GREAT-WEST LIFECO INC.

Consolidated Financial Statements

For the year 2017

GREAT-WEST LIFECO INC.

CONSOLIDATED STATEMENTS OF EARNINGS

(in Canadian $ millions except per share amounts)

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

GREAT-WEST LIFECO INC.

CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME

(in Canadian $ millions)

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

GREAT-WEST LIFECO INC.

CONSOLIDATED BALANCE SHEETS

(in Canadian $ millions)

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

Approved by the Board of Directors:

Jeffrey Orr
Chair of the Board

Paul Mahon
President and Chief Executive Officer

GREAT-WEST LIFECO INC.

CONSOLIDATED STATEMENTS OF CHANGES IN EQUITY

(in Canadian $ millions)

December 31, 2017

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

December 31, 2016

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

GREAT-WEST
LIFECO INC.

CONSOLIDATED STATEMENTS OF CASH FLOWS

(in Canadian $ millions)

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

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

(in Canadian $ millions except per share amounts)

1. Corporate Information

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

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

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

2. Basis of Presentation and Summary of Accounting Policies

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

The Company adopted the narrow scope amendments to IFRS for IAS 7 *Statement of Cash Flows*, IAS 12 *Income Taxes* and *Annual Improvements 2014 - 2016 Cycle* for the amendment to IFRS 12 *Disclosure of Interest in Other Entities,* effective January 1, 2017. The adoption of these narrow scope amendments did not have a significant impact on the Company's consolidated financial statements.

Effective January 1, 2017, the Company has changed the accounting policy to classify the provision for tax uncertainties as current or deferred based on how a disallowance of the underlying uncertain tax treatment would impact the tax provision accrual as of the balance sheet date. Previously, tax uncertainties were booked as current. In addition, the Company has changed its accounting policy for the netting of U.S. deferred tax balances. The Company continues to net deferred tax balances when the Company has the legally enforceable right to offset current tax assets and liabilities and the deferred tax balances relate to entities within the same consolidated tax group. The Company no longer considers the expected order of usage. The accounting policy changes present more reliable and relevant information to financial statement users.

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

Basis of Consolidation

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

Use of Significant Judgments, Estimates and Assumptions

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

- Management uses independent qualified appraisal services to determine the fair value of investment properties, which utilize judgments and estimates. These appraisals are adjusted by applying management judgments and estimates for material changes in property cash flows, capital expenditures or general market conditions (note 5).
- Management uses judgment in determining the assets to be included in a disposal group. The Company uses estimates in the determination of the fair value for disposal groups (note 6).
- In the determination of the fair value of financial instruments, the Company's management exercises judgment in the determination of fair value inputs, particularly those items categorized within level 3 of the fair value hierarchy (note 9).
- Cash generating unit groupings for goodwill and indefinite life intangible assets have been determined by management as the lowest level that the assets are monitored for internal reporting purposes, which requires management judgment in the determination of the lowest level of monitoring (note 10).
- Management evaluates the future benefit for initial recognition and measurement of goodwill and intangible assets as well as testing the recoverable amounts. The determination of the carrying value and recoverable amounts of the cash generating unit groupings for goodwill and intangible assets relies upon the determination of fair value or value-in-use using valuation methodologies (note 10).
- Judgments are used by management in determining whether deferred acquisition costs and deferred income reserves can be recognized on the Consolidated Balance Sheets. Deferred acquisition costs are recognized if management determines the costs meet the definition of an asset and are incremental and related to the issuance of the investment contract. Deferred income reserves are amortized on a straight-line basis over the term of the policy (notes 12 and 18).
- Management uses judgment to evaluate the classification of insurance and reinsurance contracts to determine whether these arrangements should be accounted for as insurance, investment or service contracts.
- The actuarial assumptions, such as interest rates, inflation, policyholder behaviour, mortality and morbidity of policyholders, used in the valuation of insurance and certain investment contract liabilities under the Canadian Asset Liability Method require significant judgment and estimation (note 13).
- The actuarial assumptions used in determining the expense and benefit obligations for the Company’s defined benefit pension plans and other post-employment benefits requires significant judgment and estimation. Management reviews previous experience of its plan members and market conditions including interest rates and inflation rates in evaluating the assumptions used in determining the expense for the current year (note 24).

