impairment				
Balance, beginning of year	\$ (586)	\$ (57)	\$ (1,040)	\$ (1,683)
Changes in foreign exchange rates	11	1	41	53
Disposals	—	—	5	5
Amortization	(55)	(4)	(165)	(224)
Balance, end of year	\$ (630)	\$ (60)	\$ (1,159)	\$ (1,849)
Net carrying amount	\$ 401	\$ 48	\$ 726	\$ 1,175

The weighted average remaining amortization period of the customer contract related and distribution channels are 14 and 13 years respectively (13 and 14 years respectively at December 31, 2019).

(c) Recoverable Amount

For the purposes of annual impairment testing, the Company allocates indefinite life intangibles to cash generating units and goodwill to cash generating unit groupings. Any potential impairment of indefinite life intangible assets is identified by comparing the recoverable amount of a cash generating unit to its carrying value. Any potential impairment of goodwill is identified by comparing the recoverable amount of a cash generating unit grouping to its carrying value.

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

In the fourth quarter of 2020, the Company conducted its annual impairment testing of intangible assets and goodwill based on September 30, 2020 asset balances. It was determined that the recoverable amounts of cash generating units for intangible assets and cash generating unit groupings for goodwill were in excess of their carrying values and there was no evidence of significant impairment.

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

11. Owner Occupied Properties and Fixed Assets

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

	2020	2019
Carrying value, beginning of year	\$ 842	\$ 835
Less: accumulated depreciation/impairments	(115)	(104)
Net carrying value, beginning of year	727	731
Additions	42	34
Disposals	—	(10)
Impairment recovery	—	2
Transferred to investment properties ⁽¹⁾	(17)	—
Depreciation	(15)	(13)
Foreign exchange	4	(17)
Net carrying value, end of year	\$ 741	\$ 727

⁽¹⁾ As a result of the sale of IPSI, a property with a carrying value of \$17 was reclassified from owner occupied properties to investment properties.

The net carrying value of fixed assets is \$426 at December 31, 2020 (\$455 at December 31, 2019).

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

	2020	2019
Canada	\$ 640	\$ 650
United States	321	334
Europe ⁽¹⁾	205	196
Capital and Risk Solutions ⁽¹⁾	1	2
Total	\$ 1,167	\$ 1,182

⁽¹⁾ See comparative figures (note 32).

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

12. Other Assets

	2020	2019
Deferred acquisition costs	\$ 618	\$ 595
Right-of-use assets	437	466
Trading account assets ⁽¹⁾	713	1,092
Finance leases receivable	404	405
Defined benefit pension plan assets (note 23)	240	231
Prepaid expenses	115	113
Miscellaneous other assets	820	208
Total	\$ 3,347	\$ 3,110

⁽¹⁾ Includes bonds of \$386 and stocks of \$327 at December 31, 2020 (bonds of \$726 and stocks of \$366 at December 31, 2019).

Total other assets of \$1,678 (\$1,443 at December 31, 2019) are expected to be realized within 12 months from the reporting date. This amount excludes deferred acquisition costs, the changes in which are noted below.

Deferred acquisition costs

	2020	2019
Balance, beginning of year	\$ 595	\$ 597
Additions	93	118
Amortization	(55)	(51)
Changes in foreign exchange rates	26	(32)
Disposals	(41)	(36)
Write-off	—	(1)
Balance, end of year	\$ 618	\$ 595

Right-of-use assets

	2020		
	Property	Equipment	Total
Cost, beginning of year	\$ 530	\$ 7	\$ 537
Additions	47	1	48
Modifications	(5)	—	(5)
Changes in foreign exchange rates	(4)	—	(4)
Cost, end of year	\$ 568	\$ 8	\$ 576
Accumulated amortization, beginning of year	\$ (69)	\$ (2)	\$ (71)
Amortization	(68)	(3)	(71)
Changes in foreign exchange rates	3	—	3
Accumulated amortization, end of year	\$ (134)	\$ (5)	\$ (139)
Carrying amount, end of year	\$ 434	\$ 3	\$ 437

12. Other Assets (cont'd)

	2019		
	Property	Equipment	Total
Cost, beginning of year	\$ 454	\$ 6	\$ 460
Additions	113	1	114
Modifications	(21)	—	(21)
Changes in foreign exchange rates	(16)	—	(16)
Cost, end of year	<u>\$ 530</u>	<u>\$ 7</u>	<u>\$ 537</u>
Accumulated amortization, beginning of year	\$ —	\$ —	\$ —
Amortization	(67)	(2)	(69)
Impairment	(3)	—	(3)
Changes in foreign exchange rates	1	—	1
Accumulated amortization, end of year	<u>\$ (69)</u>	<u>\$ (2)</u>	<u>\$ (71)</u>
Carrying amount, end of year	<u><u>\$ 461</u></u>	<u><u>\$ 5</u></u>	<u><u>\$ 466</u></u>

Finance leases receivable

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

The terms to maturity of the lease payments receivable are as follows:

	2020	2019
One year or less	\$ 30	\$ 30
Over one year to two years	30	30
Over two years to three years	30	30
Over three years to four years	30	30
Over four years to five years	30	30
Over five years	662	686
Total undiscounted lease payments	<u>812</u>	<u>836</u>
Less: unearned finance lease income	408	431
Total finance leases receivable	<u><u>\$ 404</u></u>	<u><u>\$ 405</u></u>
Finance income on the net investment in the leases	<u><u>\$ 26</u></u>	<u><u>\$ 26</u></u>

13. Insurance and Investment Contract Liabilities

(a) Insurance and investment contract liabilities

	2020		
	Gross liability	Reinsurance assets	Net
Insurance contract liabilities	\$ 208,902	\$ 21,991	\$ 186,911
Investment contract liabilities	9,145	130	9,015
Total	\$ 218,047	\$ 22,121	\$ 195,926

	2019		
	Gross liability	Reinsurance assets	Net
Insurance contract liabilities	\$ 174,521	\$ 20,580	\$ 153,941
Investment contract liabilities	1,656	127	1,529
Total	\$ 176,177	\$ 20,707	\$ 155,470

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

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

	2020		
	Gross liability	Reinsurance assets	Net
Participating			
Canada	\$ 46,107	\$ (199)	\$ 46,306
United States	11,090	13	11,077
Europe	155	—	155
Capital and Risk Solutions	912	—	912
Non-Participating			
Canada	35,449	638	34,811
United States	65,703	15,908	49,795
Europe	48,088	5,622	42,466
Capital and Risk Solutions	10,543	139	10,404
Total	\$ 218,047	\$ 22,121	\$ 195,926

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

	2019		
	Gross liability	Reinsurance assets	Net
Participating			
Canada	\$ 42,271	\$ (247)	\$ 42,518
United States	11,329	12	11,317
Europe ⁽¹⁾	173	—	173
Capital and Risk Solutions ⁽¹⁾	846	—	846
Non-Participating			
Canada	32,668	498	32,170
United States	32,360	15,091	17,269
Europe ⁽¹⁾	45,489	5,230	40,259
Capital and Risk Solutions ⁽¹⁾	11,041	123	10,918
Total	\$ 176,177	\$ 20,707	\$ 155,470

⁽¹⁾ See comparative figures (note 32).

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

	2020					
	Bonds	Mortgage loans	Stocks	Investment properties	Other	Total
Carrying value						
Participating liabilities						
Canada	\$ 21,803	\$ 10,545	\$ 6,152	\$ 2,983	\$ 4,624	\$ 46,107
United States	5,193	593	13	—	5,291	11,090
Europe	84	—	62	9	—	155
Capital and Risk Solutions	688	12	—	—	212	912
Non-participating liabilities						
Canada	21,511	4,498	2,789	360	6,291	35,449
United States	31,631	4,586	46	—	29,440	65,703
Europe	34,941	5,746	332	2,536	4,533	48,088
Capital and Risk Solutions	2,365	52	—	—	8,126	10,543
Other	15,285	1,135	754	141	338,113	355,428
Total equity	4,091	636	852	241	21,195	27,015
Total carrying value	\$ 137,592	\$ 27,803	\$ 11,000	\$ 6,270	\$ 417,825	\$ 600,490
Fair value	\$ 140,789	\$ 29,633	\$ 10,963	\$ 6,270	\$ 417,825	\$ 605,480

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

	2019					Total
	Bonds	Mortgage loans	Stocks	Investment properties	Other	
Carrying value						
Participating liabilities						
Canada	\$ 19,484	\$ 9,655	\$ 6,142	\$ 2,472	\$ 4,518	\$ 42,271
United States	5,128	626	—	—	5,575	11,329
Europe ⁽¹⁾	97	—	63	12	1	173
Capital and Risk Solutions ⁽¹⁾	619	20	—	—	207	846
Non-participating liabilities						
Canada	20,270	4,111	2,237	407	5,643	32,668
United States	14,311	2,678	—	—	15,371	32,360
Europe ⁽¹⁾	33,062	5,387	299	2,672	4,069	45,489
Capital and Risk Solutions ⁽¹⁾	2,484	55	—	—	8,502	11,041
Other	15,630	902	902	119	231,894	249,447
Total equity	3,943	834	732	205	19,829	25,543
Total carrying value	<u>\$ 115,028</u>	<u>\$ 24,268</u>	<u>\$ 10,375</u>	<u>\$ 5,887</u>	<u>\$ 295,609</u>	<u>\$ 451,167</u>
Fair value	<u>\$ 117,000</u>	<u>\$ 25,146</u>	<u>\$ 10,367</u>	<u>\$ 5,887</u>	<u>\$ 295,609</u>	<u>\$ 454,009</u>

⁽¹⁾ See comparative figures (note 32).

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

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

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

(c) Change in insurance contract liabilities

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

	2020			
	Participating			
	Gross liability	Reinsurance assets	Net	
Balance, beginning of year	\$ 54,619	\$ (235)	\$ 54,854	
Impact of new business	(7)	32	(39)	
Normal change in force	3,883	9	3,874	
Management action and changes in assumptions	55	8	47	
Impact of foreign exchange rate changes	(286)	—	(286)	
Balance, end of year	\$ 58,264	\$ (186)	\$ 58,450	
	Non-participating			
	Gross liability	Reinsurance assets	Net	Total Net
Balance, beginning of year	\$ 119,902	\$ 20,815	\$ 99,087	\$ 153,941
Impact of new business	7,028	706	6,322	6,283
Normal change in force	1,296	750	546	4,420
Management action and changes in assumptions	161	109	52	99
Business movement from/to external parties	(48)	—	(48)	(48)
MassMutual acquisition (note 3)	22,316	—	22,316	22,316
Impact of foreign exchange rate changes	(17)	(203)	186	(100)
Balance, end of year	\$ 150,638	\$ 22,177	\$ 128,461	\$ 186,911

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

	2019			
	Participating			
	Gross liability	Reinsurance assets	Net	
Balance, beginning of year	\$ 50,927	\$ (337)	\$ 51,264	
Impact of new business	59	—	59	
Normal change in force	4,138	25	4,113	
Management action and changes in assumptions	67	77	(10)	
Impact of foreign exchange rate changes	(572)	—	(572)	
Balance, end of year	<u>\$ 54,619</u>	<u>\$ (235)</u>	<u>\$ 54,854</u>	
	Non-participating			
	Gross liability	Reinsurance assets	Net	Total Net
Balance, beginning of year	\$ 115,793	\$ 6,463	\$ 109,330	\$ 160,594
Impact of new business	5,339	(266)	5,605	5,664
Normal change in force	1,784	645	1,139	5,252
Management action and changes in assumptions	(117)	(73)	(44)	(54)
Business movement from/to external parties	(176)	14,802	(14,978)	(14,978)
Impact of foreign exchange rate changes	(2,721)	(756)	(1,965)	(2,537)
Balance, end of year	<u>\$ 119,902</u>	<u>\$ 20,815</u>	<u>\$ 99,087</u>	<u>\$ 153,941</u>

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

In 2020, the major contributors to the increase in net insurance contract liabilities was the acquisition of MassMutual of \$22,316, the impact of new business of \$6,283, and the normal change in the in force business of \$4,420.

Net non-participating insurance contract liabilities increased by \$52 due to management actions and changes in assumptions including a \$377 increase in Canada, partially offset by decreases of \$212 in Europe, \$59 in Capital & Risk Solutions, and \$54 in the United States.

The increase in Canada was primarily due to updated policyholder behaviour assumptions of \$269, updated morbidity assumptions of \$140, of which \$114 is offset by an increase in other assets, and updated economic and asset related assumptions of \$98. This was partially offset by decreases due to updated life mortality assumptions of \$129.

