



Manulife Financial Corporation Management's Discussion & Analysis

For the year ended December 31, 2023

Caution regarding forward-looking statements

From time to time, Manulife Financial Corporation (“MFC”) makes written and/or oral forward-looking statements, including in this document. In addition, our representatives may make forward-looking statements orally to analysts, investors, the media and others. All such statements are made pursuant to the “safe harbour” provisions of Canadian provincial securities laws and the U.S. Private Securities Litigation Reform Act of 1995.

The forward-looking statements in this document include, but are not limited to, statements with respect to possible share buybacks under our normal course issuer bid, the Company’s strategic priorities and targets for its highest potential businesses, net promoter score, straight-through-processing, ongoing expense efficiency, portfolio optimization, core earnings contribution from LTC and VA businesses, employee engagement, its medium-term financial and operating targets, its ability to achieve our financed emissions and absolute scope 1 and 2 emissions targets, the estimated timing and amount of state approved future premium increases on our U.S. LTC business, the closing of the reinsurance transaction in respect of certain legacy blocks and the associated capital release, the closing of the acquisition of CQS, the impact of changes in tax laws, the probability and impact of LICAT scenario switches, and our journey to net zero, and also relate to, among other things, our objectives, goals, strategies, intentions, plans, beliefs, expectations and estimates, and can generally be identified by the use of words such as “may”, “will”, “could”, “should”, “would”, “likely”, “suspect”, “outlook”, “expect”, “intend”, “estimate”, “anticipate”, “believe”, “plan”, “forecast”, “objective”, “seek”, “aim”, “continue”, “goal”, “restore”, “embark” and “endeavour” (or the negative thereof) and words and expressions of similar import, and include statements concerning possible or assumed future results. Although we believe that the expectations reflected in such forward-looking statements are reasonable, such statements involve risks and uncertainties, and undue reliance should not be placed on such statements and they should not be interpreted as confirming market or analysts’ expectations in any way.

Certain material factors or assumptions are applied in making forward-looking statements and actual results may differ materially from those expressed or implied in such statements. Important factors that could cause actual results to differ materially from expectations include but are not limited to: general business and economic conditions (including but not limited to the performance, volatility and correlation of equity markets, interest rates, credit and swap spreads, inflation rates, currency rates, investment losses and defaults, market liquidity and creditworthiness of guarantors, reinsurers and counterparties); the ongoing prevalence of COVID-19, including any variants, as well as actions that have been, or may be taken by governmental authorities in response to COVID-19, including the impacts of any variants; changes in laws and regulations; changes in accounting standards applicable in any of the territories in which we operate; changes in regulatory capital requirements; our ability to obtain premium rate increases on in-force policies; our ability to execute strategic plans and changes to strategic plans; downgrades in our financial strength or credit ratings; our ability to maintain our reputation; impairments of goodwill or intangible assets or the establishment of provisions against future tax assets; the accuracy of estimates relating to morbidity, mortality and policyholder behaviour; the accuracy of other estimates used in applying accounting policies, actuarial methods and embedded value methods; our ability to implement effective hedging strategies and unforeseen consequences arising from such strategies; our ability to source appropriate assets to back our long-dated liabilities; level of competition and consolidation; our ability to market and distribute products through current and future distribution channels; unforeseen liabilities or asset impairments arising from acquisitions and dispositions of businesses; the realization of losses arising from the sale of investments classified as fair value through other comprehensive income; our liquidity, including the availability of financing to satisfy existing financial liabilities on expected maturity dates when required; obligations to pledge additional collateral; the availability of letters of credit to provide capital management flexibility; accuracy of information received from counterparties and the ability of counterparties to meet their obligations; the availability, affordability and adequacy of reinsurance; legal and regulatory proceedings, including tax audits, tax litigation or similar proceedings; our ability to adapt products and services to the changing market; our ability to attract and retain key executives, employees and agents; the appropriate use and interpretation of complex models or deficiencies in models used; political, legal, operational and other risks associated with our non-North American operations; geopolitical uncertainty, including international conflicts; acquisitions and our ability to complete acquisitions including the availability of equity and debt financing for this purpose; the disruption of or changes to key elements of the Company’s or public infrastructure systems; environmental concerns including climate change; our ability to protect our intellectual property and exposure to claims of infringement; our inability to withdraw cash from subsidiaries; the fact that the amount and timing of any future common share repurchases will depend on the earnings, cash requirements and financial condition of Manulife, market conditions, capital requirements (including under LICAT capital standards), common share issuance requirements, applicable law and regulations (including Canadian and U.S. securities laws and Canadian insurance company regulations), and other factors deemed relevant by Manulife, and may be subject to regulatory approval or conditions; and the timing to close the reinsurance transactions and CQS transaction described in this document.

Additional information about material risk factors that could cause actual results to differ materially from expectations and about material factors or assumptions applied in making forward-looking statements may be found in this document under “Risk Management and Risk Factors” and “Critical Actuarial and Accounting Policies” and in the “Risk Management” note to the Annual Consolidated Financial Statements as well as elsewhere in our filings with Canadian and U.S. securities regulators.

The forward-looking statements in this document are, unless otherwise indicated, stated as of the date hereof and are presented for the purpose of assisting investors and others in understanding our financial position and results of operations, our future operations, as well as our objectives and strategic priorities, and may not be appropriate for other purposes. We do not undertake to update any forward-looking statements, except as required by law.

Contents

Management’s Discussion and Analysis 10

1. Manulife Financial Corporation 10

2. Asia 25

3. Canada 29

4. U.S. 31

5. Global Wealth and Asset Management 34

6. Corporate and Other 38

7. Investments 39

8. Fourth Quarter Financial Highlights 44

9. Risk Management and Risk Factors 48

10. Capital Management Framework 85

11. Critical Actuarial and Accounting Policies 88

12. Controls and Procedures 99

13. Non-GAAP and Other Financial Measures 100

14. Additional Disclosures 151

Management's Discussion and Analysis



This Management's Discussion and Analysis ("MD&A") is current as of February 14, 2024.

1. Manulife Financial Corporation

Manulife Financial Corporation is a leading international financial services provider, helping people make their decisions easier and lives better. With our global headquarters in Toronto, Canada, we provide financial advice and insurance, operating as Manulife across Canada, Asia, and Europe, and primarily as John Hancock in the United States. Through Manulife Investment Management, the global brand for our Global Wealth and Asset Management segment, we serve individuals, institutions and retirement plan members worldwide. At the end of 2023, we had more than 38,000 employees, over 98,000 agents, and thousands of distribution partners, serving over 35 million customers. At the end of 2023, we had \$1.4 trillion (US\$1.1 trillion) in assets under management and administration¹, including total invested assets of \$0.4 trillion (US\$0.3 trillion), and segregated funds net assets of \$0.4 trillion (US\$0.3 trillion). We trade as 'MFC' on the Toronto, New York, and the Philippine stock exchanges, and under '945' in Hong Kong.

Our reporting segments are:

- Asia – providing insurance products and insurance-based wealth accumulation products in Asia.
- Canada – providing insurance products, insurance-based wealth accumulation products, and banking services in Canada and has an in-force variable annuity business.
- U.S. – providing life insurance products and insurance-based wealth accumulation products and has an in-force long-term care insurance business and an in-force annuity business.
- Global Wealth and Asset Management ("Global WAM") – providing investment advice and innovative solutions to our retail, retirement, and institutional clients around the world under the Manulife Investment Management ("MIM") brand.
- Corporate and Other – comprised of investment performance on assets backing capital, net of amounts allocated to operating segments; financing costs; costs incurred by the corporate office related to shareholder activities (not allocated to operating segments); our Property and Casualty ("P&C") Reinsurance business; and run-off reinsurance business lines.

In this document, the terms "Company", "Manulife", "we" and "our" mean Manulife Financial Corporation ("MFC") and its subsidiaries. The term "MLI" means The Manufacturers Life Insurance Company and its subsidiaries.

Implementation of IFRS 17 and IFRS 9

Manulife adopted IFRS 17 "Insurance Contracts" and IFRS 9 "Financial Instruments" effective January 1, 2023, applied retrospectively. See notes 2 and 25 of the Consolidated Financial Statements for the year ended December 31, 2023. Our quarterly and full year 2022 results have been restated in accordance with IFRS 17, including the other comprehensive income option², and IFRS 9.

The 2022 comparative results restated in this MD&A may not be fully representative of our market risk profile, as the transition of our general fund portfolio for asset-liability matching purposes under IFRS 17 and IFRS 9 was not completed until early 2023. Consequently, year-over-year variations between our 2023 results compared with the 2022 results should be viewed in this context.

In addition, our 2022 results are also not directly comparable with 2023 results because IFRS 9 hedge accounting and expected credit loss ("ECL") principles are applied prospectively effective January 1, 2023. Accordingly, we have also presented comparative quarterly and full year 2022 results as if IFRS had allowed such principles to be implemented for 2022 (the "IFRS 9 transitional impacts"). This presentation will only be reported in our MD&A for 2023 for certain 2022 comparative results.

These 2022 comparative results are non-GAAP and denoted as being "transitional" and include the financial measures noted below:

- Transitional net income (loss) attributed to shareholders;
- Transitional net income (loss) before income taxes;
- Transitional net income (loss);
- Transitional net income (loss) attributed to shareholders before income taxes;
- Common shareholders' transitional net income (loss);
- Transitional return on common shareholders' equity ("Transitional ROE");
- Transitional basic earnings (loss) per common share; and
- Transitional diluted earnings (loss) per common share.

¹ This item is a non-GAAP financial measure. See "Non-GAAP and Other Financial Measures" below for more information.

² More information about the other comprehensive income option can be found in note 25 of the Consolidated Financial Statements for the year ended December 31, 2023.

Adoption of IFRS 17 and IFRS 9 has also resulted in additional definitions and revisions to the following financial measures:

- **New non-GAAP financial measures:** post-tax contractual service margin (“post-tax CSM”); post-tax contractual service margin net of non-controlling interests (“NCI”) (“post-tax CSM net of NCI”); Drivers of Earnings (“DOE”) line items for net investment result, other, income tax (expenses) recoveries and transitional net income attributed to participating policyholders and NCI; and core DOE line items for core net insurance service result, core net investment result, other core earnings, and core income tax (expenses) recoveries.
- **New non-GAAP ratios:** expenditure efficiency ratio with its component non-GAAP financial measures: total expenditures and core expenditures (for 2022 and 2023 quarterly and full year results only); and adjusted book value per common share.
- **Revised definitions of non-GAAP and other financial measures:** core earnings; expense efficiency ratio with its new component non-GAAP financial measures: total expenses and core expenses; consolidated capital; and financial leverage ratio.

Profitability

Profitability

As at and for the years ended December 31,
(\$ millions, unless otherwise stated)

	2023	2022 Transitional
Net income (loss) attributed to shareholders ⁽¹⁾	\$ 5,103	\$ 3,498
Return on common shareholders' equity (“ROE”) ⁽¹⁾	11.9%	8.2%
Diluted earnings (loss) per common share (\$) ⁽¹⁾	\$ 2.61	\$ 1.69

As at and for the years ended December 31,
(\$ millions, unless otherwise stated)

	2023	2022
Net income (loss) attributed to shareholders ⁽¹⁾	\$ 5,103	\$ (1,933)
Core earnings ⁽²⁾	\$ 6,684	\$ 5,801
Diluted earnings (loss) per common share (\$)	\$ 2.61	\$ (1.15)
Diluted core earnings per common share (“Core EPS”) ⁽³⁾	\$ 3.47	\$ 2.90
ROE	11.9%	(5.5)%
Core return on shareholders' equity (“Core ROE”) ⁽³⁾	15.9%	14.0%
Expense efficiency ratio ⁽³⁾	45.5%	45.7%
Expenditure efficiency ratio ⁽³⁾	52.2%	52.8%
General expenses	\$ 4,330	\$ 3,731
Core expenses ⁽²⁾	\$ 6,550	\$ 5,762
Core expenditures ⁽²⁾	\$ 8,571	\$ 7,671

⁽¹⁾ 2022 results for transitional net income attributed to shareholders, transitional diluted earnings per common share and transitional ROE are adjusted to include IFRS 9 hedge accounting and expected credit loss principles (“IFRS 9 transitional impacts”). See “Implementation of IFRS 17 and IFRS 9” above for more information. For 2023, there are no IFRS 9 transitional adjustments as ECL and hedge accounting is effective January 1, 2023 and therefore the impact is included in net income attributed to shareholders.

⁽²⁾ This item is a non-GAAP financial measure. See “Non-GAAP and Other Financial Measures” below for more information.

⁽³⁾ This item is a non-GAAP ratio. See “Non-GAAP and Other Financial Measures” below for more information.

Our net income attributed to shareholders was \$5.1 billion in 2023 compared with a net loss attributed to shareholders of \$1.9 billion in 2022 and transitional net income attributed to shareholders of \$3.5 billion in 2022. The 2022 transitional net income attributed to shareholders includes \$5.4 billion of IFRS 9 transitional impacts. Net income attributed to shareholders is comprised of core earnings (consisting of items we believe reflect the underlying earnings capacity of the business), which amounted to \$6.7 billion in 2023 compared with \$5.8 billion in 2022, and items excluded from core earnings of \$1.6 billion of net charges in 2023 compared with a net charge of \$7.7 billion in 2022. Items excluded from core earnings in 2022 on a transitional basis amounted to a net charge of \$2.3 billion.

The \$1.6 billion increase in net income attributed to shareholders in 2023 compared with the transitional net income attributed to shareholders in 2022 was primarily driven by growth in core earnings and a smaller net charge from market experience. The net charge from market experience in 2023 was primarily related to lower-than-expected returns (including fair value changes) relative to long-term assumptions on alternative long-duration assets (“ALDA”) mainly related to real estate, private equity and energy, as well as a charge from derivatives and hedge accounting ineffectiveness. Net income attributed to shareholders in 2023 increased by \$7.0 billion compared with 2022, driven by the factors noted above and the \$5.4 billion of IFRS 9 transitional impacts (transitional impacts are geography-related and do not impact total shareholders' equity as the corresponding offset is in other comprehensive income).

In 2023, core earnings increased \$0.9 billion or 13%¹ on a constant exchange rate basis compared with 2022. The increase was driven by an increase in expected investment earnings related to higher investment yields and business growth, gains in our P&C Reinsurance business from updates to prior years' hurricane provisions of \$95 million in 2023 compared with a charge of \$256 million in 2022 including Hurricane Ian, improved insurance experience reflecting more favourable experience in Canada and improved, although unfavourable, experience in the U.S., and higher returns on surplus assets net of higher cost of debt financing. These were partially offset by higher performance-related costs in Corporate and Other and Global WAM, and higher investments in technology, an increase in the

¹ Percentage growth / declines in core earnings, pre-tax core earnings, total expenses, core expenses, total expenditures, core expenditures, general expenses, contractual service margin net of NCI, new business CSM, assets under management and administration, assets under management, core EBITDA, and Manulife Bank average net lending assets are stated on a constant exchange rate basis, a non-GAAP ratio. See “Non-GAAP and Other Financial Measures” below for more information.

2023 ECL provision, and lower expected earnings on insurance contracts due to a slower contractual service margin (“CSM”) amortization on certain variable fee approach (“VFA”) contracts and the impact of the 2022 U.S. variable annuity reinsurance transactions, partially offset by the net impact of updates to actuarial methods and assumptions and business growth in Canada. In addition, 2023 core earnings benefited from growth in Global WAM’s net fee income, from higher fee spreads and average assets under management and administration (“average AUMA”)¹, as well as higher performance fees in Institutional Asset Management, partially offset by lower earnings from its seed capital investments due to repatriations. Actions to improve the capital efficiency of our legacy business resulted in \$29 million lower core earnings in 2023 compared with 2022.

Core earnings by segment is presented in the following table. See Asia, Canada, U.S., and Global WAM sections below.

For the years ended December 31, (\$ millions)	2023	2022	% change ⁽¹⁾ 2023 vs 2022
Core earnings by segment⁽²⁾			
Asia	\$ 2,048	\$ 1,812	13%
Canada	1,487	1,387	7%
U.S.	1,759	1,566	12%
Global Wealth and Asset Management	1,321	1,299	2%
Corporate and Other	69	(263)	-
Total core earnings	\$ 6,684	\$ 5,801	15%

⁽¹⁾ Percentage change is on an actual exchange rate basis.

⁽²⁾ Effective January 1, 2023, we have made a number of changes to the composition of reporting segments to better align our financial reporting with our business strategy and operations. Our international high net worth business was reclassified from the U.S. segment to the Asia segment to reflect the contributions of our Bermuda operations alongside the high net worth business that we report in our Singapore and Hong Kong operations. Our investment in the start-up capital of segregated and mutual funds, and investment-related revenue and expense were reclassified from the Corporate and Other segment to the Global WAM segment to more closely align with Global WAM’s management practices. Refinements were made to the allocations of corporate overhead and interest on surplus among segments. Prior period comparative information has been restated to reflect the changes in segment reporting.

The table below presents transitional net income attributed to shareholders and net income attributed to shareholders consisting of core earnings and items excluded from core earnings.

For the years ended December 31, (\$ millions)	2023	2022
Core earnings	\$ 6,684	\$ 5,801
Items excluded from core earnings:		
Market experience gains (losses) ⁽¹⁾	(1,790)	(2,585)
<i>Realized gains (losses) on debt instruments</i>	(130)	(1,161)
<i>Derivatives and hedge accounting ineffectiveness</i>	(152)	267
<i>Actual less expected long-term returns on public equity</i>	103	(1,291)
<i>Actual less expected long-term returns on ALDA</i>	(1,623)	(32)
<i>Other investment results</i>	12	(368)
Changes in actuarial methods and assumptions that flow directly through income ⁽²⁾	105	26
Restructuring charge ⁽³⁾	(36)	-
Reinsurance transactions, tax-related items and other ⁽⁴⁾	140	256
Total items excluded from core earnings	(1,581)	(2,303)
Transitional net income attributed to shareholders	\$ n/a	\$ 3,498
Less: IFRS 9 transitional impacts:		
Change in expected credit loss		(35)
Hedge accounting		7,356
Total IFRS 9 transitional impacts (pre-tax)		7,321
Tax on IFRS 9 transitional impacts		(1,890)
Total IFRS 9 transitional impacts (post-tax)		5,431
Net income (loss) attributed to shareholders	\$ 5,103	\$ (1,933)

⁽¹⁾ Market experience was a net charge of \$1,790 million in 2023 primarily driven by lower-than-expected returns (including fair value changes) relative to long-term assumptions on ALDA mainly related to real estate, private equity and energy, a net charge from derivatives and hedge accounting ineffectiveness, as well as net realized losses from the sale of debt instruments which are classified as fair value through other comprehensive income (“FVOCI”) partially offset by gains from higher-than-expected returns relative to long-term assumptions on public equity. Market experience was a net charge of \$2,585 million in 2022 consisting of lower-than-expected returns relative to long-term assumptions on public equity, net realized losses from the sale of debt instruments which are classified as FVOCI, and a net loss from changes in foreign currency exchange rates, partially offset by a net gain on derivatives and hedge accounting ineffectiveness. A modest net charge from ALDA was driven by lower-than-expected returns (including fair value changes) relative to long-term assumptions on real estate, partially offset by private equity.

⁽²⁾ See “Critical Actuarial and Accounting Policies – Review of Actuarial Methods and Assumptions” section below for further information on the 2023 and the 2022 net gain.

⁽³⁾ In the fourth quarter of 2023 (“4Q23”) we reported a restructuring charge of \$36 million post-tax (\$46 million pre-tax) in Global WAM.

⁽⁴⁾ In 2023, the net gain of \$140 million included a one-time tax benefit of \$290 million. This was partially offset by \$46 million related to a provision for the cancellation of certain policies in our Vietnam operations, other tax related net true-ups of \$39 million, a \$38 million charge for an investment impairment in Asia and a charge of \$33 million related to legal settlements in the U.S. In 2022, the net gain of \$256 million consisted of tax benefits of \$269 million as a result of an increase in the Canadian corporate tax rate, and a net gain of \$86 million related to acquiring full ownership interest of Manulife Fund Management Co., Ltd. (“MFM”), partially offset by a charge of \$71 million related to withholding tax on anticipated remittances resulting from the U.S. variable annuity reinsurance transaction, a charge of \$15 million resulting from actuarial model adjustments in Asia, and a \$13 million increase to an existing legal provision in the U.S.

¹ For more information on this metric, see “Non-GAAP and Other Financial Measures” below.

Transitional net income attributed to shareholders by segment and net income attributed to shareholders by segment is presented in the following tables. See Asia, Canada, U.S., and Global WAM sections below.

For the years ended December 31, (\$ millions)	2023	2022 Transitional	% change ⁽¹⁾ 2023 vs 2022 Transitional
Transitional net income (loss) attributed to shareholders by segment⁽²⁾			
Asia	\$ 1,348	\$ 647	108%
Canada	1,191	1,198	(1)%
U.S.	639	1,448	(56)%
Global Wealth and Asset Management	1,297	1,121	16%
Corporate and Other	628	(916)	–
Total transitional net income (loss) attributed to shareholders	\$ 5,103	\$ 3,498	46%

For the years ended December 31, (\$ millions)	2023	2022	% change ⁽¹⁾ 2023 vs 2022
Net income (loss) attributed to shareholders by segment⁽²⁾			
Asia	\$ 1,348	\$ 683	97%
Canada	1,191	(503)	–
U.S.	639	(2,316)	–
Global Wealth and Asset Management	1,297	1,121	16%
Corporate and Other	628	(918)	–
Total net income (loss) attributed to shareholders	\$ 5,103	\$ (1,933)	–

⁽¹⁾ Percentage change is on an actual exchange rate basis.

⁽²⁾ Effective January 1, 2023, we have made a number of changes to the composition of reporting segments to better align our financial reporting with our business strategy and operations. Our international high net worth business was reclassified from the U.S. segment to the Asia segment to reflect the contributions of our Bermuda operations alongside the high net worth business that we report in our Singapore and Hong Kong operations. Our investment in the start-up capital of segregated and mutual funds, and investment-related revenue and expense were reclassified from the Corporate and Other segment to the Global WAM segment to more closely align with Global WAM's management practices. Refinements were made to the allocations of corporate overhead and interest on surplus among segments. Prior period comparative information has been restated to reflect the changes in segment reporting.

Diluted earnings (loss) per common share (“EPS”) was \$2.61 in 2023, compared with \$(1.15) in 2022 and a transitional diluted earnings per common share of \$1.69 in 2022. The increase compared with 2022 diluted EPS and 2022 transitional diluted EPS is primarily related to the increase in net income attributed to common shareholders. Diluted core earnings per common share was \$3.47 in 2023, compared with \$2.90 in 2022 primarily related to the increase in core earnings. The diluted weighted average common shares outstanding was 1,838 million in 2023 and 1,913 million in 2022.

Return on common shareholders’ equity (“ROE”) for 2023 was 11.9%, compared with (5.5)% for 2022 and a transitional ROE of 8.2% in 2022. The increase in ROE reflects higher net income attributed to common shareholders in 2023 compared with a net loss attributed to common shareholders in 2022, and the increase in ROE in 2023 compared with transitional ROE in 2022 is primarily due to higher net income attributed to common shareholders. The core return on common shareholders’ equity (“core ROE”) was 15.9% in 2023 compared with 14.0% in 2022. The increase in 2023 core ROE was primarily driven by an increase in common shareholders’ core earnings.

Expenditure efficiency ratio and expense efficiency ratio

In 2018 we introduced our strategic priority of expense efficiency.

The expense efficiency ratio is a financial measure which we use to measure progress on this priority. The expense efficiency ratio reflects only those expenses that flow directly through core earnings (“core expenses”). Due to changes introduced by IFRS 17, certain costs that are directly attributable to acquire new business are capitalized into the CSM instead of directly flowing through core earnings and are now excluded from the ratio.

To provide a reference point to our expense efficiency ratio prior to the adoption of IFRS 17, we are temporarily introducing an additional efficiency ratio, the expenditure efficiency ratio, for 2022 and 2023 only, which captures all expenses, including costs that are directly attributable to the acquisition of new business (“core expenditures”).

The **expenditure efficiency ratio** was 52.2% in 2023, compared with 52.8% in 2022. The 0.6 percentage point decrease in the ratio compared with 2022 was driven by a 12% increase in pre-tax core earnings¹, partially offset by a 10% increase in core expenditures. 2023 core expenditures increased as a result of higher performance-related costs, investments in technology, higher distribution costs reflecting stronger top-line growth, additional expenses related to the impact of now consolidating 100% of MFM and higher travel and return to pre-pandemic activities. Costs directly attributable to the acquisition of new business that are capitalized into the CSM represented approximately 24% and 25% of total core expenditures in 2023 and 2022, respectively.

¹ This item is a non-GAAP financial measure. See “Non-GAAP and Other Financial Measures” below for more information.

The **expense efficiency ratio** was 45.5% in 2023, compared with 45.7% in 2022. The 0.2 percentage point decrease in the ratio compared with 2022 was driven by the items noted above related to the decrease in the expenditure efficiency ratio excluding those costs that are directly attributable to the acquisition of new business which are reflected in the CSM under IFRS 17.

Total 2023 general expenses increased 16% on an actual exchange rate basis and 14% on a constant exchange rate basis compared with 2022 driven by the items noted above related to the decrease in the expenditure efficiency ratio and items excluded from core earnings. General expenses excluded from core earnings consisted primarily of a true-up of an existing legal provision and a restructuring charge in Global WAM in 2023 compared with a true-up of an existing legal provision and acquisition and integration expenses in 2022. General expenses are also net of directly attributable maintenance expenses and directly attributable acquisition expenses for products measured using the premium allocation approach (“PAA”) which are included in insurance service expenses on our financial statements. Directly attributable maintenance expenses and directly attributable acquisition expenses for products measured using the PAA increased 11% on a constant exchange rate basis and 12% on an actual exchange rate basis in 2023 compared with 2022.

Business Performance

Business performance¹

As at and for the years ended December 31,
(\$ millions, unless otherwise stated)

	2023	2022
Asia APE sales	\$ 4,469	\$ 3,793
Canada APE sales	1,409	1,261
U.S. APE sales	562	599
Total APE sales ⁽¹⁾	6,440	5,653
Asia new business value	1,627	1,537
Canada new business value	490	362
U.S. new business value	207	164
Total new business value ^{(1),(2)}	2,324	2,063
Asia new business CSM ⁽³⁾	1,549	1,309
Canada new business CSM	224	199
U.S. new business CSM	394	387
Total new business CSM ⁽³⁾	2,167	1,895
Asia CSM net of NCI	12,617	9,420
Canada CSM	4,060	3,675
U.S. CSM	3,738	4,136
Corporate and Other CSM	25	52
Total CSM net of NCI	20,440	17,283
Post-tax CSM net of NCI ⁽⁴⁾	17,748	14,659
Global WAM gross flows (\$ billions) ⁽¹⁾	143.4	136.9
Global WAM net flows (\$ billions) ⁽¹⁾	4.5	3.2
Global WAM assets under management and administration (\$ billions) ^{(4),(5)}	849.2	782.3
Global WAM total invested assets (\$ billions)	7.1	5.8
Global WAM segregated funds net assets (\$ billions) ⁽⁵⁾	248.1	224.2
Total assets under management and administration (\$ billions) ⁽⁴⁾	1,388.8	1,301.1
Total invested assets (\$ billions)	417.2	400.1
Total net segregated funds net assets (\$ billions)	377.5	348.6

⁽¹⁾ For more information on this metric, see “Non-GAAP and Other Financial Measures” below.

⁽²⁾ 2022 new business value (“NBV”) has not been restated as a result of the adoption of IFRS 17. The impact of not restating 2022 is not material.

⁽³⁾ New business CSM is net of NCI.

⁽⁴⁾ This item is a non-GAAP financial measure. See “Non-GAAP and Other Financial Measures” below for more information.

⁽⁵⁾ The Global WAM portion of AUMA as at December 31, 2023 was \$849.2 billion, an increase of 11% compared with December 31, 2022, driven by the net favourable impact of interest rate and equity markets and net inflows. The Global WAM segregated funds net assets were \$248.1 billion as at December 31, 2023, an increase of 11% compared with December 31, 2022 on an actual exchange rate basis driven by the net favourable impact of interest rate and equity markets.

Annualized premium equivalent (“APE”) sales were \$6.4 billion in 2023, an increase of 12%² compared with 2022. In Asia, APE sales increased 15% compared with 2022, driven by growth in Hong Kong, mainland China and Singapore, partially offset by a decrease in Vietnam and Japan. The increase was led by demand across various markets in Asia after the lifting of all COVID-19 containment measures in early 2023. In Hong Kong, APE sales increased 58% compared with 2022, reflecting strong growth in our broker, bancassurance and agency channels, primarily driven by a return of demand from mainland Chinese visitor (“MCV”) customers following the reopening of the border between Hong Kong and mainland China. Mainland China APE sales increased 62% compared with 2022, reflecting growth in

¹ Effective January 1, 2023, our international high net worth business was reclassified from the U.S. segment to the Asia segment to reflect the contributions of our Bermuda operations alongside the high net worth business that we report in our Singapore and Hong Kong operations. Prior period comparative information has been restated to reflect the reclassification.

² Percentage growth / declines in APE sales, gross flows and NBV are stated on a constant exchange rate basis.

bancassurance and agency channels. Singapore APE sales were up 4% compared with 2022, reflecting growth in the broker channel. Vietnam APE sales were down 56% compared with 2022, reflecting a decline in agency and bancassurance channels, driven by the industry and macro-economic environment in this market. Japan APE sales decreased 9% compared with 2022, reflecting lower corporate-owned life insurance (“COLI”) and other wealth sales. Other Emerging Markets¹ and International High Net Worth business APE sales were in line with 2022. In Canada, APE sales increased 12% in 2023 compared with 2022, driven by a large affinity markets sale, higher Group Insurance sales in all group benefits markets, partially offset by lower sales of segregated fund products. In the U.S., APE sales were down 10% compared with 2022 due to the adverse impact of higher short-term interest rates on accumulation insurance products for most of 2023, particularly for our affluent customers.

New business value (“NBV”) was \$2.3 billion in 2023, an increase of 10% compared with 2022. In Asia, NBV increased 3% compared with 2022, driven by growth in Hong Kong, mainland China, Japan and our International High Net Worth business, partially offset by lower NBV in Vietnam, Singapore and Other Emerging Markets. In Canada, NBV increased 35% compared with 2022, driven by higher sales volumes in Individual Insurance and Group Insurance and higher margins in Group Insurance and Annuities, partially offset by lower segregated funds sales. In the U.S., NBV increased 21% compared with 2022, primarily due to pricing actions, product mix and higher interest rates, partially offset by lower sales volumes.

New business contractual service margin (“New business CSM”) was \$2,167 million in 2023, an increase of 12% compared with 2022. Asia new business CSM increased 16% in 2023 compared with 2022, reflecting growth in Hong Kong, mainland China, Singapore, the International High Net Worth business and Other Emerging Markets, partially offset by decreases in Vietnam and Japan. In Canada, new business CSM increased 13% compared with 2022, driven by higher margins in Individual Insurance and Annuities, partially offset by lower sales volumes in Annuities. Under IFRS 17, the majority of Group Insurance and affinity products are classified as premium allocation approach and do not generate CSM. In the U.S., new business CSM decreased 2% compared with 2022 driven by lower sales volumes, partially offset by pricing actions.

The contractual service margin (“CSM”) net of NCI was \$20,440 million as at December 31, 2023, an increase of \$3,157 million or 21% compared with December 31, 2022. The increase in CSM net of NCI reflects an increase in total CSM movement of \$3,324 million, net of an increase in NCI of \$167 million. Organic CSM movement was an increase of \$890 million or 5%² in 2023, driven by the impact of new insurance business and expected movements related to finance income or expenses, partially offset by amounts recognized for service provided in 2023 earnings and a net reduction from insurance experience. Inorganic CSM movement was an increase of \$2,434 million in 2023, primarily driven by changes in actuarial methods and assumptions that adjust the CSM, partially offset by changes in foreign currency exchange rates.

Global WAM gross flows of \$143.4 billion increased \$6.5 billion or 2% compared with 2022, primarily driven by higher gross flows in Institutional Asset Management and Retirement, partially offset by lower gross flows in Retail. See “Global Wealth and Asset Management” section below for further details.

Global WAM net inflows were \$4.5 billion in 2023, compared with net inflows of \$3.2 billion in 2022. Net outflows in Retirement were \$4.0 billion in 2023, compared with net outflows of \$0.1 billion in 2022, driven by large case pension plan redemptions by a single sponsor in the U.S. in the third quarter of 2023 (“3Q23”) and 4Q23. This was partially offset by growth in member contributions. Net outflows in Retail were \$0.5 billion in 2023, compared with net outflows of \$1.6 billion in 2022, driven by lower mutual fund redemption rates and the launch of our Global Semiconductors strategy in Japan in 3Q23. This was partially offset by lower demand as investors continued to favour short-term cash and money market instruments amid market volatility and higher interest rates. Net inflows in Institutional Asset Management were \$9.0 billion in 2023, compared with net inflows of \$4.9 billion in 2022, driven by higher net inflows in timberland, real estate, private equity and credit mandates, and the impact of acquiring full ownership of MFM in 4Q22³, as well as new institutional product launches totaling \$1.6 billion in 2023.

Assets under Management and Administration (“AUMA”)

AUMA as at December 31, 2023 was \$1.4 trillion, an increase of 9% compared with December 31, 2022, primarily due to the favourable impact of markets and net inflows. Total invested assets and segregated funds net assets increased 4% and 8%, respectively, on an actual exchange rate basis, primarily due to the net impact of interest rate and equity markets.

Assets under Management and Administration

As at December 31,
(\$ millions)

	2023	2022
Total invested assets	\$ 417,210	\$ 400,142
Segregated funds net assets ⁽¹⁾	377,544	348,562
Mutual funds, institutional asset management and other ^{(1),(2)}	411,961	381,630
Total assets under management	1,206,715	1,130,334
Other assets under administration	182,046	170,768
Total assets under management and administration	\$ 1,388,761	\$ 1,301,102

⁽¹⁾ These assets are not available to satisfy the liabilities of the Company's general fund.

⁽²⁾ Other funds represent pension funds, pooled funds, endowment funds and other institutional funds managed by the Company on behalf of others.

¹ Other Emerging Markets includes Indonesia, the Philippines, Malaysia, Thailand, Cambodia and Myanmar.

² Percentage growth / decline in organic CSM is stated on a constant exchange rate basis.

³ Manulife Fund Management (“MFM”) was formerly known as Manulife TEDA Fund Management Co., Ltd (“MTEDA”). In 4Q22, we acquired full ownership of MTEDA by purchasing the remaining 51% of the shares from our joint venture partner. In 2023, we report 100% of the gross and net flows from MFM, compared with reporting only 49% of the joint venture's gross and net flows in 2022.

Financial Strength

Financial strength metrics

As at and for the years ended December 31,
(\$ millions, unless otherwise stated)

	2023	2022
MLI's LICAT ratio ⁽¹⁾	137%	131%
Financial leverage ratio ⁽²⁾	24.3%	25.1%
Consolidated capital (\$ billions) ⁽³⁾	\$ 73.9	\$ 69.6
Book value per common share (\$)	\$ 22.36	\$ 21.56
Adjusted book value per common share (\$) ⁽²⁾	\$ 32.19	\$ 29.42

⁽¹⁾ This item is disclosed under the Office of the Superintendent of Financial Institutions ("OSFI") Life Insurance Capital Adequacy Test Public Disclosure Requirements guideline. The comparative 2022 LICAT ratio is as reported in 2022 and has not been restated for the implementation of IFRS 17.

⁽²⁾ This item is a non-GAAP ratio. See "Non-GAAP and Other Financial Measures" below for more information.

⁽³⁾ This item is a capital management measure. For more information on this metric, see "Non-GAAP and Other Financial Measures" below.

The Life Insurance Capital Adequacy Test ("LICAT") ratio for MLI was 137% as at December 31, 2023, compared with 131% as at December 31, 2022. The six percentage point increase from December 31, 2022 was primarily driven by the transition to the IFRS 17 accounting basis. Other positive movements included earnings and capital initiatives, partially offset by the capital impacts of market movements, capital market actions and shareholder dividends.

MFC's financial leverage ratio¹ as at December 31, 2023 was 24.3%, a decrease of 0.8 percentage points from 25.1% as at December 31, 2022. The decrease in the ratio was driven by higher post-tax CSM and an increase in total equity, partially offset by the net issuance of subordinated debt². The increase in total equity was due to growth in retained earnings, partially offset by common share buybacks.

MFC's consolidated capital¹ was \$73.9 billion as at December 31, 2023, an increase of \$4.3 billion compared with \$69.6 billion as at December 31, 2022. The increase was driven by higher post-tax CSM, an increase in total equity, and the net issuance of subordinated debt². The increase in total equity was due to growth in retained earnings, partially offset by common share buybacks.

Remittances³ were \$5.5 billion in 2023 of which Asia and U.S. operations delivered \$1.7 billion and \$1.5 billion, respectively. Remittances in 2023 decreased by \$1.4 billion compared with 2022 as prior year remittances benefited from the U.S. variable annuity transaction. Refer to "Remittance of Capital" below for more information.

Cash and cash equivalents and marketable securities⁴ were \$250.7 billion as at December 31, 2023 compared with \$241.1 billion as at December 31, 2022. The increase of \$9.6 billion was primarily driven by the higher market value of fixed income instruments due to interest rate movement and an increase in the market value of public equities due to higher equity markets. Refer to "Liquidity Risk Management Strategy" below for more information.

Book value per common share as at December 31, 2023 was \$22.36, a 4% increase compared with \$21.56 as at December 31, 2022. The number of common shares outstanding was 1,806 million as at December 31, 2023, a decrease of 59 million common shares from 1,865 million as at December 31, 2022, primarily due to common share buybacks.

Adjusted book value per common share as at December 31, 2023 was \$32.19, a 9% increase compared with \$29.42 as at December 31, 2022, driven by an increase in adjusted book value⁵ and a lower number of common shares outstanding. Adjusted book value increased \$3.3 billion due to an increase in post-tax CSM and growth in common shareholder's equity. The increase in common shareholder's equity reflects the growth in retained earnings, partially offset by common share buybacks.

Impact of Foreign Currency Exchange Rates

We have worldwide operations, including in Canada, the United States and various markets in Asia, and generate revenues and incur expenses in local currencies in these jurisdictions, all of which are translated into Canadian dollars. The bulk of our exposure to foreign currency exchange rates is to movements in the U.S. dollar.

¹ Effective January 1, 2022, the calculation of financial leverage ratio and consolidated capital now includes the impact of post-tax CSM. See "Non-GAAP and Other Financial Measures" below for more information.

² The net issuance of subordinated debt consists of the issuance of \$1.2 billion in the first quarter of 2023 and the redemption of \$0.6 billion in the second quarter of 2023.

³ For more information on this metric, see "Non-GAAP and Other Financial Measures" below.

⁴ Includes cash & cash equivalents, comprised of cash on deposit, Canadian and U.S. Treasury Bills and high quality short-term investments, and marketable assets, comprised of investment grade government and agency bonds, investment grade corporate bonds, investment grade securitized instruments, publicly traded common stocks and preferred shares.