- The Company operates within various tax jurisdictions where significant management judgments and estimates are required when interpreting the relevant tax laws, regulations and legislation in the determination of the Company’s tax provisions and the carrying amounts of its tax assets and liabilities (note 27).
- Management applies judgment in assessing the recoverability of the deferred income tax asset carrying values based on future years’ taxable income projections (note 27).
- Legal and other provisions are recognized resulting from a past event which, in the judgment of management, has resulted in a probable outflow of economic resources which would be passed to a third-party to settle the obligation. Management uses judgment to evaluate the possible outcomes and risks in determining the best estimate of the provision at the balance sheet date (note 31).
- The operating segments of the Company, which are the segments reviewed by the Company’s Chief Executive Officer to assess performance and allocate resources within the Company, are aligned with the Company’s geographic operations. Management applies judgment in the aggregation of the business units into the Company's operating segments (note 33).
- The Company consolidates all subsidiaries and entities which management determines that the Company controls. Control is evaluated on the ability of the Company to direct the activities of the subsidiary or entity to derive variable returns and management uses judgment in determining whether control exists. Judgment is exercised in the evaluation of the variable returns and in determining the extent to which the Company has the ability to exercise its power to generate variable returns.
- Management uses judgments, such as the determination of the risks and benefits associated with the transaction that are used in determining whether the Company retains the primary obligation with a client in sub-advisor arrangements. Where the Company retains the risks and benefits, revenue and expenses are recorded on a gross basis.
- Within the Consolidated Statements of Cash Flows, purchases and sales of portfolio investments are recorded within investment activities due to management's judgment that these investing activities are long-term in nature.
- The results of the Company reflect management’s judgments regarding the impact of prevailing global credit, equity and foreign exchange market conditions. The provision for future credit losses within the Company's insurance contract liabilities relies upon investment credit ratings. The Company’s practice is to use third-party independent credit ratings where available. Management judgment is required when setting credit ratings for instruments that do not have a third-party rating.

The significant accounting policies are as follows:

(a) Portfolio Investments

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

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

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

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

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

Fair Value Measurement

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

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

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

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

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

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

Bonds and Mortgages - Loans and Receivables

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

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

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

Investment Properties

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

Impairment

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

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

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

Securities Lending

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

(b) Transaction Costs

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

(c) Cash and Cash Equivalents

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

(d) Trading Account Assets

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

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

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

(f) Other Assets and Other Liabilities

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

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

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

(g) Disposal Group Classified As Held For Sale

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

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

(h) Derivative Financial Instruments

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

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

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

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

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

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

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

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

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

Cash flow hedges

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

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

Net investment hedges

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

The Company currently has instruments designated as net investment hedges.

(i) Embedded Derivatives

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

(j) Foreign Currency Translation

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

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

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

(k) Loans to Policyholders

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

(l) Reinsurance Contracts

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

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

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

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

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

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

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

(n) Business Combinations, Goodwill and Intangible Assets

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

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

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

Impairment Testing

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

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

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

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

(o) Revenue Recognition

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

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

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

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

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

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

(p) Owner Occupied Properties and Fixed Assets

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

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

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

(q) Deferred Acquisition Costs

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

(r) Segregated Funds

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

(s) Insurance and Investment Contract Liabilities

Contract Classification

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

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

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

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

Measurement

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

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

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

(t) Deferred Income Reserves

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

(u) Income Taxes

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

Current Income Tax

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

A provision for tax uncertainties which meet the probable threshold for recognition is measured based on the probability weighted average approach. The provision for tax uncertainties will be classified as current or deferred based on how a disallowance of the underlying uncertain tax treatment would impact the tax provision accrual as of the balance sheet date.