The decrease in Europe was primarily due to updated longevity assumptions of \$138, modeling refinements of \$28, updated morbidity assumptions of \$24, updated policyholder behaviour assumptions of \$19, and updated economic and asset related assumptions of \$10. This was partially offset by an increase due to updated expense and tax assumptions of \$6.

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

The decrease in Capital and Risk Solutions was primarily due to updated longevity assumptions of \$135, updated economic assumptions of \$41, and modeling refinements of \$37. This was partially offset by increases due to updated life mortality assumptions of \$107, updated expense and tax assumptions of \$28, and updated policyholder behaviour assumptions of \$14.

The decrease in the United States was primarily due to updated economic assumptions of \$50.

Net participating insurance contract liabilities increased by \$47 in 2020 due to management actions and changes in assumptions. The increase was primarily due to updated economic assumptions of \$2,358, and updated policyholder behaviour assumptions of \$34. This was partially offset by decreases due to provisions for future policyholder dividends of \$1,899, updated expense and tax assumptions of \$446, and modeling refinements of \$5.

In July 2019, the Canadian Actuarial Standards Board published revised standards for the valuation of insurance contract liabilities, with an effective date of October 15, 2019. The revised standards include decreases to ultimate reinvestment rates and revised calibration criteria for stochastic risk-free interest rates.

In 2019, the major contributor to the decrease in net insurance contract liabilities was the business movement to external parties of \$14,978, which includes the transfer to Protective Life, and the net impact of foreign exchange rate changes of \$2,537. This was partially offset by increases due to the impact of new business of \$5,664, and normal change in force of \$5,252.

Net non-participating insurance contract liabilities decreased by \$44 in 2019 due to management actions and assumption changes including a \$272 decrease in Europe, partially offset by a \$145 increase in Canada, a \$52 increase in the United States, and a \$31 increase in Capital and Risk Solutions.

The decrease in Europe was primarily due to updated longevity assumptions of \$187, updated economic assumptions of \$98, which includes the net impact of new standards, and updated life mortality assumptions of \$7, partially offset by increases due to updated expense and tax assumptions of \$25.

The increase in Canada was primarily due to updated policyholder behaviour assumptions of \$254, and updated longevity assumptions of \$54, partially offset by decreases due to updated morbidity assumptions of \$169 and updated economic assumptions of \$6, which includes the net impact of the new standards.

The increase in the United States was primarily due to updated expense and tax assumptions of \$45, and updated mortality assumptions of \$43 partially offset by decreases due to updated economic assumptions of \$34, which includes the net impact of new standards.

The increase in Capital and Risk Solutions was primarily due to updated life mortality assumptions of \$87, and updated expense and tax assumptions of \$34, partially offset by decreases due to updated longevity assumptions of \$112 and updated economic assumptions of \$3, which includes the net impact of new standards.

Net participating insurance contract liabilities decreased by \$10 in 2019 due to management actions and assumption changes. The decrease was primarily due to updated provisions for future policyholder dividends \$2,232, updated expense and tax assumptions of \$535, and modeling refinements of \$198. This was partially offset by increases due to updated economic assumptions of \$1,884, updated policyholder behaviour assumptions of \$935 and updated mortality assumptions of \$153.

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

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

	2020			2019		
	Gross liability	Reinsurance assets	Net	Gross liability	Reinsurance assets	Net
Balance, beginning of year	\$ 1,656	\$ 127	\$ 1,529	\$ 1,711	\$ —	\$ 1,711
Normal change in force business	2,489	(20)	2,509	(87)	38	(125)
Investment experience	147	26	121	103	(23)	126
Management action and changes in assumptions	(4)	—	(4)	(4)	—	(4)
Business movement from/to external parties	—	—	—	—	116	(116)
MassMutual acquisition (note 3)	4,984	—	4,984	—	—	—
Impact of foreign exchange rate changes	(127)	(3)	(124)	(67)	(4)	(63)
Balance, end of year	<u>\$ 9,145</u>	<u>\$ 130</u>	<u>\$ 9,015</u>	<u>\$ 1,656</u>	<u>\$ 127</u>	<u>\$ 1,529</u>

The carrying value of investment contract liabilities approximates their fair value.

(e) Gross premiums written and gross policyholder benefits

(i) Premium Income

	2020	2019
Direct premiums	\$ 28,102	\$ 25,419
Assumed reinsurance premiums	19,652	17,847
Total	<u>\$ 47,754</u>	<u>\$ 43,266</u>

(ii) Policyholder Benefits

	2020	2019
Direct	\$ 19,538	\$ 19,643
Assumed reinsurance	20,067	18,126
Total	<u>\$ 39,605</u>	<u>\$ 37,769</u>

(f) Actuarial Assumptions

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

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

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

Mortality

A life insurance mortality study is carried out annually for each major block of insurance business. The results of each study are used to update the Company's experience valuation mortality tables for that business. When there is insufficient data, use is made of the latest industry experience to derive an appropriate valuation mortality assumption. Improvement scales for life insurance and annuitant mortality are updated periodically based on population and industry studies, product specific considerations, as well as professional guidance. In addition, appropriate provisions have been made for future mortality deterioration on term insurance.

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

Morbidity

The Company uses industry developed experience tables modified to reflect emerging Company experience. Both claim incidence and termination are monitored regularly and emerging experience is factored into the current valuation.

Property and casualty reinsurance

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

Investment returns

The assets which correspond to the different liability categories are segmented. For each segment, projected cash flows from the current assets and liabilities are used in the Canadian Asset Liability Method to determine insurance contract liabilities. Cash flows from assets are reduced to provide for asset default losses. Testing under several interest rate and equity scenarios (including increasing and decreasing rates) is done to provide for reinvestment risk (note 8(c)).

Expenses

Contractual policy expenses (e.g. sales commissions) and tax expenses are reflected on a best estimate basis. Expense studies for indirect operating expenses are updated regularly to determine an appropriate estimate of future operating expenses for the liability type being valued. Improvements in unit operating expenses are not projected. An inflation assumption is incorporated in the estimate of future operating expenses consistent with the interest rate scenarios projected under the Canadian Asset Liability Method as inflation is assumed to be correlated with new money interest rates.

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

Policy termination

Studies to determine rates of policy termination are updated regularly to form the basis of this estimate. Industry data is also available and is useful where the Company has no experience with specific types of policies or its exposure is limited. The Company's most significant exposures are in respect of the T-100 and Level Cost of Insurance Universal Life products in Canada and policy renewal rates at the end of term for renewable term policies in Canada and Capital and Risk Solutions. Industry experience has guided the Company's assumptions for these products as the Company's own experience is very limited.

Utilization of elective policy options

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

Policyholder dividends and adjustable policy features

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

(g) Risk Management

(i) Insurance risk

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

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

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

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

	Increase (decrease) in net earnings	
	2020	2019
Mortality - 2% increase	\$ (288)	\$ (279)
Annuitant mortality - 2% decrease	\$ (756)	\$ (601)
Morbidity - 5% adverse change	\$ (279)	\$ (253)
Investment returns		
Parallel shift in yield curve		
1% increase	\$ —	\$ —
1% decrease	\$ —	\$ —
Change in interest rates		
1% increase	\$ 224	\$ 175
1% decrease	\$ (920)	\$ (619)
Change in publicly traded common stock values		
20% increase	\$ 28	\$ 54
10% increase	\$ 15	\$ 27
10% decrease	\$ (51)	\$ (39)
20% decrease	\$ (208)	\$ (182)
Change in other non-fixed income asset values		
10% increase	\$ 34	\$ 60
5% increase	\$ 6	\$ 25
5% decrease	\$ (69)	\$ (28)
10% decrease	\$ (108)	\$ (90)
Change in best estimate return assumptions for equities		
1% increase	\$ 556	\$ 509
1% decrease	\$ (682)	\$ (585)
Expenses - 5% increase	\$ (165)	\$ (125)
Policy termination and renewal - 10% adverse change	\$ (1,017)	\$ (813)

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

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

	2020			2019		
	Gross liability	Reinsurance assets	Net	Gross liability	Reinsurance assets	Net
Canada	\$ 81,556	\$ 439	\$ 81,117	\$ 74,939	\$ 251	\$ 74,688
United States	76,793	15,921	60,872	43,689	15,103	28,586
Europe ⁽¹⁾	48,243	5,622	42,621	45,662	5,230	40,432
Capital and Risk Solutions ⁽¹⁾	11,455	139	11,316	11,887	123	11,764
Total	\$ 218,047	\$ 22,121	\$ 195,926	\$ 176,177	\$ 20,707	\$ 155,470

⁽¹⁾ See comparative figures (note 32).

(ii) Reinsurance risk

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

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

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

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

14. Segregated Funds and Other Structured Entities

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

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

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

In circumstances where the segregated funds are invested in structured entities and are deemed to control the entity, the Company has presented the non-controlling ownership interest within the segregated funds for the risk of policyholders as equal and offsetting amounts in the assets and liabilities. The amounts presented within are \$1,490 at December 31, 2020 (\$1,147 at December 31, 2019).

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

Segregated Funds Guarantee Exposure

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

In Canada, the Company offers retail segregated fund products through Canada Life. These products provide guaranteed minimum death benefits (GMDB) and guaranteed minimum accumulation on maturity benefits.

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

In Europe, the Company offers UWP products in Germany and unit-linked products with investment guarantees in Ireland. These products are similar to segregated fund products but include minimum credited interest rates and pooling of policyholders' funds.

The Company also offers a GMWB product in the U.S., and Germany, and previously offered GMWB product in Canada and Ireland. Certain GMWB products offered by the Company offer levels of death and maturity guarantees. At December 31, 2020, the amount of GMWB product in-force in Canada, the U.S., Ireland and Germany was \$3,375 (\$3,332 at December 31, 2019).

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

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

(a) Investments on account of segregated fund policyholders

	2020	2019
Cash and cash equivalents	\$ 15,558	\$ 12,501
Bonds	65,338	44,973
Mortgage loans	2,686	2,670
Stocks and units in unit trusts	112,675	104,330
Mutual funds	127,577	55,779
Investment properties	12,430	12,986
	336,264	233,239
Accrued income	463	373
Other liabilities	(4,185)	(3,737)
Non-controlling mutual funds interest	1,490	1,147
Total ⁽¹⁾	\$ 334,032	\$ 231,022

⁽¹⁾ At December 31, 2020, \$84,785 of investments on account of segregated fund policyholders are reinsured by the Company on a modified coinsurance basis (nil at December 31, 2019) (note 3). Included in this amount are \$87 of cash and cash equivalents, \$15,320 of bonds, \$23 of stocks and units in unit trusts, \$69,259 of mutual funds, \$100 of accrued income and \$(4) of other liabilities.

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

	2020	2019
Balance, beginning of year	\$ 231,022	\$ 209,527
Additions (deductions):		
Policyholder deposits	21,916	24,685
Net investment income	2,695	3,331
Net realized capital gains on investments	8,954	4,265
Net unrealized capital gains on investments	474	19,658
Unrealized gains (losses) due to changes in foreign exchange rates	3,920	(6,539)
Policyholder withdrawals	(20,371)	(24,721)
Business acquisition ⁽¹⁾	84,785	—
Change in Segregated Fund investment in General Fund	51	(4)
Change in General Fund investment in Segregated Fund	234	105
Net transfer from General Fund	9	23
Non-controlling mutual funds interest	343	283
Transfer from assets held for sale	—	409
Total	103,010	21,495
Balance, end of year	\$ 334,032	\$ 231,022

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

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

(c) Investment income on account of segregated fund policyholders

	2020	2019
Net investment income	\$ 2,695	\$ 3,331
Net realized capital gains on investments	8,954	4,265
Net unrealized capital gains on investments	474	19,658
Unrealized gains (losses) due to changes in foreign exchange rates	3,920	(6,539)
Total	16,043	20,715
Change in investment and insurance contracts liability on account of segregated fund policyholders	16,043	20,715
Net	\$ —	\$ —

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

	2020			
	Level 1	Level 2	Level 3	Total
Investments on account of segregated fund policyholders ⁽¹⁾	\$ 224,831	\$ 98,424	\$ 13,556	\$ 336,811

⁽¹⁾ Excludes other liabilities, net of other assets, of \$2,779.

	2019			
	Level 1	Level 2	Level 3	Total
Investments on account of segregated fund policyholders ⁽¹⁾	\$ 146,861	\$ 73,173	\$ 13,988	\$ 234,022

⁽¹⁾ Excludes other liabilities, net of other assets, of \$3,000.