⁵ This item is a non-GAAP financial measure. See "Non-GAAP and Other Financial Measures" below for more information.

Items impacting our Consolidated Statements of Income are translated to Canadian dollars using average exchange rates for the respective quarterly period. For items impacting our Consolidated Statements of Financial Position, period end rates are used for currency translation purposes. The following table provides the most relevant foreign currency exchange rates for 2023 and 2022.

Exchange rate	Quarterly					Full Year	
	4Q23	3Q23	2Q23	1Q23	4Q22	2023	2022
Average ⁽¹⁾							
U.S. dollar	1.3612	1.3411	1.3430	1.3524	1.3575	1.3494	1.3015
Japanese yen	0.0092	0.0093	0.0098	0.0102	0.0096	0.0096	0.0099
Hong Kong dollar	0.1742	0.1714	0.1713	0.1726	0.1736	0.1724	0.1662
Period end							
U.S. dollar	1.3186	1.3520	1.3233	1.3534	1.3549	1.3186	1.3549
Japanese yen	0.0094	0.0091	0.0092	0.0102	0.0103	0.0094	0.0103
Hong Kong dollar	0.1689	0.1726	0.1689	0.1724	0.1736	0.1689	0.1736

⁽¹⁾ Average rates for the quarter are from Bank of Canada which are applied against Consolidated Statements of Income items for each period. Average rate for the full year is a 4-point average of the quarterly average rates.




Net income attributed to shareholders, transitional net income attributed to shareholders and core earnings from the Company's foreign operations are translated to Canadian dollars, and in general, our net income attributed to shareholders, transitional net income attributed to shareholders and core earnings benefit from a weakening Canadian dollar and are adversely affected by a strengthening Canadian dollar. However, in a period of net losses in foreign operations, the weakening of the Canadian dollar has the effect of increasing the losses. The relative impact of foreign currency exchange in any given period is driven by the movement of currency rates as well as the proportion of earnings generated in our foreign operations.

Changes in foreign currency exchange rates increased core earnings by \$136 million in 2023 compared with the same period of 2022, due to a weaker Canadian dollar compared with the U.S. dollar. The impact of foreign currency exchange rates on items excluded from core earnings does not provide relevant information given the nature of these items.

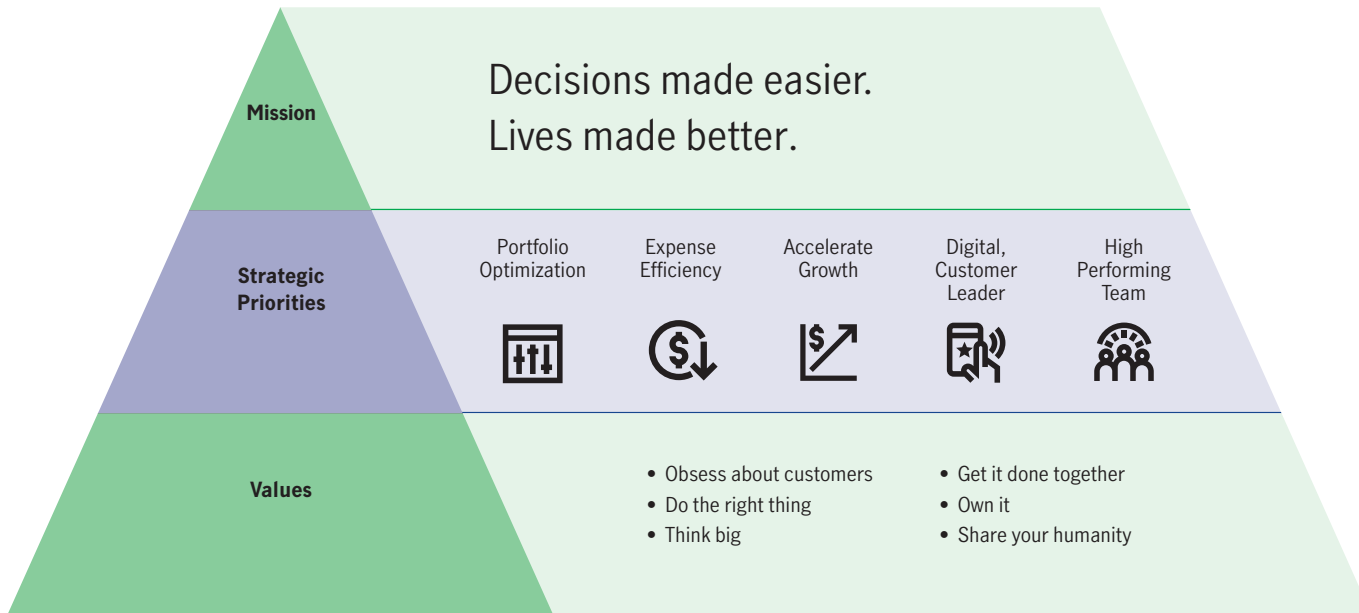
Strategic Priorities Progress Update

Strategy

Our ambition is to be the most digital, customer-centric global company in our industry. The goals for our stakeholders are:

-  **Customers**
Improve Net Promoter Score (“NPS”) by +36 points and delight customers¹
-  **Employees**
Engage our employees — maintain top quartile engagement²
-  **Shareholders**
Deliver top quartile returns³

Our mission, strategic priorities and values are summarized below:



Our values enable the achievement of our mission and strategic priorities, reflect our culture, inform our behaviours, and help define how we work together:

- Obsess about customers – Predict their needs and do everything in our power to satisfy them.
- Do the right thing – Act with integrity and do what we say.
- Think big – Anything is possible. We can always find a better way.
- Get it done together – We’re surrounded by an amazing team. Do it better by working together.
- Own it – Feel empowered to make decisions and take action to deliver our mission.
- Share your humanity – Build a supportive, diverse and thriving workplace.

¹ As compared to a baseline of 1 in 2017. 2023 results are discussed in the “Strategic Priorities” section below.

² Top quartile employee engagement compared to global financial services companies and insurance peers. 2023 results are discussed in the “Strategic Priorities” section below.

³ MFC’s Total Shareholder Return was 67th percentile compared with our performance peer group for the five-year period ended December 31, 2023. Please refer to Manulife’s most recent Management Information Circular for more information on our performance peer group.

Strategic Priorities

Our strategy is underpinned by five strategic priorities which we introduced in 2018, and we have made substantial progress on the ambitious targets that we set for ourselves.

Accelerate Growth	
We strive to increase the core earnings contribution from our highest potential businesses ¹ and the Asia region (our Asia segment and Asia wealth and asset management (“Asia WAM”)).	
Focus areas:	
<ul style="list-style-type: none"> • Execute on organic and inorganic growth opportunities in Asia and Global WAM • Leverage global footprint and business diversity to allocate capital and resources to higher growth opportunities • Expand North American behavioural insurance offerings to provide innovative solutions and support positive health for customers • Drive new business growth and persistency in group benefits in Canada 	

	2023	2022	Baseline 2017 (IFRS 4) ³	Targets ² 2025
Core earnings from highest potential businesses	60%	61%	54%	75%
Core earnings from Asia region	37%	37%	36%	50%

In 2023, 60% of core earnings were generated from our highest potential businesses compared with 61% in 2022, as the increase in core earnings from highest potential businesses was mostly in line with the increase in total company core earnings.

Since 2017, these businesses have been supported by a strong execution track record against our strategic priorities, coupled with robust inorganic growth opportunities in Asia and Global WAM markets. Our position as the third largest Pan-Asian life insurer, a scalable Global WAM platform that enables an integrated operating model and distribution capabilities, and greater demand for our North American behavioural insurance products reinforced this growth. Looking forward, we will continue to drive momentum through a strong and professional agency force, successful bancassurance partnerships, transformational digital offerings, and strategic expansion into high-potential markets in Asia.

In addition, inorganic optimization actions to transform our portfolio will further shift our focus and business mix towards our highest-potential businesses. In December 2023, we entered into an agreement with Global Atlantic to reinsure a combined \$13 billion⁴ of insurance and investment contract net liabilities across four in-force blocks of legacy and low ROE business. The blocks include portions of U.S. LTC, U.S. structured settlements, and two Japan whole life products; the transaction is expected to close by the end of February 2024.²

Asia segment core earnings in 2023 increased 11% compared with 2022 after adjusting for the impact of changes in foreign currency exchange rates, primarily reflecting higher investment yields and business growth, as well as the net impact of updates to actuarial methods and assumptions on our CSM and risk adjustment. Due to an uneven recovery following the pandemic, a challenging macroeconomic environment, and the conversion to IFRS 17 which defers the recognition of new business into CSM, we are extending our 2025 target of Asia region’s 50% contribution to total company core earnings, to 2027.² Asia contributed to over 60%⁵ of the total company CSM balance as at December 31, 2023 and over 70%⁵ of the total company increase in CSM from new business in 2023, demonstrating that accelerating growth is at the heart of our ambition and our commitment to delivering 50% of total company core earnings from the Asia region.

Global WAM core earnings increased \$22 million, a decline of 1% compared with 2022 on a constant exchange rate basis, reflecting an increase in performance-related costs and lower earnings from seed capital investments due to repatriations were offset by growth in net fee income, from higher fee spreads and average AUMA, as well as higher performance fees in Institutional Asset Management, and a lower effective tax rate in 2023.

Canada group insurance core earnings in 2023 benefited from more favourable insurance experience, business growth, and higher expected investment earnings from higher yields and business growth.

We continue to innovate and scale our behavioural insurance offerings in North America.

Confidence in the strength of our diverse, global franchise, balance sheet and financial flexibility position us well to capitalize on attractive opportunities for our highest potential businesses.

¹ Highest potential businesses include Asia segment, Global WAM, Canada group benefits and North American behavioural insurance products.

² See “Caution regarding forward-looking statements” above.

³ 2017 core earnings is a non-GAAP financial measure. See “Non-GAAP and Other Financial Measures” below.

⁴ Insurance and investment contract net liabilities amounts are as at September 30, 2023.

⁵ CSM closing balance and 2023 new business recognized into CSM are net of non-controlling interests (pre-tax).

2023 Highlights

- In Asia:
 - Continued to enhance our MCV capabilities to complement our prominent domestic franchise in Hong Kong with the support from the launch of an expanded hospital network covering more than 3,000 hospitals in mainland China and the opening of our second prestige service centre in Hong Kong. Our continued investments in MCV capabilities have contributed to robust MCV APE sales in 2023, more than double that of our 2019 pre-pandemic levels; and
 - Continued to drive agency productivity and professionalization across the region, with the initial roll out of Manulife Pro in Singapore and Vietnam, a comprehensive premier recognition and activation program, providing selected agents with differentiated resources and tools, including dedicated underwriting support and enhanced customer engagement services with access to customer leads.
- In Global WAM:
 - Entered an agreement to acquire multi-sector alternative credit manager CQS, headquartered in London. The acquisition will give MIM and CQS clients enhanced access to our combined global investment solutions. We will retain CQS's rigorous investment philosophy and process and bring its differentiated capabilities to new investors by leveraging our global footprint. The CQS credit platform has approximately \$18.8 billion in assets under management as of October 31, 2023, and the transaction is expected to close in the first half of 2024 subject to customary closing conditions and regulatory approvals; and
 - Continued to meet investor needs for wealth solutions through the expansion of our product offerings with the launch of the Global Semiconductors strategy in Japan Asia Retail which garnered more than \$0.8 billion in net flows since its launch in 3Q23.
- In Canada:
 - Partnered with League, a leading healthcare technology provider, to offer our group benefits members more personalized and integrated digital healthcare experiences, enabling them to connect their benefits directly with healthcare options; and
 - Partnered with Cleveland Clinic Canada, using its global healthcare expertise to enhance product offering and services to over five million group benefits plan members, including their families, by providing industry research, thought leadership, and education materials.
- In the U.S.:
 - Expanded our reach into the employer market by introducing a Premier Benefit Indexed Universal Life product. This permanent life insurance product, available through the workplace, offers a streamlined digital process for employees to purchase individual coverage and includes our John Hancock Vitality PLUS feature;
 - Launched a distribution relationship with JPMorgan Chase & Co. enabling new sales of our suite of products, including our John Hancock Vitality Program, through its network of more than 6,900 advisors; and
 - Enhanced our John Hancock Vitality Program by extending eligibility to access GRAIL's Galleri® multi-cancer early detection test to additional members, expanding eligibility for preventative care and early detection behaviours through annual skin cancer screenings, and introducing a personalized way to incentivize members to be more physically active through a new Active Rewards feature.

Digital, Customer Leader

We strive to continue improving our digital, customer leadership through the NPS and straight-through-processing (“STP”)¹ lens.

Focus areas:

- Harness customer feedback to enhance the experience delivered
- Build differentiated, market-leading priority customer experiences
- Extend customer relationships through value-added advice, and new services in health and wellness
- Drive NPS through a robust NPS system that spans across the customer journey

	2023	2022	Baseline		Targets ²
			2018	2017	2025
Net promoter score	23	20	n/a	1	37
Straight-through-processing (STP)	85%	83%	68%	n/a	88%

We have made significant progress against our NPS ambition, driving a 3-point improvement from 2022 and a 22-point improvement from our 2017 baseline of 1, leading or on par with peers³ across the majority of our business lines. Despite this progress, headwinds experienced in select markets have impacted our momentum, and while we remain committed to digital, customer leadership as a strategic priority, we are extending our 2025 NPS target of 37, to 2027. We are focused on driving customer experience improvements across our business portfolio and progressing our mission to make decisions easier, lives better.

¹ Straight-through processing represents customer interactions that are completely digital, and includes money movement.

² See “Caution regarding forward-looking statements” above.

³ Based on studies conducted in 2023 by IPSOS, a global market research company.

We are making consistent progress on our global STP objective, with a 2 percentage point improvement from 2022 and a 17 percentage point improvement from the 2018 baseline across segments in a variety of areas. In 2023, we continued to invest in digital capabilities through the delivery of multiple technology transformation initiatives across segments, notably the group benefits claims system transformation in Canada, enhancement of websites/portals enabling customer self service capabilities globally, and the launch of targeted campaigns to drive digital adoption globally.

Customer centricity is at the heart of our ambition and we remain focused on achieving our NPS and STP targets of 37 and 88%, respectively.

2023 Highlights

- In Asia:
 - Completed Phase 1 of the policy administration system modernization in mainland China, launching new business and underwriting modules on the new cloud-native solution, together with the seamless data migration of more than three million customers. This enables scale and efficiency, and lays the foundation for improved customer, distributor and partner experience; this milestone will enable faster speed to market through collaborative product development and easier integration with our digital partners' ecosystems;
 - Made it easier for customers to manage their policies through the continued enhancement of our voice bot capabilities at our contact center in Japan, including the migration of our telephony systems to Amazon Connect¹. This has contributed to a year-over-year 13 percentage point increase in 2023 in the proportion of customer-initiated interactions that are handled by interactive voice response system without any human intervention; and
 - Enhanced customer experience at point of sales in Vietnam through the roll-out of a first-in-market digital pre-issuance verification tool, providing customers with an easier way to review their policy before issuance, and ensure that it fully addresses their insurance needs.
- In Global WAM:
 - Continued to enhance and broaden our wealth planning and advice business in Canada Retail through strategic agreements with Fidelity Clearing Canada and Envestnet that will provide access to leading advisory technology and portfolio management platforms, which combined will deliver an enhanced digital client experience and improved advisor productivity;
 - Increased our mobile application user count in Canada Retirement by 38% in 2023 following the delivery of new features (fund switch and TFSA lump sum contributions) and experience enhancements (deep linking and personalized nudges enhancements);
 - Continued to improve "Join Now", our digital enrolment process in Canada Retirement, with features that have enabled us to deploy it to 92% of eligible sponsors, representing an increase of 10% compared with 2022. This contributed to 49,500 new digital enrolments in 2023; and
 - Accelerated customer adoption of digital applications in Canada Retirement through our "Say Goodbye to Paper" campaign which contributed to a 165% increase in members converting to e-statements over the campaign period, which spanned from June to August, and an increase in satisfaction with their digital experience.
- In Canada:
 - Grew our annual Manulife mobile app downloads by 18%, supported by upgrades designed to enhance our customers' digital experience and a successful communication campaign highlighting the ease and speed of online claims submissions;
 - Expanded our Personalized Medicine program to all group benefits extended healthcare plans, making this service available to more customers, while enabling them to learn about medications that best meet their needs and work with healthcare providers on customized treatment plans that can lead to better outcomes; and
 - Increased our use of Amazon Connect¹, which enabled a more holistic digital customer experience and drove operational efficiency. This contributed to a 25% reduction of call transfer rates year over year for contact centres that had moved to Amazon Connect.
- In the U.S.:
 - Optimized the customer registration experience across our customer websites resulting in a 26% increase in online registrations in 2023, contributing to a 19% improvement in unique website traffic;
 - Eliminated over 7.8 million pieces of paper and mail by automating key back-end processes and increasing digital communications, including our first e-delivery of life insurance policy prospectuses; and
 - Enhanced our interactive voice response authentication enabling 29% of inbound calls to be completed with no human interaction.

Expense Efficiency

We remain focused on driving efficient growth by effectively managing expense growth at a rate below the pace of our topline growth, while ensuring outstanding customer experience and digital ways of working.

Focus areas:

- Leverage global scale and operating environment
- Streamline business processes and eliminate activities not valued by end customers
- Continue to sustain a culture of expense efficiency and driving efficient growth

¹ Amazon Connect from Amazon Web Services Inc.

	2023	2022	Baseline	Target ¹
			2017 (IFRS 4) ²	2022 and onwards
Expense efficiency ratio	45.5%	45.7%	55.4%	<50%

We previously delivered on our 2022 target of \$1 billion in expense efficiencies in 2020, two years ahead of schedule. Progress on our expense efficiency ratio compared with the 2017 baseline, reflects a cultural shift throughout the organization that rightsized our expense base by eliminating significant costs and allowing us to be more nimble.

The expense efficiency ratio was 45.5% for 2023, compared with 45.7% in 2022. The 0.2 percentage point decrease in the ratio compared with 2022 was driven by a 12% increase in pre-tax core earnings, offset by a 12% increase in core expenses. Core expenses increased in comparison with 2022 as a result of higher performance-related costs, investments in technology, additional expenses related to the impact of now consolidating 100% of MFM and higher travel and return to pre-pandemic activities.

Expense efficiency continues to be an important lever in our current operating environment, and we remain committed to consistently achieving a ratio of less than 50%.

2023 Highlights

- Continued to improve expense efficiency by lowering unit costs and improving scalability of our operations through:
 - Digitizing to improve automation and straight-through processing;
 - Simplifying and standardizing processes;
 - Optimizing organizational structure;
 - Actively managing third-party spend and procurement; and
 - Rationalizing real estate expenditures.
- Achieved annual savings of approximately \$250 million (pre-tax) in 2023 resulting from the restructuring action in the first half of 2021.

Portfolio Optimization

We will continue to optimize our legacy businesses and reduce the combined contributions from long-term care insurance (“LTC”) and variable annuities (“VA”) businesses.

Focus areas:

- Deliver capital release from legacy or low ROE businesses, including variable annuity, long-term care insurance and select long-duration, guaranteed insurance products
- Optimize portfolio to improve our risk profile and ROE
- Create value for customers and shareholders through in-force management initiatives

	2023	2022	Baseline	Target ¹
			2017 (IFRS 4)	2025
Core earnings contribution from LTC and VA	12%	16%	24%	<15%

We previously achieved our 2022 target to release \$5.0 billion of capital in 2019, three years ahead of schedule, when we reduced the size of our legacy businesses, freed up capital, and improved core ROE through actions such as reinsurance transactions in North America, buy-back programs on guaranteed minimum withdrawal benefit (“GMWB”) blocks, repricing life insurance blocks, and reinsurance renegotiations and recaptures. In 2022, we completed two transactions to reinsure over 80% of our legacy U.S. variable annuity block, releasing \$2.5 billion of capital and significantly reducing our risk. In December 2023, we entered into an agreement with Global Atlantic to reinsure four in-force blocks of legacy or low ROE businesses, including \$6 billion³ of LTC insurance contract net liabilities; in 2024, this transaction is expected to release \$1.2 billion of capital⁴, reducing our risk profile and unlocking significant value for shareholders. With this transaction and other portfolio optimization efforts, we have released over \$10 billion⁴ of capital since 2018.

¹ See “Caution regarding forward-looking statements” above.

² 2017 expense efficiency ratio is a non-GAAP ratio.

³ Insurance contract net liabilities amounts are as at September 30, 2023.

⁴ Pro-forma. Includes \$9 billion of capital release from 2018 to 2022 under IFRS 4, \$0.2 billion from 2023 initiatives under IFRS 17, and an estimated \$1.2 billion capital release under IFRS 17 from this transaction to be recognized in 2024.

In 2023, we achieved our 2025 target of less than 15% of core earnings contribution from LTC and VA, two years ahead of schedule. Contribution to core earnings from these businesses was 12% in 2023, a decrease of 4 percentage points as compared with 2022, primarily driven by core earnings growth in other businesses and lower combined core earnings from LTC and VA. The decrease in combined core earnings from LTC and VA was driven by lower CSM recognized and more unfavourable LTC insurance experience in 2023 compared to 2022. The reinsurance transaction noted above is expected to further reduce the core earnings contribution from LTC and VA by 1 percentage point¹. A dedicated team working exclusively on portfolio optimization, and our proactive, disciplined approach in optimizing the in-force business, are key success factors to these achievements.

We aim to create strategic and financial flexibility to deliver on our Total Shareholder Return objectives by continuing to assess inorganic options, taking into account policyholder considerations and the impacts to our risk profile and ROE. We are also confident in our ability to effectively manage the LTC and VA blocks of business to maturity, most importantly by seeking premium increases for LTC for which we have a strong track record of success¹. We are also investing and leveraging technologies to transform the LTC customer experience, providing significant value to our customers and shareholders.

2023 Highlights

- Entered into an agreement to reinsure \$13 billion² of insurance and investment contract net liabilities:
 - U.S. LTC (\$6 billion), and structured settlements (\$1.6 billion) and two Japan whole life products (\$5.6 billion);
 - In 2024, this transaction is expected to release \$1.2 billion³ of capital;
- Released \$217 million of capital through various other reinsurance optimization opportunities in 2023; and
- In the LTC business, expanded anti-fraud, waste and abuse initiatives, as well as wellness programs, and began buyout offerings while continuing to gain approval on the assumed premium increases.

High Performing Team	
We are committed to enabling a high performing team and maintaining top quartile employee engagement compared to global financial services and insurance peers.	
Focus areas:	
<ul style="list-style-type: none"> • Organizational effectiveness and speed of decision making • Diversity, equity, and inclusion • Developing our talent with differentiated capabilities • Continuing to strengthen our value proposition to attract and retain top talent 	

	2023	2022	Baseline	Target ¹
			2017 ⁴	2022 and onwards
Employee Engagement	1st quartile	1 st quartile	2 nd quartile	1 st quartile

We achieved a top quartile employee engagement rank⁵ in each of 2020, 2021, 2022 and 2023. Our employee engagement score has improved steadily from 2017 to 2022, and in 2023 we have maintained our top quartile position.

Our high performing team has been a key enabler of accomplishments to date, and we remain committed to achieving top quartile employee engagement going forward.

2023 Highlights

- Awarded the Gallup Exceptional Workplace Award, recognizing our focus on engagement and prioritization of the employee experience that creates an authentic, unique culture that empowers our colleague population to do and achieve more;
- Named to Bloomberg's 2023 Gender-Equality Index for the fifth consecutive year, highlighting our commitment to support gender equality through policy development, representation, and transparency;
- Recognized globally across various markets by a number of organizations:
 - By Mediacorp Canada Inc. as one of Canada's Top 100 Employers for the third year in a row, and as one of Canada's Top Employers for Young People in 2023;
 - By Forbes as one of Canada's Best Employers for the seventh consecutive year, one of Canada's Best Employers for Diversity in 2023, and as one of the World's Best Employers for the fourth consecutive year; and,
 - By HR Asia as one of the "Best Companies to work for in Asia 2023" across six of our Asian markets⁶; and

¹ See "Caution regarding forward-looking statements" above.

² Insurance and investment contract net liabilities amounts are as at September 30, 2023.

³ Pro-forma. Estimated capital release under IFRS 17 from this transaction to be recognized in 2024.

⁴ Starting in 2019, engagement surveys were transitioned to the Gallup methodology.

⁵ Based on the annual global employee engagement survey conducted by Gallup. Ranking is measured by the engagement grand mean as compared to Gallup's Finance and Insurance Company level database.

⁶ mainland China, Hong Kong, Malaysia, Vietnam, Indonesia and the Philippines.

- Appointed to the Dow Jones Sustainability North America Index ranking in the 93rd percentile of its GICS[®] Industry Group, as one of only eight insurers across North America to be included in the index overall; this recognition underscores our leading sustainable business practices and proven ability to deliver long-term shareholder value.

Medium-term financial and operating targets¹

Our medium-term financial targets, as communicated in May 2022, remain unchanged:

- Core EPS growth of 10% to 12%;
- Core ROE of 15%+;
- Leverage ratio of 25%;
- Common share core dividend payout ratio² range of 35% to 45%;
- CSM balance growth of 8% to 10% per year; and
- New business CSM growth of 15% per year.

¹ See “Caution regarding forward-looking statements” above.

² This item is a non-GAAP ratio. See “Non-GAAP and Other Financial Measures” below for more information.

2. Asia¹

Our Asia segment is a leading provider of insurance products and insurance-based wealth accumulation products, driven by a customer-centric strategy, and leveraging the asset management expertise and products managed by our Global Wealth and Asset Management segment. Present in many of Asia's largest and fastest growing economies, we are well positioned to capitalize on the attractive underlying demographics of the region, underpinned by a rigorous focus on creating value for our customers, employees and shareholders.

We have insurance operations in 12 markets: Hong Kong, Macau, Japan, Bermuda, mainland China, Singapore, Vietnam, Indonesia, the Philippines, Malaysia, Cambodia, and Myanmar.

We have a diversified multi-channel distribution network, including approximately 98,000 contracted agents and over 100 bank partnerships. We also work with many independent agents, financial advisors, and brokers. Among our bancassurance partnerships we have 10 exclusive partnerships, including a long-term partnership with DBS Bank across Singapore, Hong Kong, mainland China, and Indonesia, and our recently extended partnership with Alliance Bank in Malaysia, that give us access to over 35 million bank customers.

In 2023, our Asia segment contributed 31%² of the Company's core earnings from operating segments and, as at December 31, 2023, accounted for 12% of the Company's assets under management and administration.

Profitability

Asia reported net income attributed to shareholders of \$1,348 million in 2023 compared with net income attributed to shareholders of \$683 million and transitional net income attributed to shareholders of \$647 million in 2022. The 2022 transitional net income attributed to shareholders includes a charge of \$36 million from IFRS 9 transitional impacts. Net income attributed to shareholders is comprised of core earnings, which were \$2,048 million in 2023 compared with \$1,812 million in 2022, and items excluded from core earnings, which amounted to a net charge of \$700 million for 2023 compared with a net charge of \$1,129 million in 2022. Items excluded from core earnings in 2022 on a transitional basis amounted to a net charge of \$1,165 million. See section 13 "Non-GAAP and Other Financial Measures" below, for a reconciliation of core earnings to net income (loss) attributed to shareholders for 2023 and core earnings and transitional net income (loss) attributed to shareholders to net income (loss) attributed to shareholders for 2022. The changes in net income attributed to shareholders and core earnings expressed in Canadian dollars were due to the factors described below and, in addition, the change in core earnings reflected a net \$38 million favourable impact due to changes in various foreign currency exchange rates versus the Canadian dollar.

Expressed in U.S. dollars, the presentation currency of the segment, net income attributed to shareholders was US\$995 million in 2023 compared with net income attributed to shareholders of US\$516 million and transitional net income attributed to shareholders of US\$481 million in 2022. Core earnings were US\$1,518 million in 2023 compared with US\$1,392 million in 2022 and items excluded from core earnings amounted to a net charge of US\$523 million in 2023 compared with a net charge of US\$876 million in 2022. Items excluded from core earnings in 2022 on a transitional basis were a net charge of US\$911 million. Items excluded from core earnings are outlined in the table below.

Core earnings in 2023 increased 11% compared with 2022, after adjusting for the impact of changes in foreign currency exchange rates. The changes in core earnings by geography are primarily due to the following:

- Hong Kong increased 9% driven by improved insurance experience, an increase in expected earnings on insurance contracts, primarily reflecting the net impact of updates to actuarial methods and assumptions on our CSM and risk adjustment partially offset by slower CSM amortization on certain VFA contracts, and higher expected investment income due to business growth;
- Singapore increased 15% driven by favourable insurance experience and an increase in CSM amortization reflecting the impact of updates to actuarial methods and assumptions, partially offset by lower investment results;
- Vietnam increased 23% benefiting from higher investment yields and improved claims experience, partially offset by lower CSM amortization;
- Mainland China increased 77% reflecting higher expected investment income due to business growth, and improved new business results on onerous contracts as a result of product actions;
- Other Emerging Markets increased 15% reflecting higher investment yields;
- Japan increased 8% reflecting higher expected investment income due to higher investment yields and business growth; and
- International High Net Worth business decreased 4% due to modestly unfavourable claims experience, partially offset by an increase in CSM amortization reflecting the impact of updates to actuarial methods and assumptions.

¹ Effective January 1, 2023, we have made a change to the composition of reporting segments to better align our financial reporting with our business strategy and operations. Our international high net worth business was reclassified from the U.S. segment to the Asia segment (in Asia Other) to reflect the contributions of our Bermuda operations alongside the high net worth business that we report in our Singapore and Hong Kong operations. Refinements were made to the allocations of corporate overhead and interest on surplus among segments. Prior period comparative information has been restated to reflect the changes in segment reporting.

² This item is a non-GAAP ratio. See "Non-GAAP and Other Financial Measures" below for more information.

The table below presents net income attributed to shareholders (2023 and 2022) and transitional net income attributed to shareholders (2022) for Asia consisting of core earnings and items excluded from core earnings.

For the years ended December 31, (\$ millions)	Canadian \$		US \$	
	2023	2022	2023	2022
Core earnings	\$ 2,048	\$ 1,812	\$ 1,518	\$ 1,392
Items excluded from core earnings:⁽¹⁾				
Market experience gains (losses)	(553)	(1,141)	(413)	(893)
<i>Realized gains (losses) on debt instruments</i>	(113)	(241)	(83)	(183)
<i>Derivatives and hedge accounting ineffectiveness</i>	(264)	(135)	(197)	(100)
<i>Actual less expected long-term returns on public equity</i>	12	(488)	8	(385)
<i>Actual less expected long-term returns on ALDA</i>	(72)	42	(54)	36
<i>Other investment results</i>	(116)	(319)	(87)	(261)
Changes in actuarial methods and assumptions that flow directly through income	(68)	(9)	(51)	(7)
Reinsurance transactions, tax-related items and other	(79)	(15)	(59)	(11)
Total items excluded from core earnings	(700)	(1,165)	(523)	(911)
Transitional net income attributed to shareholders	n/a	\$ 647	n/a	\$ 481
Less: IFRS 9 transitional impacts:				
Change in expected credit loss		(34)		(26)
Hedge accounting		(80)		(71)
Total IFRS 9 transitional impacts (pre-tax)		(114)		(97)
Tax on IFRS 9 transitional impacts		78		62
Total IFRS 9 transitional impacts (post-tax)		(36)		(35)
Net income (loss) attributed to shareholders	\$ 1,348	\$ 683	\$ 995	\$ 516

⁽¹⁾ For explanations of items excluded from core earnings, see "Items excluded from core earnings" table in the total Company "Profitability" section above.

Business Performance

(All percentages quoted are on a constant exchange rate basis)

APE sales in 2023 were US\$3,313 million in 2023, representing an increase of 15% compared with 2022. APE sales increased in Hong Kong, mainland China, and Singapore, and were partially offset by a decrease in Vietnam and Japan. The increase was led by demand across various markets in Asia after the lifting of all COVID-19 containment measures in early 2023.

In Hong Kong, APE sales were US\$904 million in 2023, a 58% increase compared with 2022, reflecting strong growth in our broker, bancassurance and agency channels, primarily driven by a return of demand from MCV customers following the reopening of the border between Hong Kong and mainland China. Mainland China APE sales were US\$738 million in 2023, a 62% increase compared with 2022, reflecting growth in bancassurance and agency channels. Singapore APE sales were US\$817 million in 2023, a 4% increase compared with 2022, reflecting growth in the broker channel. Vietnam APE sales were US\$147 million in 2023, a 56% decrease compared with 2022, reflecting a decline in agency and bancassurance channels, driven by the industry and macro-economic environment in this market. Japan APE sales were US\$262 million in 2023, a decrease of 9% compared with 2022, reflecting lower COLI and other wealth sales. Other Emerging Markets and International High Net Worth business APE sales in 2023 were in line with 2022.

New business value ("NBV") was US\$1,206 million in 2023, an increase of 3% compared with 2022. NBV was higher in Hong Kong, mainland China, Japan, and our International High Net Worth business, partially offset by lower NBV in Vietnam, Singapore, and Other Emerging Markets.

- In Hong Kong, NBV was US\$538 million in 2023, a 20% increase compared with 2022, reflecting higher sales volumes, partially offset by a higher proportion of lower margin savings products.
- In mainland China, NBV was US\$111 million in 2023, a 139% increase compared with 2022, reflecting higher sales volumes and product mix.
- In Japan, NBV was US\$117 million in 2023, an increase of 22% compared with 2022 due to product mix and management actions, partially offset by lower sales volume.
- NBV of International High Net Worth business was US\$155 million in 2023, an 8% increase compared with 2022 due to product mix.
- In Vietnam, NBV was US\$25 million in 2023, an 86% decrease compared with 2022, reflecting lower sales volumes and the impact of updates to actuarial methods and assumptions.
- In Singapore, NBV was US\$207 million in 2023, a 2% decrease compared with 2022 due to increase in the cost of reinsurance, partially offset by higher sales volumes and product mix.
- NBV of Other Emerging Markets was US\$53 million, a 4% decrease compared with 2022 due to changes in product mix.

The new business value margin (“NBV margin”)¹ was 41.2% in 2023, a decrease of 3.3 percentage points compared with 2022.

New business CSM was US\$1,148 million in 2023, a 16% increase compared with 2022. New business CSM was higher in Hong Kong, mainland China, Singapore, the International High Net Worth business and Other Emerging Markets, partially offset by lower new business CSM in Vietnam and Japan.

- In Hong Kong, new business CSM was US\$501 million in 2023, a 49% increase compared with 2022, reflecting higher sales volumes and the impact of updates to actuarial methods and assumptions, partially offset by higher proportion of lower margin savings products.
- In mainland China, new business CSM was US\$103 million in 2023, a nine-fold increase compared with the US\$10 million reported in 2022, reflecting higher sales volumes, product mix and the impact of updates to actuarial methods and assumptions.
- In Singapore, new business CSM was US\$181 million in 2023, a 21% increase compared with 2022, reflecting higher sales volumes, product mix and the impact of updates to actuarial methods and assumptions.
- New business CSM of International High Net Worth business was US\$172 million in 2023, a 15% increase compared with 2022, reflecting product mix.
- New business CSM of Other Emerging Markets was US\$34 million, a 59% increase compared with 2022, reflecting product mix and the impact of updates to actuarial methods and assumptions.
- In Vietnam, new business CSM was US\$64 million in 2023, a 73% decrease compared with 2022, reflecting lower sales volumes and the impact of updates to actuarial methods and assumptions.
- In Japan, new business CSM was US\$93 million in 2023, a decrease of 7% compared with 2022 due to lower sales volume and model refinements, partially offset by product mix.

CSM net of NCI was US\$9,570 million as at December 31, 2023, an increase of US\$2,760 million net of a US\$141 million increase attributed to NCI compared with December 31, 2022. Organic CSM movement was an increase of US\$537 million in 2023 driven by the impact of new insurance business and expected movements related to finance income or expenses, partially offset by amounts recognized for service provided in 2023 earnings and a net reduction from insurance experience. Inorganic CSM movement was an increase of US\$2,223 million in 2023 largely due to changes in actuarial methods and assumptions that adjust the CSM.

Business Performance

For the years ended December 31, (\$ millions)	Canadian \$		US \$	
	2023	2022	2023	2022
Annualized premium equivalent sales	\$ 4,469	\$ 3,793	\$ 3,313	\$ 2,920
New business value	\$ 1,627	\$ 1,537	\$ 1,206	\$ 1,181
New business contractual service margin net of NCI	\$ 1,549	\$ 1,309	\$ 1,148	\$ 1,006
Contractual service margin net of NCI	\$ 12,617	\$ 9,420	\$ 9,570	\$ 6,951

Assets under Management² (“AUM”)

Asia’s assets under management were US\$128.4 billion as at December 31, 2023, an increase of US\$13.2 billion or 13% compared with December 31, 2022. The increase was driven by lower interest rates and positive equity market performance in 2023 on invested assets and segregated funds net assets, and business growth.

Assets under Management

As at December 31, (\$ millions)	Canadian \$		US \$	
	2023	2022	2023	2022
Total invested assets	\$ 144,433	\$ 132,808	\$ 109,533	\$ 98,007
Segregated funds net assets	24,854	23,227	18,846	17,138
Total assets under management	\$ 169,287	\$ 156,035	\$ 128,379	\$ 115,145

Strategic Highlights

Asia continues to be a core driver of growth for Manulife, supported by a clear strategy, a focus on execution, a strong team, and a diversified footprint in 12 markets. Our growth is underpinned by powerful economic secular trends including middle-class emergence, low insurance penetration and an estimated mortality protection gap of more than US\$100 trillion by 2030³ driving continued demand for financial solutions.

¹ For more information on this metric, see “Non-GAAP and Other Financial Measures” below.

² This item is a non-GAAP financial measure. See “Non-GAAP and Other Financial Measures” below.

³ Closing Asia’s mortality protection gap, Swiss Re, July 2020.

We continued to invest in our diversified distribution platform to accelerate growth. In 2023 we:

- Continued to enhance our MCV capabilities to complement our prominent domestic franchise in Hong Kong with support from the launch of an expanded hospital network covering more than 3,000 hospitals in mainland China and the opening of our second prestige service centre in Hong Kong. Our continued investments in MCV capabilities have contributed to robust MCV APE sales in 2023, more than double that of our 2019 pre-pandemic levels;
- Launched a unified high net worth onboarding platform in Bermuda, Hong Kong, and Singapore. The new platform makes new business application, underwriting and compliance processes simpler and faster, enabling more streamlined interactions and an overall enhanced experience for both our brokers and customers;
- Continued to drive agency productivity and professionalization across the region, with the initial roll out of Manulife Pro in Singapore and Vietnam, a comprehensive premier recognition and activation program, providing selected agents with differentiated resources and tools, including dedicated underwriting support and enhanced customer engagement services with access to customer leads; and
- Further leveraged our exclusive partnership with a general insurer to generate cross-referrals in Hong Kong by promoting our partner's travel insurance solutions, capturing the increased demand for travel post-pandemic. This has provided us with a further opportunity to address the life insurance needs of our customers.