Deferred Income Tax

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

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

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

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

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

(v) Policyholder Benefits

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

(w) Repurchase Agreements

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

(x) Pension Plans and Other Post-Employment Benefits

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

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

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

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

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

(y) Equity

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

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

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

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

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

(z) Share-Based Payments

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

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

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

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

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

(aa) Earnings Per Common Share

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

(ab) Leases

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

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

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

(ac) Operating Segments

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

(ad) Future Accounting Policies

New Standard	Summary of Future Changes
IFRS 15 - *Revenue from Contracts with Customers*	In May 2014, the IASB issued IFRS 15, *Revenue from Contracts with Customers*, which replaces IAS 11, *Construction Contract*s and IAS 18, *Revenue*. The standard provides a single revenue recognition standard to align the financial reporting of revenue from contracts with customers and related costs. The Company will recognize revenue when it transfers goods or services to a customer in the amount of consideration the Company expects to receive from the customer. Revenue arising from insurance contracts, leases, and financial instruments are out of scope of the new standard. The Company will be adopting the standard on its effective date of January 1, 2018. The Company has concluded that there will not be a material change in the timing of revenue recognition. The presentation of certain revenues and expenses in the financial statements will change between being reported on a gross versus net basis and others from net to gross. There is no significant net earnings impact but there is an approximate $100 increase in fee income and a corresponding increase in operating expenses, mostly in the U.S. segment.
IFRS 16 - *Leases*	In January 2016, the IASB issued IFRS 16, *Leases,* which introduces new guidance for identifying leases as well as a new right-of-use accounting model for lessees, replacing the operating and finance lease accounting models that currently exist. The new accounting model will generally require all lessees to recognize lease assets and liabilities on the balance sheet, initially measured at the present value of unavoidable lease payments for all leases with a maximum possible term of more than 12 months. In contrast to the significant changes for lessees, the new standard will retain many key aspects of the current lessor accounting model. The standard is effective January 1, 2019. The Company is evaluating the impact of the adoption of this standard, however it is not yet possible to provide a reliable estimate of the impact on the Company's consolidated financial statements.

New Standard	Summary of Future Changes
IFRS 17 - *Insurance Contracts*	In May 2017, the IASB issued IFRS 17, *Insurance Contracts*, which will replace IFRS 4, *Insurance Contracts*. IFRS 17 sets out the requirements for the recognition, measurement, presentation and disclosures of insurance contracts a company issues and reinsurance contracts it holds. IFRS 17 introduces new measurement models depending on the nature of the insurance contracts. IFRS 17 requires entities to measure insurance contract liabilities on the balance sheet as the total of: (a) the fulfilment cash flows - the current estimates of amounts that the company expects to collect from premiums and pay out for claims, benefits and expenses, including an adjustment for the timing and risk of those amounts; and (b) the contractual service margin - the future profit for providing insurance coverage. The future profit for providing insurance coverage is recognized in profit or loss over time as the insurance coverage is provided. IFRS 17 also requires the Company to distinguish between groups of contracts expected to be profit making and groups of contracts expected to be onerous. The Company is required to update the fulfilment cash flows at each reporting date, using current estimates of the amount, timing and uncertainty of cash flows and discount rates. The Company is currently in the planning phase of its project which includes assessing the financial statement impact of adopting IFRS 17, identifying potential business impacts, developing a detailed project plan, assessing resource requirements, and providing training to staff. The adoption of IFRS 17 is a significant initiative for the Company supported by a formal governance framework, for which substantial resources are being dedicated to ensure proper implementation. The new standard is effective for annual periods beginning on or after January 1, 2021. IFRS 17 will affect how the Company accounts for its insurance contracts and how it reports financial performance in the Consolidated Statements of Earnings. The Company is currently assessing the impact that IFRS 17 will have on its consolidated financial statements. The Company expects this standard to have a significant impact on the timing of earnings recognition for its insurance contracts and a significant impact on how insurance contract results are presented and disclosed in the consolidated financial statements.

New Standard	Summary of Future Changes
IFRS 9 - *Financial Instruments*	In July 2014, the IASB issued a final version of IFRS 9, *Financial Instruments* (IFRS 9) to replace IAS 39, *Financial Instruments: Recognition and Measurement*. The standard provides changes to financial instruments accounting for the following: • classification and measurement of financial instruments based on a business model approach for managing financial assets and the contractual cash flow characteristics of the financial asset; • impairment based on an expected loss model; and • hedge accounting that incorporates the risk management practices of an entity. In September 2016, the IASB issued an amendment to IFRS 4, *Insurance Contracts* (IFRS 4). The amendment "Applying IFRS 9, *Financial Instruments* with IFRS 4, *Insurance Contracts*" provides qualifying insurance companies with two options to address the potential volatility associated with implementing the IFRS 9 standard before the new proposed insurance contract standard is effective. The two options are as follows: • *Deferral Approach* - provides the option to defer implementation of IFRS 9 until the year 2021 or the effective date of the new insurance contract standard, whichever is earlier; or • *Overlay Approach* - provides the option to recognize the volatility that could arise when IFRS 9 is applied within other comprehensive income, rather than profit or loss. The Company qualifies for the amendment and will be applying the deferral approach to allow adoption of both IFRS 9 and IFRS 17, *Insurance Contracts* simultaneously on January 1, 2021. In October 2017, the IASB issued an amendment to IFRS 9 that certain prepayable financial assets with negative compensation can be measured at amortized cost or fair value through other comprehensive income instead of fair value through profit or loss under a certain condition. The Company continues to evaluate the impact for the adoption of this standard with the adoption of IFRS 17, *Insurance Contracts*.
Annual Improvements 2014 - 2016 Cycle	In December 2016, the IASB issued *Annual Improvements 2014 - 2016 Cycle* as part of its ongoing process to efficiently deal with non-urgent narrow scope amendments to IFRS. Three amendments were included in this issue relating to IFRS 12, *Disclosure of Interests in Other Entities*, IFRS 1, *First-time Adoption of International Financial Reporting Standards* and IAS 28 *Investments in Associates and Joint Ventures.* The amendments to IFRS 12 were effective January 1, 2017 and did not have a significant impact on the Company's consolidated financial statements. The amendments to IFRS 1 and IAS 28 are effective January 1, 2018. Adoption of these amendments will not have an impact on the Company's consolidated financial statements.