During 2020, certain foreign stock holdings valued at \$3,190 have been transferred from Level 1 to Level 2 (\$153 were transferred from Level 1 to Level 2 at December 31, 2019) primarily based on the Company's change in use of inputs in addition to quoted prices in active markets for certain foreign stock holdings at year end. Level 2 assets include those assets where fair value is not available from normal market pricing sources, where inputs are utilized in addition to quoted prices in active markets and where the Company does not have access to the underlying asset details within an investment fund.

As at December 31, 2020, \$9,770 (\$8,471 at December 31, 2019) of the segregated funds were invested in funds managed by related parties IG Wealth Management and Mackenzie Investments, members of the Power Corporation group of companies (note 25).

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

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

	2020		2019	
	Total ⁽¹⁾	Investments on account of segregated fund policyholders	Investments on account of segregated fund policyholders held for sale	Total
Balance, beginning of year	\$ 13,988	\$ 13,235	\$ 9	\$ 13,244
Change in accounting policy	—	136	—	136
Revised balance, beginning of year	13,988	13,371	9	13,380
Total gains (losses) included in segregated fund investment income	78	141	(1)	140
Purchases	167	760	—	760
Sales	(712)	(284)	(8)	(292)
Transfers into Level 3	35	—	—	—
Transfers out of Level 3	—	—	—	—
Balance, end of year	\$ 13,556	\$ 13,988	\$ —	\$ 13,988

⁽¹⁾ At December 31, 2020, there were no investments on account of segregated fund policyholders held for sale.

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

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

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

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

During 2020, fee and other income earned by the Company resulting from the Company's interests in segregated funds and other structured entities was \$5,034 (\$4,919 during 2019).

Included within other assets (note 12) at December 31, 2020 is \$557 (\$957 at December 31, 2019) of investments by the Company in bonds and stocks of Putnam sponsored funds and \$156 (\$135 at December 31, 2019) of investments in stocks of sponsored unit trusts in Europe.

15. Debentures and Other Debt Instruments

	2020		2019	
	Carrying value	Fair value	Carrying value	Fair value
Short-term				
Commercial paper and other short-term debt instruments with interest rates from 0.223% to 0.274% (1.828% to 2.089% at December 31, 2019), unsecured	\$ 125	\$ 125	\$ 130	\$ 130
Revolving credit facility with interest equal to LIBOR plus 0.70% (U.S. \$165; U.S. \$230 at December 31, 2019), unsecured	210	210	299	299
Revolving credit facility with interest equal to LIBOR plus 1.00% (U.S. \$500), unsecured	635	635	—	—
Total short-term	970	970	429	429
Capital:				
Current				
Lifeco				
4.65% Debentures due August 13, 2020, unsecured, repaid during the year	—	—	500	508
Long-term				
Lifeco				
6.74% Debentures due November 24, 2031, unsecured	195	287	194	278
6.67% Debentures due March 21, 2033, unsecured	394	575	393	557
5.998% Debentures due November 16, 2039, unsecured	342	504	342	487
3.337% Debentures due February 28, 2028, unsecured	498	566	498	526
2.981% Debentures due July 8, 2050, unsecured	493	514	—	—
2.50% Debentures due April 18, 2023, unsecured, (500 euro)	774	825	728	788
2.379% Debentures due May 14, 2030, unsecured	597	637	—	—
1.75% Debentures due December 7, 2026, unsecured, (500 euro)	771	857	725	785
	4,064	4,765	2,880	3,421
Canada Life				
6.40% Subordinated debentures due December 11, 2028, unsecured	100	135	100	128
Canada Life Capital Trust (CLCT)				
7.529% due June 30, 2052, unsecured, face value \$150	158	222	159	221
Great-West Lifeco Finance 2018, LP				
4.581% Senior notes due May 17, 2048, unsecured, (U.S. \$500)	628	732	643	749
4.047% Senior notes due May 17, 2028, unsecured, (U.S. \$300)	379	420	388	430
	1,007	1,152	1,031	1,179
Great-West Lifeco Finance (Delaware) LP				
4.15% Senior notes due June 3, 2047, unsecured, (U.S. \$700)	874	970	894	993
Great-West Lifeco U.S. Finance 2020, LP				
0.904% Senior notes due August 12, 2025, unsecured, (U.S. \$500)	631	638	—	—
Empower Finance 2020, LP				
3.075% Senior notes due September 17, 2051, unsecured, (U.S. \$700)	879	984	—	—
1.776% Senior notes due March 17, 2031, unsecured, (U.S. \$400)	505	521	—	—
1.357% Senior notes due September 17, 2027, unsecured, (U.S. \$400)	505	512	—	—
	1,889	2,017	—	—
Total long-term	8,723	9,899	5,564	6,450
Total	\$ 9,693	\$ 10,869	\$ 5,993	\$ 6,879

15. *Debentures and Other Debt Instruments (cont'd)*

On May 14, 2020, the Company issued \$600 aggregate principal amount 2.379% debentures at par, maturing on May 14, 2030. Interest on the debentures is payable semi-annually in arrears on May 14 and November 14 in each year, commencing November 14, 2020 until the date on which the debentures are repaid. The debentures are redeemable at any time prior to February 14, 2030 in whole or in part at the greater of the Canada Yield Price (as defined in the trust indenture governing the debentures) and par, and on or after February 14, 2030 in whole or in part at par, together in each case with accrued and unpaid interest.

On July 8, 2020, the Company issued \$250 aggregate principal amount 2.981% debentures at par, maturing on July 8, 2050. Interest on the debentures is payable semi-annually in arrears on January 8 and July 8 in each year, commencing January 8, 2021 until the date on which the debentures are repaid. The debentures are redeemable at any time prior to January 8, 2050 in whole or in part at the greater of the Canada Yield Price (as defined in the trust indenture governing the debentures) and par, and on or after January 8, 2050 in whole or in part at par, together in each case with accrued and unpaid interest.

On July 13, 2020, the Company announced the re-opening of the offering of 2.981% debentures due July 8, 2050, and on July 15, 2020 issued an additional \$250 aggregate principal amount. The July 15, 2020 debentures were issued at a price of \$986.31 per \$1,000 par value for an effective yield of 3.051%. Upon issuance of the July 15, 2020 debentures, \$500 aggregate principal amount of 2050 debentures was issued and outstanding. The July 15, 2020 debentures form a single series with, are issued under the same Committee on Uniform Securities Identification Procedures (CUSIP) number as, and have the same terms as to status, redemption or otherwise as, the initial debentures issued on July 8, 2020.

On August 12, 2020, Great-West Lifeco U.S. Finance 2020, LP, a subsidiary of the Company, issued \$663 (U.S. \$500) aggregate principal amount of 0.904% senior notes due August 12, 2025. The senior notes are fully and unconditionally guaranteed by the Company.

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

On September 17, 2020, Empower Finance 2020, LP, a subsidiary of the Company, issued \$526 (U.S. \$400) aggregate principal amount of 1.357% senior notes due September 17, 2027, \$526 (U.S. \$400) aggregate principal amount of 1.776% senior notes due March 17, 2031 and \$921 (U.S. \$700) aggregate principal amount of 3.075% senior notes due September 17, 2051. The senior notes are fully and unconditionally guaranteed by the Company.

On November 2, 2020, Great-West Lifeco U.S. LLC, a subsidiary of the Company, established a 1-year \$635 (U.S. \$500) revolving credit facility with interest on the drawn balance equal to the LIBOR rate plus 1.00%. The facility is fully and unconditionally guaranteed by the Company. The facility was fully drawn as at December 31, 2020, with the proceeds used to finance a portion of the MassMutual retirement services business acquisition (note 3).

Capital Trust Securities

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

Distributions and interest on the capital trust securities are classified as financing charges in the Consolidated Statements of Earnings (note 16). The fair value for capital trust securities is determined by the bid-ask price. Refer to note 8 for financial instrument risk management disclosures.

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

16. Financing Charges

Financing charges consist of the following:

	2020	2019
Operating charges:		
Interest on operating lines and short-term debt instruments	\$ 5	\$ 12
Financial charges:		
Interest on long-term debentures and other debt instruments	251	243
Interest on capital trust securities	11	11
Other	17	19
	279	273
Total	\$ 284	\$ 285

17. Other Liabilities

	2020	2019
Pension and other post-employment benefits (note 23)	\$ 1,630	\$ 1,520
Lease liabilities	568	585
Bank overdraft	444	379
Deferred income reserves	345	380
Other	2,160	1,825
Total	\$ 5,147	\$ 4,689

Total other liabilities of \$2,604 (\$2,204 at December 31, 2019) are expected to be realized within 12 months from the reporting date. This amount excludes deferred income reserves, the changes in which are noted below.

Deferred income reserves

	2020	2019
Balance, beginning of year	\$ 380	\$ 441
Additions	51	70
Amortization	(78)	(81)
Changes in foreign exchange	12	(15)
Disposals	(20)	(35)
Balance, end of year	\$ 345	\$ 380

17. Other Liabilities (cont'd)

Lease liabilities

	2020		
	Property	Equipment	Total
Balance, beginning of year	\$ 580	\$ 5	\$ 585
Additions	56	1	57
Modifications	(4)	—	(4)
Lease payments	(85)	(3)	(88)
Changes in foreign exchange rates	(4)	—	(4)
Interest	22	—	22
Balance, end of year	\$ 565	\$ 3	\$ 568

	2019		
	Property	Equipment	Total
Balance, beginning of year	\$ 545	\$ 6	\$ 551
Additions	124	1	125
Modifications	(22)	—	(22)
Lease payments	(72)	(2)	(74)
Changes in foreign exchange rates	(17)	—	(17)
Interest	22	—	22
Balance, end of year	\$ 580	\$ 5	\$ 585

The following table presents the contractual undiscounted cash flows for lease obligations:

	2020	2019
One year or less	\$ 88	\$ 83
Over one year to two years	78	78
Over two years to three years	67	66
Over three years to four years	60	56
Over four years to five years	54	53
Over five years	387	417
Total undiscounted lease obligations	\$ 734	\$ 753

18. Non-Controlling Interests

The Company has a controlling equity interest in Canada Life, GWL&A, and Putnam at December 31, 2020. The Company had a controlling equity interest in Canada Life, GWL&A, The Great-West Life Assurance Company (Great-West Life), London Life Insurance Company (London Life) and Putnam at December 31, 2019. The non-controlling interests previously attributable to Great-West Life and London Life are now included in the non-controlling interests of Canada Life as part of the Canada Life amalgamation.

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

Non-controlling interests in subsidiaries also include non-controlling interests for the issued and outstanding shares of Putnam and PanAgora held by employees of the respective companies, and non-controlling interests through Irish Life's controlling interest in Invesco Ltd. (Ireland).

(a) The non-controlling interests recorded in the Consolidated Statements of Earnings and other comprehensive income are as follows:

	2020	2019
Net earnings attributable to participating account before policyholder dividends		
Canada Life	\$ 1,429	\$ 302
GWL&A	1	3
Great-West Life	—	150
London Life	—	919
	<u>1,430</u>	<u>1,374</u>
Policyholder dividends		
Canada Life	(1,362)	(315)
GWL&A	(2)	(3)
Great-West Life	—	(166)
London Life	—	(880)
	<u>(1,364)</u>	<u>(1,364)</u>
Net earnings - participating account	66	10
Non-controlling interests in subsidiaries	12	5
Total	\$ 78	\$ 15

The non-controlling interests recorded in other comprehensive income (loss) for the year ended December 31, 2020 was \$37 (\$30 for the year ended December 31, 2019).