In 2023, we continued to invest in our digital capabilities to enhance the customer and distributor experience.

- Completed Phase 1 of the policy administration system modernization in mainland China, launching new business and underwriting modules on the new cloud-native solution, together with the seamless data migration of more than three million customers. This enables scale and efficiency, and lays the foundation for improved customer, distributor and partner experience; this milestone will enable faster speed to market through collaborative product development and easier integration with our digital partners' ecosystems;
- Made it easier for customers to manage their policies through the continued enhancement of our voice bot capabilities at our contact center in Japan, including the migration of our telephony systems to Amazon Connect¹. This has contributed to a year-over-year 13 percentage point increase in 2023 in the proportion of customer-initiated interactions that are handled by interactive voice response system without any human intervention; and
- Enhanced customer experience at point of sales in Vietnam through the roll-out of a first-in-market digital pre-issuance verification tool, providing customers with an easier way to review their policy before issuance, and ensure that it fully addresses their insurance needs.

In addition, in 4Q23 we entered into an agreement to reinsure two whole-life products in Japan, representing insurance contract net liabilities of \$5.6 billion as of September 30, 2023, as part of a reinsurance transaction with Global Atlantic that includes legacy long-term care and structured settlement businesses in the U.S.

We continued to maintain a diverse and engaged culture and make Manulife a great place to work. Manulife has been recognized by HR Asia as one of the "Best Companies to Work for in Asia 2023" in six of our Asian markets—mainland China, Hong Kong, Malaysia, Vietnam, Indonesia and the Philippines.

¹ Amazon Connect from Amazon Web Services Inc.

3. Canada¹

Our Canada segment is a leading financial services provider, offering insurance products, insurance-based wealth accumulation and decumulation products, and banking solutions, has an in-force variable annuity business, and leverages the asset management expertise and products managed by our Global Wealth and Asset Management segment. The comprehensive solutions we offer target a broad range of customer needs and foster holistic long-lasting relationships.

We offer financial protection solutions to individuals, families and business owners through a combination of competitive products, professional advice and quality customer service. We provide group life, health and disability insurance solutions to Canadian employers, with approximately 27,000 Canadian businesses and organizations entrusting their employee benefit programs to Manulife's Group Insurance. We also provide life, health, disability and specialty products, such as mortgage creditor and travel insurance, through advisors, sponsor groups and associations, as well as direct-to-customer. We continue to increase the proportion of products with behavioural insurance features.

Manulife Bank offers flexible debt and cash flow management solutions as part of a customer's overall financial plan. Products include savings and chequing accounts, guaranteed investment certificates, lines of credit, investment loans, mortgages and other specialized lending programs, offered through financial advisors and mortgage brokers supported by a broad distribution network.

In 2023, our Canada segment contributed 22% of the Company's core earnings from operating segments and, as at December 31, 2023, accounted for 11% of the Company's assets under management and administration.

Profitability

Canada's reported net income attributed to shareholders of \$1,191 million in 2023 compared with a net loss attributed to shareholders of \$503 million and transitional net income attributed to shareholders of \$1,198 million in 2022. The 2022 transitional net income includes a gain of \$1,701 million from IFRS 9 transitional impacts. Net income attributed to shareholders is comprised of core earnings, which were \$1,487 million in 2023 compared with \$1,387 million in 2022, and items excluded from core earnings, which amounted to a net charge of \$296 million in 2023 compared with a net charge of \$1,890 million in 2022. Items excluded from core earnings in 2022 on a transitional basis amounted to a net charge of \$189 million. Items excluded from core earnings are outlined in the table below. See section 13 "Non-GAAP and Other Financial Measures" below, for a reconciliation of core earnings to net income (loss) attributed to shareholders for 2023 and core earnings and transitional net income (loss) attributed to shareholders to net income (loss) attributed to shareholders for 2022.

The \$100 million increase in core earnings was driven by more favourable insurance experience, higher expected investment earnings from higher yields and business growth, and business growth in Group Insurance, partially offset by slower CSM amortization on certain VFA contracts.

The table below presents net income attributed to shareholders (2023 and 2022) and transitional net income attributed to shareholders (2022) for Canada consisting of core earnings and items excluded from core earnings.

For the years ended December 31,
(\$ millions)

	2023	2022
Core earnings	\$ 1,487	\$ 1,387
Items excluded from core earnings:⁽¹⁾		
Market experience gains (losses)	(341)	(196)
<i>Realized gains (losses) on debt instruments</i>	<i>(10)</i>	<i>(74)</i>
<i>Derivatives and hedge accounting ineffectiveness</i>	<i>65</i>	<i>93</i>
<i>Actual less expected long-term returns on public equity</i>	<i>(13)</i>	<i>(90)</i>
<i>Actual less expected long-term returns on ALDA</i>	<i>(327)</i>	<i>(278)</i>
<i>Other investment results</i>	<i>(56)</i>	<i>153</i>
Changes in actuarial methods and assumptions that flow directly through income	41	47
Reinsurance transactions, tax-related items and other	4	(40)
Total items excluded from core earnings	(296)	(189)
Transitional net income attributed to shareholders	n/a	\$ 1,198
Less: IFRS 9 transitional impacts:		
Change in expected credit loss		(22)
Hedge accounting		2,690
Total IFRS 9 transitional impacts (pre-tax)		2,668
Tax on IFRS 9 transitional impacts		(967)
Total IFRS 9 transitional impacts (post-tax)		1,701
Net income (loss) attributed to shareholders	\$ 1,191	\$ (503)

⁽¹⁾ For explanations of items excluded from core earnings, see "Items excluded from core earnings" table in the total Company "Profitability" section above.

¹ Effective January 1, 2023, refinements were made to the allocations of corporate overhead and interest on surplus among segments. Prior period comparative information has been restated to reflect the changes in segment reporting.

Business Performance

APE sales were \$1,409 million in 2023, an increase of 12% compared with 2022. Individual Insurance APE sales of \$564 million in 2023 increased 36% compared with 2022, driven by a large affinity markets sale, partially offset by lower participating insurance sales. Group Insurance APE sales of \$644 million in 2023 increased 12% compared with 2022, reflecting higher sales in all group benefits markets. Annuities APE sales of \$201 million in 2023 decreased 26% compared with 2022, primarily due to lower sales of segregated fund products, partially offset by higher fixed product sales.

CSM was \$4,060 million as at December 31, 2023, an increase of \$385 million compared with December 31, 2022. Organic CSM movement was an increase of \$71 million in 2023 driven by the impact of new insurance business, expected movements related to finance income or expenses, and insurance experience gains, partially offset by amounts recognized for service provided in 2023 earnings. Inorganic CSM movement was an increase of \$314 million in 2023 largely due to changes in actuarial methods and assumptions, partially offset by the unfavourable impact of markets, primarily driven by high interest rates on certain variable annuity contracts.

Manulife Bank average net lending assets¹ were \$25.1 billion in 2023, up \$0.9 billion or 4% compared with 2022, driven by improved retention and business growth.

Business Performance

For the years ended December 31,
(\$ millions)

	2023	2022
APE sales	\$ 1,409	\$ 1,261
Contractual service margin	\$ 4,060	\$ 3,675
Manulife Bank average net lending assets ⁽¹⁾	\$ 25,050	\$ 24,113

⁽¹⁾ This item is a non-GAAP financial measure. See "Non-GAAP and Other Financial Measures" below for more information.

Assets under Management

Canada's assets under management of \$147.5 billion as at December 31, 2023 increased \$4.9 billion or 3% from \$142.6 billion as at December 31, 2022, due to higher total invested assets from business growth and the impact of changes in interest rates.

Assets under Management

As at December 31,
(\$ millions)

	2023	2022
Total invested assets	\$ 111,456	\$ 106,929
Segregated funds net assets	36,085	35,695
Total assets under management	\$ 147,541	\$ 142,624

Strategic Highlights

We added innovative customer-centric enhancements across our product shelf and formed key external partnerships to help Canadians focus on improving their health and wellness. During 2023, we:

- Improved our customer experiences across our various businesses:
 - Grew our annual Manulife mobile app downloads by 18%, supported by upgrades designed to enhance our customers' digital experience and a successful communication campaign highlighting the ease and speed of online claims submissions;
 - Expanded our Personalized Medicine program to all group benefits extended healthcare plans, making this service available to more customers, while enabling them to learn about medications that best meet their needs and work with healthcare providers on customized treatment plans that can lead to better outcomes; and
 - Increased our use of Amazon Connect², which enabled a more holistic digital customer experience and drove operational efficiency. This contributed to a 25% reduction of call transfer rates year over year for contact centres that had moved to Amazon Connect;
- Established strategic partnerships to provide meaningful and customized health and wellness information to our clients:
 - Partnered with League, a leading healthcare technology provider, to offer our group benefits members more personalized and integrated digital healthcare experiences, enabling them to connect their benefits directly with healthcare options; and
 - Partnered with Cleveland Clinic Canada, using its global healthcare expertise to enhance product offering and services to over five million group benefits plan members, including their families, by providing industry research, thought leadership, and education materials; and
- Re-entered the individual payout annuities market in Canada to new sales, reflecting our commitment to better address our customers' demand for stable income with an enhanced suite of products for Canadians seeking retirement income solutions.

¹ This item is a non-GAAP financial measure. See "Non-GAAP and Other Financial Measures" below for more information.

² Amazon Connect from Amazon Web Services Inc.

4. U.S.¹

Our U.S. segment provides a range of life insurance products and insurance-based wealth accumulation products, and has an in-force long-term care insurance business and an in-force annuity business.

The insurance products we offer are designed to provide customers with estate, business and income-protection solutions, and to leverage the asset management expertise and products managed by our Global Wealth and Asset Management segment. The primary distribution channel of our products is licensed financial advisors. We aim to establish lifelong customer relationships that benefit from our holistic protection and wealth product offerings.

As a life insurer, we believe we can and should help our customers live longer, healthier, better lives, and are a leader in making behavioural insurance features standard on all our insurance product offerings. Those features are primarily available through the John Hancock Vitality Program, which rewards customers for the everyday steps they take toward better long-term health. The program is underpinned by a network of companies, including Verily, Amazon, Apple, GRAIL, and ŌURA, who share our commitment to helping people gain a better understanding of their personal health and achieve better outcomes.

Our in-force business includes long-term care insurance policies which provide coverage for the cost of long-term services and support, and fixed deferred, variable deferred, and payout annuity products.

In 2023, our U.S. segment contributed 27% of the Company's core earnings from operating segments and, as at December 31, 2023, accounted for 15% of the Company's assets under management and administration.

Profitability

U.S. reported net income attributed to shareholders of \$639 million in 2023 compared with a net loss attributed to shareholders of \$2,316 million and transitional net income attributed to shareholders of \$1,448 million in 2022. The 2022 transitional net income includes a gain of \$3,764 million from IFRS 9 transitional impacts. Net income attributed to shareholders is comprised of core earnings, which was \$1,759 million in 2023 compared with \$1,566 million in 2022, and items excluded from core earnings, which amounted to a net charge of \$1,120 million in 2023 compared with a net charge of \$3,882 million in 2022. Items excluded from core earnings in 2022 on a transitional basis amounted to a net charge of \$118 million. See section 13 "Non-GAAP and Other Financial Measures" below, for a reconciliation of core earnings to net income (loss) attributed to shareholders for 2023 and core earnings and transitional net income (loss) attributed to shareholders to net income (loss) attributed to shareholders for 2022. The changes in core earnings expressed in Canadian dollars were due to the factors described below and additionally, reflected a \$60 million favourable impact from the strengthening of the U.S. dollar compared with the Canadian dollar.

Expressed in U.S. dollars, the functional currency of the segment, net income attributed to shareholders was US\$473 million in 2023 compared with a net loss attributed to shareholders of US\$1,809 million and transitional net income attributed to shareholders of US\$1,139 million in 2022. Core earnings were US\$1,304 million in 2023 compared with US\$1,202 million in 2022 and items excluded from core earnings amounted to a net charge of US\$831 million in 2023 compared with a net charge of US\$3,011 million in 2022. Items excluded from core earnings on a transitional basis in 2022 were a net charge of US\$63 million. Items excluded from core earnings are outlined in the table below.

The US\$102 million or 8% increase in core earnings was driven by increased expected investment earnings due to higher investment yields and business growth as well as improved, although unfavourable, net insurance experience primarily driven by the non-recurrence of excess mortality claims related to COVID-19 in the first quarter of 2022. These impacts were partially offset by an increase in the ECL provision in 2023 primarily related to certain commercial mortgages, electric utility bonds and private placements compared with a reduction in the provision in 2022, and lower CSM recognized into earnings. The lower CSM recognized is due to a slower CSM amortization on certain VFA contracts, the reinsurance of a significant portion of the variable annuities block in the prior year, and the impact of the update of actuarial methods and assumptions. Long-term care insurance experience included in core earnings was more unfavourable in 2023 compared with 2022.

¹ Effective January 1, 2023, we have made a number of changes to the composition of reporting segments to better align our financial reporting with our business strategy and operations. Our international high net worth business was reclassified from U.S. Insurance in the U.S. segment to the Asia segment to reflect the contributions of our Bermuda operations alongside the high net worth business that we report in our Singapore and Hong Kong operations. Refinements were made to the allocations of corporate overhead and interest on surplus among segments. Prior period comparative information has been restated to reflect the changes in segment reporting.

The table below presents net income attributed to shareholders (2023 and 2022) and transitional net income attributed to shareholders (2022) for the U.S. consisting of core earnings and items excluded from core earnings.

For the years ended December 31, (\$ millions)	Canadian \$		US \$	
	2023	2022	2023	2022
Core earnings	\$ 1,759	\$ 1,566	\$ 1,304	\$ 1,202
Items excluded from core earnings: ⁽¹⁾				
Market experience gains (losses)	(1,196)	(93)	(887)	(44)
<i>Realized gains (losses) on debt instruments</i>	(6)	(426)	(5)	(325)
<i>Derivatives and hedge accounting ineffectiveness</i>	(14)	285	(10)	225
<i>Actual less expected long-term returns on public equity</i>	6	(136)	5	(107)
<i>Actual less expected long-term returns on ALDA</i>	(1,212)	167	(899)	150
<i>Other investment results</i>	30	17	22	13
Changes in actuarial methods and assumptions that flow directly through income	132	(12)	98	(9)
Reinsurance transactions, tax-related items and other	(56)	(13)	(42)	(10)
Total items excluded from core earnings	(1,120)	(118)	(831)	(63)
Transitional net income attributed to shareholders	n/a	\$ 1,448	n/a	\$ 1,139
Less: IFRS 9 transitional impacts:				
Change in expected credit loss		19		14
Hedge accounting		4,745		3,718
Total IFRS 9 transitional impacts (pre-tax)		4,764		3,732
Tax on IFRS 9 transitional impacts		(1,000)		(784)
Total IFRS 9 transitional impacts (post-tax)		3,764		2,948
Net income (loss) attributed to shareholders	\$ 639	\$ (2,316)	\$ 473	\$ (1,809)

⁽¹⁾ For explanations of items excluded from core earnings, see "Items excluded from core earnings" table in the total Company "Profitability" section above.

Business Performance

U.S. APE sales of US\$416 million in 2023 decreased 10% compared with 2022 due to the adverse impact of higher short-term interest rates on accumulation insurance products for most of 2023, particularly for our affluent customers. APE sales of products with the John Hancock Vitality PLUS feature decreased 5%, and represented 75% of overall U.S. sales compared with 72% in 2022.

CSM was US\$2,828 million as at December 31, 2023, a decrease of US\$225 million compared with December 31, 2022. Organic CSM movement was an increase of US\$88 million in 2023 driven by the impact of new insurance business and expected movements related to finance income or expenses, partially offset by amounts recognized for service provided in 2023 earnings and a net reduction from insurance experience. The net reduction in insurance experience was modestly unfavourable, with unfavourable life experience offset by favourable long-term care experience. Inorganic CSM movement was a decrease of US\$313 million in 2023 due to changes in actuarial methods and assumptions primarily related to life insurance, partially offset by favourable market impacts from equity market experience and higher interest rates mainly on variable annuity contracts.

Business Performance

For the years ended December 31, (\$ millions)	Canadian \$		US \$	
	2023	2022	2023	2022
APE sales	\$ 562	\$ 599	\$ 416	\$ 461
Contractual service margin	\$ 3,738	\$ 4,136	\$ 2,828	\$ 3,053

Assets under Management

U.S. assets under management of US\$154 billion as at December 31, 2023 increased 5% from December 31, 2022. The increase in total invested assets and segregated funds net assets was primarily due to the net impact from interest rate and equity markets.

Assets under Management

As at December 31, (\$ millions)	Canadian \$		US \$	
	2023	2022	2023	2022
Total invested assets	\$ 133,959	\$ 133,635	\$ 101,592	\$ 98,628
Segregated funds net assets	68,585	65,490	52,014	48,333
Total assets under management	\$ 202,544	\$ 199,125	\$ 153,606	\$ 146,961

Strategic Highlights

At John Hancock, we are focused on growing our insurance business by expanding our product offerings, modernizing the buying and delivery process, and enhancing customer experience. In addition, we continued to make significant progress to optimize our portfolio through both organic initiatives and strategic reinsurance transactions, and create tangible shareholder value through various in-force management actions. In 2023, we:

- Entered into an agreement to reinsure approximately \$6.0 billion of long-term care and \$1.6 billion of structured settlements insurance and investment contract net liabilities¹ with Global Atlantic as noted above. This is the largest ever long-term care reinsurance transaction;
- Expanded our reach into the employer market by introducing a Premier Benefit Indexed Universal Life product. This permanent life insurance product, available through the workplace, offers a streamlined digital process for employees to purchase individual coverage and includes our John Hancock Vitality PLUS feature;
- Furthered our mission of helping customers live longer, healthier, better lives and differentiating ourselves from other U.S. life insurance carriers by hosting ‘Longer.Healthier.Better.’ – the first longevity symposium in the industry – that brought together 250 life insurance brokers, leadership from reinsurance companies, media, and local government officials to give them a first-hand look at the innovations and science shaping the future of longevity;
- Launched a distribution relationship with JPMorgan Chase & Co. enabling new sales of our suite of products, including our John Hancock Vitality Program, through its network of more than 6,900 advisors; and
- Enhanced our John Hancock Vitality Program by extending eligibility to access GRAIL’s Galleri® multi-cancer early detection test to additional members, expanding eligibility for preventative care and early detection behaviours through annual skin cancer screenings, and introducing a personalized way to incentivize members to be more physically active through a new Active Rewards feature.

In 2023, we achieved the following digital successes, improving the producer and customer experience while also contributing to a more cost-efficient operation:

- Optimized the customer registration experience across our customer websites resulting in a 26% increase in online registrations in 2023, contributing to a 19% improvement in unique website traffic;
- Eliminated over 7.8 million pieces of paper and mail by automating key back-end processes and increasing digital communications, including our first e-delivery of life insurance policy prospectuses;
- Enhanced our interactive voice response authentication enabling 29% of inbound calls to be completed with no human interaction; and
- Created a more seamless, digital customer experience through the launch of single sign-on for John Hancock Vitality Program members between John Hancock Life and Vitality websites as well as the expansion of our JH.com Enterprise Chatbot’s self-service capabilities.

Our focus on continual digital improvements contributed to being recognized by LIBRA Insurance Partners, the largest independently owned life insurance marketing organization in the U.S.², as one of the carriers who provide a best-in-class experience on an electronic platform for permanent life insurance products.

¹ Insurance and investment contract net liabilities amounts are as at September 30, 2023.

² Based on gross annual production according to Paradigm Partners International, a third-party research firm specializing in the insurance landscape.

5. Global Wealth and Asset Management¹

Our Global Wealth and Asset Management segment, branded as Manulife Investment Management, provides investment advice and innovative solutions to retirement, retail and institutional clients. Our leading capabilities in public and private markets are strengthened by an investment footprint that spans 19 geographies², including 10 in Asia where we have over 120 years of on-the-ground experience in the region.

In Retirement, we provide financial guidance, advice, investment solutions and recordkeeping services to nearly 9 million plan participants and rollover individuals in North America and Asia while they are in the accumulation phase with their employer, and increasingly as they prepare for retirement outside their employer's plan. In North America, our Canadian retirement business focuses on providing retirement solutions through defined contribution plans, and also to group plan members when they retire or leave their plan; and in the United States, we provide employer sponsored retirement plans as well as personal retirement accounts when individuals leave their plan. In Asia, we provide retirement offerings to employers and individuals, including Mandatory Provident Fund ("MPF") schemes and administration in Hong Kong. Additionally, we provide retirement solutions in several emerging retirement markets in Asia, including Indonesia and Malaysia.

In Retail, we distribute investment funds to clients through our proprietary advice channels in Canada and Asia, as well as through intermediaries and banks in North America and Asia, and offer investment strategies across the world, through affiliated and select unaffiliated asset managers. In Canada, we also provide holistic personal advice to individual clients and investment management, private banking and wealth and estate solutions to high net worth clients. In addition, we provide wealth management expertise for insurance-based wealth accumulation products that are distributed through Manulife's insurance segments, as well as through our own proprietary advice channels.

Our Institutional Asset Management business provides comprehensive asset management solutions for pension plans, foundations, endowments, financial institutions, and other institutional investors worldwide. Our solutions span all major asset classes including equities, fixed income, and alternative assets (including real estate, timberland, farmland, private equity/debt, infrastructure, and liquid alternatives). In addition, we offer multi-asset investment solutions covering a broad range of clients' investment needs.

Sustainable asset management is integral to our investment approach. We believe that identifying and assessing material sustainability factors helps us manage systemic risks and explore related investment opportunities for our clients. We endeavor to enhance the resiliency of our clients' assets through our robust program of stewardship, which includes company engagement, responsible asset operations, and participation in the development of global sustainability standards.

In 2023, our Global WAM segment contributed 20% of the Company's core earnings from operating segments and, as at December 31, 2023, represented 61% of the Company's total assets under management and administration.

Profitability

Global WAM's net income attributed to shareholders was \$1,297 million in 2023 compared with \$1,121 million in 2022, and core earnings were \$1,321 million in 2023 compared with \$1,299 million in 2022. Items excluded from core earnings are outlined in the table below and amounted to a net charge of \$24 million in 2023 compared with a net charge of \$178 million in 2022. See section 13 "Non-GAAP and Other Financial Measures" below, for a reconciliation of quarterly core earnings to net income (loss) attributed to shareholders for 2023 and quarterly core earnings and transitional net income (loss) attributed to shareholders to net income (loss) attributed to shareholders for 2022.

Core earnings increased \$22 million, a decline of 1% compared with 2022 on a constant exchange rate basis. An increase in performance-related costs and lower earnings from seed capital investments due to repatriations were offset by growth in net fee income, from higher fee spreads and average AUMA, as well as higher performance fees in Institutional Asset Management, and a lower effective tax rate in 2023.

¹ Effective January 1, 2023, we have made a number of changes to the composition of reporting segments to better align our financial reporting with our business strategy and operations. Our investment in the start-up capital of segregated and mutual funds, and investment-related revenue and expense were reclassified from the Corporate and Other segment to the Global WAM segment to more closely align with Global WAM's management practices. Refinements were made to the allocations of corporate overhead and interest on surplus among segments. Prior period comparative information has been restated to reflect the changes in segment reporting.

² United States, Canada, Japan, Hong Kong, Singapore, Taiwan, Indonesia, Vietnam, Malaysia, India, the Philippines, England, Ireland, Switzerland, Germany, and mainland China. In addition, we have timberland/farmland operations in Australia, New Zealand, and Chile.

The table below presents net income attributed to shareholders for the Global WAM segment for 2023 and 2022 consisting of core earnings and items excluded from core earnings.

For the years ended December 31, (\$ millions)	2023	2022
Core earnings		
Retirement	\$ 745	\$ 673
Retail	502	571
Institutional	74	55
Core earnings	1,321	1,299
Items excluded from core earnings:⁽¹⁾		
Market experience gains (losses)	10	(260)
<i>Realized gains (losses) on debt instruments</i>	-	-
<i>Derivatives and hedge accounting ineffectiveness</i>	-	-
<i>Actual less expected long-term returns on public equity</i>	10	(260)
<i>Actual less expected long-term returns on ALDA</i>	-	-
<i>Other investment results</i>	-	-
Reinsurance transactions, tax-related items and other	(34)	82
Total items excluded from core earnings	(24)	(178)
Net income attributed to shareholders	\$ 1,297	\$ 1,121

⁽¹⁾ For explanations of items excluded from core earnings, see “Items excluded from core earnings” table in the total Company “Profitability” section above.

In 2023, core EBITDA¹ for Global WAM was \$1,771 million, \$450 million higher than core earnings. In 2022, core EBITDA was \$1,773 million, \$474 million higher than core earnings. Core EBITDA decreased \$2 million or 2%, compared with 2022, driven by higher performance-related costs and lower earnings from seed capital investments, partially offset by higher net fee income.

Core EBITDA margin² was 24.9% in 2023 compared with 27.2% in 2022. The 230 basis point decrease was primarily driven by higher performance-related costs. See section 13 “Non-GAAP and Other Financial Measures” below, for additional information on core EBITDA and core EBITDA margin.

Core EBITDA

For the years ended December 31, (\$ millions)	2023	2022
Core earnings	\$ 1,321	\$ 1,299
Amortization of deferred acquisition costs and other depreciation	166	154
Amortization of deferred sales commissions	80	98
Core income tax expenses (recoveries)	204	222
Core EBITDA	\$ 1,771	\$ 1,773
Core EBITDA margin (%)	24.9%	27.2%

Business Performance

Gross Flows and Net Flows

Gross flows were \$143.4 billion in 2023, an increase of 2% compared with 2022. By business line, the results were:

- Retirement gross flows were \$55.4 billion in 2023, an increase of 3% compared with 2022, driven by growth in member contributions.
- Retail gross flows were \$60.7 billion in 2023, a decrease of 12% compared with 2022, reflecting lower demand as investors continued to favor short-term cash and money market instruments amid market volatility and higher interest rates. This was partially offset by higher gross flows in mainland China where full year 2023 gross flows reflected the impact of acquiring full ownership interest of MFM in 4Q22 and the launch of our Global Semiconductors strategy in Japan in 3Q23.
- Institutional Asset Management gross flows were \$27.3 billion in 2023, an increase of 57% compared with 2022, driven by higher sales in mainland China and the impact of acquiring full ownership interest of MFM as noted above, new product launches totaling \$1.6 billion in 2023 and higher sales of real estate, private equity and credit mandates.

Net inflows were \$4.5 billion in 2023, compared with net inflows of \$3.2 billion in 2022. By business line, the results were:

- Retirement net outflows were \$4.0 billion in 2023 compared with net outflows of \$0.1 billion in 2022, driven by large case pension plan redemptions by a single sponsor in the U.S. in 3Q23 and 4Q23. This was partially offset by growth in member contributions.
- Retail net outflows were \$0.5 billion in 2023 compared with net outflows of \$1.6 billion in 2022, driven by lower mutual fund redemption rates and the launch of our Global Semiconductors strategy in Japan in 3Q23. This was partially offset by lower demand as investors continued to favour short-term cash and money market instruments amid market volatility and higher interest rates.

¹ This item is a non-GAAP financial measure. See “Non-GAAP and Other Financial Measures” below.

² This item is a non-GAAP ratio. See “Non-GAAP and Other Financial Measures” below for more information.

- Institutional Asset Management net inflows were \$9.0 billion in 2023 compared with net inflows of \$4.9 billion in 2022, driven by higher net inflows of timberland, real estate, private equity and credit mandates, the impact of acquiring full ownership interest of MFM, as well as new product launches totaling \$1.6 billion in 2023.

Gross Flows and Net Flows

For the years ended December 31,
(\$ millions)

	2023	2022
Gross flows	\$ 143,389	\$ 136,933
Net flows	\$ 4,548	\$ 3,189

Assets under Management and Administration

As of December 31, 2023, AUMA for our wealth and asset management businesses were \$849.2 billion, an increase of 11% compared with December 31, 2022, driven by the net impact of interest rates and equity markets, and net inflows. As of December 31, 2023, Global WAM also managed \$205.8 billion in assets for the Company's non-WAM reporting segments. Including those assets, AUMA managed by Global WAM¹ were \$1,055.0 billion compared with \$984.3 billion as at December 31, 2022.

Segregated funds net assets were \$248.1 billion for December 31, 2023, 11% higher compared with December 31, 2022 on an actual exchange rate basis, driven by the favourable net impact of interest rates and equity markets. Total invested assets in our general fund form a small portion of Global WAM AUMA.

Changes in Assets under Management and Administration

For the years ended December 31,
(\$ millions)

	2023	2022
Balance January 1,	\$ 782,340	\$ 855,926
Acquisitions/Dispositions	(410)	8,789
Net flows	4,548	3,189
Investment income (loss) and other	62,685	(85,564)
Balance December 31,	\$ 849,163	\$ 782,340
Average assets under management and administration	\$ 812,662	\$ 790,268

Assets under Management and Administration

As at December 31,
(\$ millions)

	2023	2022
Total invested assets	\$ 7,090	\$ 5,752
Segregated funds net assets ⁽¹⁾	248,066	224,190
Mutual funds, institutional asset management and other ⁽²⁾	411,961	381,630
Total assets under management	667,117	611,572
Other assets under administration	182,046	170,768
Total assets under management and administration	\$ 849,163	\$ 782,340

⁽¹⁾ Segregated funds net assets are comprised of Retirement assets under management ("AUM"), consisting primarily of fee-based products with little or no guarantees.

⁽²⁾ Other funds represent pension funds, pooled funds, endowment funds and other institutional funds managed by the Company on behalf of others.

Strategic Highlights

Leveraging our integrated business model and global scale, we have a clear strategy to pursue high-growth opportunities in the most attractive markets globally through our three business lines: Retirement, Retail and Institutional Asset Management. Our strategy includes being a global retirement leader by supporting financial wellness; expanding our presence in retail distribution platforms across the globe; leveraging a multi-manager model; and providing differentiated institutional active asset management capabilities across high performing equity and fixed income strategies, outcome-oriented solutions and alternative assets.

We executed on a number of initiatives to accelerate growth in our franchise. In 2023, we:

- Entered an agreement to acquire multi-sector alternative credit manager CQS, headquartered in London. The acquisition will give MIM and CQS clients enhanced access to our combined global investment solutions. We will retain CQS's rigorous investment philosophy and process and bring its differentiated capabilities to new investors by leveraging our global footprint. The CQS credit platform has approximately \$18.8 billion in assets under management as of October 31, 2023, and the transaction is expected to close in the first half of 2024 subject to customary closing conditions and regulatory approvals; and
- Continued to meet investor needs for wealth solutions through the expansion of our product offerings with the launch of the Global Semiconductors strategy in Japan Asia Retail which garnered more than \$0.8 billion in net flows since its launch in 3Q23.

¹ This item is a non-GAAP financial measure. See "Non-GAAP and Other Financial Measures" below.

We continued to make progress on our digital customer leader strategy. In 2023, we:

- Continued to enhance and broaden our wealth planning and advice business in Canada Retail through strategic agreements with Fidelity Clearing Canada and Envestnet that will provide access to leading advisory technology and portfolio management platforms, which combined will deliver an enhanced digital client experience and improved advisor productivity;
- Increased our mobile application user count in Canada Retirement by 38% in 2023 following the delivery of new features (fund switch and TFSA lump sum contributions) and experience enhancements (deep linking and personalized nudges enhancements);
- Continued to improve “Join Now”, our digital enrolment process in Canada Retirement, with features that have enabled us to deploy it to 92% of eligible sponsors, representing an increase of 10% compared with 2022. This contributed to 49,500 new digital enrolments in 2023; and
- Accelerated customer adoption of digital applications in Canada Retirement through our “Say Goodbye to Paper” campaign which contributed to a 165% increase in members converting to e-statements over the campaign period, which spanned from June to August, and an increase in satisfaction with their digital experience.

In addition, we received numerous industry awards and recognition in 2023. Most notably, Institutional Asset Management was recognized as the world’s largest natural capital investment manager¹ by IPE Real Assets. Our Hong Kong Retirement business won a total of 19 awards in “The 2023 MPF Awards”, including “People’s Choice” for the fifth consecutive year, and our U.S. Retail’s thought leadership content, Market Intelligence, was named “Digital Marketing Campaign of the Year” at the With Intelligence Mutual Fund & ETF Awards.

¹ Ranking based on total Natural Capital AUM, which includes forestry/timberland and agriculture/farmland AUM.

6. Corporate and Other¹

Corporate and Other is comprised of investment performance on assets backing capital, net of amounts allocated to the operating segments; financing costs; costs incurred by the corporate office related to shareholder activities (not allocated to the operating segments); our P&C Reinsurance business; as well as our run-off reinsurance operation including variable annuities and accident and health. In addition, for segment reporting purposes, consolidations and eliminations of transactions between operating segments are also included in Corporate and Other earnings.

Profitability

Corporate and Other reported net income attributed to shareholders of \$628 million in 2023 compared with a net loss attributed to shareholders of \$918 million and a transitional net loss attributed to shareholders of \$916 million in 2022. The 2022 transitional net loss includes a gain of \$2 million from IFRS 9 transitional impacts. Net income (loss) attributed to shareholders is comprised of core earnings and items excluded from core earnings. Core earnings was \$69 million in 2023 compared with a core loss of \$263 million in 2022. Items excluded from core earnings amounted to a net gain of \$559 million in 2023 compared with a net charge of \$655 million in 2022. Items excluded from core loss in 2022 on a transitional basis amounted to a net charge of \$653 million. Items excluded from core earnings are outlined in the table below. See section 13 “Non-GAAP and Other Financial Measures” below, for a reconciliation of core earnings to net income (loss) attributed to shareholders for 2023 and core earnings and transitional net income (loss) attributed to shareholders to net income (loss) attributed to shareholders for 2022.

The favourable variance in core earnings of \$332 million was primarily attributable to the non-recurrence of a \$256 million charge in our P&C Reinsurance business for estimated losses relating to Hurricane Ian in 2022 followed by favourable updates to our prior years’ hurricane provisions of \$95 million in 2023 and higher yields on debt instruments, net of higher cost of debt financing. These items were partially offset by higher core expenses due to performance-related costs as well as investments in technology.

The table below presents net income (loss) attributed to shareholders (2023 and 2022) and transitional net income (loss) attributed to shareholders (2022) for Corporate and Other consisting of core earnings (loss) and items excluded from core earnings (loss).

For the years ended December 31, (\$ millions)	2023	2022
Core earnings (loss)	\$ 69	\$ (263)
Items excluded from core earnings (loss):⁽¹⁾		
Market experience gains (losses)	290	(895)
<i>Realized gains (losses) on debt instruments</i>	(1)	(420)
<i>Derivatives and hedge accounting ineffectiveness</i>	61	24
<i>Actual less expected long-term returns on public equity</i>	88	(317)
<i>Actual less expected long-term returns on ALDA</i>	(12)	(26)
Other investment results	154	(156)
Changes in actuarial methods and assumptions that flow directly through income	-	-
Reinsurance transactions, tax-related items and other	269	242
Total items excluded from core earnings (loss)	559	(653)
Transitional net income (loss) attributed to shareholders	n/a	\$ (916)
Less: IFRS 9 transitional impacts:		
Change in expected credit loss		2
Hedge accounting		1
Total IFRS 9 transitional impacts (pre-tax)		3
Tax on IFRS 9 transitional impacts		(1)
Total IFRS 9 transitional impacts (post-tax)		2
Net income (loss) attributed to shareholders	\$ 628	\$ (918)

⁽¹⁾ For explanations of items excluded from core earnings, see “Items excluded from core earnings” table in the total Company “Profitability” section above.

Strategic Highlights

Our P&C Reinsurance business provides substantial retrocessional capacity for a select clientele in the property and casualty reinsurance market. The business is largely non-correlated to Manulife’s other businesses and helps diversify our overall business mix. We manage the risk exposure of this business in relation to the total Company balance sheet risk and volatility as well as the prevailing market pricing conditions. The business is renewable annually, and we currently estimate our exposure limit in 2024 for a single event to be approximately US\$250 million (net of reinstatement premiums) and for multiple events to be approximately US\$500 million (net of all premiums).²

¹ Effective January 1, 2023, we have made a number of changes to the composition of reporting segments to better align our financial reporting with our business strategy and operations. Our investment in the start-up capital of segregated and mutual funds, and investment-related revenue and expense were reclassified from the Corporate and Other segment to the Global WAM segment to more closely align with Global WAM’s management practices. Refinements were made to the allocations of corporate overhead and interest on surplus among segments. Prior period comparative information has been restated to reflect the changes in segment reporting.

² See “Caution regarding forward-looking statements” above.

7. Investments

Our investment philosophy for the general fund is to invest in an asset mix that optimizes our risk adjusted returns and matches the characteristics of our underlying liabilities. We follow a bottom-up approach which combines our strong asset management skills with an in-depth understanding of the characteristics of each investment. We invest in a diversified mix of assets and our diversification strategy has historically produced superior risk adjusted returns while reducing overall risk. We use a disciplined approach across all asset classes. Our risk management strategy is outlined in the “Risk Management and Risk Factors” section below.

General Fund Assets

As at December 31, 2023, our general fund invested assets totaled \$417.2 billion compared with \$400.1 billion at the end of 2022. The following table shows the asset class composition as at December 31, 2023 and December 31, 2022.

As at December 31, (\$ billions)	2023			2022		
	Carrying value	% of total	Fair value	Carrying value	% of total	Fair value
Cash and short-term securities	\$ 20.3	5	\$ 20.3	\$ 19.2	5	\$ 19.2
Debt securities and private placement debt						
Government bonds	80.1	19	79.9	72.5	18	72.2
Corporate bonds	130.1	31	129.9	129.1	32	129.0
Mortgage / asset-backed securities	2.0	1	2.0	2.3	1	2.3
Private placement debt	45.6	10	45.6	42.0	10	42.0
Mortgages	52.4	13	52.3	51.8	13	51.4
Loans to Bank clients	2.4	1	2.4	2.8	1	2.8
Public equities	25.5	6	25.5	23.5	6	23.5
Alternative long-duration assets (“ALDA”)						
Real estate	13.0	3	13.2	14.3	4	14.4
Infrastructure	15.0	3	15.3	12.8	3	13.0
Timber and agriculture	5.7	1	6.3	5.9	1	6.5
Private equity	15.4	4	15.4	14.2	3	14.2
Energy	1.9	1	1.9	2.3	1	2.3
Various other ALDA	3.5	1	3.4	3.2	1	3.2
Leveraged leases and other	4.3	1	4.3	4.2	1	4.2
Total general fund invested assets	\$ 417.2	100	\$ 417.7	\$ 400.1	100	\$ 400.2

The carrying values for invested assets are generally equal to their fair values, however, residential mortgages and some commercial mortgages are carried at amortized cost; company own use properties, with the exception of one property which is held at depreciated cost, are held at fair value; loans to Bank clients are carried at unpaid principal balances less allowance for credit losses; and private equity investments, including power and infrastructure, energy, and timber, are accounted for as associates using the equity method, or at fair value. Certain public bonds are classified as held to maturity and held at amortized cost, with the remaining public and private bonds being classified as either “fair value through other comprehensive income” or as “fair value through profit or loss”.