New Standard	Summary of Future Changes
IAS 40 - *Investment Property*	In December 2016, the IASB issued an amendment to IAS 40*, Investment Property* to clarify the requirements on transfers to, or from, investment property. The amendment is effective January 1, 2018. The Company does not anticipate a significant impact from the adoption of this standard.
IFRS 2 - *Share-based Payment*	In June 2016, the IASB issued narrow scope amendments to IFRS 2*, Share-based Payment* clarifying how to account for certain types of share-based payment transactions. The amendment is effective January 1, 2018. The Company does not anticipate a significant impact from the adoption of this standard.
IFRIC 22 - *Foreign Currency Transactions and Advance Consideration*	In December 2016, the IASB issued IFRIC Interpretation 22*, Foreign Currency Transactions and Advance Consideration* that provides requirements about which exchange rate to use in reporting foreign currency transactions when payment is made or received in advance. The interpretation is effective January 1, 2018. The Company does not anticipate a significant impact from the adoption of this standard.
Annual Improvements 2015 - 2017 Cycle	In December 2017, the IASB issued *Annual Improvements 2015 - 2017 Cycle* as part of its ongoing process to efficiently deal with non-urgent narrow scope amendments to IFRS. Four amendments were included in this issue relating to IFRS 3, *Business Combinations*, IFRS 11, *Joint Arrangements*, IAS 12, *Income Taxes* and IAS 23 *Borrowing Costs.* The amendments are effective January 1, 2019. The Company is evaluating the impact of the adoption of these amendments.
IAS 28 - *Investments in Associates and Joint Ventures*	In October 2017, the IASB issued amendments to IAS 28, *Investments in Associates and Joint Ventures*. The amendments clarify that a company is to account for long-term interests in an associate or joint venture using IFRS 9, *Financial Instruments* when the equity method is not applied. The amendments are effective January 1, 2019. The Company is evaluating the impact of the adoption of these amendments.
IFRIC 23 - *Uncertainty over Income Tax Treatments*	In June 2017, the IASB issued IFRIC 23, *Uncertainty over Income Tax Treatments*. The interpretation clarifies how to apply the recognition and measurement requirements in IAS 12 *Income Taxes*, when there is uncertainty over income tax treatments. The interpretation is effective for periods beginning on or after January 1, 2019. The Company does not anticipate a significant impact from the adoption of this standard.

3. Business Acquisitions

(a) Financial Horizons Group

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

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

(b) Retirement Advantage

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

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

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

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

4. Cash and Cash Equivalents

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

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

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

5. Portfolio Investments

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

(d) Included in portfolio investments are the following:

(i) Carrying amount of impaired investments

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

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

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

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

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

(e) Net investment income comprises the following:

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

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

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

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

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

(g) Transferred Financial Assets

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

6. Assets Held For Sale

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

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

7. Funds Held by Ceding Insurers

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

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

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

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

(a) Carrying values and estimated fair values:

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

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

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

(c) Asset quality

Bond Portfolio By Credit Rating

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

8. Financial Instruments Risk Management

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

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

(a) Credit Risk

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

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

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

(i) Maximum Exposure to Credit Risk

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

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

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

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

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

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

(ii) Concentration of Credit Risk

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

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

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

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

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

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

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

(iii) Asset Quality

Bond Portfolio By Credit Rating

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

Derivative Portfolio By Credit Rating

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

(iv) Loans Past Due, But Not Impaired

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

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

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

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

(b) Liquidity Risk

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

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

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

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

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

(c) Market Risk

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

Caution Related to Risk Sensitivities

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

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

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

(i) Currency Risk

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

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

- The Company uses financial measures such as constant currency calculations to monitor the effect of currency translation fluctuations.
- Investments are normally made in the same currency as the liabilities supported by those investments. Segmented Investment Guidelines include maximum tolerances for unhedged currency mismatch exposures.
- For assets backing liabilities not matched by currency, the Company would normally convert the assets back to the currency of the liability using foreign exchange contracts.