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

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

19. Share Capital

Authorized

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

Issued and outstanding and fully paid

	2020		2019	
	Number	Carrying value	Number	Carrying value
First Preferred Shares				
Series F, 5.90% Non-Cumulative	7,740,032	\$ 194	7,740,032	\$ 194
Series G, 5.20% Non-Cumulative	12,000,000	300	12,000,000	300
Series H, 4.85% Non-Cumulative	12,000,000	300	12,000,000	300
Series I, 4.50% Non-Cumulative	12,000,000	300	12,000,000	300
Series L, 5.65% Non-Cumulative	6,800,000	170	6,800,000	170
Series M, 5.80% Non-Cumulative	6,000,000	150	6,000,000	150
Series N, Non-Cumulative 5-Year Rate Reset	10,000,000	250	8,524,422	213
Series O, Non-Cumulative Floating Rate	—	—	1,475,578	37
Series P, 5.40% Non-Cumulative	10,000,000	250	10,000,000	250
Series Q, 5.15% Non-Cumulative	8,000,000	200	8,000,000	200
Series R, 4.80% Non-Cumulative	8,000,000	200	8,000,000	200
Series S, 5.25% Non-Cumulative	8,000,000	200	8,000,000	200
Series T, 5.15% Non-Cumulative	8,000,000	200	8,000,000	200
Total	108,540,032	\$ 2,714	108,540,032	\$ 2,714
Common shares				
Balance, beginning of year	927,281,186	\$ 5,633	987,739,408	\$ 7,283
Purchased and cancelled under Substantial Issuer Bid	—	—	(59,700,974)	(2,000)
Excess of redemption proceeds over stated capital per Substantial Issuer Bid	—	—	—	1,628
Share issuance - Qualifying Holdco Alternative per Substantial Issuer Bid	—	—	595,747,641	2,306
Cancellation of Shares - Qualifying Holdco Alternative per Substantial Issuer Bid	—	—	(595,747,641)	(3,610)
Purchased and cancelled under Normal Course Issuer Bid	—	—	(2,000,000)	(66)
Excess of redemption proceeds over stated capital per Normal Course Issuer Bid	—	—	—	53
Exercised and issued under stock option plan	571,920	18	1,242,752	39
Balance, end of year	927,853,106	\$ 5,651	927,281,186	\$ 5,633

19. Share Capital (cont'd)

Preferred Shares

On November 4, 2020, the Company announced that it did not intend to exercise its rights to redeem the 8,524,422 then outstanding Series N, Non-Cumulative 5-Year Rate Reset First Preferred Shares (Series N Shares) and the 1,475,578 then outstanding Series O, Non-Cumulative Floating Rate First Preferred Shares (Series O Shares) on December 31, 2020. As a result and subject to certain conditions set out in the terms and conditions attached to the shares, holders of Series N Shares had the right to convert all or any of their Series N Shares into Series O Shares, and holders of Series O Shares had the right to convert all or any of their Series O Shares into Series N Shares, on a one-for-one basis on December 31, 2020.

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

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

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

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

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

The Series L, 5.65% Non-Cumulative First Preferred Shares are currently redeemable at the option of the Company for \$25.00 per share, together with all declared and unpaid dividends up to but excluding the date of redemption.

The Series M, 5.80% Non-Cumulative First Preferred Shares are currently redeemable at the option of the Company for \$25.00 per share, together with all declared and unpaid dividends up to but excluding the date of redemption.

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

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

19. Share Capital (cont'd)

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

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

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

Common Shares

Normal Course Issuer Bid

On January 17, 2020, the Company announced a normal course issuer bid commencing January 22, 2020 and terminating January 21, 2021 to purchase for cancellation up to but not more than 20,000,000 of its common shares at market prices.

As a result of the COVID-19 pandemic impact on markets, on March 13, 2020, OSFI set expectations that Canadian banks and insurers should suspend share buybacks until further notice.

On March 4, 2019, the Company announced a substantial issuer bid (the Offer) pursuant to which the Company offered to purchase for cancellation up to \$2,000 of its common shares from shareholders for cash. The Offer commenced on March 8, 2019 and expired on April 12, 2019. On April 17, 2019, the Company purchased and subsequently cancelled 59,700,974 common shares under the Offer at a price of \$33.50 per share for an aggregate purchase price of \$2,000. The excess paid over the average carrying value under the Offer was \$1,628 and was recognized as a reduction to accumulated surplus. Transaction costs of \$3 were incurred in connection with the Offer and charged to accumulated surplus.

As part of the substantial issuer bid, Power Financial Corporation (Power Financial) and IGM participated in the Offer. IGM tendered its Lifeco shares proportionately. Power Financial tendered a portion of its Lifeco common shares on a proportionate basis and all remaining Lifeco common shares on a non-proportionate basis and this did not impact Power Financial's voting control of the Company. Power Financial and IGM effected their tender offers through a Qualifying Holdco Alternative, which the Company also offered to other shareholders, to assist them in achieving certain Canadian tax objectives. Under the Qualifying Holdco Alternative, the Corporation issued and subsequently cancelled 595,747,641 shares which resulted in a net decrease in share capital of \$1,304 with a corresponding increase in accumulated surplus.

During the year ended December 31, 2020, the Company did not purchase any common shares under the current normal course issuer bid (2,000,000 during the year ended December 31, 2019, under the previous normal course issuer bid).

Subsequent Event

On January 25, 2021, the Company announced a normal course issuer bid (NCIB) commencing January 27, 2021 and terminating January 26, 2022 to purchase for cancellation up to but not more than 20,000,000 of its common shares at market prices. The Company does not currently intend to engage in share repurchases that reduce its outstanding shares while OSFI maintains its expectation that the institutions it regulates suspend share buybacks. However, the Company may use the renewed NCIB for other purposes permitted by the Toronto Stock Exchange or, when OSFI no longer maintains its expectation or circumstances otherwise change, to acquire common shares to mitigate the dilutive effect of issuing shares under the Company's Stock Option Plan and for other capital management purposes.

20. Earnings Per Common Share

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

	2020	2019
Earnings		
Net earnings	\$ 3,076	\$ 2,492
Preferred share dividends	(133)	(133)
Net earnings - common shareholders	\$ 2,943	\$ 2,359
 Number of common shares		
Average number of common shares outstanding	927,675,108	946,003,629
Add: Potential exercise of outstanding stock options	109,974	522,755
Average number of common shares outstanding - diluted basis	927,785,082	946,526,384
 Basic earnings per common share	\$ 3.173	\$ 2.494
 Diluted earnings per common share	\$ 3.172	\$ 2.493
 Dividends per common share	\$ 1.752	\$ 1.652

21. Capital Management

(a) Policies and Objectives

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

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

- to maintain the capitalization of its regulated operating subsidiaries at a level that will exceed the relevant minimum regulatory capital requirements in the jurisdictions in which they operate;
- to maintain strong credit and financial strength ratings of the Company ensuring stable access to capital markets; and
- to provide an efficient capital structure to maximize shareholders' value in the context of the Company's operational risks and strategic plans.

The Company has established policies and procedures designed to identify, measure and report all material risks. Management is responsible for establishing capital management procedures for implementing and monitoring the capital plan.

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

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

(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.

21. Capital Management (cont'd)

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

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

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

For entities based in Europe, the local solvency capital regime is the Solvency II basis. At December 31, 2020 and December 31, 2019, all European regulated entities met the capital and solvency requirements as prescribed under Solvency II.

GWL&A is subject to the risk-based capital regulatory regime in the U.S. Other foreign operations and foreign subsidiaries of the Company are required to comply with local capital or solvency requirements in their respective jurisdictions. At December 31, 2020 and December 31, 2019, the Company maintained capital levels above the minimum local regulatory requirements in each of its foreign operations.

22. Share-Based Payments

(a) The Company has a stock option plan (the Plan) pursuant to which options to subscribe for common shares of Lifeco may be granted to certain officers and employees of Lifeco and its affiliates. The Company's Human Resources Committee (the Committee) administers the Plan and, subject to the specific provisions of the Plan, fixes the terms and conditions upon which options are granted. The exercise price of each option granted under the Plan is fixed by the Committee, but cannot under any circumstances be less than the weighted average trading price per Lifeco common share on the Toronto Stock Exchange for the five trading days preceding the date of the grant. Options granted prior to January 1, 2019 vest over a period of five years. Options granted on or after January 1, 2019 vest 50% three years after the grant date and 50% four years after the grant date. Options have a maximum exercise period of ten years from the grant date. Termination of employment may, in certain circumstances, result in forfeiture of the options, unless otherwise determined by the Committee. In 2020, the maximum number of Lifeco common shares issuable under the Plan was 65,000,000.

During 2020, 1,932,200 common share options were granted (2,699,500 during 2019). The weighted average fair value of common share options granted during 2020 was \$1.86 per option (\$2.86 in 2019). The fair value of each common share option was estimated using the Black-Scholes option-pricing model with the following weighted average assumptions used for those options granted in 2020: dividend yield 5.44% (5.45% in 2019), expected volatility 15.75% (18.63% in 2019), risk-free interest rate 1.10% (1.86% in 2019), and expected life of eight years (eight in 2019).

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

	2020		2019	
	Options	Weighted average exercise price	Options	Weighted average exercise price
Outstanding, beginning of year	15,378,339	\$ 32.57	14,057,195	\$ 32.49
Granted	1,932,200	32.22	2,699,500	30.33
Exercised	(571,920)	26.71	(1,242,752)	26.71
Forfeited/expired	(339,340)	34.74	(135,604)	34.12
Outstanding, end of year	16,399,279	\$ 32.69	15,378,339	\$ 32.57
Options exercisable at end of year	10,084,559	\$ 32.94	9,653,016	\$ 32.32

The weighted average share price at the date of exercise of stock options for the year ended December 31, 2020 was \$32.59 (\$32.29 in 2019).

Compensation expense due to the Plan transactions accounted for as equity-settled share-based payments of \$4 after-tax in 2020 (\$5 after-tax in 2019) has been recognized in the Consolidated Statements of Earnings.

22. Share-Based Payments (cont'd)

The following summarizes information on the ranges of exercise prices including weighted average remaining contractual life at December 31, 2020:

Exercise price ranges	Outstanding			Exercisable		
	Options	Weighted average remaining contractual life	Weighted average exercise price	Options	Weighted average exercise price	Expiry
\$27.16 - \$36.87	652,320	0.28	30.37	652,320	30.37	2021
\$23.16 - \$36.87	1,229,618	1.28	27.70	1,223,018	27.69	2022
\$27.13 - \$36.87	1,573,700	2.31	31.04	1,573,700	31.04	2023
\$30.28 - \$36.87	1,876,040	3.31	32.86	1,876,040	32.86	2024
\$34.68 - \$36.87	1,670,699	4.18	35.66	1,670,699	35.66	2025
\$34.68 - \$36.87	2,013,822	5.16	34.68	1,640,842	34.68	2026
\$36.87 - \$36.87	1,241,000	6.16	36.87	755,760	36.87	2027
\$32.99 - \$34.21	1,685,780	7.16	34.20	683,780	34.20	2028
\$30.28 - \$32.50	2,524,100	8.16	30.32	8,400	30.28	2029
\$32.22 - \$32.22	1,932,200	9.16	32.22	—	—	2030

(b) To promote greater alignment of interests between the Directors and Lifeco's shareholders, the Company and certain of its subsidiaries have mandatory Deferred Share Unit Plans and/or voluntary Deferred Share Unit Plans (the "Mandatory DSU Plans" and the "Voluntary DSU Plans" respectively) in which the Directors of the Company participate. Under the Mandatory DSU Plans, each Director who is a resident of Canada or the United States must receive 50% of their annual Board retainer in the form of Deferred Share Units (DSUs). Under the Voluntary DSU Plans, each Director may elect to receive the balance of their annual Board retainer and Board Committee fees entirely in the form of DSUs, entirely in cash, or equally in cash and DSUs. In both cases, the number of DSUs granted is determined by dividing the amount of remuneration payable to the Director by the weighted average trading price per Lifeco common share on the Toronto Stock Exchange (TSX) for the last five trading days of the preceding fiscal quarter. Directors receive additional DSUs for dividends payable on the Company's common shares based on the value of a DSU at the dividend payment date. DSUs are redeemable when an individual ceases to be a Director, or as applicable, an officer or employee of the Company or any of its affiliates by a lump sum cash payment, based on the weighted average trading price per Lifeco common share on the TSX for the last five trading days preceding the date of redemption. In 2020, \$6 in Directors' fees were used to acquire DSUs (\$6 in 2019). At December 31, 2020, the carrying value of the DSU liability is \$49 (\$43 in 2019) recorded within other liabilities.

Certain employees of the Company are entitled to receive DSUs. Under these DSU Plans, certain employees may elect to receive DSUs as settlement of their annual incentive plan or as settlement of PSUs issued under the Company's PSU Plan. In both cases these employees are granted DSUs equivalent to the Company's common shares. Employees receive additional DSUs in respect of dividends payable on the common shares based on the value of the DSUs at the time. DSUs are redeemable when an individual ceases to be an officer or employee of the Company or any of its affiliates, by a lump sum cash payment representing the value of the DSUs at that date. The Company uses the fair-value based method to account for the DSUs granted to employees under the plans. For the year ended December 31, 2020, the Company recognized compensation expense of \$4 (\$7 in 2019) for the DSU Plans recorded in operating and administrative expenses in the Consolidated Statements of Earnings. At December 31, 2020, the carrying value of the DSU liability is \$25 (\$21 in 2019) recorded within other liabilities in the Consolidated Balance Sheets.