As at December 31, 2023, the carrying value of renewable energy assets was \$13.4 billion (2022 – \$13.6 billion). These assets include renewable bonds, renewable private equity, and energy efficient bonds.

Shareholders’ accumulated other comprehensive pre-tax income (loss) at December 31, 2023 consisted of a \$15.4 billion loss for bonds (2022 – loss of \$24.2 billion), a \$2.8 billion loss for private placements (2022 – loss of \$5.0 billion), and a \$1.7 billion loss for mortgages (2022 – loss of \$2.8 billion). Included in the \$15.4 billion loss for bonds was a \$411 million loss related to the fair value hedge basis adjustments attributable to the hedged risk of certain FVOCI bonds that are in a gain position (2022 – loss of \$276 million).

Debt Securities and Private Placement Debt

We manage our high-quality fixed income portfolio to optimize yield and quality while ensuring that asset portfolios remain diversified by sector, industry, issuer, and geography. As at December 31, 2023, our fixed income portfolio of \$257.8 billion (2022 – \$245.9 billion) was 96% investment grade (rated BBB or better) and 71% was rated A or higher (2022 – 96% and 71%, respectively). Our private placement debt holdings provide diversification benefits (issuer, industry, and geography) and, because they often have stronger protective covenants and collateral than debt securities, they typically provide better credit protection and potentially higher recoveries in the event of default. Geographically, our fixed income portfolio is well-diversified. 22% is invested in Canada (2022 – 22%), 48% is invested in the U.S. (2022 – 48%), 6% is invested in Europe (2022 – 5%) and the remaining 24% is invested in Asia and other geographic areas (2022 – 25%).

Debt Securities and Private Placement Debt – by Credit Quality⁽¹⁾

As at December 31, (\$ billions)	2023				2022			
	Debt securities	Private placement debt	Total	% of Total	Debt securities	Private placement debt	Total	% of Total
AAA	\$ 38.2	\$ 0.7	\$ 38.9	15	\$ 33.7	\$ 0.8	\$ 34.5	14
AA	35.8	7.8	43.6	17	36.3	6.2	42.5	17
A	84.6	15.2	99.8	39	83.6	14.3	97.9	40
BBB	47.6	16.3	63.9	25	46.1	15.5	61.6	25
BB	4.8	0.8	5.6	2	3.9	0.9	4.8	2
B & lower, and unrated	1.2	4.8	6.0	2	0.3	4.3	4.6	2
Total carrying value	\$ 212.2	\$ 45.6	\$ 257.8	100	\$ 203.9	\$ 42.0	\$ 245.9	100

⁽¹⁾ Reflects credit quality ratings as assigned by Nationally Recognized Statistical Rating Organizations (“NRSRO”) using the following priority sequence order: S&P Global Ratings (“S&P”), Moody’s Investors Services (“Moody’s”), DBRS Limited and its affiliated entities (“Morningstar DBRS”), Fitch Ratings Inc. (“Fitch”), Rating and Investment information, and Japan Credit Rating. For those assets where ratings by NRSRO are not available, disclosures are based upon internal ratings as described in the “Risk Management and Risk Factors” section below.

Debt Securities and Private Placement Debt – by Sector

As at December 31, (Per cent of carrying value, unless otherwise stated)	2023			2022		
	Debt securities	Private placement debt	Total	Debt securities	Private placement debt	Total
Government and agency	38	10	33	36	11	31
Utilities	14	35	18	14	37	18
Financial	16	12	15	16	11	16
Industrial	8	15	9	9	13	9
Consumer (non-cyclical)	8	14	9	8	14	9
Energy	6	4	6	7	4	7
Consumer (cyclical)	3	6	3	3	6	3
Securitized (MBS/ABS)	1	1	1	1	1	1
Telecommunications	2	0	2	2	0	2
Basic materials	2	3	2	2	3	2
Technology	1	0	1	1	0	1
Media and internet and other	1	0	1	1	0	1
Total per cent	100	100	100	100	100	100
Total carrying value (\$ billions)	\$ 212.2	\$ 45.6	\$ 257.8	\$ 203.9	\$ 42.0	\$ 245.9

As at December 31, 2023, gross unrealized losses on our fixed income holdings were \$23.6 billion or 9% of the amortized cost of these holdings (2022 – \$33.3 billion or 12%). Of this amount, \$10.7 billion (2022 – \$8.4 billion) related to debt securities trading below 80% of amortized cost for more than 6 months. Securitized assets represented \$141 million of the gross unrealized losses and \$6 million of the amounts traded below amortized cost for more than 6 months (2022 – \$228 million and \$nil, respectively). After adjusting for debt securities supporting participating policyholder and pass-through products and the provisions for credit included in the insurance and investment contract liabilities, the potential impact to shareholders’ pre-tax earnings for debt securities trading at less than 80% of amortized cost for greater than 6 months was approximately \$8.3 billion as at December 31, 2023 (2022 – \$6.6 billion).

Mortgages

As at December 31, 2023, our mortgage portfolio of \$52.4 billion represented 13% of invested assets (2022 – \$51.8 billion and 13%, respectively). Geographically, 69% of the portfolio is invested in Canada (2022 – 66%) and 31% is invested in the U.S. (2022 – 34%). The overall portfolio is also diversified by geographic region, property type, and borrower. Of the total mortgage portfolio, 14% is insured (2022 – 13%), primarily by the Canada Mortgage and Housing Corporation (“CMHC”) – Canada’s AAA rated government-backed national housing agency, with 32% of residential mortgages insured (2022 – 31%) and 1% of commercial mortgages insured (2022 – 1%).

As at December 31, (\$ billions)	2023		2022	
	Carrying value	% of total	Carrying value	% of total
Commercial				
Retail	\$ 7.9	15	\$ 8.1	16
Office	7.7	15	8.4	16
Multi-family residential	6.5	12	6.5	12
Industrial	4.9	9	4.3	8
Other commercial	2.6	5	2.6	5
	29.6	56	29.9	57
Other mortgages				
Manulife Bank single-family residential	22.5	43	21.6	42
Agricultural	0.3	1	0.3	1
Total mortgages	\$ 52.4	100	\$ 51.8	100

Our commercial mortgage loans are originated with a hold-for-investment philosophy. They have low loan-to-value ratios, high debt-service coverage ratios, and as at December 31, 2023 there were six loans in arrears, one loan with missed payments in the U.S. and five loans (two in Canada and three in the U.S.) in the process of foreclosure. Geographically, of the total commercial mortgage loans, 45% are in Canada and 55% are in the U.S. (2022 – 44% and 56%, respectively). We are diversified by property type and largely avoid risky market segments such as hotels, construction loans, and second liens.

Non-CMHC Insured Commercial Mortgages⁽¹⁾

As at December 31,	2023		2022	
	Canada	U.S.	Canada	U.S.
Loan-to-Value ratio ⁽²⁾	63%	60%	60%	56%
Debt-Service Coverage ratio ⁽²⁾	1.60x	1.89x	1.57x	1.90x
Average duration (years)	4.08	5.90	4.27	6.31
Average loan size (\$ millions)	\$ 21.6	\$ 20.1	\$ 21.5	\$ 21.1
Loans in arrears ⁽³⁾	0.70%	0.99%	0.00%	0.00%

⁽¹⁾ Excludes Manulife Bank commercial mortgage loans of \$338 million (2022 – \$381 million).

⁽²⁾ Loan-to-Value and Debt-Service Coverage are based on re-underwritten cash flows.

⁽³⁾ Arrears defined as three or more missed monthly payments or in the process of foreclosure in Canada and two or more missed monthly payments or in the process of foreclosure in the U.S.

Public Equities

As at December 31, 2023, public equity holdings of \$25.5 billion represented 6% (2022 – \$23.5 billion and 6%) of invested assets and, when excluding assets supporting participating policyholder and pass-through products, represented 1% (2022 – 1%) of invested assets. The portfolio is diversified by industry sector and issuer. Geographically, 26% (2022 – 29%) is held in Canada; 29% (2022 – 31%) is held in the U.S.; and the remaining 45% (2022 – 40%) is held in Asia, Europe, and other geographic areas.

Public Equities – classified by type of product-line supported⁽¹⁾

As at December 31, (\$ billions)	2023		2022	
	Carrying value	% of total	Carrying value	% of total
Participating policyholders	\$ 14.6	57	\$ 12.3	52
Non-participating products and pass-through products	8.3	33	8.4	36
Global Wealth and Asset Management ⁽²⁾	1.5	6	1.5	6
Corporate and Other segment	1.1	4	1.3	6
Total public equities	\$ 25.5	100	\$ 23.5	100

⁽¹⁾ Effective January 1, 2023, we have made a number of changes to the composition of reporting segments to better align our financial reporting with our business strategy and operations. Our investment in the start-up capital of segregated and mutual funds was reclassified from the Corporate and Other segment to the Global WAM segment to more closely align with Global WAM’s management practices. Prior period comparative information has been restated to reflect the changes in segment reporting.

⁽²⁾ Includes \$1.3 billion of seed money investments in new segregated and mutual funds.

Alternative Long-Duration Assets (“ALDA”)

Our ALDA portfolio is comprised of a diverse range of asset classes with varying degrees of correlations. The portfolio typically consists of private assets representing investments in varied sectors of the economy which act as a natural hedge against future inflation and serve as an alternative source of asset supply to long-term corporate bonds. In addition to being a suitable match for our long-duration liabilities, these assets provide enhanced long-term yields and diversification relative to traditional fixed income markets. The majority of our ALDA are managed in-house.

As at December 31, 2023, carrying value of ALDA of \$54.5 billion represented 13% (2022 – \$52.7 billion and 13%) of invested assets. The fair value of total ALDA was \$55.5 billion at December 31, 2023 (2022 – \$53.6 billion). The carrying value and corresponding fair value by sector and/or asset type are outlined above (see table in the section “General Fund Assets”).

Real Estate

Our real estate portfolio is diversified by geographic region; of the total fair value of this portfolio, 43% is located in the U.S., 39% in Canada, and 18% in Asia and Other as at December 31, 2023 (2022 – 44%, 39%, and 17%, respectively). This high-quality portfolio has very low leverage and is well-diversified by property type, including industrial, multi-family, urban office, suburban office, and company own use buildings. The portfolio is well-positioned with an average occupancy rate of 87% (2022 – 89%) and an average lease term of 4.9 years (2022 – 5.1 years). During 2023, we executed 2 acquisitions representing \$0.17 billion market value of commercial real estate assets (2022 – 2 acquisitions and \$0.09 billion). As part of ongoing portfolio management initiatives, 8 commercial real estate assets totaling \$0.12 billion were sold during 2023.

The composition of our real estate portfolio based on fair value is as follows:

As at December 31, (\$ billions)	2023		2022	
	Fair value	% of total	Fair value	% of total
Company Own Use	\$ 2.7	20	\$ 3.0	21
Office – Downtown	3.9	30	4.3	30
Office – Suburban	0.9	7	1.1	8
Industrial	2.3	17	2.7	19
Residential	2.1	16	2.2	15
Retail	0.3	2	0.4	3
Other	1.0	8	0.7	4
Total real estate⁽¹⁾	\$ 13.2	100	\$ 14.4	100

⁽¹⁾ These figures represent the fair value of the real estate portfolio excluding real estate interests. The carrying value of the portfolio was \$13.0 billion and \$14.3 billion as at December 31, 2023 and December 31, 2022, respectively.

Infrastructure

We invest both directly and through funds in a variety of industry specific asset classes, listed below. The portfolio is well-diversified with over 600 portfolio companies. The portfolio is predominantly invested in the U.S. and Canada, but also in Western Europe, the United Kingdom, Australia, Asia and Latin America. Our power and infrastructure holdings are as follows:

As at December 31, (\$ billions)	2023		2022	
	Carrying value	% of total	Carrying value	% of total
Renewable power generation	\$ 3.2	22	\$ 3.0	24
Thermal power generation	1.4	9	1.3	10
Transportation (including roads, ports)	3.9	26	3.6	28
Electric and gas regulated utilities	0.8	5	0.6	5
Electricity transmission	–	–	0.2	2
Water distribution	0.4	3	0.4	3
Midstream gas infrastructure	0.8	5	0.8	6
Maintenance service, efficiency and social infrastructure	1.0	6	0.4	3
Digital infrastructure	3.4	23	2.3	18
Other infrastructure	0.1	1	0.2	1
Total infrastructure	\$ 15.0	100	\$ 12.8	100

Timber and Agriculture

Our timber and agriculture assets are managed by a proprietary entity, Manulife Investment Management Timberland and Agriculture (“MIM Timberland and Agriculture”). In addition to being the world’s largest timberland investment manager for institutional investors¹, with timberland properties in the U.S., New Zealand, Australia, Chile, Brazil, and Canada, MIM Timberland and Agriculture also manages farmland properties in the U.S., Australia, Chile, and Canada. The general fund’s timber holdings comprised 21% of MIM’s total timberland AUM (2022 – 22%). The farmland portfolio includes annual (row) crops, fruit crops, wine grapes, and nut crops. The general fund’s farmland holdings comprised 41% of MIM’s total farmland AUM (2022 – 41%).

¹ Based on the global timber investment management organization ranking in the *RIS International Timberland Ownership and Investment Database*.

Private Equities

Our private equity portfolio of \$15.4 billion (2022 – \$14.2 billion) includes both directly held private equity and private equity funds. Both are diversified across vintage years and industry sectors.

Energy

This category is comprised of \$1.9 billion (2022 – \$2.3 billion), which includes legacy oil and gas equity interests related to upstream and midstream assets that are in runoff, and Energy Transition private equity interests in areas supportive of the transition to lower carbon forms of energy, such as wind, solar, batteries, and magnets.

Investment Income

For the years ended December 31,
(\$ millions, unless otherwise stated)

	2023	2022
Interest income	\$ 12,802	\$ 12,063
Dividend, rental income and other income ⁽¹⁾	3,318	3,900
Impairments, provisions and recoveries, net ⁽²⁾	(304)	(77)
Other	364	(682)
	16,180	15,204
Realized and unrealized gains (losses) on assets supporting insurance and investment contract liabilities		
Debt securities	430	(504)
Public equities	2,157	(3,825)
Mortgages	99	(52)
Private placements	375	234
Real estate	(1,289)	(578)
Other invested assets	491	1,791
Derivatives	875	(10,712)
	3,138	(13,646)
Investment expenses	(1,297)	(1,221)
Total investment income (loss)	\$ 18,021	\$ 337

⁽¹⁾ Rental income from investment properties is net of direct operating expenses.

⁽²⁾ The Company adopted IFRS 9's ECL impairment requirements as at January 1, 2023 without restating the comparative period. Impairments for 2023 are based on IFRS 9's ECL requirements and impairments for 2022 are based on IAS 39's incurred loss impairment requirements.

In 2023, the \$18.0 billion of investment income (2022 – income of \$0.3 billion) consisted of:

- \$16.2 billion of investment income before net realized and unrealized gains on assets supporting insurance and investment contract liabilities (2022 – gains of \$15.2 billion);
- \$3.1 billion of net realized and unrealized gains on assets supporting insurance and investment contract liabilities (2022 – losses of \$13.6 billion); and
- \$1.3 billion of investment expenses (2022 – \$1.2 billion).

The \$1.0 billion increase in net investment income before unrealized and realized gains was primarily due to the impact of a higher interest rate environment.

In 2023, net realized and unrealized gains on assets supporting insurance and investment contract liabilities were \$3.1 billion compared with losses of \$13.6 billion in 2022. The 2023 gains were primarily due to higher equity markets, partially offset by losses on real estate relating to declining office property values. The 2022 losses were primarily due to the impact of interest rate increases and lower equity markets.

8. Fourth Quarter Financial Highlights

Profitability

(\$ millions, unless otherwise stated)	Quarterly Results	
	4Q23	4Q22 Transitional
Net income (loss) attributed to shareholders ⁽¹⁾	\$ 1,659	\$ 1,228
Return on common shareholders' equity ("ROE") ⁽¹⁾	15.3%	11.0%
Diluted earnings (loss) per common share (\$) ⁽¹⁾	\$ 0.86	\$ 0.60

(\$ millions, unless otherwise stated)	Quarterly Results	
	4Q23	4Q22
Net income (loss) attributed to shareholders ⁽¹⁾	\$ 1,659	\$ 915
Core earnings	\$ 1,773	\$ 1,543
Diluted earnings (loss) per common share (\$)	\$ 0.86	\$ 0.43
Diluted core earnings per common share ("Core EPS") (\$)	\$ 0.92	\$ 0.77
ROE	15.3%	8.0%
Core return on shareholders' equity ("Core ROE")	16.4%	14.1%
Expense efficiency ratio	45.5%	47.0%
Expenditure efficiency ratio	52.1%	54.2%
General expenses	\$ 1,180	\$ 1,002
Core expenses	\$ 1,725	\$ 1,576
Core expenditures	\$ 2,249	\$ 2,108

⁽¹⁾ 2022 results for transitional net income attributed to shareholders, transitional diluted earnings per common share and transitional ROE are adjusted to include IFRS 9 hedge accounting and expected credit loss principles ("IFRS 9 transitional impacts"). See section 1 "Implementation of IFRS 17 and IFRS 9" of the MD&A above for more information. For 2023, there are no IFRS 9 transitional adjustments as ECL and hedge accounting is effective January 1, 2023 and therefore the impact is included in net income attributed to shareholders.

Manulife's 4Q23 net income attributed to shareholders was \$1,659 million compared with net income attributed to shareholders of \$915 million and transitional net income attributed to shareholders of \$1,228 million in 4Q22. The 4Q22 transitional net income attributed to shareholders includes \$313 million of IFRS 9 transitional impacts. Net income attributed to shareholders is comprised of core earnings (consisting of items we believe reflect the underlying earnings capacity of the business), which amounted to \$1,773 million in 4Q23 compared with \$1,543 million in 4Q22, and items excluded from core earnings, which amounted to a net charge of \$114 million in 4Q23 compared with a net charge of \$628 million in 4Q22. Items excluded from core earnings in 4Q22 on a transitional basis amounted to a net charge of \$315 million.

Net income attributed to shareholders in 4Q23 increased \$431 million compared with 4Q22 transitional net income attributed to shareholders primarily driven by a smaller net charge from market experience, growth in core earnings and the favourable impact of updates to actuarial methods and assumptions in 4Q23. In addition, 4Q22 included the favourable impact on our deferred tax assets due to an increase in the Canadian corporate tax rate. The net charge from market experience in 4Q23 was primarily related to lower-than-expected returns (including fair value changes) relative to long-term assumptions on ALDA mainly related to real estate and private equity, partially offset by higher-than-expected returns relative to long-term assumptions on public equity. Net income attributed to shareholders in 4Q23 increased \$744 million compared with 4Q22, driven by the factors noted above and the \$313 million of IFRS 9 transitional impacts (transitional impacts are geography-related and do not impact total shareholders' equity as the corresponding offset is in other comprehensive income).

The 15% increase in core earnings on a constant exchange rate basis compared with 4Q22 was driven by the net favourable impact of rising interest rates, higher average AUMA and fee spreads in Global WAM, the impact of updates to actuarial methods and assumptions, primarily in Asia, as well as higher earnings in our P&C Reinsurance business as a result of a \$60 million reduction to our prior years' provisions. Business growth contributed to the increase in expected earnings on investments and on Group Insurance and affinity markets businesses in Canada. These are partially offset by higher performance-related costs.

Core earnings by segment is presented in the table below for the periods presented.

For the quarters ended December 31, (\$ millions)	2023	2022
Core earnings by segment⁽¹⁾		
Asia	\$ 564	\$ 496
Canada	352	296
U.S.	474	408
Global Wealth and Asset Management	353	274
Corporate and Other	30	69
Total core earnings	\$ 1,773	\$ 1,543

⁽¹⁾ Effective January 1, 2023, we have made a number of changes to the composition of reporting segments to better align our financial reporting with our business strategy and operations. Our international high net worth business was reclassified from the U.S. segment to the Asia segment to reflect the contributions of our Bermuda operations alongside the high net worth business that we report in our Singapore and Hong Kong operations. Our investment in the start-up capital of segregated and mutual funds, and investment-related revenue and expense were reclassified from the Corporate and Other segment to the Global WAM segment to more closely align with Global WAM's management practices. Refinements were made to the allocations of corporate overhead and interest on surplus among segments. Prior period comparative information has been restated to reflect the changes in segment reporting.

In Asia, core earnings were \$564 million in 4Q23 compared with \$496 million in 4Q22. The 14% increase on a constant exchange rate basis was driven by an increase in expected earnings on insurance contracts, primarily reflecting the net impact of updates to actuarial methods and assumptions on our CSM and risk adjustment and higher expected investment income due to business growth and higher investment yields.

In Canada, core earnings were \$352 million in 4Q23 compared with \$296 million in 4Q22. The 19% increase primarily reflected business growth in Group Insurance and affinity markets, a lower ECL provision, improved insurance experience gains, and the year-to-date impact of changes in corporate tax rates recorded in 4Q22.

In the U.S., core earnings were \$474 million in 4Q23 compared with \$408 million in 4Q22. The 16% increase on a constant exchange rate basis was primarily due to an increase in expected investment earnings driven by higher investment yields and business growth. Insurance experience improved compared with 4Q22 primarily due to net favourable life experience, partially offset by unfavourable long-term care experience.

Global WAM core earnings were \$353 million in 4Q23 compared with \$274 million in 4Q22. The 29% increase was driven by growth in net fee income from higher average AUMA reflecting the favourable impact of markets in 2023 and higher fee spreads, as well as a lower effective tax rate in 4Q23.

Corporate and Other core earnings were \$30 million in 4Q23 compared with \$69 million in 4Q22. The \$39 million decrease in core earnings was primarily driven by higher core expenses due to performance-related costs and higher cost of debt financing. These items were partially offset by gains in our P&C Reinsurance business from a \$60 million update in the quarter to prior years' provisions for estimated losses, primarily related to Hurricane Ian.

The table below presents transitional net income attributed to shareholders and net income attributed to shareholders consisting of core earnings and the items excluded from core earnings.

For the quarters ended December 31,
(\$ millions)

	2023	2022
Core earnings	\$ 1,773	\$ 1,543
Items excluded from core earnings:		
Market experience gains (losses) ⁽¹⁾	(133)	(655)
<i>Realized gains (losses) on debt instruments</i>	<i>(51)</i>	<i>(453)</i>
<i>Derivatives and hedge accounting ineffectiveness</i>	<i>34</i>	<i>(182)</i>
<i>Actual less expected long-term returns on public equity</i>	<i>182</i>	<i>274</i>
<i>Actual less expected long-term returns on ALDA</i>	<i>(381)</i>	<i>(634)</i>
<i>Other investment results</i>	<i>83</i>	<i>340</i>
Changes in actuarial methods and assumptions that flow directly through income	119	-
Restructuring charge	(36)	-
Reinsurance transactions, tax-related items and other ⁽²⁾	(64)	340
Total items excluded from core earnings	(114)	(315)
Transitional net income attributed to shareholders	n/a	\$ 1,228
Less: IFRS 9 transitional impacts:		
Change in expected credit loss		(27)
Hedge accounting		461
Total IFRS 9 transitional impacts (pre-tax)		434
Tax on IFRS 9 transitional impacts		(121)
Total IFRS 9 transitional impacts (post-tax)		313
Net income (loss) attributed to shareholders	\$ 1,659	\$ 915

⁽¹⁾ Market experience was a net charge of \$133 million in 4Q23 primarily driven by lower-than-expected returns (including fair value changes) relative to long-term assumptions on ALDA related to real estate and private equity, partially offset by higher-than-expected returns relative to long-term assumptions on public equity. Market experience was a net charge of \$655 million in 4Q22 consisting of lower-than-expected returns (including fair value changes) relative to long-term assumptions on ALDA mainly related to real estate, net realized losses from the sale of debt instruments which are classified as FVOCI and a charge from derivatives and hedge accounting ineffectiveness, partially offset by a net gain primarily from changes in foreign currency exchange rates and higher-than-expected returns relative to long-term assumptions on public equity.

⁽²⁾ The 4Q23 net charge of \$64 million mainly included a \$38 million for an investment impairment in Asia and a charge for tax-related true-ups of \$23 million. The 4Q22 net gain of \$340 million included a net gain of \$86 million related to acquiring full ownership interest of Manulife Fund Management Co., Ltd. ("MFM"), formerly known as Manulife TEDA Fund Management Co., Ltd. ("MTEDA") by purchasing the remaining 51% of shares from our joint venture partner, partially offset by a charge of \$15 million resulting from actuarial model adjustments in Asia. In addition, 4Q22 included the favourable impact of \$269 million on our deferred tax assets due to an increase in the Canadian corporate tax rate.

Transitional net income attributed to shareholders by segment and net income attributed to shareholders by segment are presented in the following tables.

Transitional net income (loss) attributed to shareholders by segment ⁽¹⁾	Quarterly Results	
	4Q23	4Q22 Transitional
(\$ millions)		
Asia	\$ 615	\$ 493
Canada	365	120
U.S.	198	(106)
Global Wealth and Asset Management	365	401
Corporate and Other	116	320
Total transitional net income (loss) attributed to shareholders	\$ 1,659	\$ 1,228

Net income (loss) attributed to shareholders by segment ⁽¹⁾	Quarterly Results	
	4Q23	4Q22
(\$ millions)		
Asia	\$ 615	\$ 315
Canada	365	(73)
U.S.	198	(44)
Global Wealth and Asset Management	365	401
Corporate and Other	116	316
Total net income (loss) attributed to shareholders	\$ 1,659	\$ 915

⁽¹⁾ Effective January 1, 2023, we have made a number of changes to the composition of reporting segments to better align our financial reporting with our business strategy and operations. Our international high net worth business was reclassified from the U.S. segment to the Asia segment to reflect the contributions of our Bermuda operations alongside the high net worth business that we report in our Singapore and Hong Kong operations. Our investment in the start-up capital of segregated and mutual funds, and investment-related revenue and expense were reclassified from the Corporate and Other segment to the Global WAM segment to more closely align with Global WAM's management practices. Refinements were made to the allocations of corporate overhead and interest on surplus among segments. Prior period comparative information has been restated to reflect the changes in segment reporting.

Expenditure efficiency ratio and expense efficiency ratio

The **expenditure efficiency ratio** was 52.1% in 4Q23, compared with 54.2% in 4Q22. The 2.1 percentage point decrease in the ratio compared with 4Q22 was driven by a 16% increase in pre-tax core earnings, partially offset by a 7% increase in core expenditures. 4Q23 core expenditures increased as a result of higher performance-related costs and investments in technology. Costs directly attributable to the acquisition of new business that are capitalized into the CSM represented approximately 23% and 25% of total core expenditures in 4Q23 and 4Q22, respectively.

The **expense efficiency ratio** was 45.5% in 4Q23, compared with 47.0% in 4Q22. The 1.5 percentage point decrease in the ratio compared with 4Q22 was driven by the items noted above related to the decrease in the core expenditures efficiency ratio but is net of costs directly attributable to the acquisition of new business.

Total general expenses in 4Q23 increased 18% on an actual exchange rate basis and 17% on a constant exchange rate basis compared with 4Q22 driven by the items noted above related to the decrease in the expenditure efficiency ratio and items excluded from core earnings. In 4Q23, the items excluded from core earnings primarily reflected a restructuring charge of \$46 million pre-tax in Global WAM and were not material in 4Q22. General expenses are also net of directly attributable maintenance expenses and directly attributable acquisition expenses for products measured using the PAA which are included in insurance service expenses on our financial statements. Directly attributable maintenance expenses and directly attributable acquisition expenses for products measured using the PAA increased 3% on a constant exchange rate basis and 2% on an actual exchange rate basis in 4Q23 compared with 4Q22.

Business Performance¹

As at and for the quarters ended December 31,
(\$ millions, unless otherwise stated)

	2023	2022
Asia APE sales	\$ 995	\$ 893
Canada APE sales	363	252
U.S. APE sales	192	143
Total APE sales	1,550	1,288
Asia new business value	417	395
Canada new business value	139	87
U.S. new business value	74	42
Total new business value	630	524
Asia new business CSM	414	324
Canada new business CSM	70	47
U.S. new business CSM	142	71
Total new business CSM	626	442
Asia CSM net of NCI	12,617	9,420
Canada CSM	4,060	3,675
U.S. CSM	3,738	4,136
Corporate and Other CSM	25	52
Total CSM net of NCI	20,440	17,283
Post-tax CSM net of NCI	17,748	14,659
Global WAM gross flows (\$ billions)	35.1	32.5
Global WAM net flows (\$ billions)	(1.3)	(8.4)
Global WAM assets under management and administration (\$ billions)	849.2	782.3
Global WAM total invested assets (\$ billions)	7.1	5.8
Global WAM segregated funds net assets (\$ billions)	248.1	224.2
Total assets under management and administration (\$ billions)	1,388.8	1,301.1
Total invested assets (\$ billions)	417.2	400.1
Total net segregated funds net assets (\$ billions)	377.5	348.6

APE sales were \$1.6 billion in 4Q23, an increase of 20% compared with 4Q22. In Asia, APE sales increased 11%, driven by growth in Hong Kong and Asia Other², partially offset by lower sales in Japan. In Hong Kong, APE sales increased 55% compared with 4Q22, reflecting growth in our broker, agency and bancassurance channels, primarily driven by a return of demand from MCV customers. In Japan, APE sales decreased 12%, compared with 4Q22 due to lower other wealth sales. APE sales in Asia Other increased 1% compared with 4Q22. Higher bancassurance sales in mainland China and higher broker sales in Singapore were partially offset by lower agency and bancassurance sales in Vietnam, and lower broker sales in our International High Net Worth business. In Canada, APE sales increased 44% compared with 4Q22, primarily due to higher large-case and mid-size sales in Group Insurance and higher fixed annuity sales, partially offset by lower travel sales. U.S. APE sales increased 34% compared with 4Q22, reflecting a rebound in demand from affluent customers.

New business value (“NBV”) was \$630 million in 4Q23, an increase of 20% compared with 4Q22. In Asia, NBV increased 5% compared with 4Q22, driven by higher sales volumes partially offset by business mix. In Canada, NBV increased 60% compared with 4Q22 driven by higher sales volumes in Group Insurance and higher margins in Individual Insurance and Annuities. In the U.S., NBV increased 74% compared with 4Q22, driven by higher sales volumes, product mix and pricing actions.

New business contractual service margin (“New business CSM”) was \$626 million in 4Q23, an increase of 41% compared with 4Q22. Asia new business CSM increased 27% compared with 4Q22, primarily due to higher sales volumes and the impact of updates to actuarial methods and assumptions. In Canada, new business CSM increased 49% compared with 4Q22, driven by higher margins in Individual Insurance and Annuities. In the U.S., new business CSM increased 102% compared with 4Q22, driven by higher sales volumes, pricing actions and product mix.

Global WAM net outflows were \$1.3 billion in 4Q23 compared with net outflows of \$8.4 billion in 4Q22. Net outflows in Retirement were \$2.5 billion in 4Q23 compared with net outflows of \$4.6 billion in 4Q22, driven by lower pension plan redemptions in the U.S. and growth in new pension plan sales and member contributions. Net outflows in Retail were \$1.0 billion in 4Q23 compared with net outflows of \$4.7 billion in 4Q22, driven by lower mutual fund redemption rates. Net inflows in Institutional Asset Management were \$2.1 billion compared with net inflows of \$0.9 billion in 4Q22, driven by higher sales of real estate, private equity and credit mandates.

Global WAM gross flows were \$35.1 billion in 4Q23, an increase of 8% compared with 4Q22. Retirement gross flows were \$13.3 billion in 4Q23, an increase of 9% compared with 4Q22, driven by higher new pension plan sales and growth in member contributions. Retail gross flows were \$15.2 billion in 4Q23, in line with 4Q22, driven by higher equity fund sales in Canada and higher separately managed accounts sales in the U.S., offset by lower money market sales in mainland China. Institutional Asset Management gross flows were \$6.7 billion in 4Q23, an increase of 31% compared with 4Q22, primarily driven by higher sales of real estate, private equity and credit mandates.

¹ Effective January 1, 2023, our international high net worth business was reclassified from the U.S. segment to the Asia segment to reflect the contributions of our Bermuda operations alongside the high net worth business that we report in our Singapore and Hong Kong operations. Prior period comparative information has been restated to reflect the reclassification.

² Asia Other excludes Hong Kong and Japan.

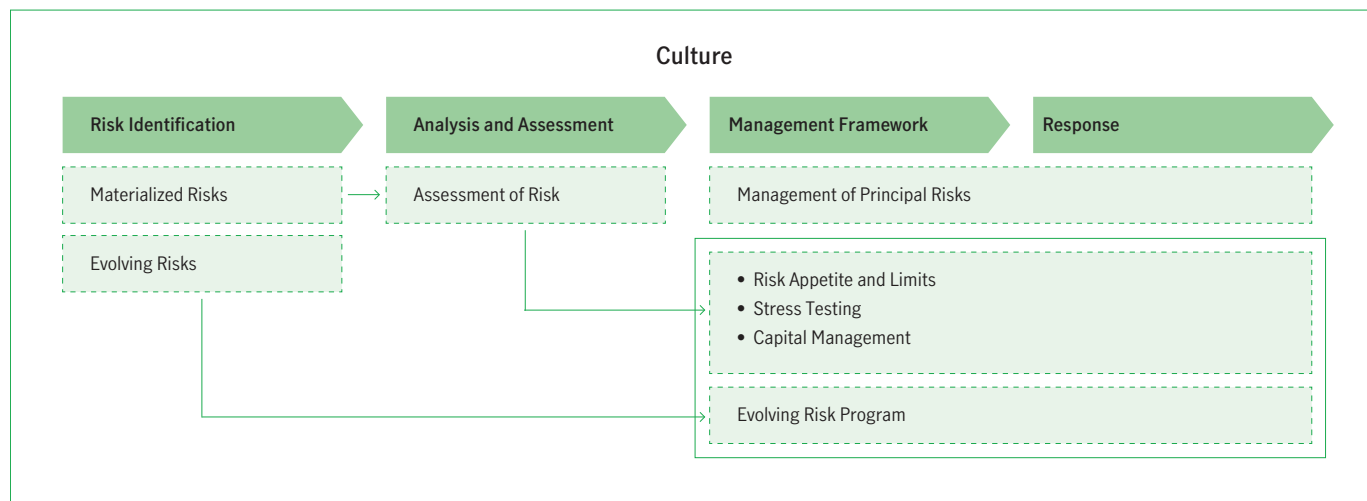
9. Risk Management and Risk Factors

This section provides an overview of our overall risk management approach along with detailed description of specific risks.

Enterprise Risk Management Framework

Delivering on our mission “Decisions made easier. Lives made better”, our ambition is to be the most digital, customer-centric global company in our industry. The activities required to achieve these results involve elements of risk taking.

Our approach to risk management is governed by our Enterprise Risk Management (“ERM”) Framework.



Our ERM Framework provides a structured approach to risk taking and risk management activities across the enterprise. It is communicated through risk policies and standards, which are intended to enable consistent design and execution of strategies across the organization. Our risk policies and standards cover:

- **Governance, risk roles and authorities** – Assignment of accountability and delegation of authority for risk oversight and risk management at various levels within the Company, as well as accountability principles and risk appetite, which drives risk limits and policies;
- **Strategy** – The types and levels of risk the Company faces given its strategic plan, and the risk assessment of the internal and external environment;
- **Execution** – Risk identification, measurement, assessment, and mitigation which enable those accountable for risks to manage and monitor the risk profile; and
- **Evaluation** – Validation and oversight to confirm the Company’s risk profile, root cause analysis of any notable variation, and any action required to maintain risk at its desired level.

Our risk management practices are influenced by external and internal factors, including economic conditions, political environments, technology and risk culture, which can significantly impact the levels and types of risks we might face in pursuit of strategically optimized risk taking and risk management. Our ERM Framework addresses relevant risk drivers and assessments, as well as mitigating actions, as appropriate.

Three Lines of Defense Model

A strong risk culture and a consistent approach are integral to Manulife’s risk management practices. Management is responsible for managing risk within risk appetite and has established risk management strategies and monitoring practices. Our approach includes a “three lines of defense” governance model that segregates duties among risk taking activities, risk monitoring and risk oversight, and establishes appropriate accountability for those who assume risk versus those who oversee risk.

Our first line of defense includes the Chief Executive Officer (“CEO”), Segment and Business Unit General Managers, Global Function Heads and all business operations personnel. The Segment General Managers are ultimately accountable for their business results, the risks they assume to achieve those results, and for the day-to-day management of the risks and related controls, and the Global Function Heads are accountable for the management of the risks and related controls for their function.

The second line of defense is comprised of the Company’s Chief Risk Officer (“CRO”), the Company’s Chief Compliance Officer, and the Company’s Chief Actuary, each with their respective teams, as well as other global oversight functions. Collectively, this group provides independent oversight of risk taking and risk management activities across the enterprise. Risk oversight committees, through broad-based membership, are an integral part of the risk oversight and management governance infrastructure.

The third line of defense is Audit Services, which provides independent, objective assurance that controls are effective and appropriate relative to the risk inherent in the business and that risk mitigation programs and risk oversight functions are effective in managing risks.

Risk Culture

To enable the achievement of our mission and strategic priorities, we are committed to a set of shared values, which reflect our culture, inform our behaviours, and help define how we work together:

- Obsess about customers – Assess their needs and do everything in our power to satisfy them.
- Do the right thing – Act with integrity and do what we say.
- Think big – Anything is possible. We can always find a better way.
- Get it done together – We're part of an amazing team. Do it better by working together.
- Own it – Feel empowered to make decisions and take action to deliver our mission.
- Share your humanity – Build a supportive, diverse and thriving workplace.

Risk Culture Vision – Within this context, we strive for a risk aware culture, where colleagues feel comfortable communicating openly, taking accountability and making decisions that align to the Company's goals and values.

Risk Culture Framework – We have set a framework of desired behaviours to foster a strong risk aware culture. The framework is assessed against a set of qualitative and quantitative indicators and regularly reported to the risk committee of MFC's board of directors (the "Board") and executive leadership, with the intent to continuously identify opportunities to increase risk awareness across all geographies, businesses and layers of management and staff.

We believe that risk culture is strengthened once desired organizational behaviours and attitudes are reinforced through effective application of our corporate values. As such, we communicate key elements of our values through a risk lens to build a strong risk aware culture, including:

- **Communication** – The potential range of outcomes are discussed openly to arrive at informed decisions. Issues are escalated before they become significant problems. Mistakes and failures are used as lessons learned to be shared broadly.
- **Accountability** – Individuals have a clear understanding of their roles and responsibilities, take ownership of their decisions and behaviours, and are held accountable for them.
- **Incentives** – Incentives are aligned to the Company's objectives and encourage behaviours aligned with the Company's values, while discouraging undesired behaviours or inappropriate risk taking.