- A 10% weakening of the Canadian dollar against foreign currencies would be expected to increase non-participating insurance and investment contract liabilities and their supporting assets by approximately the same amount resulting in an immaterial change to net earnings. A 10% strengthening of the Canadian dollar against foreign currencies would be expected to decrease non-participating insurance and investment contract liabilities and their supporting assets by approximately the same amount resulting in an immaterial change in net earnings.

(ii) Interest Rate Risk

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

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

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

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

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

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

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

- At December 31, 2017 and December 31, 2016, the effect of an immediate 1% parallel increase in the yield curve on the prescribed scenarios results in interest rate changes to assets and liabilities that will offset each other with no impact to net earnings.
- At December 31, 2017 and December 31, 2016, the effect of an immediate 1% parallel decrease in the yield curve on the prescribed scenarios results in interest rate changes to assets and liabilities that will offset each other with no impact to net earnings.

Another way of measuring the interest rate risk associated with this assumption is to determine the effect on the insurance and investment contract liabilities impacting the shareholders' net earnings of the Company of a 1% change in the Company's view of the range of interest rates to be covered by these provisions. The following provides information on the effect of an immediate 1% increase or 1% decrease in the interest rates at both the low and high end of the range of interest rates recognized in the provisions:

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

(iii) Equity Risk

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

Some insurance and investment contract liabilities are supported by investment properties, common stocks and private equities, for example segregated fund products and products with long-tail cash flows. Generally these liabilities will fluctuate in line with equity values. There will be additional impacts on these liabilities as equity values fluctuate. The following provides information on the expected impacts of a 10% increase or 10% decrease in equity values:

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

The best estimate return assumptions for equities are primarily based on long-term historical averages. Changes in the current market could result in changes to these assumptions and will impact both asset and liability cash flows. The following provides information on the expected impacts of a 1% increase or 1% decrease in the best estimate assumptions:

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

(d) Enforceable Master Netting Arrangements or Similar Agreements

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

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

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

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

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

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

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

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

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

9. Fair Value Measurement

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

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

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

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

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

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

(1) Excludes collateral received from counterparties of $77.
(2) Excludes collateral pledged to counterparties of $374.

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

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

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

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

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

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

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

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

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

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

9. Fair Value Measurement (cont'd)

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

10. Goodwill and Intangible Assets

(a) Goodwill

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

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

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

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

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

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

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

(b) Intangible Assets

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

(i) Indefinite life intangible assets:

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

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

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

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

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

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

(iii) Finite life intangible assets:

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

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

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

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

(c) Recoverable Amount

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

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

In the fourth quarter of 2017, the Company conducted its annual impairment testing of goodwill and indefinite life intangible assets based on September 30, 2017 asset balances. It was determined that the recoverable amounts of cash generating unit groupings were in excess of their carrying values and there was no evidence of impairment. In addition, during the year ended December 31, 2017, management transferred a $290 customer contract-related intangible to assets held for sale (note 6).