22. Share-Based Payments (cont'd)

- (c) Certain employees of the Company are entitled to receive PSUs. Under the PSU Plan, these employees are granted PSUs equivalent to the Company's common shares vesting over a three-year period. Employees receive additional PSUs in respect of dividends payable on the common shares based on the value of a PSU at that time. At the maturity date, employees receive cash representing the value of the PSU at this date. The Company uses the fair-value based method to account for the PSUs granted to employees under the plan. For the year ended December 31, 2020, the Company recognized compensation expense, excluding the impact of hedging, of \$41 (\$59 in 2019) for the PSU Plan recorded in operating and administrative expenses in the Consolidated Statements of Earnings. At December 31, 2020, the carrying value of the PSU liability is \$93 (\$86 in 2019) recorded within other liabilities.
- (d) The Company's Employee Share Ownership Plan (ESOP) is a voluntary plan where eligible employees can contribute up to 5% of their previous year's eligible earnings to purchase common shares of Lifeco. The Company matches 50% of the total employee contributions. The contributions from the Company vest immediately and are expensed. For the year ended December 31, 2020, the Company recognized compensation expense of \$13 (\$12 in 2019) for the ESOP recorded in operating and administrative expenses in the Consolidated Statements of Earnings.
- (e) Putnam sponsors the Putnam Investments, LLC Equity Incentive Plan. Under the terms of the Equity Incentive Plan, Putnam is authorized to grant or sell Class B Shares of Putnam (the Putnam Class B Shares), subject to certain restrictions, and to grant options to purchase Putnam Class B Shares (collectively, the Awards) to certain senior management and key employees of Putnam at fair value at the time of the award. Fair value is determined under the valuation methodology outlined in the Equity Incentive Plan. Awards vest over a period of up to five years and are specified in the individual's award letter. Holders of Putnam Class B Shares are not entitled to vote other than in respect of certain matters in regards to the Equity Incentive Plan and have no rights to convert their shares into any other securities. The number of Putnam Class B Shares that may be subject to Awards under the Equity Incentive Plan is limited to 16,764,705.

During 2020, Putnam granted 3,092,859 (2,544,222 in 2019) restricted Class B common shares to certain members of senior management and key employees.

Compensation expense recorded for the year ended December 31, 2020 related to restricted Class B common shares and Class B stock options earned was \$31 (\$20 in 2019) and is recorded in operating and administrative expenses in the Consolidated Statements of Earnings.

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

Compensation expense recorded for the year ended December 31, 2020 related to restricted Class C Shares and stock appreciation rights was \$14 in 2020 (\$14 in 2019) and is included as a component of operating and administrative expenses in the Consolidated Statements of Earnings.

23. Pension Plans and Other Post-Employment Benefits

Characteristics, Funding and Risk

The Company's subsidiaries maintain contributory and non-contributory defined benefit pension plans for eligible employees and advisors. The Company's subsidiaries also maintain defined contribution pension plans for eligible employees and advisors.

The defined benefit pension plans provide pensions based on length of service and final average pay; however, these plans are closed to new entrants. Many of the defined benefit pension plans also no longer provide future defined benefit accruals. The Company's defined benefit plan exposure is expected to reduce in future years. Where defined benefit pension accruals continue, active plan participants share in the cost by making contributions in respect of current service. Certain pension payments are indexed either on an ad hoc basis or a guaranteed basis. The determination of the defined benefit obligation reflects pension benefits in accordance with the terms of the plans. Assets supporting the funded pension plans are held in separate trustee pension funds. Obligations for the wholly unfunded plans are included in other liabilities and are supported by general assets.

New hires and active plan participants in defined benefit plans closed to future defined benefit accruals are eligible for defined contribution pension benefits. The defined contribution pension plans provide pension benefits based on accumulated employee and employer contributions. Employer contributions to these plans are a set percentage of employees' annual income and may be subject to certain vesting requirements.

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

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

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

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

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

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

(a) Plan Assets, Benefit Obligation and Funded Status

	Defined benefit pension plans		Other post- employment benefits	
	2020	2019	2020	2019
Change in fair value of plan assets				
Fair value of plan assets, beginning of year	\$ 6,972	\$ 6,484	\$ —	\$ —
Interest income	179	210	—	—
Actual return over (less than) interest income	453	663	—	—
Employer contributions	164	176	17	20
Employee contributions	15	20	—	—
Benefits paid	(285)	(266)	(17)	(20)
Settlements	(11)	(113)	—	—
Administrative expenses	(8)	(10)	—	—
Net transfer out	—	(13)	—	—
Foreign exchange rate changes	123	(179)	—	—
Fair value of plan assets, end of year	\$ 7,602	\$ 6,972	\$ —	\$ —
Change in defined benefit obligation				
Defined benefit obligation, beginning of year	\$ 7,836	\$ 7,189	\$ 388	\$ 370
Current service cost	88	76	2	2
Interest cost	204	234	12	14
Employee contributions	15	20	—	—
Benefits paid	(285)	(266)	(17)	(20)
Plan amendments	—	(1)	—	—
Curtailements and termination benefits ⁽¹⁾	(11)	(3)	—	—
Settlements	(14)	(150)	—	—
Actuarial loss (gain) on financial assumption changes	599	942	28	29
Actuarial loss (gain) on demographic assumption changes	(9)	(20)	1	(5)
Actuarial loss (gain) arising from member experience	18	14	(4)	(1)
Net transfer out	—	(13)	—	—
Foreign exchange rate changes	113	(186)	(1)	(1)
Defined benefit obligation, end of year	\$ 8,554	\$ 7,836	\$ 409	\$ 388
Asset (liability) recognized on the Consolidated Balance Sheets				
Funded status of plans - surplus (deficit)	\$ (952)	\$ (864)	\$ (409)	\$ (388)
Unrecognized amount due to asset ceiling	(29)	(37)	—	—
Asset (liability) recognized on the Consolidated Balance Sheets	\$ (981)	\$ (901)	\$ (409)	\$ (388)
Recorded in:				
Other assets (note 12)	\$ 240	\$ 231	\$ —	\$ —
Other liabilities (note 17)	(1,221)	(1,132)	(409)	(388)
Asset (liability) recognized on the Consolidated Balance Sheets	\$ (981)	\$ (901)	\$ (409)	\$ (388)
Analysis of defined benefit obligation				
Wholly or partly funded plans	\$ 8,213	\$ 7,513	\$ —	\$ —
Wholly unfunded plans	\$ 341	\$ 323	\$ 409	\$ 388

⁽¹⁾ Includes a curtailment gain recognized on sale of shares of IPSI (note 3).

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

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

	Defined benefit pension plans	
	2020	2019
Change in asset ceiling		
Asset ceiling, beginning of year	\$ 37	\$ 103
Interest on asset ceiling	1	4
Change in asset ceiling	(11)	(70)
Foreign exchange rate changes	2	—
Asset ceiling, end of year	\$ 29	\$ 37

(b) Pension and Other Post-Employment Benefits Expense

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

	All pension plans		Other post-employment benefits	
	2020	2019	2020	2019
Defined benefit current service cost	\$ 103	\$ 96	\$ 2	\$ 2
Defined contribution current service cost	145	118	—	—
Employee contributions	(15)	(20)	—	—
Employer current service cost	233	194	2	2
Administrative expense	8	10	—	—
Plan amendments	—	(1)	—	—
Curtailments ⁽¹⁾	(11)	(3)	—	—
Settlements	(3)	(37)	—	—
Net interest cost	26	28	12	14
Expense - profit or loss	253	191	14	16
Actuarial (gain) loss recognized	608	936	25	23
Return on assets (greater) less than assumed	(453)	(663)	—	—
Change in the asset ceiling	(11)	(70)	—	—
Re-measurements - other comprehensive (income) loss	144	203	25	23
Total expense (income) including re-measurements	\$ 397	\$ 394	\$ 39	\$ 39

⁽¹⁾ Includes a curtailment gain recognized on sale of shares of IPSI (note 3).

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

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

	Defined benefit pension plans	
	2020	2019
Equity securities	40%	43%
Debt securities	48%	47%
Real estate	7%	8%
Cash and cash equivalents	5%	2%
Total	100%	100%

No plan assets are directly invested in the Company's or related parties' securities. Plan assets include investments in segregated funds and other funds managed by subsidiaries of the Company of \$6,871 at December 31, 2020 and \$6,031 at December 31, 2019, of which \$6,790 (\$5,961 at December 31, 2019) are included on the Consolidated Balance Sheets. Plan assets do not include any property occupied or other assets used by the Company.

(d) Details of Defined Benefit Obligation

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

	Defined benefit pension plans		Other post-employment benefits	
	2020	2019	2020	2019
Benefit obligation without future salary increases	\$ 7,893	\$ 7,179	\$ 409	\$ 388
Effect of assumed future salary increases	661	657	—	—
Defined benefit obligation	\$ 8,554	\$ 7,836	\$ 409	\$ 388

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

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

	Defined benefit pension plans		Other post-employment benefits	
	2020	2019	2020	2019
Benefit obligation without future pension increases	\$ 7,918	\$ 7,221	\$ 409	\$ 388
Effect of assumed future pension increases	636	615	—	—
Defined benefit obligation	\$ 8,554	\$ 7,836	\$ 409	\$ 388

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

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

(iii) Maturity Profile of Plan Membership

	Defined benefit pension plans		Other post- employment benefits	
	2020	2019	2020	2019
Actives	40 %	40 %	16 %	15 %
Deferred vesteds	20 %	19 %	n/a	n/a
Retirees	40 %	41 %	84 %	85 %
Total	100 %	100 %	100 %	100 %
Weighted average duration of defined benefit obligation	18.7 years	18.5 years	11.9 years	11.7 years

(e) Cash Flow Information

	Pension plans	Other post- employment benefits	Total
Expected employer contributions for 2021:			
Funded (wholly or partly) defined benefit plans	\$ 127	\$ —	\$ 127
Unfunded plans	16	22	38
Defined contribution plans	151	—	151
Total	\$ 294	\$ 22	\$ 316

(f) Actuarial Assumptions and Sensitivities

(i) Actuarial Assumptions

	Defined benefit pension plans		Other post- employment benefits	
	2020	2019	2020	2019
To determine benefit cost:				
Discount rate - past service liabilities	2.6 %	3.4 %	3.1 %	3.8 %
Discount rate - future service liabilities	3.2 %	3.8 %	3.3 %	4.4 %
Rate of compensation increase	2.9 %	3.0 %	—	—
Future pension increases ⁽¹⁾	1.3 %	1.4 %	—	—
To determine defined benefit obligation:				
Discount rate - past service liabilities	2.1 %	2.6 %	2.5 %	3.1 %
Rate of compensation increase	2.9 %	2.9 %	—	—
Future pension increases ⁽¹⁾	1.0 %	1.3 %	—	—
Medical cost trend rates:				
Initial medical cost trend rate			4.7 %	4.7 %
Ultimate medical cost trend rate			4.1 %	4.1 %
Year ultimate trend rate is reached			2039	2039

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

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

(ii) Sample Life Expectancies Based on Mortality Assumptions

	Defined benefit pension plans		Other post- employment benefits	
	2020	2019	2020	2019
Sample life expectancies based on mortality assumption:				
Male				
Age 65 in fiscal year	22.7	22.6	22.5	22.4
Age 65 for those age 35 in the fiscal year	24.7	24.6	24.0	23.9
Female				
Age 65 in fiscal year	24.8	24.7	24.7	24.7
Age 65 for those age 35 in the fiscal year	26.7	26.7	26.2	26.2

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

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

The calculation of the defined benefit obligation is sensitive to the mortality assumptions. The effect of a one-year increase in life expectancy would be an increase in the defined benefit obligation of \$269 for the defined benefit pension plans and \$14 for other post-employment benefits.