Risk Governance

The Board oversees our culture of integrity and ethics, strategic planning, risk management, and corporate governance, among other things. The Board carries out its responsibilities directly and through its four standing committees:

- **Risk Committee** – Oversees the management of our principal risks, and our programs, policies and procedures to manage those risks.
- **Audit Committee** – Oversees internal control over financial reporting and our finance, actuarial, internal audit and global compliance functions, serves as the conduct review committee, reviews our compliance with legal and regulatory requirements and oversees the performance, qualifications and independence of our external auditors.
- **Management Resources and Compensation Committee** – Oversees our global human resources strategy, policies, programs, management succession, executive compensation, and pension plan governance.
- **Corporate Governance and Nominating Committee** – Develops our corporate governance policies and procedures, including environmental, social and governance related matters, including climate change, among other activities.

The CEO is directly accountable to the Board for our results and operations and all risk taking activities and risk management practices required to achieve those results. The CEO is supported by the CRO as well as by the Executive Risk Committee ("ERC"). Together, they shape and promote our risk culture, guide risk taking throughout our global operations and strategically manage our overall risk profile.

The ERC approves and oversees the execution of the Company's enterprise risk management program. It establishes and presents for approval to the Board the Company's risk appetite and enterprise-wide risk limits and monitors our overall risk profile, including evolving risks and risk management activities. As part of these activities, the ERC monitors material risk exposures, endorses and reviews strategic risk management priorities, and reviews and assesses the impact of business strategies, opportunities and initiatives on our overall risk position. The ERC is supported by a number of oversight sub-committees including:

- **Credit Committee** – Establishes credit risk policies and risk management standards of practice and oversees the credit risk management program. Also monitors the Company's overall credit risk profile and approves large individual credits and investments.
- **Product Oversight Committee** – Oversees insurance risk and reviews risks in new product and new business reinsurance initiatives. Also monitors product design, new product pricing, and insurance risk exposures and trends.
- **Global Asset Liability Committee** – Oversees market and liquidity risk, hedging, and asset liability management programs and strategies. Also monitors market risk profile, risk exposures, risk mitigation activities and compliance with related policies.

- **Operational Risk Committee** – Oversees operational risk appetite, exposures and associated governance, risk processes, risk management activities and compliance with related policies.
- **Capital Outlook Committee** – Oversees capital management policy and capital positions. Provides direction on strategic capital matters. Identifies key evolving risks impacting capital and the ability to remit earnings from subsidiaries.

We also have segment risk committees, each with mandates similar to the ERC except with a focus at the applicable segment.

Global Risk Management (“GRM”), under the direction of the CRO, establishes and maintains our ERM Framework and oversees the execution of individual risk management programs across the enterprise.

Risk Appetite

The Company’s strategic direction drives and is informed by our overall risk appetite. All risk taking activities are managed within the Company’s overall risk appetite, which defines the amount and types of risks the Company is willing to assume in pursuit of its objectives. The Company’s risk appetite is comprised of three components: overall risk taking philosophy, risk appetite statements, and risk limits and tolerances.

Risk Philosophy – Manulife is a global financial institution offering insurance, wealth and asset management products and other financial services. The activities required to achieve our mission of “Decisions made easier. Lives made better” are guided by our values and involve elements of prudent risk taking. As such, when making decisions about risk taking and risk management, the Company places a priority on the following objectives:

- Safeguarding the commitments and expectations established with our customers, creditors, regulators, shareholders and employees;
- Operating within the Company’s risk governance structure as defined by our risk frameworks and policies;
- Supporting the successful design and delivery of customer solutions through the development and deployment of innovative product solutions, and through providing customer-centric digital experiences while remaining within risk appetite;
- Prudently and effectively deploying shareholder capital invested in the Company to achieve appropriate risk/return profiles;
- Maintaining the Company’s targeted financial strength rating;
- Achieving and maintaining a high level of operational and financial resilience;
- Investing all assets, including in the wealth and asset management business, consistent with customers’ objectives;
- Safeguarding the well-being of our employees, and promoting a diverse, equitable and inclusive business environment;
- Considering environmental, social, and governance (“ESG”) impacts across our business activities; and
- Safeguarding or enhancing the Company’s reputation and brand.

As an integrated component of our business model, risk management assists the Company in achieving our objectives and in reaching higher levels of operational excellence, while encouraging transparency, prudence, and organizational learning. While we only pursue risks that we believe we can appropriately analyze and monitor, we accept that we are exposed to risks both within our control and outside of our direct influence. We manage each risk by taking actions designed to keep exposures within desired levels, and in accordance with the risk objectives articulated above.

Risk Appetite Statements – At least annually, we establish and/or reaffirm that our risk appetite and the Company’s strategy are aligned. The risk appetite statements provide ‘guideposts’ on our appetite for the level of identified risks, any conditions placed on associated risk taking and direction for where quantitative risk limits should be established. The Company’s risk appetite statements are as follows:

- Manulife accepts a total level of risk that provides a very high level of confidence to meeting customer obligations while targeting an appropriate overall return to shareholders over time;
- Manulife pursues product risks that add customer and shareholder value where there is competence to assess and monitor them, and for which appropriate compensation is received;
- Manulife believes a diversified investment portfolio reduces overall risk and enhances returns; therefore, it accepts credit and alternative long-duration asset related risks;
- Capital market risks are acceptable when they are managed within specific risk limits and tolerances;
- Manulife accepts that operational risks are an inherent part of the business and are managed by implementing appropriate controls that provide reasonable assurance that we are within our risk thresholds and tolerances. Management will protect its business and customers’ assets through cost-effective operational risk mitigation; and
- Manulife expects its directors, officers and employees to act in accordance with the Company’s values, ethics and standards; and to protect its brand and reputation.

Risk Limits and Tolerances – Risk limits and tolerances are established for risks within our risk classification framework that are inherent in our strategies in order to define the types and amount of risk the Company will assume. Risk tolerance levels are set for risks deemed to be most significant to the Company and are established in relation to capital and earnings.

Risk Identification, Measurement and Assessment

We have a consistent approach and process to identify, measure, and assess the risks that we assume. We evaluate all potential new business initiatives, acquisitions, product offerings, reinsurance arrangements, and investment and financing transactions on a

comparable risk adjusted basis. Segments and functional groups are responsible for identifying and assessing key and evolving risks on an ongoing basis. A standard inventory of risks is used in all aspects of risk identification, measurement and assessment, as well as monitoring and reporting.

Risk exposures are evaluated using a variety of measures focused on both short-term and long-term economic value, with certain measures used across all risk categories, and others applied only to some risks or a single risk type. Evaluation tools include stress tests such as sensitivity tests, scenario impact analyses and stochastic scenario modeling. In addition, qualitative risk assessments are performed, including for those risk types that cannot be reliably quantified.

We perform a variety of stress tests on earnings and earnings-at-risk, regulatory and economic capital, as well as liquidity. We also perform integrated complex scenario tests to assess key risks and their interaction.

Economic capital and earnings-at-risk provide measures of enterprise-wide risk that can be aggregated and compared across business activities and risk types. Economic capital measures the amount of capital required to meet obligations with a high and pre-defined confidence level. Our earnings-at-risk metric measures the potential variance from quarterly expected earnings at a specified confidence level. Economic capital and earnings-at-risk are both determined using internal models.

Risk Monitoring and Reporting

Under the direction of the CRO, GRM oversees monitoring and reporting on all significant risks at the Company-wide level. Risk exposures are also discussed at various risk oversight committees, along with any exceptions or proposed remedial actions, as required.

On at least a quarterly basis, the ERC and the Board's Risk Committee review risk reports that present an overview of our overall risk profile and exposures across our principal risks. The reports incorporate both quantitative risk exposure measures and sensitivities, and qualitative assessments. The reports also highlight key risk management activities and facilitate monitoring compliance with key risk policy limits.

The results of the Financial Condition Test and Own Risk and Solvency Assessment are presented to the Board annually by our Chief Actuary and CRO, respectively. Our Chief Auditor reports annually the results of our internal audits' assessment of risk management processes and controls to the Board's Audit Committee and the Board's Risk Committee. Management reviews annually the implementation of key risk management strategies, and their effectiveness, with the Board's Risk Committee.

Risk Control and Mitigation

Risk control activities in place throughout the Company are designed to mitigate risks within established risk limits. We believe our controls, which include policies, procedures, systems and processes, are appropriate and commensurate with the key risks faced at all levels across the Company. Such controls are an integral part of day-to-day activity, business management and decision making.

GRM establishes and oversees review and approval processes for product offerings, insurance underwriting, reinsurance, investment activities and other material business activities, based on the nature, size and complexity of the risk taking activity involved. Authority for assuming risk at the transaction level is delegated to specific individuals based on their mandates.

Principal Risk Categories

Our insurance, wealth and asset management and other financial services businesses subject Manulife to a broad range of risks. Management has identified the following key risks grouped under five principal risk categories: strategic risk, market risk, credit risk, product risk and operational risk. The following sections describe the risk management strategies and risk factors for each principal risk category.

The risks described below are not the only ones we face. Additional risks not presently known to us or that are currently immaterial could impair our businesses, operations and financial condition in the future. If any such risks should occur, the trading price of our securities, including common shares, preferred shares and debt securities, could decline, and investors may lose all or part of their investment.

Strategic Risk

Strategic risk is the risk of loss resulting from the inability to adequately plan or implement an appropriate business strategy that allows us to effectively compete in the markets in which we operate, or to adapt to change in the external business, political or regulatory environment.

We compete for customers with both insurance and non-insurance financial services companies. Customer loyalty and retention, and access to distributors, are important to the Company's success and are influenced by many factors, including our distribution practices and regulations, product features, service levels including digital capabilities, prices, investment performance, and our financial strength ratings and reputation. Our ability to effectively compete is highly dependent upon being quick to react and adapt to changes from the external environment while continuing to proactively drive innovation.

Strategic Risk Management Strategy

The CEO and Executive Leadership Team establish and oversee execution of business strategies and have accountability to identify and manage the risks embedded in these strategies. They are supported by a number of processes:

- Strategic business, risk and capital planning that is reviewed with the Board, Executive Leadership Team, and the ERC;
- Performance and risk reviews of all key businesses with the CEO and annual reviews with the Board;
- Risk based capital allocation designed to encourage a consistent decision-making framework across the organization; and
- Review and approval of significant acquisitions and divestitures by the CEO and, where appropriate, the Board.

Reputation risk is the risk that the Company's corporate image may be eroded by adverse publicity, potentially causing long-term or even irreparable damage to the Company's franchise value. Reputation risk arises from both internal and external environmental factors and cannot be managed in isolation from other risks.

The Company's Global Reputation Risk Policy requires that internal processes and controls, management decisions, and business decisions, include considerations for how the Company's reputation and brand could be impacted. Any incident with the potential to harm Manulife's reputation is of high priority and senior management is to be alerted. An essential component of the Global Reputation Risk Policy requires that all employees should conduct themselves in accordance with our values, as well as the Code of Business Conduct and Ethics.

Environmental, Social and Governance Risks

Environmental, social and governance ("ESG") risks could arise from our inability to adapt to evolving ESG issues, including climate change, and may impact our investments, underwriting, and operations, which could lead to adverse financial, operational, legal, reputational, or brand value risks for Manulife due to our actual or perceived actions, or inaction in relation to ESG issues.

The Board's Corporate Governance and Nominating Committee ("CGNC") oversees Manulife's ESG framework, including matters related to climate change. On a regular basis, the CGNC is updated on relevant ESG topics, including our progress against the commitments set out in Manulife's Climate Action Plan. Each member of the CGNC also participates in at least one externally facilitated ESG-related education session every two years. The CGNC's oversight complements Manulife's Executive Sustainability Council ("ESC"), which consists of the CEO, the Chief Sustainability Officer, the CRO and other members of the Executive Leadership Team. As part of its mandate, the ESC is responsible for guiding the development and execution of our climate strategy, including climate-related risk management activities. The ESC meets monthly and is supported by the ESG Centre of Expertise ("CoE"), which consists of corporate function and business unit leads tasked with integrating sustainability into our business practices and a Legal and Compliance ESG CoE, whose purpose is to share information and advice relating to ESG activities across Manulife. Manulife's Climate Change Taskforce, a cross-functional team, is responsible for the execution of the Climate Action Plan and manages climate-related performance and disclosures. Additionally, our global executive Diversity, Equity and Inclusion ("DEI") Council, which includes members of the Executive Leadership Team and is chaired by the CEO, meets quarterly and guides, supports, and facilitates the implementation of our DEI strategy, encourages innovative thinking about DEI challenges and opportunities, and drives and builds accountability for DEI throughout the organization.

Climate Risk

Consistent with the Financial Stability Board's Taskforce on Climate-Related Financial Disclosures ("TCFD"), Manulife defines climate-related risks as the potential negative impacts from climate change, which may be experienced directly (e.g., through financial loss) or indirectly (e.g., through reputational harm), resulting from the physical impacts of climate change or the transition to a low-carbon economy.

Climate risk is a risk with unique characteristics given the diverse set of pathways through which it can manifest. As such, it is a transversal risk, that has the potential to impact any of our principal risks, including strategic, market, credit, product, or operational risk, as well as legal and reputational risk. Climate risk, therefore, is viewed as a modifier or an accelerator of existing risk types, and failure to adequately prepare for the potential impacts of climate change can have material adverse impacts on our balance sheet or our ability to operate.

Potential impacts of climate change may include but are not limited to: business losses or disruption resulting from extreme weather conditions; challenges in adapting to changes in climate-related legal or regulatory frameworks; reputational damage; devaluation of our debt or equity asset exposures to fossil-fuel-related or high-emitting industries; or increased insurance contract liabilities arising from climate-related impacts on morbidity or mortality.

We continue to enhance the integration of climate-related risks into our enterprise risk management framework to ensure that they are managed in a manner consistent with our approach to risk management (refer to "Risk Identification, Measurement and Assessment" above). Our Environmental Risk Policy and other relevant policies and standards are used to guide business operations on climate risk identification and assessment. GRM continues to enhance risk management practices to consider the potential impacts from climate-related risk, including in our investment decision-making processes, life insurance underwriting due diligence, and assessment of operational risks and controls.

The Executive Risk Committee and the Risk Committee of the Board consider climate-related risks and opportunities through the ongoing monitoring and reporting of evolving risks. Risk management activities addressing climate-related risks are expected to continue to evolve over time as knowledge and capabilities further mature, and as applicable standards, frameworks and methodologies continue to emerge and coalesce. Manulife is a long-term oriented underwriter and investor. Therefore, climate-related risks and opportunities, including

changes in the physical environment and policy and technological changes associated with the transition to a low-carbon economy, are strategically relevant and, in some cases, could become material to our business over time. In 2023, we continued to monitor climate-related risks and opportunities within our business strategy over short (1-5 years), medium (5-15 years), and long (beyond 15 years) time horizons to better assess the relative significance of potential impacts and how and when actions will be required to address such impacts.

Our Climate Action Plan focuses on three areas: our operations, our general fund investments, and the products and services we offer to clients. It includes a commitment to achieve net zero financed emissions by 2050, and a commitment to reduce our absolute scope 1 and 2 emissions by 40% by 2035¹. In our General Account, we have set near term decarbonization targets for general fund invested assets in support of our net zero commitment. In-scope asset classes currently covered by science-based targets include project finance of power generation and listed debt and equity (excluding sovereigns). Our interim targets are developed in line with the ambition of Science-based Target Initiative guidance for Financial Institutions with criteria for well-below 2 degrees celsius of warming. Through our general fund we continue to target investment in green and transition assets, directing funds with known use of proceeds to aspects such as energy efficiency projects, sustainably certified timberlands, and renewable energy development. Through MIM, development of investment strategies for climate change mitigation and resilience remains ongoing.

Our total exposure to carbon-related assets, held in our General Account, was \$68.0 billion, or 16% of the total portfolio as of December 31, 2023. Carbon-related assets are identified based on internal sub-sector classifications. Sub-sectors in scope are informed by TCFD guidance and at this time, include oil and gas; oil and gas services; pipelines; coal; electric and gas utilities; building materials, and basic materials. Carbon-related assets are based on sectors recommended by the TCFD and represent sectors that may be financially vulnerable to climate transition risks such as rising costs of carbon, that could lead to possible devaluation, impairment or stranding of assets.

For additional information regarding strategic risks associated with Manulife's sustainability commitments, see "Strategic Risk Factors – We may not be able to achieve our sustainability commitments, or our commitments may not meet the expectations of stakeholders or regulators". Please also refer to our annual "Environmental, Social and Governance Report", published in the second quarter of each year, for detailed disclosure on our alignment with the TCFD recommendations and our ESG performance.

Strategic Risk Factors

We may not be successful in executing our business strategies or these strategies may not achieve our objectives.

- The global macroeconomic environment has a significant impact on our financial plans and ability to implement our business strategy. The macroeconomic environment can be significantly impacted by the actions of both the government sector (including central banks) and the private sector. The macroeconomic environment may also be affected by natural and human-made catastrophes.
- Our business strategy and associated financial plans are developed by considering forecasts of economic growth, both globally and in the specific countries in which we operate. Actual economic growth can be significantly impacted by the macroeconomic environment and can deviate significantly from forecasts, thus impacting our financial results and the ability to implement our business strategy.
- Any plans to expand our global operations in markets where we operate and potentially in new markets may require considerable management time, as well as start-up expenses for market development before any significant revenues and earnings are generated. Operations in new markets may achieve low margins or may be unprofitable, and expansion in existing markets may be affected by local economic and market conditions.
- Changes in the macroeconomic environment can also have a significant impact on financial markets, including movements in interest rates, spreads on fixed income assets, and returns on public equity and ALDA assets. Our financial plan, including income, balance sheet, and capital projections are based on certain assumptions with respect to future interest rates and spreads on fixed income assets, and future returns from our public equity and ALDA investments. Actual experience is highly variable and can deviate significantly from our assumptions, thus impacting our financial results. In addition, changes in the macroeconomic environment may result in changes to financial assumptions, which would also impact our financial results.
- Specific changes in the macroeconomic environment can have very different impacts across different parts of the business. For example, a rise in interest rates is generally beneficial to us in the long-term as higher interest rates may facilitate financial product development and exceed our product pricing assumptions, but can adversely affect valuations of some ALDA assets, especially those that have expected returns substantially dependent on long-dated contractual cash flows.
- A rise in geopolitical tensions and political risk either within or outside of jurisdictions in which we operate can trigger changes in the macroeconomic environment and overall regulatory landscape which can have various impacts across our business. For example, economic sanctions imposed on a country could adversely impact our ability to achieve specific business objectives. Military conflicts could drive financial and economic dislocations across global capital markets, supply chains or commodity markets. See also "Operational Risk Factors – Our operations face political, legal, operational and other risks that could negatively affect those operations or our results of operations and financial condition."
- The spending and savings patterns of our customers could be significantly influenced by the macroeconomic environment and could have an impact on the products and services we offer to our customers.

¹ See "Caution regarding forward-looking statements" above.

- Customer behaviour and emergence of claims on our liabilities can be significantly impacted by the macroeconomic environment. For example, a prolonged period of economic weakness could impact the health and well-being of our customers and that could result in increased claims for certain insurance risks.
- An elevated risk for stagflation, increased unemployment, inflation and economic uncertainty in certain parts of the global markets may result in adverse policyholders' behaviour (such as higher withdrawals, lapses, lower premium deposits and lower policy persistency than anticipated), higher expenses and cost of fundings, along with other adverse impacts from higher rates due to inflationary pressure as noted in the Market Risk Factors section. These impacts could have a material adverse effect on our business, financial condition, results of operations, and cash flows.

Adverse publicity, litigation or regulatory action resulting from our business practices or actions by our employees, representatives and/or business partners, could erode our corporate image and damage our franchise value and/or create losses.

- Manulife's reputation is one of its most valuable assets. Harm to a company's reputation is often a consequence of risk control failure, whether associated with complex financial transactions or routine operational activities. Manulife's reputation could also be harmed by the actions of third parties with whom we do business. Our representatives include affiliated broker-dealers, agents, wholesalers and independent distributors, such as broker-dealers and banks, on whose services and representations our customers rely. Business partners include, among others, joint venture partners and third parties to whom we outsource certain functions and that we rely on to fulfill various obligations.
- If any of these representatives or business partners fail to adequately perform their responsibilities, or monitor their own risks, these failures could affect our business reputation and operations. While we seek to maintain adequate internal risk management policies and procedures and protect against performance failures, events may occur involving our representatives or our business partners that could cause us to lose customers or cause us or our representatives or business partners to become subject to legal, regulatory, economic or trade sanctions, which could have a material adverse effect on our reputation, our business, and our results of operations. For further discussion of government regulation and legal proceedings refer to "Government Regulation" in MFC's Annual Information Form dated February 14, 2024 and note 19 of the 2023 Annual Consolidated Financial Statements.

Our businesses are heavily regulated, and changes in regulation or laws, or in the interpretation or enforcement of regulation and laws, may reduce our profitability and limit our growth.

- Our operations are subject to a wide variety of insurance and other laws and regulations including with respect to financial crimes (which include, but are not limited to, money laundering, bribery and economic or trade sanctions), privacy, market conduct, consumer protection, business conduct, prudential and other generally applicable non-financial requirements. Insurance and securities regulators in Canada, the United States, Asia and other jurisdictions regularly re-examine existing laws and regulations applicable to insurance companies, investment advisors, broker-dealers and their products. Compliance with applicable laws and regulations is time consuming and personnel-intensive, and changes in these laws and regulations or in the interpretation or enforcement thereof, may materially increase our direct and indirect compliance costs and other expenses of doing business, thus having a material adverse effect on our results of operations and financial condition.
- Future regulatory capital, actuarial and accounting changes, including changes with a retroactive impact, could have a material adverse effect on the Company's consolidated financial condition, results of operations and regulatory capital both on transition and going forward. In addition, such changes could have a material adverse effect on the Company's position relative to that of other Canadian and international financial institutions with which Manulife competes for business and capital.
- In Canada, MFC and its principal operating subsidiary, MLI, are governed by the Insurance Companies Act (Canada) ("ICA"). The ICA is administered, and the activities of the Company are supervised, by the Office of the Superintendent of Financial Institutions ("OSFI"). MLI is also subject to regulation and supervision under the insurance laws of each of the provinces and territories of Canada. Regulatory oversight is vested in various governmental agencies having broad administrative power with respect to, among other things, dividend payments, capital adequacy and risk based capital requirements, asset and reserve valuation requirements, permitted investments and the sale and marketing of insurance contracts. These regulations are intended to protect policyholders and beneficiaries rather than investors and may adversely impact shareholder value.
- Some recent examples of regulatory and professional standard developments, which could impact our net income attributed to shareholders and/or capital position are provided below.
 - OSFI published the Parental Stand-alone (Solo) Capital Framework in September 2023 with an effective date of January 1, 2024. The Solo Capital Framework applies to all life insurers designated by OSFI as internationally active insurance groups (IAIGs). The objective of this framework is to assess the sufficiency of capital that is readily available to the domestic parent operating life insurer on a solo basis and to assess the parent's ability to act as a source of strength for its subsidiaries and/or other affiliates. MLI is in scope for this framework and meets the requirement.
 - In January 2023, a revised LICAT guideline, aligning with the IFRS 17 accounting changes, took effect. This will be followed by an update to the capital rules for Segregated Fund Guarantees, expected to be effective in January 2025. OSFI's LICAT capital regime applies to our business globally on a group consolidated basis. We continue to meet OSFI's requirements and maintain capital in excess of regulatory expectations.
 - At its annual meeting in November 2019, the IAIS adopted a risk based global Insurance Capital Standard ("ICS"), that is being further developed over a five-year monitoring period that commenced in 2020. While broadly supportive of the goals of ICS, OSFI

stated that it did not support the current ICS design, adopted by the IAIS in November 2019, citing that it was 'not fit for purpose for the Canadian market'. While the IAIS intend to adopt ICS in November 2024, the final form and timing of ICS that will be implemented in different jurisdictions, remains the sole responsibility of the local regulators. Without OSFI's adoption, the IAIS rules will not apply in Canada or to Canadian companies on a group-wide basis, while other regulators may use the ICS framework, adapted for their local market, for calculating capital in their specific markets. We will continue to monitor developments as the ICS methodology and its applicability evolve.

- The National Association of Insurance Commissioners ("NAIC") continues to review and revise reserving and capital methodologies as well as the overall risk management framework as required to keep pace with an evolving landscape. These reviews will affect U.S. life insurers, including John Hancock, and could lead to increased reserving and/or capital requirements for our business in the U.S. In addition, in December 2020 the NAIC adopted a group capital calculation ("GCC") and amendments to the NAIC Insurance Holding Company System Regulatory Act which exempt certain insurance holding groups, including John Hancock and Manulife, from the requirements relating to the GCC. In Michigan, which is the lead state for NAIC regulation of John Hancock, the Michigan Insurance Code was recently amended to adopt the NAIC GCC model language and the Michigan Department of Insurance and Financial Services ("DIFS") is promulgating the associated rules. OSFI has been working with the NAIC to achieve mutual recognition and treatment of internationally active insurance groups domiciled in Canada with U.S. operations. Mutual recognition will avoid redundant group oversight, and Manulife and John Hancock have taken a leadership role to ensure the NAIC process could accommodate a process that OSFI could and would undertake. With the ongoing NAIC mutual recognition process, Michigan DIFS issued guidance providing a narrowly tailored waiver that relieves John Hancock of any additional reporting obligations in 2024.
- Regulators in various jurisdictions in which we operate continue to reform their respective capital regulations. We continue to closely monitor the developments.
- Increasingly, global financial regulators are promulgating guidance related to climate change and its potential impacts on financial services firms. OSFI, the SEC and several regulators across Asia have been engaging industry to assess the impacts of climate change and to set expectations on establishing climate transition plans, including ensuring effective risk management and governance structures to manage climate change-related risks and have begun releasing guidance. There are also increasing expectations from investors, regulators, and other stakeholders to provide comparable, decision-useful data and reporting on climate change-related risks and opportunities, including performance metrics such as an organization's Scope 1, 2 and 3 carbon emissions. Regulatory disclosure requirements are guided by private sector bodies, where there is a convergence in the industry around sustainability reporting frameworks. The IFRS Foundation's International Sustainability Standards Board ("ISSB") is one such body and has published draft standards for a comprehensive global baseline of sustainability disclosures for capital markets.
- In the United States, state insurance laws regulate most aspects of our business, and our U.S. insurance subsidiaries are regulated by the insurance departments of the states in which they are domiciled and the states in which they are licensed. State laws grant insurance regulatory authorities broad administrative powers with respect to, among other things: licensing companies and agents to transact business; calculating the value of assets to determine compliance with statutory requirements; mandating certain insurance benefits; regulating certain premium rates; reviewing and approving policy forms; regulating unfair trade and claims practices, including through the imposition of restrictions on marketing and sales practices, distribution arrangements and payment of inducements; regulating advertising; protecting privacy; establishing statutory capital and reserve requirements and solvency standards; fixing maximum interest rates on insurance policy loans and minimum rates for guaranteed crediting rates on life insurance policies and annuity contracts; approving changes in control of insurance companies; restricting the payment of dividends and other transactions between affiliates; and regulating the types, amounts and valuation of investments. Changes in any such laws and regulations, or in the interpretation or enforcement thereof by regulators, could significantly affect our business, results of operations and financial condition.
- Currently, the U.S. federal government does not directly regulate the business of insurance. However, federal legislation and administrative policies in several areas can significantly and adversely affect state regulated insurance companies. These areas include financial services regulation, securities regulation, pension regulation, privacy, tort reform legislation, and taxation. In addition, under the Dodd-Frank Wall Street Reform and Consumer Protection Act ("Dodd-Frank"), the U.S. Board of Governors of the Federal Reserve has supervisory powers over non-bank financial companies that are determined to be systemically important.
- Insurance guaranty associations in Canada and the United States have the right to assess insurance companies doing business in their jurisdiction for funds to help pay the obligations of insolvent insurance companies to policyholders and claimants. Typically, an insurer is assessed an amount related to its proportionate share of the line of business written by all insurers in the relevant jurisdiction. Because the amount and timing of an assessment is beyond our control, the liabilities that we have currently established for these potential liabilities may not be adequate, particularly if there is an increase in the number of insolvent insurers or if the insolvent insurers operated in the same lines of business and in the same jurisdictions in which we operate.
- Manulife operates in numerous jurisdictions in Asia. These operations are subject to the regulations and laws in each local jurisdiction, with the structure or model for oversight of insurance differing by jurisdiction. We are encouraged to see further regional economic and trade integration in Asia, with most jurisdictions supportive of foreign investment and many regulators' increasing willingness to benchmark domestic law and regulation against international standards and best practices. However, the increasing geopolitical complexity, rising political and regulatory uncertainty, and regulatory tightening in some jurisdictions have created heightened complexity and risk for Manulife to mitigate and navigate, which may adversely impact shareholder value.

- While many of the laws and regulations to which we are subject are intended to protect policyholders, beneficiaries, depositors and investors in our products and services, others also set standards and requirements for the governance of our operations. Failure to comply with applicable laws or regulations could result in financial penalties or sanctions, and damage our reputation.
- All aspects of Manulife's Global WAM businesses are subject to various laws and regulations around the world. These laws and regulations are primarily intended to protect investment advisory clients, investors in registered and unregistered funds, and clients of Manulife's global retirement businesses. Agencies that regulate investment advisors, investment funds and retirement plan products and services have broad administrative powers, including the power to limit, restrict or prohibit the regulated entity or person from carrying on business if it fails to comply with such laws and regulations. Possible sanctions for significant compliance failures include the suspension of individual employees, limitations on engaging in certain lines of business for specified periods of time, revocation of investment advisor and other registrations and censures and fines both for individuals and Manulife, along with the resulting damage to our reputation.
- From time to time, regulators raise issues during examinations or audits of Manulife that could have a material adverse impact on us. We cannot predict whether or when regulatory actions may be taken that could adversely affect our operations. Our failure to comply with existing and evolving regulatory requirements could also result in regulatory sanctions and could affect our relationships with regulatory authorities and our ability to execute our business strategies and plans. For further discussion of government regulation and legal proceedings refer to "Government Regulation" in MFC's Annual Information Form dated February 14, 2024 and note 19 of the 2023 Annual Consolidated Financial Statements. See also "Operational Risk Factors – Our operations face political, legal, operational and other risks that could negatively affect those operations or our results of operations and financial condition" for further discussion on the impact to our operations.

Changes to International Financial Reporting Standards could have a material impact on our financial results.

- New standards or modifications to existing standards could have a material adverse impact on our financial results and regulatory capital position (the regulatory capital framework in Canada uses IFRS as a base). Additionally, any mismatch between the underlying economics of our business and new accounting standards could have significant unintended negative consequences on our business model; and potentially affect our customers, shareholders and our access to capital markets.

Changes in tax laws, tax regulations, or interpretations of such laws or regulations could make some of our products less attractive to consumers, could increase our corporate taxes or cause us to change the value of our deferred tax assets and liabilities as well as our tax assumptions included in the valuation of our insurance and investment contract liabilities. This could have a material adverse effect on our business, results of operations and financial condition.

- Many of the products that the Company sells benefit from one or more forms of preferred tax treatment under current income tax regimes. For example, the Company sells life insurance policies that benefit from the deferral or elimination of taxation on earnings accrued under the policy, as well as permanent exclusion of certain death benefits that may be paid to policyholders' beneficiaries. We also sell annuity contracts that allow the policyholders to defer the recognition of taxable income earned within the contract. Other products that the Company sells, such as certain employer-paid health and dental plans, also enjoy similar, as well as other, types of tax advantages. The Company also benefits from certain tax benefits, including tax-exempt interest, dividends-received deductions, tax credits (such as foreign tax credits), and favourable tax rates and/or income measurement rules for tax purposes.
- There is risk that tax legislation could be enacted that would lessen or eliminate some or all of the tax advantages currently benefiting the Company or its policyholders or its other clients. This could occur in the context of deficit reduction or other tax reforms. The effects of any such changes could result in materially lower product sales, lapses of policies currently held, and/or our incurrence of materially higher corporate taxes, any of which could have a material adverse effect on our business, results of operations and financial condition.
- Additionally, the Company may be required to change its provision for income taxes or carrying amount of deferred tax assets or liabilities if the characterization of certain items is successfully challenged by taxing authorities or if future transactions or events, which could include changes in tax laws, tax regulations or interpretations of such laws or regulations, occur. Any such changes could significantly affect the amounts reported in the consolidated financial statements in the year these changes occur.
- In 2021, 136 of the 140 members of the Organization for Economic Co-Operation and Development ("OECD") / G20 Inclusive Framework agreed on a two-pillar solution to address tax challenges from the digital economy, and to close the gaps in international tax systems. These include a new approach to allocating certain profits of multinational entities amongst countries and a global minimum income tax rate of 15%. On July 12, 2023, the Canadian government reaffirmed its commitment to the two-pillar solution and the target date of December 31, 2023 for implementation of the Pillar 2 global minimum tax. This would first apply to the Company's 2024 fiscal year if enacted on this timeline. The Company is closely monitoring developments and potential impacts and, in particular, for issues unique to the insurance industry. If enacted, we expect an increase in the effective tax rate, pending further details on timing and specific implementation in both Canada and other affected countries.
- In Canada, the 1.5% corporate tax rate increase on Canadian taxable income over \$100 million effective in 2022, had an immediate favourable impact on the value of our existing deferred tax assets in the fourth quarter of 2022 that will be offset over time by a slight increase to our effective tax rate as future Canadian insurance and banking earnings are taxed at the new higher federal corporate tax rate of 16.5%.
- Rules to govern the transition to IFRS 17 for Canadian tax purposes were enacted in late 2022 and became effective January 1, 2023. A five-year transition period for both insurance reserves and revaluations of investments under IFRS 9 should generally smooth the current tax impact of the change in accounting standards but is not expected to have a material effect on the Company's annual cash tax payable.

- The U.S. Inflation Reduction Act of 2022 was signed into law on August 16, 2022, which includes a 15% minimum tax based on financial statement income, starting in 2023. Many related regulations remain to be drafted to clarify how the tax will operate, but at this time we do not expect our IFRS effective tax rate to be materially affected by this new tax, though the timing of cash tax payments could be accelerated.
- Canada's 2023 Budget statement proposed to deny financial institutions of the traditional tax deduction of dividends received on shares of Canadian corporations when such shares are held as mark-to-market property. The affected property is a small component of the investment portfolio that supports the Company's business. Should this rule be enacted as proposed, the Company would expect its tax expense on investment income to increase starting in 2024, though not significantly¹. The resulting negative impact on net investment income would also reduce the value of certain in-force insurance policies and could result in upward pressure on policy pricing going forward.
- On December 27, 2023, Bermuda enacted a 15% domestic corporate income tax regime applicable to large multinational entities that will come into force in 2025. Bermuda has also introduced a transition process intended to phase in the tax impact to affected taxpayers over a number of years. There are no immediate consequences to Manulife from the passage of this tax reform and the longer-term impact on the Company's income tax expense is not expected to be material.

Access to capital may be negatively impacted by market conditions.

- Disruptions, uncertainty or volatility in the financial markets may limit or delay our access to the capital markets to raise capital required to operate our business, satisfy regulatory capital requirements or meet our refinancing needs. Under extreme conditions, we may be forced, among other things, to delay raising capital, issue different types of capital than we would otherwise under normal conditions, issue shorter term securities than we prefer, or issue securities that bear an unattractive cost of capital which could decrease our financial flexibility, profitability, and/or dilute our existing shareholders.

As a holding company, MFC depends on the ability of its subsidiaries to transfer funds to it to meet MFC's obligations and pay dividends. Subsidiaries' remittance of capital depends on subsidiaries' earnings, regulatory requirements and restrictions, macroeconomic and market conditions.

- MFC is a holding company and relies on dividends and interest payments from our insurance and other subsidiaries as the principal source of cash flow to meet MFC's obligations and pay dividends. As a result, MFC's cash flows and ability to service its obligations are dependent upon the earnings of its subsidiaries and the distribution of those earnings and other funds by its subsidiaries to MFC. Substantially all of MFC's business is currently conducted through its subsidiaries.
- The ability of MFC's insurance subsidiaries to pay dividends to MFC in the future will depend on their earnings, macroeconomic and market conditions, and their respective local regulatory requirements and restrictions, including capital adequacy and requirements, exchange controls and economic or trade sanctions.
- MFC's insurance subsidiaries are subject to a variety of insurance and other laws and regulations that vary by jurisdiction and are intended to protect policyholders and beneficiaries in that jurisdiction first and foremost, rather than investors. These subsidiaries are generally required to maintain solvency and capital standards as set by their local regulators and may also be subject to other regulatory restrictions, all of which may limit the ability of subsidiary companies to pay dividends or make distributions to MFC.
- Potential changes to regulatory capital and actuarial and accounting standards could also limit the ability of the insurance subsidiaries to pay dividends or make distributions and could have a material adverse effect on internal capital mobility. We may be required to raise additional capital, which could be dilutive to existing shareholders, or to limit the new business we write, or to pursue actions that would support capital needs but adversely impact our subsequent earnings potential. In addition, the timing and outcome of these initiatives could have a significantly adverse impact on our competitive position relative to that of other Canadian and international financial institutions with which we compete for business and capital.
- The Company seeks to maintain capital in its regulated subsidiaries in excess of the minimum required in all jurisdictions in which the Company does business. The minimum requirements in each jurisdiction may increase due to regulatory changes and we may decide to maintain additional capital in our operating subsidiaries for competitive reasons, to fund expected growth of the business or to deal with changes in the risk profile of such subsidiaries. Any such increases in the level of capital may reduce the ability of the operating companies to pay dividends.
- The payment of dividends to MFC by MLI is subject to restrictions set out in the ICA. The ICA prohibits the declaration or payment of any dividend on shares of an insurance company if there are reasonable grounds for believing: (i) the company does not have adequate capital and adequate and appropriate forms of liquidity; or (ii) the declaration or the payment of the dividend would cause the company to be in contravention of any regulation made under the ICA respecting the maintenance of adequate capital and adequate and appropriate forms of liquidity, or of any order made to the company by the Superintendent. All of our U.S. and Asian operating life insurance companies are subsidiaries of MLI. Accordingly, a restriction on dividends from MLI would restrict MFC's ability to obtain dividends from its U.S. and Asian businesses.
- Certain of MFC's U.S. insurance subsidiaries also are subject to insurance laws in Michigan, New York and Massachusetts, the jurisdictions in which these subsidiaries are domiciled, which impose general limitations on the payment of dividends and other upstream distributions by these subsidiaries to MLI.
- Our Asian insurance subsidiaries are also subject to restrictions in the jurisdictions in which these subsidiaries are domiciled which could affect their ability to pay dividends to MLI in certain circumstances.

¹ See "Caution regarding forward-looking statements" above.

We may experience future downgrades in our financial strength or credit ratings, which may materially adversely impact our financial condition and results of operations.