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

11. Owner Occupied Properties and Fixed Assets

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

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

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

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

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

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

12. Other Assets

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

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

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

Deferred acquisition costs

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

Finance leases receivable

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

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

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

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

13. Insurance and Investment Contract Liabilities

(a) Insurance and investment contract liabilities

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

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

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

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

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

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

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

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

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

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

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

(c) Change in insurance contract liabilities

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

(e) Gross premiums written and gross policyholder benefits

(i) Premium Income

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

(ii) Policyholder Benefits

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

(f) Actuarial Assumptions

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

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

Mortality

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

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

Morbidity

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

Property and casualty reinsurance

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

Investment returns

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

Expenses

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

Policy termination

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

Utilization of elective policy options

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

Policyholder dividends and adjustable policy features

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

(g) Risk Management

(i) Insurance risk

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

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

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

	Increase (decrease) in net earnings	
	2017	2016
Mortality - 2% increase	**$ (296)**	$ (281)
Annuitant mortality - 2% decrease	**$ (446)**	$ (384)
Morbidity - 5% adverse change	**$ (256)**	$ (242)
Investment returns		
Parallel shift in yield curve		
1% increase	**$ —**	$ —
1% decrease	**$ —**	$ —
Change in interest rates		
1% increase	**$ 150**	$ 149
1% decrease	**$ (523)**	$ (491)
Change in equity values		
10% increase	**$ 48**	$ 43
10% decrease	**$ (85)**	$ (50)
Change in best estimate return assumptions for equities		
1% increase	**$ 439**	$ 407
1% decrease	**$ (470)**	$ (438)
Expenses - 5% increase	**$ (127)**	$ (117)
Policy termination and renewal - 10% adverse change	**$ (672)**	$ (608)

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

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

(ii) Reinsurance risk

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

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

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

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

14. Segregated Funds and Other Structured Entities

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

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

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

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

Segregated Funds Guarantee Exposure

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

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

In the U.S., the Company offers variable annuities with GMDB through Great-West Financial. For the standalone GMDB business, most are a return of premium on death with the guarantee expiring at age 70. Great-West Financial in the U.S. also offers a GMWB product with an optional GMDB feature that does not expire with age.

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

The Company also offers a guaranteed minimum withdrawal benefits (GMWB) product in Canada, the U.S., and Germany, and previously offered GMWB product in Ireland. Certain GMWB products offered by the Company offer levels of death and maturity guarantees. At December 31, 2017, the amount of GMWB product in-force in Canada, the U.S., Ireland and Germany was $4,225 ($3,917 at December 31, 2016).

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

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

(a) Investments on account of segregated fund policyholders

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

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

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

(c) Investment income on account of segregated fund policyholders

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

15. Financing Charges

Financing charges consist of the following:

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

16. Debentures and Other Debt Instruments

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

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

On May 26, 2017, Great-West Lifeco Finance (Delaware) LP issued $925 (U.S. $700) principal amount 4.150% senior unsecured notes that are fully and unconditionally guaranteed by Lifeco, maturing on June 3, 2047.

On June 21, 2017, Great-West Lifeco Finance (Delaware) LP redeemed all $1,000 principal amount of its 5.691% subordinated debentures at a redemption price equal to 100% of the principal amount of the debentures, plus accrued interest up to but excluding the redemption date. The debentures were hedged using a cross-currency swap designated as a cash flow hedge. Upon redemption of the debentures, the gains on the debentures realized and the losses realized on the hedging instrument were recorded in the Consolidated Statements of Earnings with no impact on net earnings. The deferred income taxes related to this cash flow hedge resulted in a reduction to Other Comprehensive Income of $97 that had not previously been recorded (note 25).

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

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

17. Capital Trust Securities

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

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

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

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

18. Other Liabilities

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

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

Deferred income reserves

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

19. Non-Controlling Interests

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

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

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

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

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

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

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

	2017	2016
Participating account surplus in subsidiaries:		
Great-West Life	**$ 622**	$ 610
London Life	**1,796**	1,798
Canada Life	**339**	357
Great-West Financial	**14**	17
Total	**$ 2,771**	$ 2,782
Non-controlling interests in subsidiaries	**$ 164**	$ 224

20. Share Capital

Authorized

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

Issued and outstanding and fully paid

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

Preferred Shares

On May 18, 2017 the Company issued 8,000,000 Series T, 5.15% Non-Cumulative First Preferred Shares at $25.00 per share for gross proceeds of $200. The shares are redeemable at the option of the Company on or after June 30, 2022 for $25.00 per share plus a premium if redeemed prior to June 30, 2026, in each case together with all declared and unpaid dividends up to but excluding the date of redemption. Transaction costs incurred in connection with the preferred share issue of $5 ($3 after-tax) were charged to accumulated surplus.

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

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

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

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

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

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

The Series N, Non-Cumulative 5-Year Rate Reset First Preferred Shares carry an annual fixed non-cumulative dividend rate of 2.176% up to but excluding December 31, 2020 and are redeemable at the option of the Company on December 31, 2020 and on December 31 every five years thereafter for $25.00 per share plus all declared and unpaid dividends up to but excluding the date of redemption. Subject to the Company's right of redemption and certain other restrictions on conversion described in the Series N share conditions, each Series N share is convertible into one Series O share at the option of the holders on December 31, 2020 and on December 31 every five years thereafter.