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

	1% increase		1% decrease	
	2020	2019	2020	2019
Defined benefit pension plans:				
Impact of a change to the discount rate	\$ (1,350)	\$ (1,242)	\$ 1,784	\$ 1,630
Impact of a change to the rate of compensation increase	329	311	(291)	(284)
Impact of a change to the rate of inflation	662	598	(569)	(541)
Other post-employment benefits:				
Impact of a change to assumed medical cost trend rates	31	27	(26)	(23)
Impact of a change to the discount rate	(44)	(41)	53	50

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

24. Accumulated Other Comprehensive Income

		2020								
		Unrealized foreign exchange gains (losses) on translation of foreign operations	Unrealized foreign exchange gains (losses) on euro debt designated as hedge of the net investment in foreign operations	Unrealized gains (losses) on available-for- sale assets	Unrealized gains on cash flow hedges	Re- measurements on defined benefit pension and other post- employment benefit plans	Revaluation surplus on transfer to investment properties	Total	Non- controlling interest	Shareholders
Balance, beginning of year	\$	1,236	\$ (57)	\$ 154	\$ 13	\$ (849)	—	\$ 497	\$ (2)	\$ 495
Other comprehensive income (loss)		105	(90)	146	15	(169)	11	18	(54)	(36)
Income tax		(2)	12	(34)	(4)	40	(1)	11	17	28
		103	(78)	112	11	(129)	10	29	(37)	(8)
Balance, end of year	\$	1,339	\$ (135)	\$ 266	\$ 24	\$ (978)	\$ 10	\$ 526	\$ (39)	\$ 487
		2019								
		Unrealized foreign exchange gains (losses) on translation of foreign operations	Unrealized foreign exchange gains (losses) on euro debt designated as hedge of the net investment in of foreign operations	Unrealized gains (losses) on available- for- sale assets	Unrealized gains on cash flow hedges	Re-measurements on defined benefit pension and other post- employment benefit plans	Total	Non- controlling interest	Shareholders	
Balance, beginning of year	\$	1,797	\$ (143)	\$ 22	\$ 11	\$ (670)	\$ 1,017	\$ 28	\$ 1,045	
Other comprehensive income (loss)		(561)	100	163	2	(226)	(522)	(33)	(555)	
Income tax		—	(14)	(31)	—	47	2	3	5	
		(561)	86	132	2	(179)	(520)	(30)	(550)	
Balance, end of year	\$	1,236	\$ (57)	\$ 154	\$ 13	\$ (849)	\$ 497	\$ (2)	\$ 495	

25. Related Party Transactions

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

(a) Principal subsidiaries

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

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

⁽¹⁾ Lifeco holds 100% of the voting shares and 96.31% of the total outstanding shares.

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

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

During the year, Canada Life provided to and received from IGM and its subsidiaries, a member of the Power Corporation group of companies, certain administrative and information technology services. During the year, IGM notified the Company that it intends to terminate its long-term technology infrastructure related sharing agreement with the Company in the first quarter of 2021 (note 4). Canada Life also provided life insurance, annuity and disability insurance products under a distribution agreement with IGM. In addition, Canada Life provided distribution services to IGM. All transactions were provided at market terms and conditions.

The Company owns 9,200,518 shares, held through Canada Life, representing a 3.86% ownership interest in IGM. The Company uses the equity method to account for its investment in IGM as it exercises significant influence. In 2020, the Company recognized \$25 for the equity method share of IGM net earnings and received dividends of \$21 from its investment in IGM (note 6).

During the year, the Company completed the sale of GLC to Mackenzie. The Company recorded a gain on disposal of \$143 after-tax, net of restructuring and other one-time costs of \$16 after-tax (\$22 pre-tax) (note 3).

During the year, GWL&A completed the acquisition of 100% of the equity of Personal Capital. Prior to the completion of the acquisition, IGM held a 24.8% interest in Personal Capital (approximately 21.7% after giving effect to dilution). The transaction resulted from an auction process conducted by Personal Capital and shareholders other than IGM (note 3).

During the year, the Company and Mackenzie jointly acquired a non-controlling interest in Northleaf, a premier global private equity, private credit and infrastructure fund manager (note 3).

Segregated funds of the Company were invested in funds managed by IG Wealth Management and Mackenzie Investments. The Company also has interests in mutual funds, open-ended investment companies and unit trusts. Some of these funds are managed by related parties of the Company and the Company receives management fees related to these services. All transactions were provided at market terms and conditions (note 14).

25. Related Party Transactions (cont'd)

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

	2020	2019
3.44%, matures January 26, 2027	\$ 22	\$ 21
6.65%, matures December 13, 2027	17	16
7.45%, matures May 9, 2031	14	14
7.00%, matures December 31, 2032	14	13
4.56%, matures January 25, 2047	25	22
4.115%, matures December 9, 2047	12	10
4.174%, matures July 13, 2048	6	5
Total	\$ 110	\$ 101

During 2020, the Company purchased residential mortgages of \$21 from IGM (\$11 in 2019).

The Company holds investments in Portag3 Ventures Limited Partnership, Portag3 Ventures II Limited Partnership, Wealthsimple Europe S.a.r.l. and other entities which invest in the FinTech sector. These investments were made in partnership with Power Corporation, IGM and, in certain circumstances, outside investors.

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

There were no material loans or guarantees issued to or from related parties during 2020 or 2019. There were no significant outstanding loans or guarantees with related parties at December 31, 2020 or December 31, 2019. There were no provisions for uncollectible amounts with related parties at December 31, 2020 or December 31, 2019.

As part of the substantial issuer bid completed in 2019 (note 19), Power Financial and IGM participated in the Offer. IGM tendered its Lifeco shares proportionately. Power Financial tendered a portion of its Lifeco common shares on a proportionate basis and all remaining Lifeco common shares on a non-proportionate basis and this did not impact Power Financial's voting control of the Company. Power Financial and IGM effected their tender offers through a Qualifying Holdco Alternative, which the Company also offered to other shareholders, to assist them in achieving certain Canadian tax objectives.

(c) Key management compensation

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

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

	2020	2019
Salary	\$ 20	\$ 20
Share-based awards	17	14
Option-based awards	6	6
Annual non-equity incentive plan compensation	24	24
Pension value	1	1
Total	\$ 68	\$ 65

26. Income Taxes

(a) Components of the income tax expense

(i) Income tax recognized in Consolidated Statements of Earnings

Current income tax

	2020	2019
Total current income tax	\$ 271	\$ 196

Deferred income tax

	2020	2019
Origination and reversal of temporary differences	\$ (168)	\$ (29)
Effect of changes in tax rates or imposition of new income taxes	7	(11)
Tax expense (recovery) arising from unrecognized tax losses, tax credits or temporary differences	(192)	217
Total deferred income tax	\$ (353)	\$ 177

Total income tax expense (recovery)

	\$ (82)	\$ 373
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(ii) Income tax recognized in other comprehensive income (note 24)

	2020	2019
Current income tax expense	\$ 28	\$ 7
Deferred income tax recovery	(39)	(9)
Total	\$ (11)	\$ (2)

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

	2020	2019
Current income tax expense	\$ —	\$ 78
Deferred income tax expense	—	23
Total	\$ —	\$ 101

26. Income Taxes (cont'd)

(b) The effective income tax rate reported in the Consolidated Statements of Earnings varies from the combined Canadian federal and provincial income tax rate of 26.5% for the following items:

	2020		2019	
Earnings before income taxes	\$	3,072	\$	2,880
Combined basic Canadian federal and provincial tax rate	814	26.50 %	778	27.00 %
Increase (decrease) in the income tax rate resulting from:				
Non-taxable investment income ⁽¹⁾	(332)	(10.81)	(166)	(5.76)
Operations outside of Canada subject to a lower average foreign tax rate	(375)	(12.21)	(315)	(10.93)
Impact of rate changes on deferred income taxes	7	0.23	(11)	(0.38)
(Recognition) de-recognition of deferred tax assets associated with prior year tax losses	(197)	(6.41)	199	6.91
Other ⁽²⁾	1	0.03	(112)	(3.89)
Total income tax expense (recovery) and effective income tax rate	\$	(82)	\$	373
		(2.67)%		12.95 %

⁽¹⁾ In 2020, a \$64 tax benefit from the non-taxable gains on the sale of the shares of GLC and IPSI reduced the effective income tax rate by 2.08 points (note 3).

⁽²⁾ In 2019, a \$101 tax benefit due to the resolution of an outstanding issue with a foreign tax authority reduced the effective income tax rate by 3.51 points.

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

	2020						
	Insurance and investment contract liabilities	Portfolio investments	Losses carried forward	Intangible assets	Tax credits	Other	Total
Balance, beginning of year	\$ (999)	\$ (536)	\$ 1,056	\$ (542)	\$ 311	\$ 287	\$ (423)
Recognized in Statements of Earnings	375	(237)	238	(63)	(25)	65	353
Recognized in Statements of Comprehensive Income	—	(12)	—	—	—	51	39
Recognized in Statements of Changes in Equity	—	—	—	—	—	—	—
Acquired in business acquisitions	300	—	107	(73)	—	7	341
Foreign exchange rate changes and other	4	19	10	8	(1)	(21)	19
Balance, end of year	\$ (320)	\$ (766)	\$ 1,411	\$ (670)	\$ 285	\$ 389	\$ 329

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26. Income Taxes (cont'd)

	2019 ⁽¹⁾						
	Insurance and investment contract liabilities	Portfolio investments	Losses carried forward	Intangible assets	Tax credits	Other	Total
Balance, beginning of year	\$ (1,379)	\$ (350)	\$ 1,357	\$ (496)	\$ 364	\$ 275	\$ (229)
Recognized in Statements of Earnings	352	(164)	(245)	(59)	(45)	(16)	(177)
Recognized in Statements of Comprehensive Income	—	(24)	—	—	—	33	9
Recognized in Statements of Changes in Equity	(20)	—	—	—	—	(3)	(23)
Acquired in business acquisitions	—	—	(1)	(1)	—	—	(2)
Foreign exchange rate changes and other	48	2	(55)	14	(8)	(2)	(1)
Balance, end of year	\$ (999)	\$ (536)	\$ 1,056	\$ (542)	\$ 311	\$ 287	\$ (423)

⁽¹⁾ Due to a change in presentation, the Company reclassified the composition of net deferred income tax assets. The reclassifications had no impact on the equity or net earnings of the Company (note 32).

Recorded on Consolidated Balance Sheets:

	2020	2019
Deferred tax assets	\$ 975	\$ 693
Deferred tax liabilities	(646)	(1,116)
Total	\$ 329	\$ (423)

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

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

Management assesses the recoverability of the deferred income tax assets carrying values based on future years' taxable income projections and believes the carrying values of the deferred income tax assets as of December 31, 2020 are recoverable.

At December 31, 2020, the Company has recognized a deferred tax asset of \$1,411 (\$1,056 at December 31, 2019) on tax loss carryforwards totaling \$8,264, of which \$6,579 expire between 2021 and 2040 while \$1,685 have no expiry date. The Company will realize this benefit in future years through a reduction in current income taxes payable.

26. *Income Taxes (cont'd)*

One U.S. subsidiary has had a history of losses. The subsidiary has a net deferred income tax asset balance of \$561 (U.S. \$442) as at December 31, 2020, comprised principally of net operating losses and future deductions related to goodwill. During the year ended December 31, 2020, management revised its estimates of future taxable profits to reflect the impact of the completion of the U.S. acquisitions of Personal Capital and MassMutual (note 3) and as a result, recognized a deferred tax asset of \$192 (U.S. \$151) related to losses that had previously been de-recognized in 2019. The deferred income tax asset increase resulted in a recovery to income tax expense of \$196 (U.S. \$151) in the Consolidated Statements of Earnings. In 2019, the deferred income tax asset decrease resulted in a charge to income tax expense of \$199 (U.S. \$151). Management has concluded that it is probable that the subsidiary and other historically profitable subsidiaries with which it files or intends to file a consolidated U.S. income tax return will generate sufficient taxable income to utilize the unused U.S. losses and deductions.

The Company has not recognized a deferred tax asset of \$37 (\$231 in 2019) on tax loss carryforwards totaling \$188 (\$1,252 in 2019). Of this amount, \$92 expire between 2021 and 2040 while \$96 have no expiry date. In addition, the Company has not recognized a deferred tax asset of \$21 (\$16 in 2019) on other temporary differences of \$99 (\$78 in 2019) associated with investments in subsidiaries, branches, and associates.

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

27. Operating and Administrative Expenses

	2020	2019
Salaries and other employee benefits	\$ 3,716	\$ 3,474
General and administrative	1,554	1,541
Interest expense on leases	22	22
Amortization of fixed assets	129	125
Depreciation of right-of-use assets	71	69
Total	\$ 5,492	\$ 5,231

28. Derivative Financial Instruments

In the normal course of managing exposure to fluctuations in interest and foreign exchange rates, and to market risks, the Company is an end-user of various derivative financial instruments. It is the Company's policy to transact in derivatives only with the most creditworthy financial intermediaries. Note 8 discloses the credit quality of the Company's exposure to counterparties. Credit risk equivalent amounts are presented net of collateral received, including initial margin on exchange-traded derivatives, of \$211 as at December 31, 2020 (\$156 at December 31, 2019).