- Credit rating agencies publish financial strength ratings on life insurance companies that are indicators of an insurance company's ability to meet contract holder and policyholder obligations. Credit rating agencies also assign credit ratings, which are indicators of an issuer's ability to meet the terms of its obligations in a timely manner and are important factors in a company's overall funding profile and ability to access external capital. Ratings reflect the views held by each credit agency, which are subject to change based on various factors that may be within or beyond a company's control.
- Ratings are important factors in establishing the competitive position of insurance companies, maintaining public confidence in products being offered, and determining the cost of capital. A ratings downgrade, or the potential for such a downgrade could adversely affect our operations and financial condition. A downgrade could, among other things, increase our cost of capital and limit our access to the capital and loan markets; cause some of our existing liabilities to be subject to acceleration, additional collateral support, changes in terms, or additional financial obligations; result in the termination of our relationships with broker-dealers, banks, agents, wholesalers and other distributors of our products and services; increase our cost of hedging; unfavourably impact our ability to execute on our hedging strategies; materially increase the number of surrenders, for all or a portion of the net cash values, by the owners of policies and contracts we have issued; impact our ability to obtain reinsurance at reasonable prices or at all; and materially increase the number of withdrawals by policyholders of cash values from their policies; and reduce new sales.

Competitive factors may adversely affect our market share and profitability.

- The insurance, wealth and asset management industries are highly competitive. Our competitors include other insurers, securities firms, investment advisors, asset managers, banks and other financial institutions. The rapid advancement of new technologies, such as blockchain, artificial intelligence and advanced analytics, may enable other non-traditional firms (e.g., big technology competitors providing financial products and services) to compete directly in the industry space, or offer services to our traditional competitors to enhance their value propositions. The impact from technological disruption may result in our competitors improving their customer experience, product offerings and business costs. Our competitors compete with us for customers, access to distribution channels such as brokers and independent agents, and for employees. In some cases, competitors may be subject to less onerous regulatory requirements, have lower operating costs or have the ability to absorb greater risk while maintaining their financial strength ratings, thereby allowing them to price their products more competitively or offer features that make their products more attractive. These competitive pressures could result in lower new business volumes and increased pricing pressures on a number of our products and services that may harm our ability to maintain or increase our profitability. Due to the highly competitive nature of the financial services industry, there can be no assurance that we will continue to effectively compete with our traditional and non-traditional industry rivals, and competitive pressure may have a material adverse effect on our business, results of operations and financial condition.

We may experience difficulty in marketing and distributing products through our current and future distribution channels.

- We distribute our insurance and wealth management products through a variety of distribution channels, including brokers, independent agents, broker-dealers, banks, wholesalers, affinity partners, other third-party organizations and our own sales force in Asia. We generate a significant portion of our business through individual third-party arrangements. We periodically negotiate provisions and renewals of these relationships, and there can be no assurance that such terms will remain acceptable to us or relevant third parties. An interruption in our continuing relationship with certain of these third parties could significantly affect our ability to market our products and could have a material adverse effect on our business, results of operations and financial condition.

Industry trends could adversely affect the profitability of our businesses.

- Our business segments continue to be influenced by a variety of trends that affect our business and the financial services industry in general. The impact of the volatility and instability of the financial markets on our business is difficult to predict and the results of operations and our financial condition may be significantly impacted by general business and economic trends in the geographies in which we operate. These conditions include, but are not limited to, market factors, such as public equity, foreign currency, interest rate and other market risks, demographic shifts, consumer behaviours (e.g., spending habits and debt levels), and governmental policies (e.g., fiscal, monetary, and global trade). The Company's business plans, results of operations, and financial condition have been negatively impacted in the past and may be negatively affected in the future.

We may face unforeseen liabilities or asset impairments arising from possible mergers with, or acquisitions and dispositions of, or strategic investments in, businesses or difficulties integrating acquired businesses.

- We have engaged in mergers with, acquisitions and dispositions of, or strategic investments in, businesses in the past and expect to continue to do so in the future as we may deem appropriate. There could be unforeseen liabilities or asset impairments, including goodwill impairments that arise in connection with the businesses that we may sell, have acquired, or may acquire in the future. In addition, there may be liabilities or asset impairments that we fail, or are unable, to discover in the course of performing due diligence investigations on acquisition targets. Furthermore, the use of our own funds as consideration in any acquisition would consume capital resources that would no longer be available for other corporate purposes.
- Our ability to achieve some or all of the benefits we anticipate from any mergers with, acquisitions and dispositions of, or strategic investments in, businesses will depend in large part upon our ability to successfully integrate the businesses in an efficient and effective manner. We may not be able to integrate the businesses smoothly or successfully, and the process may take longer than expected. The integration of operations may require the dedication of significant management resources, which may distract management's attention

from our day-to-day business. Mergers with, acquisitions and dispositions of, or strategic investments in, operations outside of North America, especially any acquisition in a jurisdiction in which we do not currently operate, may be particularly challenging or costly to integrate. If we are unable to successfully integrate the operations of any acquired businesses, we may be unable to realize the benefits we expect to achieve as a result of the acquisitions and the results of operations may be less than expected.

If our businesses do not perform well, or if the outlook for our businesses is significantly lower than historical trends, we may be required to recognize an impairment of goodwill or intangible assets or to establish a valuation allowance against our deferred tax assets, which could have a material adverse effect on our results of operations and financial condition.

- Goodwill represents the excess of the amounts we paid to acquire subsidiaries and other businesses over the fair value of their net identifiable assets at the date of acquisition. Intangible assets represent assets that are separately identifiable at the time of an acquisition and provide future benefits such as the John Hancock brand.
- As outlined below under “Critical Actuarial and Accounting Policies – Goodwill and Intangible Assets”, goodwill and intangible assets with indefinite lives are tested at least annually for impairment at the cash generating unit (“CGU”) or group of CGUs level, representing the smallest group of assets that is capable of generating largely independent cash flows. Going forward, as a result of the impact of economic conditions and changes in product mix and the granular level of goodwill testing under IFRS, additional impairment charges could occur in the future. Any impairment in goodwill would not affect LICAT capital.
- If market conditions deteriorate in the future and, in particular, if MFC’s common share price is low relative to book value per share, if the Company’s actions to limit risk associated with its products or investments cause a significant change in any one CGU’s recoverable amount, or if the outlook for a CGU’s results deteriorate, the Company may need to reassess the value of goodwill and/or intangible assets which could result in impairments during 2024 or subsequent periods. Such impairments could have a material adverse effect on our results of operations and financial condition.
- Deferred income tax balances represent the expected future tax effects of the differences between the book and tax basis of assets and liabilities, loss carry forwards and tax credits. Deferred tax assets are recorded when the Company expects to claim deductions on tax returns in the future for expenses that have already been recorded in the financial statements.
- The availability of those deductions is dependent on future taxable income against which the deductions can be made. Deferred tax assets are assessed periodically by management to determine if they are realizable.
- Factors in management’s determination include the performance of the business including the ability to generate gains from a variety of sources and tax planning strategies. If based on information available at the time of the assessment, it is determined that the deferred tax asset will not be realized, then the deferred tax asset is reduced to the extent that it is no longer probable that the tax benefit will be realized.

We may not be able to protect our intellectual property and may be subject to infringement claims.

- We rely on a combination of registrations, contractual rights and copyright, trademark, patent and trade secret laws to establish and protect our intellectual property. In particular, we have invested considerable resources in promoting and protecting the brand names “Manulife” and “John Hancock” and expect to continue to do so. Although we use a broad range of measures to protect our intellectual property rights, third parties may infringe or misappropriate our intellectual property. As the occurrence of potential infringements or misappropriations against our intellectual property increases, we may have to litigate more often to enforce and protect our copyrights, trademarks, patents, trade secrets and know-how or to determine their scope, validity or enforceability, which represents a diversion of resources that may be significant in amount and may not prove successful. The loss of intellectual property protection or the inability to secure or enforce the protection of our intellectual property assets could have a material adverse effect on our business and our ability to compete.
- We also may be subject to costly litigation in the event that another party alleges our operations or activities infringe upon its intellectual property rights. Third parties may have, or may eventually be issued, patents that could be infringed by our products, methods, processes or services. Any party that holds such a patent could make a claim of infringement against us. We may also be subject to claims by third parties for breach of copyright, trademark, trade secret or license usage rights. Any such claims and any resulting litigation could result in significant liability for damages. If we were found to have infringed a third-party patent or other intellectual property rights, we could incur substantial liability, and in some circumstances could be enjoined from providing certain products or services to our customers or utilizing and benefiting from certain methods, processes, copyrights, trademarks, trade secrets or licenses, or alternatively could be required to enter into costly licensing arrangements with third parties, all of which could have a material adverse effect on our business, results of operations and financial condition.

Applicable laws may discourage takeovers and business combinations that common shareholders of MFC might consider in their best interests.

- The ICA contains restrictions on the purchase or other acquisition, issue, transfer and voting of the shares of an insurance company. In addition, under applicable U.S. insurance laws and regulations in states where certain of our insurance company subsidiaries are domiciled, no person may acquire control of MFC without obtaining prior approval of those states’ insurance regulatory authorities. These restrictions may delay, defer, prevent, or render more difficult a takeover attempt that common shareholders of MFC might consider in their best interests. For instance, they may prevent shareholders of MFC from receiving the benefit from any premium to the market price of MFC’s common shares offered by a bidder in a takeover context. Even in the absence of a takeover attempt, the existence of these provisions may adversely affect the prevailing market price of MFC’s common shares if they are viewed as discouraging takeover attempts in the future.

Entities within the MFC group are interconnected which may make separation difficult.

- MFC operates in local markets through subsidiaries and branches of subsidiaries. These local operations are financially and operationally interconnected to lessen expenses, share and reduce risk, and efficiently utilize financial resources. In general, external capital required for companies in the Manulife group has been raised at the MFC level in recent years and then transferred to other entities primarily as equity or debt capital as appropriate. Other linkages include policyholder and other creditor guarantees and other forms of internal support between various entities, loans, capital maintenance agreements, derivatives, shared services and affiliate reinsurance treaties. Accordingly, the risks undertaken by a subsidiary may be transferred to or shared by affiliates through financial and operational linkages. Some of the consequences of this are:
 - Financial difficulties at a subsidiary may not be isolated and could cause material adverse effects on affiliates and the group as a whole.
 - Linkages may make it difficult to dispose of or separate a subsidiary or business within the group by way of a spin-off or similar transaction and the disposition or separation of a subsidiary or business may not fully eliminate the liability of the Company and its remaining subsidiaries for shared risks. Issues raised by such a transaction could include: (i) the Company cannot terminate, without policyholder consent and in certain jurisdictions regulator consent, parental guarantees on in-force policies and therefore would continue to have residual risk under any such non-terminated guarantees; (ii) internal capital mobility and efficiency could be limited; (iii) significant potential tax consequences; (iv) uncertainty about the accounting and regulatory outcomes of such a transaction; (v) obtaining any other required approvals; (vi) there may be a requirement for significant capital injections; and (vii) the transaction may result in increased sensitivity of net income attributed to shareholders and capital of MFC and its remaining subsidiaries to market declines.

We may not be able to achieve our sustainability commitments, or our commitments may not meet the expectations of stakeholders or regulators.

- We continue to build on our sustainability commitments, including our climate-related commitments, as set out in our sustainability strategy, and continue to adopt policies and processes to manage these commitments, in alignment with our business priorities. Internal or external circumstances could affect our ability to successfully meet some or all of our sustainability commitments. Our commitments could also materially change in the future and this could affect stakeholders' evaluation of us and lead to adverse impacts to our business operations and reputation.
- Our progress towards the commitments is disclosed periodically, which allows our stakeholders, including shareholders, customers and employees, to evaluate our business based on our advancement towards these commitments. Our reporting on our progress relies on various external frameworks, methodologies, taxonomies and other standards, which may change over time, resulting in changes to or restatements of our reporting processes and results. Stakeholders may also evaluate our business by their own sustainability criteria which may not be consistent with our own criteria or performance indicators, which could result in varying levels of expectations for which we may not be able to entirely satisfy.
- The availability of quality and reliable data, including issuer data, is a notable factor in our ability to set targets, make effective decisions against, and report on our progress towards our targets and strategic areas of focus, for our general fund. However, as a consequence of incomplete, inadequate, or unavailable data, our targets, and our progress toward achieving them, may need to be revisited.
- Interim targets support us in understanding how our investments can contribute to decarbonization of the real economy and provide guideposts against which to measure our progress towards our long-term commitments. However, our targets, and our progress toward achieving them, may need to be revisited if the assumptions underlying net zero scenarios and pathways prove incorrect, or if regulatory, economic, technological and other external factors needed to enable such scenarios and pathways fail to evolve.
- As regulators start to adopt mandatory sustainability related disclosure requirements and investment criteria and taxonomies, there is an increasing possibility of regulatory sanctions, including fines, and litigation resulting from inaccurate or misleading statements, often referred to as "greenwashing". As a result, we may face adverse investor, media, or public scrutiny which may negatively impact our financial results and reputation.
- With respect to our asset management business, we may be subject to competing demands from investors who have divergent views on ESG matters and may choose to invest or not invest in our products based on their assessment of how we address ESG in our investment process. This divergence increases the risk that action, or inaction, on ESG matters will be perceived negatively by at least some stakeholders and impact their investment decisions potentially adversely impacting our business.

Market Risk

Market risk is the risk of loss resulting from market price volatility, interest rate change, credit and swap spread changes, and adverse foreign currency exchange rate movements. Market price volatility primarily relates to changes in prices of publicly traded equities and alternative long-duration assets. The profitability of our insurance and annuity products, as well as the fees we earn in our investment management business, are subject to market risk.

IFRS 7 Disclosures

Text and tables in this and the following section (“Market Risk Sensitivities and Market Risk Exposure Measures”) include disclosures on market and liquidity risk in accordance with IFRS 7, “Financial Instruments – Disclosures”, and discussions on how we measure risk and our objectives, policies and methodologies for managing them. Disclosures in accordance with IFRS 7 are identified by a vertical line in the left margin of each page. The identified text and tables represent an integral part of our audited 2023 Annual Consolidated Financial Statements. The fact that certain text and tables are considered an integral part of the 2023 Annual Consolidated Financial Statements does not imply that the disclosures are of any greater importance than the sections not part of the disclosure. Accordingly, the “Risk Management and Risk Factors” disclosure should be read in its entirety.

Market Risk Management Strategy

Market risk management strategy is governed by the Global Asset Liability Committee which oversees the overall market and liquidity risk program. Our overall strategy to manage our market risks incorporates several component strategies, each targeted to manage one or more of the market risks arising from our businesses. At an enterprise level, these strategies are designed to manage our aggregate exposures to market risks against limits associated with earnings and capital volatility.

The following table outlines our key market risks and identifies the risk management strategies which contribute to managing these risks.

Risk Management Strategy

	Key Market Risk				
	Public Equity Risk	Interest Rate and Spread Risk	ALDA Risk	Foreign Currency Exchange Risk	Liquidity Risk
Product design and pricing	✓	✓	✓	✓	✓
Variable annuity guarantee dynamic hedging	✓	✓		✓	✓
Macro equity risk hedging	✓			✓	✓
Asset liability management	✓	✓	✓	✓	✓
Foreign currency exchange management				✓	✓
Liquidity risk management					✓

Public Equity Risk – To manage public equity risk from our insurance and annuity businesses, we primarily use a variable annuity and segregated fund guarantee dynamic hedging strategy which is complemented by a general macro equity risk hedging strategy, in addition to asset liability management strategies. Our strategies employed for dynamic hedging of variable annuity and segregated fund guarantees and macro equity risk hedging expose the Company to additional risks. See “Market Risk Factors” below.

Interest Rate and Spread Risk – To manage interest rate and spread risk, we primarily employ asset liability management strategies to manage the duration of our fixed income investments and execute interest rate hedges.

ALDA Risk – We seek to limit concentration risk associated with ALDA performance by investing in a diversified basket of assets including commercial real estate, timber, farmland, private equities, infrastructure, and energy assets. We further diversify risk by managing investments against established investment and risk limits.

Foreign Currency Exchange Risk – Our policy is to generally match the currency of our assets with the currency of the liabilities they support. Where assets and liabilities are not currency matched, we seek to hedge this exposure where appropriate to stabilize our capital positions and remain within our enterprise foreign exchange risk limits.

Liquidity Risk – We are exposed to liquidity risk, which is the risk of not having access to sufficient funds or liquid assets to meet both expected and unexpected cash outflows and collateral demands in our operating and holding companies. In the operating companies, cash and collateral demands arise day-to-day to fund policyholder benefits, customer withdrawals, reinsurance settlements, derivative instrument settlements/collateral pledging, expenses, and investment and hedging activities. Under stressed conditions, additional cash and collateral demands could arise from changes to policyholder termination or policy renewal rates, withdrawals of customer deposit balances, borrowers renewing or extending their loans when they mature, derivative settlements or collateral demands, and reinsurance settlements.

Our liquidity risk management framework is designed to provide adequate liquidity to cover cash and collateral obligations as they come due, and to sustain and grow operations in both normal and stressed conditions. Refer to “Liquidity Risk Management Strategy” below for more information.

Product Design and Pricing Strategy

Our policies, standards, and guidelines with respect to product design and pricing are designed with the objective of aligning our product offerings with our risk taking philosophy and risk appetite, and in particular, ensuring that incremental risk generated from new sales aligns with our strategic risk objectives and risk limits. The specific design features of our product offerings, including level of benefit guarantees, policyholder options, fund offerings and availability restrictions as well as our associated investment strategies, help to mitigate the level of underlying risk. We regularly review and modify key features within our product offerings, including premiums and fee charges with a goal of meeting profit targets and staying within risk limits. Certain of our general fund adjustable benefit products have minimum rate guarantees. The rate guarantees for any particular policy are set at the time the policy is issued and governed by insurance regulation in each jurisdiction where the products are sold. The contractual provisions allow crediting rates to be re-set at pre-established intervals subject to the established minimum crediting rate guarantees. The Company may partially mitigate the interest rate exposure by setting new rates on new business and by adjusting rates on in-force business where permitted. In addition, the Company partially mitigates this interest rate risk through its asset liability management process, product design elements, and crediting rate strategies. All material new product, reinsurance and underwriting initiatives must be reviewed and approved by the CRO or key individuals within risk management functions.

Hedging Strategies for Variable Annuity and Other Equity Risks

The Company's exposure to movement in public equity market values primarily arises from insurance contract liabilities related to variable annuity guarantees and general fund public equity investments.

Dynamic hedging is the primary hedging strategy for variable annuity market risks. Dynamic hedging is employed for new variable annuity guarantees business when written or as soon as practical thereafter.

We seek to manage public equity risk arising from unhedged exposures in our insurance contract liabilities through our macro equity risk hedging strategy. We seek to manage interest rate risk arising from variable annuity business not dynamically hedged through our asset liability management strategy.

Variable Annuity Dynamic Hedging Strategy

The variable annuity dynamic hedging strategy is designed to hedge the sensitivity of variable annuity guarantee insurance contract liabilities to fund performance (both public equity and bond funds) and interest rate movements. The objective of the variable annuity dynamic hedging strategy is to offset, as closely as possible, the change in the economic value of guarantees with the profit and loss from our hedge asset portfolio.

Our variable annuity hedging program uses a variety of exchange-traded and over-the-counter ("OTC") derivative contracts to offset the change in value of variable annuity guarantees. The main derivative instruments used are equity index futures, government bond futures, currency futures, interest rate swaps, total return swaps, equity options and interest rate swaptions. The hedge instruments' positions against insurance contract liabilities are continuously monitored as market conditions change. As necessary, the hedge asset positions will be dynamically rebalanced in order to stay within established limits. We may also utilize other derivatives with the objective to improve hedge effectiveness opportunistically.

Our variable annuity guarantee dynamic hedging strategy is not designed to completely offset the sensitivity of insurance contract liabilities to all risks associated with the guarantees embedded in these products. The profit (loss) on the hedge instruments will not completely offset the underlying losses (gains) related to the guarantee liabilities hedged because:

- Policyholder behaviour and mortality experience are not hedged;
- Risk adjustment related to cost of guarantees in the insurance contract liabilities is largely hedged;
- A portion of interest rate risk is not hedged;
- Credit spreads may widen and actions might not be taken to adjust accordingly;
- Fund performance on a small portion of the underlying funds is not hedged due to lack of availability of effective exchange-traded hedge instruments;
- Performance of the underlying funds hedged may differ from the performance of the corresponding hedge instruments;
- Correlations between interest rates and equity markets could lead to unfavourable material impacts;
- Unfavourable hedge rebalancing costs can be incurred during periods of high volatility from equity markets, bond markets and/or interest rates. The impact is magnified when these impacts occur concurrently; and
- Not all other risks are hedged.

Macro Equity Risk Hedging Strategy

The objective of the macro equity risk hedging program is to maintain our overall earnings sensitivity to public equity market movements within our Board approved risk appetite limits. The macro equity risk hedging program is designed to hedge earnings sensitivity due to movements in public equity markets arising from all sources (outside of dynamically hedged exposures). Sources of equity market sensitivity addressed by the macro equity risk hedging program include:

- Residual equity and currency exposure from variable annuity guarantees not dynamically hedged;
- General fund equity holdings backing guaranteed, adjustable liabilities and variable universal life; and
- Host contract fees related to variable annuity guarantees are not dynamically hedged.

Asset Liability Management Strategy

Our asset liability management strategy is designed to help ensure that the market risks embedded in our assets and liabilities held in the Company's general fund are effectively managed and that risk exposures arising from these assets and liabilities are maintained within risk limits. The embedded market risks include risks related to the level and movement of interest rates and credit and swap spreads, public equity market performance, ALDA performance and foreign currency exchange rate movements.

General fund product liabilities are categorized into groups with similar characteristics in order to support them with a specific asset strategy. We seek to align the asset strategy for each group to the premium and benefit patterns, policyholder options and guarantees, and crediting rate strategies of the products they support. The strategies are set using portfolio analysis techniques intended to optimize returns, subject to considerations related to regulatory and economic capital requirements, and risk tolerances. They are designed to achieve broad diversification across asset classes and individual investment risks while being suitably aligned with the liabilities they support. The strategies encompass asset mix, quality rating, term profile, liquidity, currency and industry concentration targets.

Products which feature guaranteed liability cash flows (i.e., where the projected net flows are not materially dependent upon economic scenarios) are managed to a target return investment strategy. The products backed by this asset group include:

- Accumulation annuities (other than annuities with pass-through features), which are primarily short-to-medium-term obligations and offer interest rate guarantees for specified terms on single premiums. Withdrawals may or may not have market value adjustments;
- Payout annuities, which have no surrender options and include predictable and very long-dated obligations; and
- Insurance products, with recurring premiums extending many years in the future, and which also include a significant component of very long-dated obligations.

We seek to manage the assets backing these long-dated benefits to achieve a target return sufficient to support the obligations over their lifetime, subject to established risk tolerances and the impact of regulatory and economic capital requirements. Fixed income assets are managed to a benchmark developed to minimize interest rate risk against the liability cash flows. Utilizing ALDA and public equity investments provides a suitable match for long-duration liabilities that also enhances long-term investment returns and reduces aggregate risk through diversification.

For insurance and annuity products where significant pass-through features exist, a total return strategy approach is used, generally combining fixed income with ALDA plus public equity investments. ALDA and public equity may be included to enhance long-term investment returns and reduce aggregate risk through diversification. Target investment strategies are established using portfolio analysis techniques that seek to optimize long-term investment returns while considering the risks related to embedded product guarantees and policyholder withdrawal options, the impact of regulatory and economic capital requirements and considering management tolerances with respect to short-term income volatility and long-term tail risk exposure. For these pass-through products such as participating insurance and universal life insurance, the investment performance of assets supporting the liabilities will be largely passed through to policyholders as changes in the amounts of dividends declared or rates of interest credited, subject to embedded minimum guarantees. Shorter duration liabilities such as fixed deferred annuities do not incorporate ALDA plus public equity investments into their target asset mixes. Authority to manage our investment portfolios is delegated to investment professionals who manage to benchmarks derived from the target investment strategies established for each group, including interest rate risk tolerances.

Our asset liability management strategy incorporates a wide variety of risk measurement, risk mitigation and risk management, and hedging processes. The liabilities and risks to which the Company is exposed, however, cannot be completely matched or hedged due to both limitations on instruments available in investment markets and uncertainty of impact on liability cash flows from policyholder experience/behaviour.

Foreign Currency Exchange Risk Management Strategy

Our policy is to generally match the currency of our assets with the currency of the liabilities they support. Where assets and liabilities are not currency matched, we seek to hedge this exposure where appropriate to stabilize our earnings and capital positions, and remain within our enterprise foreign exchange risk limits.

Risk from small balance sheet mismatches is accepted if managed within set risk limits. Risk exposures are measured in terms of potential changes in capital ratios, due to foreign currency exchange rate movements, determined to represent a specified likelihood of occurrence based on internal models.

Liquidity Risk Management Strategy

Global liquidity management policies and procedures are designed to provide adequate liquidity to cover cash and collateral obligations as they come due, and to sustain and grow operations in both normal and stressed conditions. They consider legal, regulatory, tax, operational or economic impediments to inter-entity funding. The asset mix of our balance sheet takes into account the need to hold adequate unencumbered and appropriate liquid assets to satisfy the requirements arising under stressed scenarios and to allow our liquidity ratios to remain strong. We manage liquidity centrally and closely monitor the liquidity positions of our principal subsidiaries.

We seek to mitigate liquidity risk by diversifying our business across different products, markets, geographical regions and policyholders. We design insurance products to encourage policyholders to maintain their policies in-force, to help generate a diversified and stable flow of recurring premiums. We design the policyholder termination features with the goal of mitigating the financial exposure and liquidity risk related to unexpected policyholder terminations. We establish and implement investment strategies intended to match the term profile of the assets to the liabilities they support, taking into account the potential for unexpected policyholder terminations and resulting liquidity needs. Liquid assets represent a large portion of our total assets. We aim to reduce liquidity risk in our businesses by diversifying our funding sources and appropriately managing the term structure of our funding. We forecast and monitor daily operating liquidity and cash movements in various individual entities and operations as well as centrally, aiming to ensure liquidity is available and cash is employed optimally.

We also maintain centralized cash pools and access to other sources of liquidity and contingent liquidity such as repurchase funding agreements. Our centralized cash pools consist of cash or near-cash, high quality short-term investments that are continually monitored for their credit quality and market liquidity.

As at December 31, 2023, the Company held \$250.7 billion in cash and cash equivalents, comprised of cash on deposit, Canadian and U.S. Treasury Bills and high quality short-term investments, and marketable securities comprised of investment grade government and agency bonds, investment grade corporate bonds, investment grade securitized instruments, publicly traded common stocks and preferred shares, compared with \$241.1 billion as at December 31, 2022 as noted in the table below.

As at December 31,

(\$ millions, unless otherwise stated)

	2023	2022
Cash and cash equivalents	\$ 20,338	\$ 19,153
Marketable securities		
Government bonds (investment grade)	77,191	70,508
Corporate bonds (investment grade)	126,992	126,893
Securitized — ABS, CMBS, RMBS (investment grade)	1,971	2,286
Public equities	24,211	22,221
Total marketable assets	230,365	221,908
Total cash and cash equivalents and marketable securities⁽¹⁾	\$ 250,703	\$ 241,061

⁽¹⁾ Including \$11.0 billion encumbered cash and cash equivalents and marketable securities as at December 31, 2023 (2022 – \$13.3 billion).

We have established a variety of contingent liquidity sources. These include, among others, a \$500 million committed unsecured revolving credit facility with certain Canadian chartered banks available for MFC, and a US\$500 million committed unsecured revolving credit facility with certain U.S. banks available for MFC and certain of its U.S. subsidiaries. There were no outstanding borrowings under these facilities as of December 31, 2023 (2022 – \$nil). In addition, John Hancock Life Insurance Company (U.S.A.) (“JHUSA”) is a member of the Federal Home Loan Bank of Indianapolis (“FHLBI”), which enables the company to obtain loans from FHLBI as an alternative source of liquidity that is collateralizable by qualifying mortgage loans, mortgage-backed securities and U.S. Treasury and Agency securities. As of December 31, 2023, JHUSA had an estimated maximum borrowing capacity of US\$4.3 billion (2022 – US\$3.8 billion) based on regulatory limitations with an outstanding balance of US\$500 million (2022 – US\$500 million), under the FHLBI facility.

The following table outlines the maturity of the Company’s significant financial liabilities.

Maturity of financial liabilities⁽¹⁾

As at December 31, 2023 (\$ millions)	Less than 1 year	1 to 3 years	3 to 5 years	Over 5 years	Total
Long-term debt	\$ –	\$ 1,672	\$ 920	\$ 3,479	\$ 6,071
Capital instruments	594	–	–	6,073	6,667
Derivatives	1,561	1,982	717	7,427	11,687
Deposits from Bank clients ⁽²⁾	16,814	2,963	1,839	–	21,616
Lease liabilities	100	133	68	49	350

⁽¹⁾ The amounts shown above are net of the related unamortized deferred issue costs.

⁽²⁾ Carrying value and fair value of deposits from Bank clients as at December 31, 2023 was \$21,616 million and \$21,518 million, respectively (2022 – \$22,507 million and \$22,271 million, respectively). Fair value is determined by discounting contractual cash flows, using market interest rates currently offered for deposits with similar terms and conditions. All deposits from Bank clients were categorized in Level 2 of the fair value hierarchy (2022 – Level 2).

Through the normal course of business, pledging of assets is required to comply with jurisdictional regulatory and other requirements including collateral pledged to partially mitigate derivative counterparty credit risk, assets pledged to exchanges as initial margin and assets held as collateral for repurchase funding agreements. Total unencumbered assets were \$470.2 billion as at December 31, 2023 (2022 – \$477.7 billion).

Market Risk Sensitivities and Market Risk Exposure Measures

Variable Annuity and Segregated Fund Guarantees Sensitivities and Risk Exposure Measures

Guarantees on variable annuity products and segregated funds may include one or more of death, maturity, income and withdrawal guarantees. Variable annuity and segregated fund guarantees are contingent and only payable upon the occurrence of the relevant event, if fund values at that time are below guarantee values. Depending on future equity market levels, liabilities on current in-force business would be due primarily in the period from 2023 to 2043.

We seek to mitigate a portion of the risks embedded in our retained (i.e. net of reinsurance) variable annuity and segregated fund guarantee business through the combination of our dynamic and macro hedging strategies (see “Publicly Traded Equity Performance Risk” below).

The table below shows selected information regarding the Company’s variable annuity and segregated fund investment-related guarantees gross and net of reinsurance.

Variable annuity and segregated fund guarantees, net of reinsurance

As at December 31, (\$ millions)	2023			2022		
	Guarantee value ⁽¹⁾	Fund value	Net amount at risk ^{(1),(2),(3)}	Guarantee value ⁽¹⁾	Fund value	Net amount at risk ^{(1),(2),(3)}
Guaranteed minimum income benefit	\$ 3,864	\$ 2,735	\$ 1,156	\$ 4,357	\$ 2,723	\$ 1,639
Guaranteed minimum withdrawal benefit	34,833	33,198	4,093	38,319	34,203	5,734
Guaranteed minimum accumulation benefit	18,996	19,025	116	20,035	19,945	221
Gross living benefits ⁽⁴⁾	57,693	54,958	5,365	62,711	56,871	7,594
Gross death benefits ⁽⁵⁾	9,133	17,279	975	10,465	15,779	2,156
Total gross of reinsurance	66,826	72,237	6,340	73,176	72,650	9,750
Living benefits reinsured	24,208	23,146	3,395	26,999	23,691	4,860
Death benefits reinsured	3,400	2,576	482	3,923	2,636	1,061
Total reinsured	27,608	25,722	3,877	30,922	26,327	5,921
Total, net of reinsurance	\$ 39,218	\$ 46,515	\$ 2,463	\$ 42,254	\$ 46,323	\$ 3,829

⁽¹⁾ Guarantee Value and Net Amount at Risk in respect of guaranteed minimum withdrawal business in Canada and the U.S. reflect the time value of money of these claims.

⁽²⁾ Amount at risk (in-the-money amount) is the excess of guarantee values over fund values on all policies where the guarantee value exceeds the fund value. For guaranteed minimum death benefit, the amount at risk is defined as the current guaranteed minimum death benefit in excess of the current account balance and assumes that all claims are immediately payable. In practice, guaranteed death benefits are contingent and only payable upon the eventual death of policyholders if fund values remain below guarantee values. For guaranteed minimum withdrawal benefit, the amount at risk assumes that the benefit is paid as a lifetime annuity commencing at the earliest contractual income start age. These benefits are also contingent and only payable at scheduled maturity/income start dates in the future, if the policyholders are still living and have not terminated their policies and fund values remain below guarantee values. For all guarantees, the amount at risk is floored at zero at the single contract level.

⁽³⁾ The amount at risk net of reinsurance at December 31, 2023 was \$2,463 million (December 31, 2022 – \$3,829 million) of which: US\$391 million (December 31, 2022 – US\$737 million) was on our U.S. business, \$1,559 million (December 31, 2022 – \$2,154 million) was on our Canadian business, US\$140 million (December 31, 2022 – US\$275 million) was on our Japan business and US\$155 million (December 31, 2022 – US\$224 million) was related to Asia (other than Japan) and our run-off reinsurance business.

⁽⁴⁾ Where a policy includes both living and death benefits, the guarantee in excess of the living benefit is included in the death benefit category as outlined in footnote 5.

⁽⁵⁾ Death benefits include standalone guarantees and guarantees in excess of living benefit guarantees where both death and living benefits are provided on a policy.

Investment categories for variable contracts with guarantees

Variable contracts with guarantees, including variable annuities and variable life, are invested, at the policyholder’s discretion subject to contract limitations, in various fund types within the segregated fund accounts and other investments. The account balances by investment category are set out below.

As at December 31, (\$ millions)	2023	2022
Investment category		
Equity funds	\$ 45,593	\$ 42,506
Balanced funds	35,801	36,290
Bond funds	8,906	9,336
Money market funds	1,559	1,924
Other fixed interest rate investments	1,907	2,029
Total	\$ 93,766	\$ 92,085

Caution Related to Sensitivities

In the sections that follow, we provide sensitivities and risk exposure measures for certain risks. These include sensitivities due to specific changes in market prices and interest rate levels projected using internal models as at a specific date, and are measured relative to a starting level reflecting the Company's assets and liabilities at that date. The risk exposures measure the impact of changing one factor at a time and assume that all other factors remain unchanged. Actual results can differ significantly from these estimates for a variety of reasons including the interaction among these factors when more than one changes; changes in liabilities from updates to non-economic assumptions, changes in business mix, effective tax rates and other market factors; and the general limitations of our 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 below. Given the nature of these calculations, we cannot provide assurance that the actual impact on contractual service margin ("CSM"), net income attributed to shareholders, other comprehensive income attributed to shareholders, and total comprehensive income attributed to shareholders or on MLI's LICAT ratio will be as indicated.

Market movements affect LICAT capital sensitivities through the available capital, surplus allowance and required capital components of the regulatory capital framework. The LICAT available capital component is primarily affected by total comprehensive income and the CSM.

Publicly Traded Equity Performance Risk Sensitivities and Exposure Measures

As outlined above, we have net exposure to equity risk through asset and liability mismatches; our variable annuity guarantee dynamic hedging strategy is not designed to completely offset the sensitivity of insurance contract liabilities to all risks associated with the guarantees embedded in these products. The macro hedging strategy is designed to mitigate public equity risk arising from variable annuity guarantees not dynamically hedged and from other unhedged exposures in our insurance contracts.

Changes in public equity prices may impact other items including, but not limited to, asset-based fees earned on assets under management and administration or policyholder account value, and estimated profits and amortization of deferred policy acquisition and other costs. These items are not hedged.

The tables below include the potential impacts from an immediate 10%, 20% and 30% change in market values of publicly traded equities on CSM, net income attributed to shareholders, other comprehensive income attributed to shareholders, and total comprehensive income attributed to shareholders. The potential impact is shown after taking into account the impact of the change in markets on the hedge assets. While we cannot reliably estimate the amount of the change in dynamically hedged variable annuity guarantee liabilities that will not be offset by the change in the dynamic hedge assets, we make certain assumptions for the purposes of estimating the impact on net income attributed to shareholders.

This estimate assumes that the performance of the dynamic hedging program would not completely offset the gain/loss from the dynamically hedged variable annuity guarantee liabilities. It assumes that the hedge assets are based on the actual position at the period end, and that equity hedges in the dynamic program offset 95% of the hedged variable annuity liability movement that occurs as a result of market changes.

It is also important to note that these estimates are illustrative, and that the dynamic and macro hedging programs may underperform these estimates, particularly during periods of high realized volatility and/or periods where both interest rates and equity market movements are unfavourable. The adoption of IFRS 17 did not change the method or assumptions used for deriving sensitivity information.

Changes in equity markets impact our available and required components of the LICAT ratio. The second set of tables shows the potential impact to MLI's LICAT ratio resulting from changes in public equity market values.

Potential immediate impact on net income attributed to shareholders arising from changes to public equity returns⁽¹⁾

As at December 31, 2023 (\$ millions)	Net income attributed to shareholders					
	-30%	-20%	-10%	+10%	+20%	+30%
Underlying sensitivity						
Variable annuity guarantees ⁽²⁾	\$ (2,370)	\$ (1,460)	\$ (670)	\$ 550	\$ 1,010	\$ 1,390
General fund equity investments ⁽³⁾	(1,170)	(770)	(390)	380	760	1,140
Total underlying sensitivity before hedging	(3,540)	(2,230)	(1,060)	930	1,770	2,530
Impact of macro and dynamic hedge assets ⁽⁴⁾	880	530	240	(190)	(340)	(460)
Net potential impact on net income attributed to shareholders after impact of hedging and before impact of reinsurance	(2,660)	(1,700)	(820)	740	1,430	2,070
Impact of reinsurance	1,470	900	420	(350)	(650)	(910)
Net potential impact on net income attributed to shareholders after impact of hedging and reinsurance	\$ (1,190)	\$ (800)	\$ (400)	\$ 390	\$ 780	\$ 1,160

As at December 31, 2022 (\$ millions)	Net income attributed to shareholders					
	-30%	-20%	-10%	+10%	+20%	+30%
Underlying sensitivity						
Variable annuity guarantees ⁽²⁾	\$ (2,110)	\$ (1,310)	\$ (610)	\$ 530	\$ 980	\$ 1,360
General fund equity investments ⁽³⁾	(1,450)	(920)	(420)	400	780	1,170
Total underlying sensitivity before hedging	(3,560)	(2,230)	(1,030)	930	1,760	2,530
Impact of macro and dynamic hedge assets ⁽⁴⁾	930	570	260	(220)	(400)	(540)
Net potential impact on net income attributed to shareholders after impact of hedging and before impact of reinsurance	(2,630)	(1,660)	(770)	710	1,360	1,990
Impact of reinsurance	1,170	740	350	(310)	(580)	(810)
Net potential impact on net income attributed to shareholders after impact of hedging and reinsurance	\$ (1,460)	\$ (920)	\$ (420)	\$ 400	\$ 780	\$ 1,180

⁽¹⁾ See "Caution related to sensitivities" above.

⁽²⁾ For variable annuity contracts measured under VFA the impact of financial risk and changes in interest rates adjusts CSM, unless the risk mitigation option applies. The Company has elected to apply risk mitigation and therefore a portion of the impact is reported in net income attributed to shareholders instead of adjusting the CSM. If the CSM for a group of variable annuity contracts is exhausted the full impact is reported in net income attributed to shareholders.