The Series O, Non-Cumulative Floating Rate First Preferred Shares carry a floating non-cumulative dividend rate equal to the relevant Government of Canada Treasury Bill rate plus 1.30% and are redeemable at the option of the Company for $25.50 per share, unless the shares are redeemed on December 31, 2020 or on December 31 every five years thereafter in which case the redemption price will be $25.00 per share, plus in each case all declared and unpaid dividends up to but excluding the date of redemption. Subject to the Company's right of redemption and certain other restrictions on conversion described in the Series O share conditions, each Series O share is convertible into one Series N share at the option of the holders on December 31, 2020 and on December 31 every five years thereafter.

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

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

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

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

Common Shares

Normal Course Issuer Bid

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

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

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

Subsequent event

On January 10, 2018, the Company announced a normal course issuer bid commencing January 15, 2018 and terminating January 14, 2019 to purchase for cancellation up to but not more than 20,000,000 of its common shares at market prices.

21. Earnings Per Common Share

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

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

22. Capital Management

(a) Policies and Objectives

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

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

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

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

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

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

(b) Regulatory Capital

In Canada, OSFI has established a capital adequacy measurement for life insurance companies incorporated under the Insurance Companies Act (Canada) and their subsidiaries, known as the Minimum Continuing Capital and Surplus Requirements (MCCSR). For this purpose, various additions or deductions from capital are mandated by the guidelines issued by OSFI. The following provides a summary of the MCCSR information and ratios for Great-West Life:

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

The MCCSR ratio of 241% for Great-West Life includes 6 points for the impact of capital activity in advance of closing for the Retirement Advantage business acquisition.

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

At December 31, 2017, the Risk-Based Capital ratio of Great-West Life & Annuity Insurance Company, Lifeco's regulated U.S. operating company was estimated to be 487% of the Company Action Level set by the National Association of Insurance Commissioners. Great-West Life & Annuity Insurance Company reports its Risk-Based Capital ratio annually to U.S. insurance regulators.

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

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

23. Share-Based Payments

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

24. Pension Plans and Other Post-Employment Benefits

Characteristics, Funding and Risk

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

The defined benefit pension plans provide pensions based on length of service and final average pay. For most plans, active plan participants share in the cost by making contributions in respect of current service. Certain pension payments are indexed either on an ad hoc basis or a guaranteed basis. The determination of the defined benefit obligation reflects pension benefits in accordance with the terms of the plans. The assets supporting the funded pension plans are held in separate trusteed pension funds. The obligations for the wholly unfunded plans are included in other liabilities and are supported by general assets.

The significant defined benefit plans of the Company's subsidiaries are closed to new entrants with plans in several geographies also closed to future defined benefit accruals. New hires and employees who previously accrued defined benefits in the closed plans are eligible only for defined contribution benefits. The Company's defined benefit plan exposure will continue to be reduced in future years.

The defined contribution pension plans provide pension benefits based on accumulated employee and subsidiary company contributions. Subsidiary company contributions to these plans are a set percentage of employees' annual income and may be subject to certain vesting requirements.

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

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

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

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

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

(a) Plan Assets, Benefit Obligation and Funded Status

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

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

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

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

(b) Pension and Other Post-Employment Benefits Expense

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

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

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

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

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

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

(d) Details of Defined Benefit Obligation

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

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

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

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

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

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

(iii) Maturity Profile of Plan Membership

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

(e) Cash Flow Information

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

(f) Actuarial Assumptions and Sensitivities

(i) Actuarial Assumptions

	Defined benefit pension plans		Other post-employment benefits	
	2017	2016	**2017**	2016
To determine benefit cost:				
Discount rate - past service liabilities	**3.3%**	3.8%	**3.8%**	4.1%
Discount rate - future service liabilities	**3.4%**	3.8%	**4.3%**	4.5%
Rate of compensation increase	**3.2%**	3.2%	**—**	—
Future pension increases [(1)]	**1.1%**	1.5%	**—**	—
To determine defined benefit obligation:				
Discount rate - past service liabilities	**3.1%**	3.3%	**3.5%**	3.8%
Rate of compensation increase	**3.1%**	3.2%	**—**	—
Future pension increases [(1)]	**1.3%**	1.1%	**—**	—
Medical cost trend rates:				
Initial medical cost trend rate			**5.0%**	5.1%
Ultimate medical cost trend rate			**4.5%**	4.5%
Year ultimate trend rate is reached			**2029**	2029