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

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

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28. Derivative Financial Instruments (cont'd)

	2020				
	Notional amount	Maximum credit risk	Future credit exposure	Credit risk equivalent	Risk weighted equivalent
Interest rate contracts					
Swaps	\$ 3,688	\$ 331	\$ 43	\$ 333	\$ 90
Futures - long	9	—	—	—	—
Futures - short	194	—	—	—	—
Options purchased	221	—	1	1	—
	<u>4,112</u>	<u>331</u>	<u>44</u>	<u>334</u>	<u>90</u>
Foreign exchange contracts					
Cross-currency swaps	15,186	388	1,004	1,237	315
Forward contracts	5,079	57	72	125	10
	<u>20,265</u>	<u>445</u>	<u>1,076</u>	<u>1,362</u>	<u>325</u>
Other derivative contracts					
Equity contracts	727	43	46	86	7
Futures - long	17	—	—	—	—
Futures - short	682	1	—	—	—
Other forward contracts	4,318	9	394	403	38
	<u>5,744</u>	<u>53</u>	<u>440</u>	<u>489</u>	<u>45</u>
Total	<u>\$ 30,121</u>	<u>\$ 829</u>	<u>\$ 1,560</u>	<u>\$ 2,185</u>	<u>\$ 460</u>
	2019				
	Notional amount	Maximum credit risk	Future credit exposure	Credit risk equivalent	Risk weighted equivalent
Interest rate contracts					
Swaps	\$ 3,179	\$ 197	\$ 38	\$ 206	\$ 60
Futures - long	12	—	—	—	—
Futures - short	17	—	—	—	—
Options purchased	244	—	1	1	—
	<u>3,452</u>	<u>197</u>	<u>39</u>	<u>207</u>	<u>60</u>
Foreign exchange contracts					
Cross-currency swaps	13,039	209	899	997	266
Forward contracts	2,573	43	47	76	7
	<u>15,612</u>	<u>252</u>	<u>946</u>	<u>1,073</u>	<u>273</u>
Other derivative contracts					
Equity contracts	74	—	4	4	—
Futures - long	13	—	—	—	—
Futures - short	774	—	—	—	—
Other forward contracts	1,709	2	94	94	9
	<u>2,570</u>	<u>2</u>	<u>98</u>	<u>98</u>	<u>9</u>
Total	<u>\$ 21,634</u>	<u>\$ 451</u>	<u>\$ 1,083</u>	<u>\$ 1,378</u>	<u>\$ 342</u>

28. Derivative Financial Instruments (cont'd)

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

	2020				Total estimated fair value
	Notional Amount			Total	
	1 year or less	Over 1 year to 5 years	Over 5 years		
Derivatives not designated as accounting hedges					
Interest rate contracts					
Swaps	\$ 325	\$ 770	\$ 2,565	\$ 3,660	\$ 281
Futures - long	6	3	—	9	—
Futures - short	190	4	—	194	—
Options purchased	41	166	14	221	—
	<u>562</u>	<u>943</u>	<u>2,579</u>	<u>4,084</u>	<u>281</u>
Foreign exchange contracts					
Cross-currency swaps	896	3,068	11,222	15,186	(783)
Forward contracts	3,689	—	—	3,689	32
	<u>4,585</u>	<u>3,068</u>	<u>11,222</u>	<u>18,875</u>	<u>(751)</u>
Other derivative contracts					
Equity contracts	626	—	—	626	18
Futures - long	17	—	—	17	—
Futures - short	682	—	—	682	(4)
Other forward contracts	4,318	—	—	4,318	8
	<u>5,643</u>	<u>—</u>	<u>—</u>	<u>5,643</u>	<u>22</u>
Fair value hedges					
Foreign exchange forward contracts	74	—	—	74	3
Cash flow hedges					
Interest rate contracts					
Swaps	—	—	28	28	14
Other derivative contracts					
Equity contracts	—	101	—	101	24
Net investment hedges					
Foreign exchange forward contracts	786	530	—	1,316	15
Total	<u>\$ 11,650</u>	<u>\$ 4,642</u>	<u>\$ 13,829</u>	<u>\$ 30,121</u>	<u>\$ (392)</u>

28. Derivative Financial Instruments (cont'd)

	2019				Total estimated fair value
	Notional Amount				
	1 year or less	Over 1 year to 5 years	Over 5 years	Total	
Derivatives not designated as accounting hedges					
Interest rate contracts					
Swaps	\$ 185	\$ 653	\$ 2,312	\$ 3,150	\$ 161
Futures - long	9	3	—	12	—
Futures - short	10	7	—	17	—
Options purchased	35	184	25	244	—
	239	847	2,337	3,423	161
Foreign exchange contracts					
Cross-currency swaps	299	2,395	10,345	13,039	(1,135)
Forward contracts	1,334	—	—	1,334	15
	1,633	2,395	10,345	14,373	(1,120)
Other derivative contracts					
Equity contracts	74	—	—	74	—
Futures - long	13	—	—	13	—
Futures - short	774	—	—	774	(2)
Other forward contracts	1,709	—	—	1,709	2
	2,570	—	—	2,570	—
Fair value hedges					
Foreign exchange forward contracts	74	—	—	74	2
Cash flow hedges					
Interest rate contracts					
Swaps	—	—	29	29	10
Net investment hedges					
Foreign exchange forward contracts	641	524	—	1,165	17
Total	\$ 5,157	\$ 3,766	\$ 12,711	\$ 21,634	\$ (930)

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

28. *Derivative Financial Instruments (cont'd)*

(c) Interest Rate Contracts

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

Foreign Exchange Contracts

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

Other Derivative Contracts

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

Equity total return swaps are used to manage exposure to fluctuations in the total return of common shares related to deferred compensation arrangements. Total return swaps require the exchange of net contractual payments periodically or at maturity without the exchange of the notional principal amounts on which the payments are based. Certain of these instruments are not designated as hedges.

The ineffective portion of the cash flow hedges during 2020, which includes interest rate contracts, foreign exchange contracts, and equity total return swap contracts, and the anticipated net gains (losses) reclassified out of accumulated other comprehensive income within the next twelve months is nil. The maximum time frame for which variable cash flows are hedged is 50 years.

29. Legal Provisions and Contingent Liabilities

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

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

30. Commitments

(a) Letters of Credit

Letters of credit are written commitments provided by a bank. The total amount of letter of credit facilities is U.S. \$2,107 of which U.S. \$1,791 were issued as of December 31, 2020.

The Capital and Risk Solutions segment periodically uses letters of credit as collateral under certain reinsurance contracts for on balance sheet policy liabilities.

(b) Investment Commitments

Commitments of investment transactions made in the normal course of operations in accordance with policies and guidelines that are to be disbursed upon fulfillment of certain contract conditions were \$1,990 as at December 31, 2020, with \$1,874 maturing within one year, \$95 maturing within two years and \$21 maturing within three years.

(c) Pledged Assets

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

- (i) The amount of assets included in the Company's balance sheet which have a security interest by way of pledging is \$1,421 (\$1,456 at December 31, 2019) in respect of reinsurance agreements.

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

- (ii) The Company has pledged, in the normal course of business, \$75 (\$75 at December 31, 2019) of assets of the Company for the purpose of providing collateral for the counterparty.

31. Segmented Information

The operating segments of the Company are Canada, United States, Europe, Capital and Risk Solutions and Lifeco Corporate. These segments reflect the Company's management structure and internal financial reporting. Each of these segments operates in the financial services industry and the revenues from these segments are derived principally from interests in life insurance, health insurance, retirement and investment services, asset management and reinsurance businesses.

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

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

31. Segmented Information (cont'd)

(a) Consolidated Net Earnings

	2020					
	Canada	United States	Europe	Capital and Risk Solutions	Lifeco Corporate	Total
Income						
Total net premiums	\$ 13,188	\$ 6,773	\$ 3,651	\$ 19,407	\$ —	\$ 43,019
Net investment income						
Regular net investment income	3,050	1,278	1,313	320	2	5,963
Changes in fair value through profit or loss	2,633	938	1,669	459	—	5,699
Total net investment income	5,683	2,216	2,982	779	2	11,662
Fee and other income	1,756	2,769	1,366	11	—	5,902
	20,627	11,758	7,999	20,197	2	60,583
Benefits and expenses						
Paid or credited to policyholders	15,572	8,413	5,184	19,318	—	48,487
Other ⁽¹⁾	3,545	2,870	1,686	239	28	8,368
Financing charges	127	110	25	12	10	284
Amortization of finite life intangible assets	104	83	51	—	—	238
Restructuring and integration expenses	92	42	—	—	—	134
Earnings (loss) before income taxes	1,187	240	1,053	628	(36)	3,072
Income taxes	54	(158)	33	(1)	(10)	(82)
Net earnings (loss) before non-controlling interests	1,133	398	1,020	629	(26)	3,154
Non-controlling interests	76	7	1	(6)	—	78
Net earnings (loss)	1,057	391	1,019	635	(26)	3,076
Preferred share dividends	114	—	19	—	—	133
Net earnings (loss) before capital allocation	943	391	1,000	635	(26)	2,943
Impact of capital allocation	127	(11)	(87)	(21)	(8)	—
Net earnings (loss) - common shareholders	\$ 1,070	\$ 380	\$ 913	\$ 614	\$ (34)	\$ 2,943

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

GREAT-WEST LIFECO INC.

31. Segmented Information (cont'd)

	2019					
	Canada	United States	Europe ⁽¹⁾	Capital and Risk Solutions ⁽¹⁾	Lifeco Corporate	Total
Income						
Total net premiums	\$ 13,505	\$ (9,659)	\$ 3,198	\$ 17,466	\$ —	\$ 24,510
Net investment income						
Regular net investment income	2,785	1,785	1,285	306	—	6,161
Changes in fair value through profit or loss	3,157	1,371	1,851	567	—	6,946
Total net investment income	5,942	3,156	3,136	873	—	13,107
Fee and other income	1,766	3,767	1,539	9	—	7,081
	<u>21,213</u>	<u>(2,736)</u>	<u>7,873</u>	<u>18,348</u>	<u>—</u>	<u>44,698</u>
Benefits and expenses						
Paid or credited to policyholders	16,268	(5,932)	5,026	17,729	—	33,091
Other ⁽²⁾	3,510	2,780	1,637	217	22	8,166
Financing charges	128	118	24	12	3	285
Amortization of finite life intangible assets	92	85	47	—	—	224
Restructuring expenses	—	52	—	—	—	52
Earnings (loss) before income taxes						
	1,215	161	1,139	390	(25)	2,880
Income taxes						
	149	205	31	(6)	(6)	373
Net earnings (loss) before non-controlling interests						
	1,066	(44)	1,108	396	(19)	2,507
Non-controlling interests						
	13	3	(1)	—	—	15
Net earnings (loss)						
	1,053	(47)	1,109	396	(19)	2,492
Preferred share dividends						
	114	—	19	—	—	133
Net earnings (loss) before capital allocation						
	939	(47)	1,090	396	(19)	2,359
Impact of capital allocation						
	112	(14)	(86)	(10)	(2)	—
Net earnings (loss) - common shareholders						
	<u>\$ 1,051</u>	<u>\$ (61)</u>	<u>\$ 1,004</u>	<u>\$ 386</u>	<u>\$ (21)</u>	<u>\$ 2,359</u>

⁽¹⁾ See comparative figures (note 32).

⁽²⁾ Includes commissions, operating and administrative expenses, and premium taxes.

The revenue by source currency for Capital and Risk Solutions:

Revenue	Capital and Risk Solutions	
	2020	2019
United States	\$ 16,118	\$ 16,227
United Kingdom	1,807	1,376
Other	2,272	745
Total revenue	<u>\$ 20,197</u>	<u>\$ 18,348</u>

31. Segmented Information (cont'd)

(b) Consolidated Total Assets and Liabilities

	2020				
	Canada	United States	Europe	Capital and Risk Solutions	Total
Assets					
Invested assets	\$ 87,732	\$ 54,522	\$ 50,793	\$ 5,951	\$ 198,998
Goodwill and intangible assets	5,625	5,729	3,037	—	14,391
Other assets	3,661	30,347	10,151	8,910	53,069
Investments on account of segregated fund policyholders	90,680	117,982	125,370	—	334,032
Total	\$ 187,698	\$ 208,580	\$ 189,351	\$ 14,861	\$ 600,490
Liabilities					
Insurance and investment contract liabilities	\$ 81,556	\$ 76,793	\$ 48,243	\$ 11,455	\$ 218,047
Other liabilities	7,731	8,004	4,767	894	21,396
Investment and insurance contracts on account of segregated fund policyholders	90,680	117,982	125,370	—	334,032
Total	\$ 179,967	\$ 202,779	\$ 178,380	\$ 12,349	\$ 573,475

31. Segmented Information (cont'd)

	2019				
	Canada	United States	Europe ⁽¹⁾	Capital and Risk Solutions ⁽¹⁾	Total
Assets					
Invested assets	\$ 81,179	\$ 32,768	\$ 48,845	\$ 5,995	\$ 168,787
Goodwill and intangible assets	5,560	1,990	2,834	—	10,384
Other assets	3,953	19,421	8,465	9,135	40,974
Investments on account of segregated fund policyholders	85,612	31,433	113,977	—	231,022
Total	\$ 176,304	\$ 85,612	\$ 174,121	\$ 15,130	\$ 451,167

	2019				
	Canada	United States	Europe ⁽¹⁾	Capital and Risk Solutions ⁽¹⁾	Total
Liabilities					
Insurance and investment contract liabilities	\$ 74,939	\$ 43,689	\$ 45,662	\$ 11,887	\$ 176,177
Other liabilities	8,448	5,035	3,653	1,289	18,425
Investment and insurance contracts on account of segregated fund policyholders	85,612	31,433	113,977	—	231,022
Total	\$ 168,999	\$ 80,157	\$ 163,292	\$ 13,176	\$ 425,624

⁽¹⁾ See comparative figures (note 32).