⁽³⁾ This impact for general fund equity investments includes general fund investments supporting our insurance contract liabilities, investment in seed money investments (in segregated and mutual funds made by Global WAM segment) and the impact on insurance contract liabilities related to the projected future fee income on variable universal life and other unit linked products. The impact does not include any potential impact on public equity weightings. The participating policy funds are largely self-supporting and generate no material impact on net income attributed to shareholders as a result of changes in equity markets.

⁽⁴⁾ Includes the impact of assumed rebalancing of equity hedges in the macro and dynamic hedging program. The impact of dynamic hedge represents the impact of equity hedges offsetting 95% of the dynamically hedged variable annuity liability movement that occurs as a result of market changes, but does not include any impact in respect of other sources of hedge accounting ineffectiveness (e.g. fund tracking, realized volatility and equity, interest rate correlations different from expected among other factors).

Potential immediate impact on contractual service margin, other comprehensive income to shareholders, total comprehensive income to shareholders and MLI's LICAT ratio from changes to public equity market values^{(1),(2),(3)}

As at December 31, 2023	-30%	-20%	-10%	+10%	+20%	+30%
Variable annuity guarantees reported in CSM	\$ (3,810)	\$ (2,370)	\$ (1,100)	\$ 940	\$ 1,760	\$ 2,470
Impact of risk mitigation — hedging ⁽⁴⁾	1,150	700	310	(250)	(450)	(600)
Impact of risk mitigation — reinsurance ⁽⁴⁾	1,850	1,140	530	(450)	(830)	(1,150)
VA net of risk mitigation	(810)	(530)	(260)	240	480	720
General fund equity	(940)	(610)	(300)	290	590	870
Contractual service margin (\$ millions, pre-tax)	\$ (1,750)	\$ (1,140)	\$ (560)	\$ 530	\$ 1,070	\$ 1,590
Other comprehensive income attributed to shareholders (\$ millions, post-tax)⁽⁵⁾	\$ (730)	\$ (490)	\$ (240)	\$ 230	\$ 460	\$ 680
Total comprehensive income attributed to shareholders (\$ millions, post-tax)	\$ (1,920)	\$ (1,290)	\$ (640)	\$ 620	\$ 1,240	\$ 1,840
MLI's LICAT ratio (change in percentage points)	(3)	(2)	(1)	1	2	2

As at December 31, 2022, except MLI LICAT, which is as at January 1, 2023 ⁽⁶⁾	-30%	-20%	-10%	+10%	+20%	+30%
Variable annuity guarantees reported in CSM	\$ (3,410)	\$ (2,140)	\$ (1,010)	\$ 890	\$ 1,670	\$ 2,360
Impact of risk mitigation — hedging ⁽⁴⁾	1,200	740	340	(280)	(510)	(690)
Impact of risk mitigation — reinsurance ⁽⁴⁾	1,480	930	440	(390)	(730)	(1,030)
VA net of risk mitigation	(730)	(470)	(230)	220	430	640
General fund equity	(520)	(370)	(210)	240	490	730
Contractual service margin (\$ millions, pre-tax)	\$ (1,250)	\$ (840)	\$ (440)	\$ 460	\$ 920	\$ 1,370
Other comprehensive income attributed to shareholders (\$ millions, post-tax)⁽⁵⁾	\$ (620)	\$ (410)	\$ (210)	\$ 210	\$ 400	\$ 600
Total comprehensive income attributed to shareholders (\$ millions, post-tax)	\$ (2,080)	\$ (1,330)	\$ (630)	\$ 610	\$ 1,180	\$ 1,780
MLI's LICAT ratio (change in percentage points)⁽⁶⁾	(3)	(2)	(1)	1	2	3

⁽¹⁾ See "Caution related to sensitivities" above.

⁽²⁾ This estimate assumes that the performance of the dynamic hedging program would not completely offset the gain/loss from the dynamically hedged variable annuity guarantee liabilities. It assumes that the hedge assets are based on the actual position at the period end, and that equity hedges in the dynamic program offset 95% of the hedged variable annuity liability movement that occur as a result of market changes.

⁽³⁾ The Office of the Superintendent of Financial Institutions ("OSFI") rules for segregated fund guarantees reflect full capital impacts of shocks over 20 quarters within a prescribed range. As such, the deterioration in equity markets could lead to further increases in capital requirements after the initial shock.

⁽⁴⁾ For variable annuity contracts measured under VFA the impact of financial risk and changes in interest rates adjusts CSM, unless the risk mitigation option applies. The Company has elected to apply risk mitigation and therefore a portion of the impact is reported in net income attributed to shareholders instead of adjusting the CSM. If the CSM for a group of variable annuity contracts is exhausted the full impact is reported in net income attributed to shareholders.

⁽⁵⁾ The impact of financial risk and changes to interest rates for variable annuity contracts is not expected to generate sensitivity in Other Comprehensive Income.

⁽⁶⁾ LICAT capital sensitivity is based on the 2023 LICAT guideline that became effective January 1, 2023.

Interest Rate and Spread Risk Sensitivities and Exposure Measures

As at December 31, 2023, we estimated the sensitivity of our net income attributed to shareholders to a 50 basis point parallel decline in interest rates to be a benefit of \$100 million, and to a 50 basis point parallel increase in interest rates to be a charge of \$100 million.

The table below shows the potential impacts from a 50 basis point parallel move in interest rates on CSM, net income attributed to shareholders, other comprehensive income attributed to shareholders, and total comprehensive income attributed to shareholders. This includes a change in current government, swap and corporate rates for all maturities across all markets with no change in credit spreads between government, swap and corporate rates. Also shown separately are the potential impacts from a 50 basis point parallel move in corporate spreads and a 20 basis point parallel move in swap spreads. The impacts reflect the net impact of movements in asset values in liability and surplus segments and movements in the present value of cash flows for insurance contracts including those with cash flows that vary with the returns of underlying items where the present value is measured by stochastic modelling. The method used for deriving sensitivity information and significant assumptions made did not change from the previous period.

The disclosed interest rate sensitivities reflect the accounting designations of our financial assets and corresponding insurance contract liabilities. In most cases these assets and liabilities are designated as fair value through other comprehensive income ("FVOCI") and as a result, impacts from changes to interest rates are largely in other comprehensive income. There are also changes in interest rates that impact the CSM for VFA contracts that relate to amounts that are not passed through to policyholders. In addition, changes in interest rates impact net income as it relates to derivatives not in hedge accounting relationships and on VFA contracts where the CSM has been exhausted.

The disclosed interest rate sensitivities assume no hedge accounting ineffectiveness, as our hedge accounting programs are optimized for parallel movements in interest rates, leading to immaterial net income impacts under these shocks. However, the actual hedge accounting ineffectiveness is sensitive to non-parallel interest rate movements and will depend on the shape and magnitude of the interest rate movements which could lead to variations in the impact to net income attributed to shareholders.

Our sensitivities vary across all regions in which we operate, and the impacts of yield curve changes will vary depending upon the geography where the change occurs. Furthermore, the impacts from non-parallel movements may be materially different from the estimated impacts of parallel movements.

The interest rate and spread risk sensitivities are determined in isolation of each other and therefore do not reflect the combined impact of changes in government rates and credit spreads between government, swap and corporate rates occurring simultaneously. As a result, the impact of the summation of each individual sensitivity may be materially different from the impact of sensitivities to simultaneous changes in interest rate and spread risk.

The potential impacts also do not take into account other potential effects of changes in interest rate levels, for example, CSM at recognition on the sale of new business or lower interest earned on future fixed income asset purchases.

The impacts do not reflect any potential effect of changing interest rates on the value of our ALDA. Rising interest rates could negatively impact the value of our ALDA (see “Critical Actuarial and Accounting Policies – Fair Value of Invested Assets”, below). More information on ALDA can be found below under “Alternative long-duration asset performance risk sensitivities and exposure measures”.

The impact to the LICAT ratio from a change in interest rates reflects the impacts on total comprehensive income, the LICAT adjustments to earnings for the CSM, the surplus allowance and required capital components of the regulatory capital framework.

Potential impacts on contractual service margin, net income attributed to shareholders, other comprehensive income attributed to shareholders, and total comprehensive income attributed to shareholders of an immediate parallel change in interest rates, corporate spreads or swap spreads relative to current rates^{(1),(2),(3),(4)}

As at December 31, 2023 (\$ millions, post-tax except CSM)	Interest rates		Corporate spreads		Swap spreads	
	-50bp	+50bp	-50bp	+50bp	-20bp	+20bp
CSM	\$ -	\$ (100)	\$ -	\$ (100)	\$ -	\$ -
Net income attributed to shareholders	100	(100)	-	-	100	(100)
Other comprehensive income attributed to shareholders	(300)	300	(200)	300	(100)	100
Total comprehensive income attributed to shareholders	(200)	200	(200)	300	-	-

As at December 31, 2022 (\$ millions, post-tax except CSM)	Interest rates		Corporate spreads		Swap spreads	
	-50bp	+50bp	-50bp	+50bp	-20bp	+20bp
CSM	\$ (100)	\$ -	\$ (100)	\$ -	\$ -	\$ -
Net income attributed to shareholders	1,700	(1,500)	-	-	-	-
Other comprehensive income attributed to shareholders	(1,900)	1,600	-	-	-	-
Total comprehensive income attributed to shareholders	(200)	100	-	-	-	-

(1) See “Caution related to sensitivities” above.

(2) Estimates include changes to the net actuarial gains/losses with respect to the Company’s pension obligations as a result of changes in interest rates.

(3) Includes guaranteed insurance and annuity products, including variable annuity contracts as well as adjustable benefit products where benefits are generally adjusted as interest rates and investment returns change, a portion of which have minimum credited rate guarantees. For adjustable benefit products subject to minimum rate guarantees, the sensitivities are based on the assumption that credited rates will be floored at the minimum.

(4) The Company adopted IFRS 9 hedge accounting prospectively from January 1, 2023, as such the sensitivity results for 2023 and 2022 are based on different accounting basis in which 2023 includes the impacts of hedge accounting and 2022 does not.

Swap spreads remain at low levels, and if they were to rise, this could generate material changes to net income attributed to shareholders.

Potential impact on MLI’s LICAT ratio of an immediate parallel change in interest rates, corporate spreads or swap spreads relative to current rates^{(1),(2),(3),(4),(5)}

As at December 31, 2023 (change in percentage points)	Interest rates		Corporate spreads		Swap spreads	
	-50bp	+50bp	-50bp	+50bp	-20bp	+20bp
MLI’s LICAT ratio	-	-	(4)	4	-	-

As at January 1, 2023 ⁽⁶⁾ (change in percentage points)	Interest rates		Corporate spreads		Swap spreads	
	-50bp	+50bp	-50bp	+50bp	-20bp	+20bp
MLI’s LICAT ratio	(1)	1	(3)	3	-	-

(1) See “Caution related to sensitivities” above.

(2) In addition, estimates include changes to the net actuarial gains/losses with respect to the Company’s pension obligations as a result of changes in interest rates.

(3) Includes guaranteed insurance and annuity products, including variable annuity contracts as well as adjustable benefit products where benefits are generally adjusted as interest rates and investment returns change, a portion of which have minimum credited rate guarantees. For adjustable benefit products subject to minimum rate guarantees, the sensitivities are based on the assumption that credited rates will be floored at the minimum.

(4) LICAT impacts reflect the impact of anticipated scenario switches.

(5) Under LICAT, spread movements are determined from a selection of investment grade bond indices with BBB and better bonds for each jurisdiction. For LICAT, we use the following indices: FTSE TMX Canada All Corporate Bond Index, Barclays USD Liquid Investment Grade Corporate Index, and Nomura-BPI (Japan). LICAT impacts presented for corporate spreads reflect the impact of anticipated scenario switches.

(6) LICAT capital sensitivity is based on the 2023 LICAT guideline that became effective January 1, 2023.

LICAT Scenario Switch

When interest rates change past a certain threshold, reflecting the combined movement in risk-free rates and corporate spreads, a different prescribed interest rate stress scenario needs to be taken into account in the LICAT ratio calculation in accordance with OSFI's LICAT guideline.

The LICAT guideline specifies four stress scenarios for interest rates and prescribes the methodology to determine the most adverse scenario to apply for each LICAT geographic region¹ based on current market inputs and the Company's balance sheet.

With the current level of interest rates in 2023, the probability of a scenario switch that could materially impact our LICAT ratio is low². Should a scenario switch be triggered in a LICAT geographic region, the full impact would be reflected immediately for non-participating products while the impact for participating products would be reflected over six quarters using a rolling average of interest rate risk capital, in line with the smoothing approach prescribed in the LICAT guideline. The LICAT interest rate, corporate spread and swap spread sensitivities presented above reflect the impact of scenario switches, if any, for each disclosed sensitivity.

The level of interest rates and corporate spreads that would trigger a switch in the scenarios is dependent on market conditions and movements in the Company's asset and liability position. The scenario switch, if triggered, could reverse in response to subsequent changes in interest rates and/or corporate spreads.

Alternative Long-Duration Asset Performance Risk Sensitivities and Exposure Measures

The following table shows the potential impact on CSM, net income attributed to shareholders, other comprehensive income attributed to shareholders, and total comprehensive income attributed to shareholders resulting from an immediate 10% change in market values of ALDA. The method used for deriving sensitivity information and significant assumptions made did not change from the previous period.

ALDA includes commercial real estate, timber and farmland real estate, infrastructure, and private equities, some of which relate to energy³.

The impacts do not reflect any future potential changes to non-fixed income return volatility. Refer to "Publicly traded equity performance risk sensitivities and exposure measures" above for more details.

Potential immediate impacts on contractual service margin, net income attributed to shareholders, other comprehensive income attributed to shareholders, and total comprehensive income attributed to shareholders from changes in ALDA market values⁽¹⁾

As at (\$ millions, post-tax except CSM)	December 31, 2023		December 31, 2022	
	-10%	+10%	-10%	+10%
CSM excluding NCI	\$ (100)	\$ 100	\$ (100)	\$ 100
Net income attributed to shareholders ⁽²⁾	(2,400)	2,400	(2,500)	2,500
Other comprehensive income attributed to shareholders	(200)	200	(100)	100
Total comprehensive income attributed to shareholders	(2,600)	2,600	(2,600)	2,600

⁽¹⁾ See "Caution related to sensitivities" above.

⁽²⁾ Net income attributed to shareholders includes core earnings and the amounts excluded from core earnings.

Potential immediate impact on MLI LICAT ratio arising from changes in ALDA market values⁽¹⁾

(change in percentage points)	December 31, 2023		January 1, 2023 ⁽²⁾	
	-10%	+10%	-10%	+10%
MLI's LICAT ratio	(2)	2	(3)	3

⁽¹⁾ See "Caution Related to Sensitivities" above.

⁽²⁾ LICAT capital sensitivity is based on the 2023 LICAT guideline that became effective January 1, 2023.

Foreign Exchange Risk Sensitivities and Exposure Measures

We generally match the currency of our assets with the currency of the insurance and investment contract liabilities they support, with the objective of mitigating risk of loss arising from foreign currency exchange rate changes. As at December 31, 2023, we did not have a material unmatched currency exposure.

The following table shows the potential impact on core earnings of a 10% change in the value of the Canadian dollar relative to our other key operating currencies. Note that the impact of foreign currency exchange rates on items excluded from core earnings does not provide relevant information given the nature of these items.

¹ LICAT geographic locations to determine the most adverse scenario include North America, the United Kingdom, Europe, Japan and Other Region.

² See "Caution regarding forward-looking statements" above.

³ Energy includes legacy oil and gas equity interests related to upstream and midstream assets that are in runoff, and Energy Transition private equity interests in areas supportive of the transition to lower carbon forms of energy, such as wind, solar, batteries, and magnets.

Potential impact on core earnings of changes in foreign exchange rates^{(1),(2)}

As at December 31, (\$ millions)	2023		2022	
	+10% strengthening	-10% weakening	+10% strengthening	-10% weakening
10% change in the Canadian dollar relative to the U.S. dollar and the Hong Kong dollar	\$ (390)	\$ 390	\$ (320)	\$ 320
10% change in the Canadian dollar relative to the Japanese yen	(40)	40	(40)	40

⁽¹⁾ This item is a non-GAAP financial measure. See "Non-GAAP and Other Financial Measures" below for more information.

⁽²⁾ See "Caution Related to Sensitivities" above.

LICAT regulatory ratios are also sensitive to the fluctuations in the Canadian dollar relative to our other key operating currencies. The direction and materiality of this sensitivity varies across various capital metrics.

Liquidity Risk Exposure Strategy

We manage liquidity levels of the consolidated group and key subsidiaries against established thresholds. These thresholds are based on liquidity stress scenarios over varying time horizons.

Increased use of derivatives for hedging purposes has necessitated greater emphasis on measurement and management of contingent liquidity risk related to these instruments, in particular the movement of "over-the-counter" derivatives to central clearing in the U.S. and Japan places an emphasis on cash as the primary source of liquidity as opposed to security holdings. The market value of our derivative portfolio is therefore regularly stress tested to assess the potential collateral and cash settlement requirements under various market conditions.

Manulife Bank (the "Bank") has a standalone liquidity risk management framework. The framework includes stress testing, cash flow modeling, a funding plan and a contingency plan. The Bank has an established securitization infrastructure which enables the Bank to access a range of funding and liquidity sources. The Bank models extreme but plausible stress scenarios that demonstrate that the Bank has a sufficient pool of highly liquid marketable securities, which when combined with the Bank's capacity to securitize residential mortgage assets provides sufficient liquidity to meet potential requirements under these stress scenarios.

Similarly, Global WAM has a standalone liquidity risk management framework for the businesses managing assets or manufacturing investment products for third-party clients. We maintain fiduciary standards to ensure that client and regulatory expectations are met in relation to the liquidity risks taken within each investment. Additionally, we regularly monitor and review the liquidity of our investment products as part of our ongoing risk management practices.

Market Risk Factors

Our most significant source of publicly traded equity risk arises from equity-linked products with guarantees, where the guarantees are linked to the performance of the underlying funds.

- Publicly traded equity performance risk arises from a variety of sources, including guarantees associated with equity-linked investments such as variable annuity and segregated fund products, general fund investments in publicly traded equities and mutual funds backing general fund product liabilities.
- Market conditions resulting in reductions in the asset value we manage have an adverse effect on the revenues and profitability of our investment management business, which depends on fees related primarily to the values of assets under management and administration.
- Guaranteed benefits of variable annuity and segregated funds are contingent and payable upon death, maturity, permitted withdrawal or annuitization. If equity markets decline or even if they increase by an amount lower than the risk-free rate plus an adjustment for product illiquidity assumed in our actuarial valuation, additional liabilities may need to be established to cover the contingent liabilities, resulting in reductions that could impact net income attributed to shareholders, the contractual service margin, and regulatory capital ratios. Further, if equity markets do not recover to the amount of the guarantees, by the dates the liabilities are due, the accrued liabilities will need to be paid out in cash. In addition, sustained flat or declining public equity markets would likely reduce asset-based fee revenues related to variable annuities and segregated funds with guarantees, unit linked products, and other wealth and insurance products.
- Where publicly traded equity investments are used to support general fund product liabilities, adverse public equity returns and associated impacts to insurance contract liabilities from certain product features such as universal life minimum crediting rate guarantees, or participating product zero dividend floor implicit guarantees, could result in a reduction to the contractual services margin or total comprehensive income.

We experience interest rate and spread risk within the general fund primarily due to differences in how our assets and liabilities respond to changes in these variables.

- Interest rate and spread risk arises from differences in the movements of our assets and liabilities due to changes in these variables. For our assets, changes in value from movements in interest rates and spreads would vary by asset and would be impacted by factors such as duration and credit rating. For insurance contract liabilities, which are discounted using risk-free yields adjusted by an illiquidity premium, changes in the value would be impacted by factors such as the duration of the liability, and the spread exposure through the

illiquidity premium. To the extent that there are mismatches between the assets and liabilities such as through differences in duration, or differences in spread exposure, interest rate or spread movements could result in a reduction in the contractual service margin or total comprehensive income.

- The Company's disclosed estimated impact from interest rate movements reflects a parallel increase and decrease in interest rates of specific amounts. The impact from non-parallel movements may be different from the estimated impact of parallel movements. For further information on interest rate scenarios refer to "Interest Rate and Spread Risk Sensitivities and Exposure Measures".

We experience ALDA performance risk from the risk of low returns, including lower valuations.

- ALDA performance risk arises from general fund investments in directly-owned real estate, timber properties, farmland properties, infrastructure, private equities, and oil and gas and energy transition assets.
- Difficult economic conditions could result in higher vacancy, lower rental rates, and lower demand for real estate investments, all of which would adversely impact the value of our diversified real estate investments. Continual advances in the digitization of work and the transformation of physical retail may have further negative impact to our commercial real estate investments. Difficult economic conditions could also prevent companies in which we have made private equity investments from achieving their business plans and could cause the value of these investments to fall, or even cause the companies to fail. Sustained declines in valuation multiples in the public equity market would also likely cause values to decline in our private equity portfolio. The timing and amount of investment income from private equity investments is difficult to predict, and investment income from these investments can vary from quarter to quarter.
- Our timberland and farmland holdings are exposed to natural risks, such as prolonged drought, wildfires, insects, windstorms, flooding, and climate change. We are generally not insured for these types of risks but seek to proactively mitigate their impact through portfolio diversification and prudent operating practices.
- The value of oil and gas and energy transition assets could be adversely affected by declines in energy prices as well as by a number of other factors including production declines, uncertainties associated with estimating oil and natural gas reserves, difficult economic conditions, changes in consumer preferences to transition to a low-carbon economy, competition from renewable energy providers and geopolitical events. Changes in government regulation of the oil and gas industry, including environmental regulation, carbon taxes and changes in the royalty rates resulting from provincial royalty reviews, could also adversely affect the value of our oil and gas investments.
- Higher interest rates, in combination with uncertain economic environments, could precipitate higher ALDA discount rates as buyers begin to demand higher current returns to invest in ALDA. Since ALDA cash flows may, to some degree, be fixed in the near to medium term, some ALDA values may initially decline in order for the asset returns to meet the desired higher discount rates in future periods, resulting in lowered current portfolio returns.
- The negative impact of changes in market or economic factors can take time to be fully reflected in the valuations of private investments, including ALDA, especially if the change is large and rapid, as market participants endeavor to adjust their forecasts and better understand the potential medium to long-term impact of such changes. As a result, valuation changes in any given period may reflect the delayed impact of events that occurred in prior periods. Our real estate valuations are based on external appraisals, and these appraisals may lag behind current market transactions.
- We rely on a diversified portfolio of ALDA to generate relatively stable investment returns. Diversification benefits may be reduced at times, especially during a period of economic stress, which would adversely affect portfolio returns.

We experience foreign exchange risk as a substantial portion of our business is transacted in currencies other than Canadian dollars.

- Our financial results are reported in Canadian dollars. A substantial portion of our business is transacted in currencies other than Canadian dollars, mainly U.S. dollars, Hong Kong dollars and Japanese yen. If the Canadian dollar strengthens relative to these currencies, net income attributed to shareholders would decline and our reported shareholders' equity would decline. A weakening of the Canadian dollar against the foreign currencies in which we do business would have the opposite effect and would increase net income attributed to shareholders and shareholders' equity.

The Company's hedging strategies will not fully reduce the market risks related to the product guarantees and fees being hedged, hedging costs may increase and the hedging strategies expose the Company to additional risks.

- Our hedging strategies rely on the execution of derivative transactions in a timely manner. Market conditions can limit availability of hedging instruments, requiring us to post additional collateral, and can further increase the costs of executing derivative transactions. Therefore, hedging costs and the effectiveness of the strategy may be negatively impacted if markets for these instruments become illiquid. The Company is subject to the risk of increased funding and collateral demands which may become significant as equity markets and interest rates increase.
- The Company is also subject to counterparty risks arising from the derivative instruments and to the risk of increased funding and collateral demands which may become significant as equity markets and interest rates increase. The strategies are highly dependent on complex systems and mathematical models that are subject to error and rely on forward-looking long-term assumptions that may prove inaccurate, and which rely on sophisticated infrastructure and personnel which may fail or be unavailable at critical times. Due to the complexity of the strategies, there may be additional unidentified risks that may negatively impact our business and future financial results. In addition, rising equity markets and interest rates that would otherwise result in profits on variable annuities and segregated funds will be offset by losses from our hedging positions. For further information pertaining to counterparty risks, refer to the risk factor "If a counterparty fails to fulfill its obligations, we may be exposed to risks we had sought to mitigate".

- Under certain market conditions, which include a sustained increase in realized equity and interest rate volatilities, a decline in interest rates, or an increase in the correlation between equity returns and interest rate declines, the costs of hedging the benefit guarantees provided in variable annuities and segregated funds may increase or become uneconomic. In addition, there can be no assurance that our dynamic hedging strategy will fully offset the risks arising from the variable annuities and segregated funds being hedged.
- The level of guarantee claims returns or other benefits ultimately paid will be impacted by policyholder longevity and policyholder behaviour including the timing and amount of withdrawals, lapses, fund transfers, and contributions. The sensitivity of liability values to equity market and interest rate movements that we hedge are based on long-term expectations for longevity and policyholder behaviour since the impact of actual policyholder longevity and policyholder behaviour variances cannot be hedged using capital markets instruments. The efficiency of our market risk hedging is directly affected by accuracy of the assumptions related to policyholder longevity and policyholder behaviour.

Prolonged changes in market interest rates may impact our net income attributed to shareholders and capital ratios.

- A prolonged low or negative (nominal or real) interest rate environment may result in lower net investment results and a decrease in new business CSM until products are repositioned for the lower rate environment. Other potential consequences of low interest rates include:
 - Negative impact on sales and reduced new business profitability;
 - Increased cost of hedging and as a result, the offering of guarantees could become uneconomic;
 - Reinvestment of cash flows into low yielding bonds could result in lower future earnings due to lower returns on surplus and general fund assets supporting in-force liabilities, and due to guarantees embedded in products including minimum guaranteed rates in participating and adjustable products;
 - Negative impacts to other macroeconomic factors including unfavourable economic growth and lower returns on other asset classes;
 - Potential impairments of goodwill;
 - Lower expected earnings on in-force policies;
 - Potential risk of lowering the ultimate spot rate within our discount rates that would increase our liabilities;
 - A switch in the prescribed interest stress scenario that impacts LICAT capital. See “LICAT Scenario Switch” above; and
 - Reduced ability of MFC’s insurance subsidiaries to pay dividends to MFC.
- While higher interest rates are generally good for our business, there are some associated risks. A rapid rise in interest rate or a prolonged high-rate environment may result in material changes in policyholder behavior such as higher surrenders, withdrawals, changes in fund contributions or fund transfers. Other potential consequences of rapid rise in or prolonged high interest rates include:
 - Decrease in value of existing fixed income assets supporting general account surplus and liabilities, including the employee benefit plans;
 - Losses attributable to early liquidation of fixed income instruments supporting contractual surrender benefits;
 - Decline in value of some of our ALDA investments, particularly those with fixed contractual cash flows such as long-leased real estate and certain infrastructure investments;
 - Increase in collateral demands, especially for our interest rate hedging book which incurs market-to-market losses in a rising rate environment;
 - Adverse effect on the local solvency ratio for some countries in which we operate;
 - A switch in the prescribed interest stress scenario that impacts LICAT capital. See “LICAT Scenario Switch” above;
 - Shift in new sales mix from competitive pressure on wealth products that are less attractive on a yield basis;
 - Increase in funding costs on repurchase agreements (i.e., repo transactions); and
 - Increase in borrowing costs as we refinance our debt.

The global interest rate benchmark reform, leading to the transition away from IBORs to alternative reference rates based on risk-free rates, may impact the value of our IBOR-based financial instruments.

- Various interest rate benchmarks, including Interbank Offered Rates (IBORs) such as London Interbank Offered Rate (LIBOR) and Canadian Dollar Offered Rate (CDOR), are the subject of international regulatory guidance and proposals for reform. Regulators in various jurisdictions have pushed for the transition of IBORs to alternative reference rates based on risk-free rates. Manulife holds different types of instruments, including derivatives, bonds, loans, and other floating rate instruments that reference IBORs. Changes from IBORs to alternative reference rates that have different characteristics compared to IBORs may adversely affect the valuation of our existing interest rate linked and derivatives securities we hold, the effectiveness of those derivatives in mitigating our risks, securities we have issued, or other assets, liabilities and other contractual rights, and obligations whose value is tied to IBORs or to IBOR alternatives. There can be no assurance that alternative reference rates will perform in the same way as IBORs as a result of interest rate changes, market volatility, or global or regional economic, financial, political, regulatory, judicial, or other events. Furthermore, depending on the nature of the alternative reference rate, we may become exposed to additional risks such as legal settlement risk associated with instruments having inadequate fallback language. To ensure a timely transition to alternative reference rates, Manulife has established an enterprise-wide program and governance structure across functions to identify, measure, monitor, and manage financial and non-financial risks of transition. Manulife’s enterprise-wide program focuses on quantifying our exposures to various IBORs, evaluating contract fallback language, contract remediation, risk management, assessing accounting and tax implications, and ensuring operational readiness for IT systems, models, processes, and controls.

- Further to previous announcements by various regulators, the publication of GBP, EUR, CHF and JPY LIBOR settings, as well as one-week and two-month USD LIBOR settings was discontinued on December 31, 2021. The publication of the remaining USD LIBOR tenors (overnight and one, three, six and twelve-month USD LIBOR) was discontinued on June 30, 2023. We have successfully transitioned our exposures to the LIBOR rates that decommissioned on December 31, 2021 and June 30, 2023.
- In December 2021, the Canadian Alternative Reference Rate (CARR) working group recommended that the administrator of CDOR, Refinitiv Benchmark Services (UK) Limited (RBSL), cease publication of CDOR after the end of June 2024. On May 16, 2022, RBSL announced that the calculation and publication of all tenors of CDOR will permanently cease immediately following a final publication on June 28, 2024. Further to the confirmation of CDOR's cessation date, OSFI expects all new derivative contracts and securities to transition to alternative reference rates by June 30, 2023, with no new CDOR exposure being booked after that date, with limited exceptions. OSFI also expects Federally Regulated Financial Institutions (FRFIs) to transition all loan agreements referencing CDOR by June 28, 2024, including prioritizing system and model updates to accommodate the use of Canadian Overnight Repo Rate Average (CORRA), the alternative reference rate to which CDOR is expected to transition, or any alternative reference rates, as necessary. In July 2023, CARR announced that there should be no new CDOR or Banker's Acceptance (BA) loans after November 1, 2023 to facilitate a tapered transition for the loan market. Manulife has incorporated these developments in its project plan to align with updated timelines and ensure an orderly transition. We continue to monitor market developments, changes, and guidance from regulators on the interest rate benchmark reform.

Liquidity risk is impacted by various factors, including but not limited to, capital and credit market conditions, repricing risk on letters of credit, collateral pledging obligations, and reliance on deposits sensitive to confidence or broad macroeconomic factors.

- Adverse market conditions may significantly affect our liquidity risk.
 - Reduced asset liquidity may restrict our ability to sell certain types of assets for cash without taking significant losses. If providers of credit preserve their capital, our access to borrowing from banks and others or access to other types of credit, such as letters of credit, may be reduced. If investors have a negative perception of our creditworthiness, this may reduce access to the debt capital markets or increase borrowing costs.
 - Liquid assets are required to pledge as collateral to support activities such as the use of derivatives for hedging purposes and to cover cash settlement associated with such derivatives.
 - The principal sources of our liquidity are cash, insurance and annuity premiums, fee income earned on AUM, cash flow from our investment portfolios, and our assets that are readily convertible into cash, including money market securities. The issuance of long-term debt, common and preferred shares, and other capital securities may also increase our available liquid assets or be required to replace certain maturing or callable liabilities. In the event we seek additional financing, the availability and terms of such financing will depend on a variety of factors including market conditions, the availability of credit to the financial services industry, our credit ratings and credit capacity, as well as the possibility that customers, lenders, or investors could develop a negative perception of our long-term or short-term financial prospects if we incur large financial losses or if the level of our business activity decreases due to a significant market downturn.
- Increased cleared derivative transactions, combined with margin rules on non-cleared derivatives, could adversely impact our liquidity risk.
 - Over time our existing over-the-counter derivatives will migrate to clearing houses, or the Company and its counterparties may have the right to cancel derivative contracts after specific dates or in certain situations such as a ratings downgrade, which could accelerate the transition to clearing houses. Cleared derivatives are subject to both initial and variation margin requirements, and a more restrictive set of eligible collateral than non-cleared derivatives.
 - In addition, initial margin rules for new non-cleared derivatives further increase our liquidity needs.
- We are exposed to repricing risk on letters of credit.
 - In the normal course of business, third-party banks issue letters of credit on our behalf. In lieu of posting collateral, our businesses utilize letters of credit for which third parties are the beneficiaries, as well as for affiliate reinsurance transactions between subsidiaries of MFC. Letters of credit and letters of credit facilities must be renewed periodically. At time of renewal, the Company is exposed to repricing risk and under adverse conditions increases in costs may be realized. In the most extreme scenarios, letters of credit capacity could become constrained due to non-renewals which would restrict our flexibility to manage capital. This could negatively impact our ability to meet local capital requirements or our sales of products in jurisdictions in which our operating companies have been affected. As at December 31, 2023, letters of credit for which third parties are beneficiaries, in the amount of \$466 million, were outstanding. There were no assets pledged against these outstanding letters of credit as at December 31, 2023.
- Our obligations to pledge collateral or make payments related to declines in value of specified assets may adversely affect our liquidity.
 - In the normal course of business, we are obligated to pledge assets to comply with jurisdictional regulatory and other requirements including collateral pledged in relation to derivative contracts and assets held as collateral for repurchase funding agreements. The amount of collateral we may be required to post under these agreements, and the payments we are required to make to our counterparties, may increase under certain circumstances, including a sustained or continued decline in the value of our derivative contracts. Such additional collateral requirements and payments could have an adverse effect on our liquidity. As at December 31, 2023, total pledged assets were \$13,840 million, compared with \$16,221 million as at December 31, 2022.

- Our bank subsidiary relies on deposits sensitive to confidence as well as macroeconomic conditions.
 - Manulife Bank is a wholly owned subsidiary of our Canadian life insurance operating company, MLI. Retail deposits are a significant part of the funding base of Manulife Bank. A real or perceived problem with the Bank or its parent company could result in a loss of confidence in the Bank's ability to meet its obligations, which in turn may trigger a significant withdrawal of deposit funds. A substantial portion of the Bank's deposits are demand deposits that can be withdrawn at any time, while the majority of the Bank's assets are first residential mortgages and home equity lines of credit, which represent long-term funding obligations. Manulife Bank is a member of the Canadian Deposit Insurance Corporation (CDIC) which insures demand deposits up to \$100,000 per eligible depositor. Insured demand deposits are less susceptible to runoff and a significant proportion of Manulife Bank's deposits are CDIC insured. If deposit withdrawal speeds exceed our extreme stress test assumptions, mitigation strategies outlined in the Bank's liquidity contingency plan will be executed and the Bank may choose to sell or securitize assets with third parties. There is no guarantee that the Bank will be able to sell or securitize the assets or that its customers will be able to repay their indebtedness. In such circumstances, Manulife Bank may consider the use of Bank of Canada facilities to generate liquidity to pay depositors; however, access to these facilities is at the sole discretion of the Bank of Canada and they provide only short-term liquidity.

The declaration and payment of dividends and the amount thereof is subject to change.

- The holders of common shares are entitled to receive dividends as and when declared by the Board, subject to the preference of the holders of Class A Shares, Class 1 Shares, Class B Shares (collectively, the "Preferred Shares") and any other shares ranking senior to the common shares with respect to priority in payment of dividends. The declaration and payment of dividends and the amount thereof is subject to the discretion of the Board of MFC and is dependent upon the results of operations, financial condition, cash requirements and future prospects of, and regulatory and contractual restrictions on the payment of dividends by MFC and other factors deemed relevant by the Board of MFC. Although MFC has historically declared quarterly cash dividends on the common shares, MFC is not required to do so and the Board of MFC may reduce, defer, or eliminate MFC's common share dividend in the future.
- The foregoing risk disclosure in respect of the declaration and payment of dividends on the common shares applies equally in respect of the declaration and payment of dividends on the Preferred Shares, notwithstanding that the Preferred Shares have a fixed rate of dividend.
- See "Government Regulation" and "Dividends" in MFC's Annual Information Form dated February 14, 2024 for a summary of additional statutory and contractual restrictions concerning the declaration of dividends by MFC.

Credit Risk

Credit risk is the risk of loss due to the inability or unwillingness of a borrower or counterparty to fulfill its payment obligations.

Credit Risk Management Strategy

Credit risk is governed by the Credit Committee which oversees the overall credit risk management program. The Company has established objectives for overall quality and diversification of our general fund investment portfolio and criteria for the selection of counterparties, including derivative counterparties, reinsurers, and insurance providers. Our policies establish exposure limits by borrower, corporate connection, quality rating, industry, and geographic region, and govern the usage of credit derivatives. Corporate connection limits vary according to risk rating. Our general fund fixed income investments are primarily public and private investment grade bonds and commercial mortgages. We have a program for selling Credit Default Swaps ("CDS") that employs a highly selective, diversified and conservative approach. CDS decisions follow the same underwriting standards as our cash bond portfolio. Our credit granting units follow a defined evaluation process that provides an objective assessment of credit proposals. We assign a risk rating, based on a standardized 22-point scale consistent with those of external rating agencies, following a detailed examination of the borrower that includes a review of business strategy, market competitiveness, industry trends, financial strength, access to funds, and other risks facing the counterparty. We assess and update risk ratings regularly. For additional input to the process, we also assess credit risks using a variety of industry standard market-based tools and metrics. We map our risk ratings to pre-established probabilities of default and loss given defaults, based on historical industry and Company experience, and to resulting default costs.

We establish delegated credit approval authorities and make credit decisions on a case-by-case basis at a management level appropriate to the size and risk level of the transaction, based on the delegated authorities that vary according to risk rating. Major credit decisions are approved by the Credit Committee and the largest decisions are approved by the CEO and, in certain cases, by the Board.

We limit the types of authorized derivatives and applications and require pre-approval of all derivative application strategies and regular monitoring of the effectiveness of derivative strategies. Derivative counterparty exposure limits are established based on a minimum acceptable counterparty credit rating (generally A- from internationally recognized rating agencies). We measure both bilateral and exchange-traded derivative counterparty exposure as net potential credit exposure, which takes into consideration the replacement cost, which reflects mark-to-market values of the exposure adjusted for the effects of net collateral, and the potential future exposure, which reflects the potential increase in exposure until the closure or replacement of the transactions. Reinsurance counterparty exposure is measured reflecting the level of ceded liabilities on a best estimate basis net of collateral held. The creditworthiness of all reinsurance counterparties is reviewed internally on a regular basis.

Regular reviews of the credits within the various portfolios are undertaken with the goal of prompt identification of changes to credit quality and, where appropriate, taking corrective action.