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

(ii) Sample Life Expectancies Based on Mortality Assumptions

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

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

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

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

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

	1% increase		1% decrease	
	2017	2016	**2017**	2016
Defined benefit pension plans:				
Impact of a change to the discount rate	**$ (1,187)**	$ (1,138)	**$ 1,553**	$ 1,458
Impact of a change to the rate of compensation increase	**313**	303	**(270)**	(264)
Impact of a change to the rate of inflation	**582**	550	**(514)**	(498)
Other post-employment benefits:				
Impact of a change to assumed medical cost trend rates	**32**	33	**(27)**	(28)
Impact of a change to the discount rate	**(43)**	(46)	**52**	56

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

25. Accumulated Other Comprehensive Income

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

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

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

26. Related Party Transactions

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

(a) Principal subsidiaries

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

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

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

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

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

During the year, Great-West Life provided to and received from IGM and its subsidiaries, a member of the Power Financial group of companies, certain administrative services. Great-West Life also provided life insurance, annuity and disability insurance products under a distribution agreement with IGM. London Life provided distribution services to IGM. All transactions were provided at market terms and conditions.

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

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

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

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

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

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

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

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

(c) Key management compensation

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

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

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

27. Income Taxes

(a) Components of the income tax expense

(i) Income tax recognized in Consolidated Statements of Earnings

Current income tax

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

Deferred income tax

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

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

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

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

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

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

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

On December 22, 2017, H.R. 1, the *Tax Reconciliation Act*, was substantively enacted. The legislation, which was generally effective for tax years beginning on January 1, 2018, results in significant U.S. tax reform and revises the Internal Revenue Code by, among other things, lowering the corporate federal income tax rate from 35% to 21% and modifying how the U.S. taxes multinational entities.

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

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

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

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

The revaluation of deferred tax balances, which are based on management's best estimates and are included in the "U.S. tax reform impact of rate changes on deferred income taxes", increases the 2017 effective income tax rate by 4.94%. These estimates may require further adjustments as additional guidance from the U.S. Department of the Treasury is provided, the Company's assumptions change, and as further information and interpretations become available. Changes in these estimates will impact the 2018 consolidated financial statements.

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

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

27. Income Taxes (cont'd)

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

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

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

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

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

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

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

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

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

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

28. Operating and Administrative Expenses

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

29. Restructuring

Canadian Business Transformation

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

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

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

Putnam Restructuring

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

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

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

30. Derivative Financial Instruments

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

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

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

30. Derivative Financial Instruments (cont'd)

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

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

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

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

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

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

(c) Interest Rate Contracts

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

Foreign Exchange Contracts

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

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

Other Derivative Contracts

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

31. Legal Provisions and Contingent Liabilities

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

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

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

32. Commitments

(a) Letters of Credit

Letters of credit are written commitments provided by a bank. The total amount of letter of credit facilities is U.S. $1,726 of which U.S. $1,629 were issued as of December 31, 2017.

The Reinsurance operation periodically uses letters of credit as collateral under certain reinsurance contracts for on balance sheet policy liabilities.

(b) Investment Commitments

Commitments of investment transactions made in the normal course of operations in accordance with policies and guidelines that are to be disbursed upon fulfillment of certain contract conditions were $939 as at December 31, 2017, with $938 maturing within one year and $1 maturing within two years.

(c) Lease Obligations

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

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

(d) Pledged Assets

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

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

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

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

33. Segmented Information

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

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

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

(a) Consolidated Net Earnings

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

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

33. Segmented Information (cont'd)

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

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

(b) Consolidated Total Assets and Liabilities

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

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

	2016			
	Canada	United States	Europe	Total
Assets				
Invested assets	$ 70,311	$ 44,904	$ 47,940	$ 163,155
Goodwill and intangible assets	5,133	2,388	2,428	9,949
Other assets [(1)]	3,178	4,351	18,697	26,226
Investments on account of segregated fund policyholders	74,909	35,414	90,080	200,403
Total	$ 153,531	$ 87,057	$ 159,145	$ 399,733

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

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

34. Comparative Figures

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

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

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Independent Auditor's Report

To the Shareholders of
Great-West Lifeco Inc.

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

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

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

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

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

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

/s/ Deloitte LLP
Chartered Professional Accountants
February 8, 2018
Winnipeg, Manitoba