The assets by source currency for Capital and Risk Solutions:

	Capital and Risk Solutions	
	2020	2019
Assets		
United Kingdom	\$ 7,572	\$ 8,261
United States	6,667	6,365
Other	622	504
Total assets	\$ 14,861	\$ 15,130

32. Comparative Figures

Effective January 1, 2020, the Company divided its Europe operating segment into two operating segments: Europe, and Capital and Risk Solutions. The adjustment had no impact on the net earnings or cash flows of the Company. The realignment resulted in a change to comparative figures within these operating segments (notes 8, 11, 13 and 31).

During the year, the Company reclassified certain comparative figures for presentation adjustments (note 26). The reclassifications had no impact on the equity or net earnings of the Company.

Independent Auditor's Report

To the Shareholders of Great-West Lifeco Inc.

Opinion

We have audited the consolidated financial statements of Great-West Lifeco Inc. (the "Company"), which comprise the consolidated balance sheets as at December 31, 2020 and 2019, and the consolidated statements of earnings, comprehensive income, changes in equity and cash flows for the years then ended, and notes to the consolidated financial statements, including a summary of significant accounting policies (collectively referred to as the "financial statements").

In our opinion, the accompanying financial statements present fairly, in all material respects, the financial position of the Company as at December 31, 2020 and 2019, and its financial performance and its cash flows for the years then ended in accordance with International Financial Reporting Standards ("IFRS").

Basis for Opinion

We conducted our audit in accordance with Canadian generally accepted auditing standards ("Canadian GAAS"). Our responsibilities under those standards are further described in the *Auditor's Responsibilities for the Audit of the Financial Statements* section of our report. We are independent of the Company in accordance with the ethical requirements that are relevant to our audit of the financial statements in Canada, and we have fulfilled our other ethical responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Key Audit Matters

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the consolidated financial statements for the year ended December 31, 2020. These matters were addressed in the context of our audit of the consolidated financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters.

Insurance Contract Liabilities – Refer to Notes 2 and 13 to the financial statements

Key Audit Matter Description

The Company has insurance contract liabilities representing a significant portion of its total liabilities. Insurance contract liabilities are determined in accordance with generally accepted actuarial practices established by the Canadian Institute of Actuaries using the Canadian Asset Liability Method (CALM). This method requires the use of complex valuation models incorporating projections of cash inflows and outflows using the best estimate of future experience together with a margin for adverse deviation.

While there are many assumptions which management makes, the assumptions with the greatest estimation uncertainty are those related to mortality, including the impact, if any, of the COVID-19 pandemic, and policyholder behaviour. These assumptions required significant auditor attention in specific circumstances where (i) there is limited Company and industry experience data, and (ii) the historical experience may not be a good indicator of the future. Auditing of certain valuation models, mortality and policyholder behaviour assumptions required a high degree of auditor judgment and an increased extent of audit effort, including the need to involve actuarial specialists.

How the Key Audit Matter was Addressed in the Audit

Our audit procedures related to certain valuation models, mortality and policyholder behaviour assumptions included the following, among others:

- With the assistance of actuarial specialists, tested the appropriateness of certain valuation models used in the estimation process by:
 - Calculating an independent estimate of the insurance contract liability for a sample of insurance policies and comparing the results to the Company's estimate.
 - Testing the accuracy of certain valuation models for changes in key assumptions.
- With the assistance of actuarial specialists, tested the reasonableness of mortality and policyholder behaviour assumptions, by:
 - Evaluating whether management's assumptions were determined in accordance with actuarial principles and practices under the Canadian actuarial standards of practice.
 - Testing experience studies and other inputs used in the determination of the mortality and policyholder behaviour assumptions.
 - Analyzing management's interpretation and judgment of its experience study results and emerging claims experience, evaluating triggers and drivers for revisions of assumptions, assessing reasonable possible alternative assumptions, and considering industry and other external sources of benchmarking where applicable.

Income Taxes – Refer to Notes 2 and 26 to the financial statements

Key Audit Matter Description

The Company recognizes deferred income taxes for the tax expected to be payable or recoverable on differences arising between the financial statement and tax basis of assets and liabilities, and is recorded at enacted or substantively enacted tax rates in effect for the years in which the differences are expected to be realized. The Company applies judgment in assessing the recoverability of the deferred income tax asset carrying values based on future years' taxable income projections. Certain of the Company's subsidiaries have had a history of losses and have a deferred income tax asset comprised principally of net operating losses. The Company has concluded that through the use of certain tax planning opportunities, it is probable that sufficient taxable income will be generated to utilize certain of the unused losses.

The determination of the recoverability of the Company's deferred tax assets in the Company's subsidiaries required management to make judgements related to the assessment of management's planned implementation of tax strategies. In addition, management makes significant estimates and assumptions in projecting future taxable income, specifically the revenue growth rates and projected expense margins and in the determination of whether the deferred tax asset will be realized. Auditing these judgements required a high degree of auditor judgment as the estimations made by management contain significant measurement uncertainty. This resulted in an increased extent of audit effort, including the need to involve income tax and other specialists.

How the Key Audit Matter was Addressed in the Audit

Our audit procedures related to the tax strategies, revenue growth rates and projected expense margins, and the determination of whether the deferred tax assets in the Company's subsidiaries will be realized included the following, among others:

- With the assistance of income tax specialists, analyzed the reasonableness of management's projected future taxable income available to determine whether the models properly factored in the impact of the tax planning strategies.
- Tested the reasonableness of the revenue growth rates and projected expense margins used to project future taxable income that was available to realize the deferred tax asset by:
 - Assessing the key factors influencing management's revenue growth rates and projected expense margins used in the projections through both market and internally entity specific driven evidence.
 - Performing a retrospective analysis of projected future taxable income against actual results from prior years.
- With the assistance of income tax and other specialists, evaluated the proposed tax planning strategies considered in the recoverability analysis to assess whether the deferred tax asset will be realized.

Massachusetts Mutual Life Insurance Acquisition - Insurance Contract Liabilities – Refer to Notes 2 and 3 to the financial statements

Key Audit Matter Description

The Company purchased the retirement services business of Massachusetts Mutual Life Insurance Company ("MassMutual") via indemnity reinsurance and recognized an estimate of the initial fair value of net assets acquired, including insurance contract liabilities. The estimate of the assumed insurance contract liabilities required the use of complex valuation models incorporating projections of cash inflows and outflows using the best estimate of future experience together with a margin for adverse deviation.

While there were a number of estimates and assumptions required to determine the initial fair value of the insurance contract liabilities, the assumptions with the greatest estimation uncertainty are those related to the policyholder behaviour assumptions. Auditing of the valuation models and policyholder behaviour assumptions required a high degree of auditor judgment and an increased extent of audit effort, including the need to involve actuarial specialists.

How the Key Audit Matter Was Addressed in the Audit

Our audit procedures related the valuation models and policyholder behaviour assumptions as it relates to the acquired insurance contract liabilities included the following, among others:

- With the assistance of actuarial specialists, tested the appropriateness of the valuation models used in the estimation process by calculating an independent estimate of the insurance contract liability for a sample of insurance policies and comparing the results to the Company's estimate.

- With the assistance of actuarial specialists, tested the reasonableness of policyholder behaviour assumptions, by:
 - Evaluating whether management’s assumptions were determined in accordance with actuarial principles and practices.
 - Analyzing management’s interpretation and judgments based on the relative inputs, considering reasonable possible alternative assumptions, and considering industry and other external sources of benchmarking where applicable.
 - Testing the inputs used in the determination of the policyholder behaviour assumptions, including an assessment of the use of experience studies and other data from the Company’s comparable lines of business in the determination of the MassMutual assumptions.

Personal Capital Corporation Acquisition- Intangible Assets – Refer to Notes 2 and 3 to the financial statements

Key Audit Matter Description

The Company acquired 100% of the equity of Personal Capital Corporation (“Personal Capital”) and recognized the assets acquired and the liabilities assumed based on the estimated fair value, including customer relationships and brand intangible assets. The transaction includes a contingent consideration earn-out which is based on the achievement of growth in assets under management (“AUM”). The determination of the fair value of the customer relationships and brand is based on a discounted cash flow model and required management to make significant estimates and assumptions related to forecasted future revenue and earnings before interest, taxes, depreciation and amortization (“EBITDA”) margins, and discount rates.

While there are several estimates and assumptions that are required to determine the fair value of the contingent consideration earn-out and the customer relationships and brand, the estimates and assumptions with the highest degree of subjectivity are forecasted future revenue and EBITDA margins, forecasted growth in AUM and discount rates. This required a high degree of auditor judgment and an increased extent of audit effort, including the need to involve fair value specialists.

How the Key Audit Matter Was Addressed in the Audit

Our audit procedures related to forecasted future revenue and EBITDA margins, forecasted growth in AUM, and discount rates used to determine the fair value of the contingent consideration and of the customer relationships and brand intangible assets included the following, among others:

- Evaluated the reasonableness of forecasted revenue and EBITDA margin, and forecasted growth in AUM by comparing the forecasts to:
 - Actual historical results of the acquired entity.
 - Actual results of the acquired entity after acquisition.
 - Underlying analyses detailing business strategies and growth plans.
- Evaluated the reasonableness of forecasted future revenue and forecasted growth in AUM based on reputable third-party reports, comparable company performance, internal and external customer data, and comparing those to the estimates used by management.

- With the assistance of fair value specialists, evaluated the reasonableness of the discount rates used by testing the source information underlying the determination of the discount rates and developing a range of independent estimates and comparing those to the discount rate selected by management.

Other Information

Management is responsible for the other information. The other information comprises:

- Management's Discussion and Analysis
- The information, other than the financial statements and our auditor's report thereon, in the Annual Report.

Our opinion on the financial statements does not cover the other information and we do not and will not express any form of assurance conclusion thereon. In connection with our audit of the financial statements, our responsibility is to read the other information identified above and, in doing so, consider whether the other information is materially inconsistent with the financial statements or our knowledge obtained in the audit, or otherwise appears to be materially misstated.

We obtained Management's Discussion and Analysis prior to the date of this auditor's report. If, based on the work we have performed on this other information, we conclude that there is a material misstatement of this other information, we are required to report that fact in this auditor's report. We have nothing to report in this regard.

The Annual Report is expected to be made available to us after the date of the auditor's report. If, based on the work we will perform on this other information, we conclude that there is a material misstatement of this other information, we are required to report that fact to those charged with governance.

Responsibilities of Management and Those Charged with Governance for the Financial Statements

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

In preparing the financial statements, management is responsible for assessing the Company's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate the Company or to cease operations, or has no realistic alternative but to do so.

Those charged with governance are responsible for overseeing the Company's financial reporting process.

Auditor's Responsibilities for the Audit of the Financial Statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with Canadian GAAS will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

As part of an audit in accordance with Canadian GAAS, we exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Company's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Company to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the financial statements, including the disclosures, and whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation.
- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Company to express an opinion on the financial statements. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our audit opinion.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We also provide those charged with governance with a statement that we have complied with relevant ethical requirements regarding independence, and to communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, related safeguards.

From the matters communicated with those charged with governance, we determine those matters that were of most significance in the audit of the consolidated financial statements of the current period and are therefore the key audit matters. We describe these matters in our auditor's report unless law or regulation precludes public disclosure about the matter or when, in extremely rare circumstances, we determine that a matter should not be communicated in our report because the adverse consequences of doing so would reasonably be expected to outweigh the public interest benefits of such communication.

The engagement partner on the audit resulting in this independent auditor's report is Paul Stauch.

/s/ Deloitte LLP
Chartered Professional Accountants
Winnipeg, Manitoba
February 10, 2021