We establish Expected Credit Loss (“ECL”) allowances for investments in debt instruments which are measured at FVOCI or amortized cost. On an ongoing basis, ECL allowances are monitored for changes in credit quality and adjusted accordingly. Credit risk which arises from reinsurance counterparties is included in the valuation models of reinsurance contract assets. There is no assurance that the ECL allowances or valuation results will be adequate to cover future potential losses.

Our credit policies, procedures and investment strategies are established under a strong governance framework and are designed to ensure that risks are identified, measured, and monitored consistent with our risk appetite. We seek to actively manage credit exposure in our investment portfolio to reduce risk and minimize losses, and derivative counterparty exposure is managed proactively. However, we could experience volatility on a quarterly basis and losses could potentially rise as a result.

Credit Risk Exposure Measures

We use the ECL impairment allowance model in accordance with IFRS to establish and maintain allowances on our invested assets which are debt instruments measured at FVOCI or amortized cost. ECL allowances are measured on a probability-weighted basis, based on four macroeconomic scenarios, and incorporate consideration of past events, current market conditions, and reasonable supportable information about future economic conditions.

We measure ECL allowances using a three-stage approach. We recognize ECL on performing financial instruments that have not experienced significant increases in credit risk since acquisition to the extent of losses expected to result from defaults occurring within 12 months of the reporting date (Stage 1). Full lifetime ECLs are recognized for financial instruments experiencing significant increase in credit risk since acquisition or having become 30 days in arrears in principal or interest payments (Stage 2). Full lifetime ECLs are also recognized for financial instruments which have become credit-impaired (Stage 3), with a probability of default set at 100%. Interest income on Stage 3 financial instruments is determined based on the carrying amount of the asset, net of any credit loss allowance.

For more information on our ECL allowances, refer to notes 1 and 9 of the 2023 Annual Consolidated Financial Statements.

Credit Risk Factors

Borrower or counterparty defaults or downgrades could adversely impact our earnings.

Worsening regional and global economic conditions could result in borrower or counterparty defaults or downgrades and could lead to increased allowances or impairments related to our general fund invested assets and derivative financial instruments, and an increase in the credit risk factored into modeling of our reinsurance contract assets and insurance contract liabilities.

Our invested assets subject to credit risk primarily include investment grade bonds, private placements, commercial mortgages, asset-backed securities, and consumer loans. These assets are generally carried at FVOCI, and as a result of ECL modeling changes in various elements used in ECL calculations would be recorded as a charge against income. The return cash inflow assumptions incorporated in actuarial liabilities include an expected level of future asset impairments. There is a risk that actual impairments will exceed the assumed level of impairments in the future and earnings could be adversely impacted.

Volatility may arise from defaults and downgrade charges on our invested assets and as a result, losses could potentially rise above long-term expected levels. The ECL impairment allowance was \$929 million, representing 0.22% of total general fund invested assets as at December 31, 2023, compared with \$724 million, representing 0.18% of total general fund invested assets on implementation of IFRS 9, effective January 1, 2023.

If a counterparty fails to fulfill its obligations, we may be exposed to risks we had sought to mitigate.

- The Company uses derivative financial instruments to mitigate exposures to public equity, foreign currency, interest rate and other market risks arising from on-balance sheet financial instruments, guarantees related to variable annuity products, selected anticipated transactions and certain other guarantees. The Company may be exposed to counterparty risk if a counterparty fails to pay amounts owed to us or otherwise perform its obligations to us. Counterparty risk increases during economic downturns because the probability of default increases for most counterparties. If any of these counterparties default, we may not be able to recover the amounts due from that counterparty. As at December 31, 2023, the largest single counterparty exposure, without taking into account the impact of master netting agreements or the benefit of collateral held, was \$1,357 million (2022 – \$1,582 million). The net exposure to this counterparty, after taking into account master netting agreements and the fair value of collateral held, was \$nil (2022 – \$nil). As at December 31, 2023, the total maximum credit exposure related to derivatives across all counterparties, without taking into account the impact of master netting agreements and the benefit of collateral held, was \$9,044 million (2022 – \$9,072 million) compared with \$154 million after taking into account master netting agreements and the benefit of fair value of collateral held (2022 – \$215 million). The exposure to any counterparty would grow if, upon the counterparty’s default, markets moved such that our derivatives with that counterparty gain in value. Until we are able to replace those derivatives with another counterparty, the gain on the derivatives subsequent to the counterparty’s default would not be backed by collateral.
- The Company reinsures a portion of the business we enter into; however, we remain legally liable for contracts that we had reinsured. In the event that any of our reinsurance providers were unable or unwilling to fulfill their contractual obligations related to the liabilities we cede to them, we would need to decrease reinsurance contract held assets, adversely impacting our net income attributed to shareholders and capital position. In addition, the Company has over time sold certain blocks of business to third-party purchasers using reinsurance. To the extent that the reinsured contracts are not subsequently novated to the purchasers, we remain legally liable

to the insureds. Should the purchasers be unable or unwilling to fulfill their contractual obligations under the reinsurance agreement, we would need to decrease reinsurance contract held assets resulting in a charge to net income attributed to shareholders. To reduce credit risk, the Company may require purchasers to provide collateral for their reinsurance liabilities.

- We participate in a securities lending program whereby blocks of securities are loaned to third parties, primarily major brokerage firms and commercial banks. Collateral, which exceeds the market value of the loaned securities, is retained by the Company until the underlying security has been returned. If any of our securities lending counterparties default and the value of the collateral is insufficient, we would incur losses. As at December 31, 2023, the Company had loaned securities (which are included in invested assets) valued at approximately \$626 million, compared with \$723 million as at December 31, 2022.

The determination of loss allowances and impairments on our investments is subjective and changes could materially impact our results of operations or financial position.

- The determination of impairment losses on debt investments measured at FVOCI or amortized cost is based upon the expected credit loss (“ECL”) model which is applied quarterly. ECL allowances are measured under four probability-weighted macroeconomic scenarios and are estimated as the differences between all contractual cash flows that are due in accordance with the contract and all the cash flows that we expect to receive, discounted at the original effective interest rates of the contracts. This process includes consideration of past events, current market conditions, and reasonable supportable information about future economic conditions. Forward-looking macroeconomic variables used within the estimation models represent variables that are the most closely related with credit loss expectations for the relevant issuance.
- The estimation and measurement of ECL impairment losses requires significant judgment. These estimates are driven by many elements, changes in which can result in different levels of allowances. Elements include the estimation of the amount and timing of future cash flows, our criteria for assessing if there has been a significant increase in credit risk (“SICR”), the selection of forward-looking macroeconomic scenarios and their probability weights, the application of expert credit judgment in the development of the models, inputs and, when applicable, overlay adjustments. It is our process to regularly review our models in the context of actual loss experience and adjust when necessary. We have implemented formal policies, procedures, and controls over all significant impairment processes.
- Such evaluations and assessments are revised as conditions change and new information becomes available. We update our evaluations regularly and reflect changes in allowances and impairments as such evaluations warrant. The evaluations are inherently subjective and incorporate only those risk factors known to us at the time the evaluation is made. There can be no assurance that management has accurately assessed the level of impairments that have occurred. Additional impairments will likely need to be taken or allowances provided for in the future as conditions evolve. Historical trends may not be indicative of future impairments or allowances.

Product Risk

We make a variety of assumptions related to the expected future level of claims, policyholder behaviour, expenses, reinsurance costs and sales levels when we design and price products, and when we establish insurance and investment contract liabilities. Product risk is the risk of failure to design, implement and maintain a product or service to achieve these expected outcomes, and the risk of loss due to actual experience emerging differently than assumed when a product was designed and priced. Assumptions for future claims are generally based on both Company and industry experience, and assumptions for future policyholder behaviour and expenses are generally based on Company experience. Assumptions for future policyholder behaviour include assumptions related to the retention rates for insurance and wealth products. Assumptions for expenses include assumptions related to future maintenance expense levels and volume of the business.

Product Risk Management Strategy

Product risk is governed by the Product Oversight Committee for the insurance business. Global WAM product risk is managed by first line product management working groups and the Global Investment Product Committee. Notable products which could introduce new and material risks are reviewed and approved by the Global WAM Risk Committee prior to launch.

Product Oversight Committee

The Product Oversight Committee oversees the overall insurance risk management program. The Product Oversight Committee has established a broad framework for managing insurance risk under a set of policies, standards and guidelines, to ensure that our product offerings align with our risk taking philosophy and risk limits, and achieve acceptable profit margins. These cover:

- product design features
- use of reinsurance
- pricing models and software
- internal risk based capital allocations
- target profit objectives
- pricing methods and assumption setting
- stochastic and stress scenario testing
- required documentation
- review and approval processes
- experience monitoring programs

In each business unit that sells insurance, we designate individual pricing officers who are accountable for pricing activities, chief underwriters who are accountable for underwriting activities, and chief claims risk managers who are accountable for claims activities. Both the pricing officer and the general manager of each business unit approve the design and pricing of each product, including key

claims, policyholder behaviour, investment return and expense assumptions, in accordance with global policies and standards. Risk management functions provide additional oversight, review and approval of material product and pricing initiatives, as well as material underwriting initiatives. Actuarial functions provide oversight review and approval of insurance and investment contract liability valuation methods and assumptions. In addition, both risk and actuarial functions review and approve new reinsurance arrangements. We perform annual risk and compliance self-assessments of the product development, pricing, underwriting and claims activities of all insurance businesses. To leverage best practices, we facilitate knowledge transfer between staff working with similar businesses in different geographies.

We utilize a global underwriting manual intended to ensure insurance underwriting practices for direct written life business are consistent across the organization while reflecting local conditions. Each business unit establishes underwriting policies and procedures, including criteria for approval of risks and claims adjudication policies and procedures.

We apply retention limits per insured life that are intended to reduce our exposure to individual large claims which are monitored in each business unit. These retention limits vary by market and jurisdiction. We reinsure exposure in excess of these limits with other companies (see “Risk Management and Risk Factors – Product Risk Factors – External market conditions determine the availability, terms and cost of reinsurance protection” below). Our current global life retention limit is US\$30 million for individual policies (US\$35 million for survivorship life policies) and is shared across businesses. We apply lower limits in some markets and jurisdictions. We aim to further reduce exposure to claims concentrations by applying geographical aggregate retention limits for certain covers. Enterprise-wide, we aim to reduce the likelihood of high aggregate claims by operating globally, insuring a wide range of unrelated risk events, and reinsuring some risks. We seek to actively manage the Company’s aggregate exposure to each of policyholder behaviour risk and claims risk against enterprise-wide economic capital limits. Policyholder behaviour risk limits cover the combined risk arising from policy lapses and surrenders, withdrawals and other policyholder driven activity. The claims risk limits cover the combined risk arising from mortality, longevity and morbidity.

Internal experience studies, as well as trends in our experience and that of the industry, are monitored to update current and projected claims and policyholder behaviour assumptions, resulting in updates to insurance contract liabilities as appropriate.

Global WAM Risk Management Committee

Global WAM product risk is managed by first line product management working groups and the Global Investment Product Committee. The Global WAM Risk Management Committee reviews and approves notable new products prior to launch. The Global WAM Risk Management Committee has established a framework for managing risk to ensure that notable product offerings align with Global WAM risk taking philosophy and risk appetite.

Product Risk Factors

Losses may result should actual experience be materially different than that assumed in the valuation of insurance contract liabilities.

- Such losses could have a significant adverse effect on our results of operations and financial condition. In addition, we periodically review the assumptions we make in determining our insurance contract liabilities and the review may result in an increase in insurance contract liabilities and a decrease in net income attributed to shareholders. Such assumptions require significant professional judgment, and actual experience may be materially different than the assumptions we make. (See “Critical Actuarial and Accounting Policies” below).
- Policyholder behaviour including premium payment patterns, policy renewals, lapse rates and withdrawal, and surrender activity are influenced by many factors including market and general economic conditions, and the availability and relative attractiveness of other products in the marketplace. For example, a weak or declining economic environment could increase the value of guarantees associated with variable annuities or other embedded guarantees and contribute to adverse policyholder behaviour experience, or a rapid rise in interest rates could increase the attractiveness of alternatives for customers holding products that offer contractual surrender benefits that are not market value adjusted, which could also contribute to adverse policyholder behaviour experience. If premium persistency or lapse rates are significantly different from our expectations, it could have a material adverse effect on our business, financial condition, results of operations, and cash flows.

We may be unable to implement necessary price increases on our in-force businesses or may face delays in implementation.

- We continue to seek state regulatory approvals for price increases on existing long-term care business in the United States. We cannot be certain whether or when each approval will be granted. For some in-force business, regulatory approval for price increases may not be required. However, regulators or policyholders may nonetheless seek to challenge our authority to implement such increases. Our insurance contract liabilities reflect our estimates of the impact of these price increases, but should we be less successful than anticipated in obtaining them, then insurance contract liabilities could increase accordingly and reduce net income attributed to shareholders.

Evolving legislation related to genetic testing could adversely impact our underwriting abilities.

- Current or future legislation in jurisdictions where Manulife operates may restrict its right to underwrite based on access to genetic test results. Without the obligation of disclosure, the asymmetry of information shared between applicant and insurer could increase anti-selection in both new business and in-force policyholder behaviour. The impact of restricting insurers' access to this information and the associated problems of anti-selection becomes more acute where genetic technology leads to advancements in diagnosis of life-threatening conditions that are not matched by improvements in treatment. We cannot predict the potential financial impact that this would have on the Company or the industry as a whole. In addition, there may be further unforeseen implications as genetic testing continues to evolve and becomes more established in mainstream medical practice.

Life and health insurance claims may be impacted unexpectedly by changes in the prevalence of diseases or illnesses, medical and technology advances, widespread lifestyle changes, natural disasters, large-scale human-made disasters and acts of terrorism.

- Claims resulting from catastrophic events could cause substantial volatility in our financial results in any period and could materially reduce our profitability or harm our financial condition. Large-scale catastrophic events may also reduce the overall level of economic activity, which could hurt our business and our ability to write new business. It is possible that geographic concentration of insured individuals could increase the severity of claims we receive from future catastrophic events. The effectiveness of external parties, including governmental and non-governmental organizations, in combating the severity of such an event is outside of our control and could have a material impact on the losses we experience.
- The cost of health insurance benefits may be impacted by unforeseen trends in the incidence, termination and severity rates of claims. The ultimate level of lifetime benefits paid to policyholders may be increased by an unexpected increase in life expectancy. For example, advances in technology could lead to longer lives through better medical treatment or better disease prevention. As well, adverse claims experience could result from systematic anti-selection, which could arise from anti-selective lapse behaviour, underwriting process failures, anti-selective policyholder behaviour due to greater consumer accessibility to home-based medical screening, or other factors.
- For information on the implications of COVID-19 on our product risk, please refer to "Pandemic risk and potential implications of COVID-19" below.

External market conditions determine the availability, terms and cost of reinsurance protection which could impact our financial position and our ability to write new policies.

- As part of our overall risk and capital management strategy, we purchase reinsurance protection on certain risks underwritten or assumed by our various insurance businesses. As the global reinsurance industry continues to review and optimize their business models, certain of our reinsurers have attempted to increase rates on our existing reinsurance contracts. The ability of our reinsurers to increase rates depends upon the terms of each reinsurance contract. Typically, the reinsurer's ability to raise rates is restricted by a number of terms in our reinsurance contracts, which we seek to enforce. We believe our reinsurance provisions are appropriate; however, there can be no assurance regarding the impact of future rate increase actions taken by our reinsurers. Accordingly, future rate increase actions by our reinsurers could result in financial impacts including charges to earnings and/or CSM, an increase in the cost of reinsurance and the assumption of more risk on business already reinsured.
- In addition, an increase in the cost of reinsurance could also adversely affect our ability to write future new business or result in the assumption of more risk with respect to policies we issue. Premium rates charged on new policies we write are based, in part, on the assumption that reinsurance will be available at a certain cost. Certain reinsurers may attempt to increase the rates they charge us for new policies we write, and for competitive reasons, we may not be able to raise the premium rates we charge for newly written policies to offset the increase in reinsurance rates. If the cost of reinsurance were to increase, or if reinsurance were to become unavailable and if alternatives to reinsurance were not available, our ability to write new policies at competitive premium rates could be adversely affected.

Operational Risk

Operational risk is naturally present in all of our business activities and encompasses a broad range of risks, including regulatory compliance failures, legal disputes, technology failures, business interruption, information security and privacy breaches, human resource management failures, processing errors, modelling errors, business integration, theft and fraud, and damage to physical assets. Exposures can take the form of financial losses, regulatory sanctions, loss of competitive positioning, or damage to our reputation. Operational risk is also embedded in all the practices we use to manage other risks; therefore, if not managed effectively, operational risk can impact our ability to manage other key risks such as credit risk, market risk, liquidity risk and product risk.

Operational Risk Management Strategy

Our corporate governance practices, corporate values, and integrated enterprise-wide approach to managing risk set the foundation for mitigating operational risks. This base is further strengthened by internal controls and systems, compensation programs, and talent management throughout the organization. We align compensation programs with business strategy, long-term shareholder value and good governance practices, and we benchmark these compensation practices against peer companies.

We have an enterprise operational risk management framework that sets out the processes we use to identify, assess, manage, mitigate and report on significant operational risk exposures. Execution of our operational risk management strategy supports the drive towards a

focus on the effective management of our key global operational risks. An Operational Risk Committee oversees all operational risk matters, including operational risk strategy, management and governance. We have enterprise-wide risk management programs for specific operational risks that could materially impact our ability to do business or impact our reputation.

Legal and Regulatory Risk Management Strategy

Global Compliance oversees our regulatory compliance program and function, supported by designated Chief Compliance Officers in every segment. The program is designed to promote compliance with regulatory obligations worldwide and to assist in making the Company's employees aware of the laws and regulations that affect it, and the risks associated with failing to comply. Segment Compliance groups monitor emerging legal and regulatory issues and changes and prepare us to address new requirements. Global Compliance also independently assesses and monitors the effectiveness of a broad range of regulatory compliance processes and business practices against potential legal, regulatory, fraud and reputation risks, and allows significant issues to be escalated and proactively mitigated. Among these processes and business practices are: privacy (i.e. handling of personal and other confidential information), sales and marketing practices, sales compensation practices, asset management practices, fiduciary responsibilities, employment practices, product design, the Ethics Hotline, and regulatory filings. In addition, we have policies, processes and controls in place to help protect the Company, our customers and other related third parties from acts of fraud and from risks associated with money laundering and terrorist financing. Audit Services, Global Compliance and Segment Compliance personnel periodically assess the effectiveness of the system of internal controls. For further discussion of government regulation and legal proceedings, refer to "Government Regulation" in MFC's Annual Information Form dated February 14, 2024 and note 19 of the 2023 Annual Consolidated Financial Statements.

Business Continuity Risk Management Strategy

Our enterprise-wide business continuity and disaster recovery program includes policies, plans and procedures that seek to minimize the impact of disruptions resulting from internal or external factors (including natural or human-made disasters), and is designed to ensure that key business services and functions can continue normal operations in the event of a major disruption. Each business unit is accountable for preparing and maintaining detailed business continuity plans and processes which through regular monitoring and assessment, are recalibrated to meet evolving environment conditions and business requirements. The global program incorporates periodic scenario analysis designed to validate the assessment of both critical and non-critical units, as well as the establishment and testing of appropriate business continuity plans for all critical functions. The business continuity team establishes and regularly tests crisis management plans and global crisis communications protocols. We maintain off-site data backup facilities and/or failover capabilities as required to manage the risk of downtime and to accelerate system recovery when needed.

Technology & Information Security Risk Management Strategy

Our Technology Risk Management function provides strategy, direction, and oversight and facilitates governance for all technology risk domain activities across the Company. The scope of this function includes: reducing information risk exposures by introducing a robust enterprise information risk management framework and supporting infrastructure for proactively identifying, managing, monitoring and reporting on critical information risk exposures; promoting transparency and informed decision-making by building and maintaining information risk profiles and risk dashboards for Enterprise Technology & Services and segments aligned with enterprise and operational risk reporting; providing advisory services to Global Technology and the segments around current and evolving technology risks and their impact to the Company's information risk profile; and reducing vendor information risk exposures by incorporating sound information risk management practices into sourcing, outsourcing and offshoring initiatives and programs.

The enterprise-wide information security program, which is overseen by the Chief Information Risk Officer, seeks to mitigate information security risks. This program establishes the information and cyber security framework for the Company, including governance, policies and standards, and appropriate controls to protect information and computer systems. We also have ongoing security awareness training sessions for all employees. The Board's Risk Committee regularly reviews the Company's information security program, including cyber security risks, mitigation and resilience, and engages in discussions regarding the effectiveness of the program for identifying and addressing relevant risks.

Many jurisdictions in which we operate are implementing more stringent privacy legislation. Our global privacy program, overseen by our Chief Privacy Officer, seeks to manage the risk associated with the handling of personal information, including the risk of privacy breaches. It includes policies and standards, ongoing monitoring of emerging privacy legislation, and a network of privacy officers. Processes have been established to provide guidance on handling personal information and for reporting privacy incidents and issues to appropriate management for response and resolution. As a global company, Manulife is subject to a wide variety of laws and regulations throughout its operations, including those related to privacy and information security. In many jurisdictions, privacy and information security requirements are becoming more onerous, including stringent incident reporting requirements, and may increase our compliance costs as well as the risks associated with any compliance failure.

In addition, the Chief Information Risk Officer, the Chief Privacy Officer, and their teams work closely on information security and privacy matters.

Human Resource Risk Management Strategy

We have multiple human resource policies, practices and programs in place that seek to manage the risks associated with attracting and retaining top talent. These include recruiting programs at every level of the organization, training and development programs for our

individual contributors and people leaders, initiatives to help increase diversity, equity and inclusion, employee engagement surveys, and competitive compensation programs that are designed to attract, motivate and retain high performing and high potential employees.

Model Risk Management Strategy

We have designated model risk management teams working closely with model owners and users that seek to manage model risk. Our model risk oversight program includes processes intended to ensure that our critical business models are conceptually sound and used as intended, and to assess the appropriateness of the calculations and outputs.

Third-Party Risk Management Strategy

Our governance framework to address third-party risk includes appropriate policies, standards and procedures, and monitoring of ongoing results and contractual compliance of third-party arrangements.

Initiatives Risk Management Strategy

To seek to ensure that key initiatives are successfully implemented and monitored by management, we have a global Transformation and Delivery Team, which is responsible for establishing policies and standards for initiative management. Our policies, standards and practices are benchmarked against leading practices.

Operational Risk Factors

Competition for the best people is intense and an inability to recruit qualified individuals may negatively impact our ability to execute on business strategies or to conduct our operations.

- Market fluctuations aside, the competition for top talent and key capabilities continues to be fierce. Our ability to attract external talent while developing our own internal capabilities is core to our high performing team ambitions. Our industry continues to require specific core capabilities and in meeting those talent needs we compete against other insurance companies, financial institutions, and wealth management organizations to attract talent. We also compete against organizations across many industries for digital talent, functional experts, leaders, and sales talent. To find the talent we need to deliver on our strategic objectives and maintain our competitive advantage, our core approach is focused on building enhanced talent networks to entice top candidates in the market. The risk of other organizations both inside and outside of our geographic footprint targeting our employees is heightened as companies maintain flexible remote working arrangements. Additionally, we are in an environment where pay levels have been increasing more quickly than in recent years due to the competitive talent market, inflation, and other factors. We help ensure that our value proposition remains competitive and current through offerings such as flexible work arrangements, learning investments, wellbeing, recognition & incentive programs, and a culture that strives to be recognized as a top employer within the markets we operate.

If we are not able to attract, motivate and retain agency leaders and individual agents, our competitive position, growth and profitability will suffer.

- The attraction and motivation of productive and engaged sales representatives (agents) is critical to achieving our financial targets and a positive customer experience and brand. We compete with other financial services companies for sales representatives primarily based on the opportunity available, our brand and culture, support services, compensation and product features. Negative changes to any of these factors, or falling below market competitive levels, could impact our ability to attract, retain and engage sufficient sales representatives which could pose a risk to our business objectives and ambitions and could have a material adverse effect on our business, results of operations and financial condition.

If we are unable to complete key projects on time, on budget, and capture planned benefits, our business strategies and plans, and operations may be impaired.

- We must successfully deliver several key projects in order to implement our business strategies and successfully achieve plans. If we are unable to complete these projects in accordance with planned schedules, and to capture projected benefits, there could be a material adverse effect on our business and financial condition.

Key business processes may fail, causing material loss events and impacting our customers and reputation.

- A large number of complex transactions are processed by the organization and third parties, there is risk that errors may have significant impact on our customers or result in a loss to the organization. Controls are in place that seek to ensure processing accuracy for our most significant business processes, and the necessary monitoring, escalation and reporting processes have been established for when errors do occur.

The interconnectedness of our operations and risk management strategies could expose us to risk if all factors are not appropriately considered and communicated.

- Our business operations, including strategies and operations related to risk management, asset liability management and liquidity management, are interconnected and complex. Changes in one area may have a secondary impact in another area of our operations. For example, risk management actions, such as the increased use of interest rate swaps, could have implications for liquidity risk management, as this strategy could result in the need to post additional amounts of collateral. Failure to appropriately consider these inter-relationships, or effectively communicate changes in strategies or activities across our operations, could have a negative impact on the strategic objectives or operations of another group.

Our risk management policies, procedures and strategies may leave us exposed to unidentified or unanticipated risks, which could negatively affect our business, results of operations and financial condition.

- We devote significant resources to develop our risk management policies, procedures, and strategies. Nonetheless, there is a risk that our policies, procedures, and strategies may not be comprehensive. Many of our methods for measuring and managing risk exposures are based upon the use of observed historical market behaviour or statistics based on historical models. Future behaviour may differ from past behaviour. Furthermore, data or models we use may not always be accurate, complete, up-to-date, or properly evaluated or reported.

We are subject to tax audits, tax litigation or similar proceedings, and as a result we may owe additional taxes, interest and penalties in amounts that may be material.

- We are subject to income and other taxes in the jurisdictions in which we do business. In determining our provisions for income taxes and our accounting for tax related matters in general, we are required to exercise judgment. We regularly make estimates where the ultimate tax determination is uncertain. There can be no assurance that the final determination of any tax audit, appeal of the decision of a taxing authority, tax litigation or similar proceedings will not be materially different from that reflected in our historical financial statements. The assessment of additional taxes, interest and penalties could be materially adverse to our current and future results of operations and financial condition.

Our operations face political, legal, operational and other risks that could negatively affect those operations or our results of operations and financial condition.

- Our operations face the risk of discriminatory regulation, political and economic instability, the imposition of economic or trade sanctions, isolationist foreign policies, armed conflicts, civil unrest or disobedience, government policies or regulations adopted in response to political or social pressures and rising populism and/or nationalism, limited protection for, or increased costs to protect intellectual property rights, inability to protect and/or enforce contractual or legal rights, nationalization or expropriation of assets, price controls and exchange controls or other restrictions that prevent us from transferring funds out of the countries in which we operate and disruptions in global supply chains. In addition, as political tensions and populism and/or nationalism rise in a number of locations, compliance with laws and regulations by global financial institutions may become challenging as complying with the requirements in one jurisdiction may be contrary to the requirements of another.
- A substantial portion of our revenue and net income attributed to shareholders is derived from our operations outside of North America, primarily in Asian markets. Some of these markets are developing and are rapidly growing countries where these risks may be heightened.
- In particular, tensions remain elevated between mainland China and Canada, the U.S. and their allies over a number of issues, including trade, technology and human rights resulting in the imposition of sanctions and trade restrictions on companies and individuals. Mainland China and the Hong Kong SAR are important markets for Manulife and tensions may create a more challenging operating environment for Manulife. In addition, the military conflicts in the Middle East and in Ukraine may negatively impact regional and global financial markets and economies.
- These risks could result in disruptions to our operations, unanticipated costs, increased market volatility and inflation, a contraction of business activity and recession, diminished investor and consumer confidence, lower investment growth, insurance sales and fees earned on managed assets, the loss of assets or a reduction in their value and reduced remittances. Failure to manage these risks could have a significant negative impact on our operations and profitability globally.

We are regularly involved in litigation.

- We are regularly involved in litigation, either as a plaintiff or defendant. These cases could result in an unfavourable resolution and could have a material adverse effect on our results of operations and financial condition. For further discussion of legal proceedings refer to note 19 of the 2023 Annual Consolidated Financial Statements.

We are exposed to investors trying to profit from short positions in our stock.

- Short-sellers seek to profit from a decline in the price of our common shares. Through their actions and public statements, they may encourage the decline in price from which they profit and may encourage others to take short positions in our shares. The existence of such short positions and the related publicity may lead to continued volatility in our common share price.

System failures or events that impact our facilities may disrupt business operations.

- Technology is used in virtually all aspects of our business and operations; in addition, part of our strategy involves the expansion of technology to directly serve our customers. An interruption in the service of our technology resulting from system failure, cyber-attack, human error, natural disaster, human-made disaster, pandemic, or other unpredictable events beyond reasonable control could prevent us from effectively operating our business. We rely on the internet in order to conduct business and may be adversely impacted by outages in critical infrastructure such as electric grids, undersea cables, satellites or other communications used by us or our third parties.
- While our facilities and operations are distributed across the globe, we can experience extreme weather, natural disasters, civil unrest, human-made disasters, power outages, pandemic, and other events which can prevent access to, and operations within, the facilities for our employees, partners, and other parties that support our business operations.

- We take measures to plan, structure and protect against routine events that may impact our operations, and maintain plans to recover from unpredictable events. An interruption to our operations may subject us to regulatory sanctions and legal claims, lead to a loss of customers, assets and revenues, or otherwise adversely affect us from a financial, operational and reputational perspective.

An information security or privacy breach of our operations or of a related third party could adversely impact our business, results of operations, financial condition, and reputation.

- It is possible that the Company may not be able to anticipate or to implement effective preventive measures against all disruptions or privacy and security breaches, especially because the techniques used change frequently, generally increase in sophistication, often are not recognized until launched, and because cyber-attacks can originate from a wide variety of sources, including organized crime, hackers, terrorists, activists, and other parties, including parties sponsored by hostile foreign governments. Those parties may also attempt to fraudulently induce employees, customers, and other users of the Company's systems or third-party service providers to disclose sensitive information in order to gain access to the Company's data or that of its customers or clients. We, our customers, regulators and other third parties have been subject to, and are likely to continue to be the target of, cyber-attacks, including computer viruses, malicious or destructive code, phishing attacks, denial of service and other security incidents, that could result in the unauthorized release, gathering, monitoring, misuse, loss or destruction of personal, confidential, proprietary and other information of the Company, our employees, our customers or of third parties, or otherwise materially disrupt our or our customers' or other third parties' network access or business operations. These attacks could adversely impact us from a financial, operational and reputational perspective.
- The Company maintains an Information Risk Management Program, which includes information and cyber security defenses, to protect our networks and systems from attacks; however, there can be no assurance that these counter measures will be successful in every instance in protecting our networks against advanced attacks. In addition to protection, detection and response mechanisms, the Company maintains cyber risk insurance, but this insurance may not cover all costs associated with the financial, operational and reputational consequences of personal, confidential or proprietary information being compromised.

Model risk may arise from the inappropriate use or interpretation of models or their output, or the use of deficient models, data or assumptions.

- We rely on highly complex models for pricing, valuation and risk measurement, and for input on decision making. Consequently, the risk of inappropriate use or interpretation of our models or their output, or the use of deficient models, could have a material adverse effect on our business.

Fraud risks may arise from incidents related to many external threats.

- Fraud incidents could adversely impact our business, results of operations, financial condition, and reputation. Anti-Fraud policies and standards are in place to guide our organization in the implementation of controls to protect against, detect and recover from ever-evolving fraud risks, such as distributor, underwriting, disbursement, account take-over, claims, bank, and others. The Global Anti-Fraud Office with Global Compliance is responsible for governance and oversight of external fraud risks.

Contracted third parties may fail to deliver against contracted activities.

- We rely on third parties to perform a variety of activities on our behalf, and failure of our most significant third parties to meet their contracted obligations may impact our ability to meet our strategic objectives or may directly impact our customers. Vendor governance processes are in place that seek to ensure that appropriate due diligence is conducted at time of vendor contracting, and ongoing vendor monitoring activities are in place that seek to ensure that the contracted services are being fulfilled to satisfaction, but we may nevertheless not be able to mitigate all possible failures.

Damage to the natural environment may arise related to our business operations, owned property or commercial mortgage loan portfolio.

- Environmental risk may originate from investment properties that are subject to natural or human-made environmental risk. Real estate assets may be owned, leased and/or managed, as well as mortgaged by Manulife and we might enter into the chain of liability due to foreclosure ownership when in default.
- Liability under environmental protection laws resulting from our commercial mortgage loan portfolio and owned property (including commercial real estate, timberland and farmland properties) may adversely impact our reputation, results of operations and financial condition. Under applicable laws, contamination of a property with hazardous materials or substances may give rise to a lien on the property to secure recovery of the costs of cleanup. In some instances, this lien has priority over the lien of an existing mortgage encumbering the property. The environmental risk may result from on-site or off-site (adjacent) due to migration of regulated pollutants or contaminants with financial or reputational environmental risk and liability consequences by virtue of strict liability. Environmental risk could also arise from natural disasters (e.g., climate change, weather, fire, earthquake, floods, and pests) or human activities (use of chemicals or pesticides) conducted within the site or when impacted from adjacent sites.
- Additionally, as lender, we may incur environmental liability (including without limitation liability for cleanup, remediation and damages incurred by third parties) similar to that of an owner or operator of the property, if we or our agents exercise sufficient control over the operations at the property. We may also have liability as the owner and/or operator of real estate for environmental conditions or contamination that exist or occur on the property or affecting other property.

Pandemic risk and potential implications of COVID-19

Governments and businesses continue to navigate the longer-term implications from COVID-19, including economic, legal, regulatory, tax, and other responses that could have a significant adverse impact on our global business operations and financial results. The pace of recovery, or any resurgence of COVID-19, may continue to differ across geographies in which we operate, which could impact the execution of our business strategies.

- We purchase reinsurance protection on certain risks underwritten or assumed by our various insurance businesses. As either a direct or indirect result of COVID-19, we may find reinsurance more difficult or costly to obtain.
- In pricing or repricing of new business, the impact of any COVID-19 related changes may be compounded with or offset by other pricing inputs. These inputs include assumption changes (e.g., reinsurance, interest rates, morbidity, mortality, expense, and lapse and surrender changes), business considerations related to retaining specific market share or client business and regulatory restrictions impacting the approval process for price changes.
- The implementation of widespread remote or hybrid work arrangements continues to heighten operational risks, including, but not limited to, cyber, fraud, money laundering, information security, privacy, and third-party risks. We rely on our risk management strategies to monitor and mitigate these and other operational risks.
- Market volatility and stressed conditions resulting from possible longer-term impacts of COVID-19 could result in additional cash and collateral demands primarily from changes to policyholder termination or renewal rates, withdrawals of customer deposit balances, borrowers renewing or extending their loans when they mature, derivative settlements or collateral demands, reinsurance settlements or collateral demands, and our willingness to support the local solvency position of our subsidiaries. Such an environment could also limit our access to capital markets. Sustained global economic uncertainty could also result in adverse credit ratings changes which in turn could result in more costly or limited access to funding sources. While we currently have a variety of sources of liquidity including cash balances, short-term investments, government and highly rated corporate bonds, and access to contingent liquidity facilities, there can be no assurance that these sources will provide us with sufficient liquidity on commercially reasonable terms in the future.

Evolving Risks

The identification and assessment of our external environment for evolving risks is an important aspect of our ERM Framework, as these risks could have the potential to have a material adverse impact on our operations and/or business strategies.

Our Evolving Risk Framework facilitates the ongoing identification, assessment and monitoring of evolving risks, and includes: maintaining a process for the ongoing discussion and evaluation of such risks with senior leaders; reviewing and validating evolving risks with the ERC; developing and executing on responses to each evolving risk based on materiality and prioritization; and monitoring and reporting on evolving risks on a regular basis to the Board's Risk Committee.

Additional Risk Factors That May Affect Future Results

Other factors that may affect future results include changes in government trade policy; monetary policy or fiscal policy, including interest rates policy from central banks; political conditions and developments in or affecting the countries in which we operate; technological changes; public infrastructure disruptions; changes in consumer spending and saving habits; the possible impact on local, national or global economies from public health or natural disaster emergencies; and international conflicts and other developments including those relating to terrorist activities. Although we take steps to anticipate and minimize risks in general, unforeseen future events may have a negative impact on our business, financial condition and results of operations.

We caution that the preceding discussion of risks that may affect future results is not exhaustive. When relying on our forward-looking statements to make decisions with respect to our Company, investors and others should carefully consider the foregoing risks, as well as other uncertainties and potential events, and other external and Company specific risks that may adversely affect the future business, financial condition or results of operations of our Company.

10. Capital Management Framework

Manulife seeks to manage its capital with the objectives of:

- Operating with sufficient capital to be able to honour all commitments to its policyholders and creditors with a high degree of confidence;
- Retaining the ongoing confidence of regulators, policyholders, rating agencies, investors and other creditors in order to ensure access to capital markets; and
- Optimizing return on capital to meet shareholders' expectations subject to constraints and considerations of adequate levels of capital established to meet the first two objectives.

Capital is managed and monitored in accordance with the Capital Management Policy. The Policy is reviewed and approved by the Board annually and is integrated with the Company's risk and financial management frameworks. It establishes guidelines regarding the quantity and quality of capital, internal capital mobility, and proactive management of ongoing and future capital requirements.

Our capital management framework takes into account the requirements of the Company as a whole, as well as the needs of each of our subsidiaries. Internal capital targets are set above regulatory requirements, and consider a number of factors, including results of sensitivity and stress testing and our own risk assessments, as well as business needs. We monitor against these internal targets and initiate actions appropriate to achieving our business objectives.

We periodically assess the strength of our capital position under various stress scenarios. The annual Financial Condition Testing ("FCT") typically quantifies the financial impact of economic events arising from shocks in public equity and other markets, interest rates and credit, amongst others. Our 2023 FCT results demonstrate that we would have sufficient assets, under the various adverse scenarios tested, to discharge our insurance and investment contract liabilities. This conclusion was also supported by a variety of other stress tests conducted by the Company.

We use an Economic Capital ("EC") framework to inform our internal view of the level of required capital and available capital. The EC framework is a key component of the Own Risk and Solvency Assessment ("ORSA") process, which is an internal assessment of an insurer's risks, capital needs and solvency position, and is used for setting Internal Capital Targets.

Capital management is also integrated into our product planning and performance management practices.

The composition of capital between equity and other capital instruments impacts the financial leverage ratio which is an important consideration in determining the Company's financial strength and credit ratings. The Company monitors and rebalances its capital mix through capital issuances and redemptions.

Financing Activities

Securities Transactions

During 2023, we raised a total of \$1.2 billion of subordinated debt in Canada, and \$0.6 billion of subordinated debt was redeemed at par.

(\$ millions)	Par value	Issued ⁽¹⁾	Redeemed/ Matured ⁽¹⁾
5.409% MFC Subordinated debentures, issued on Mar 10, 2023	\$ 1,200	\$ 1,195	\$ -
3.317% MFC Subordinated debentures, redeemed on May 9, 2023	\$ 600	-	600
Total		\$ 1,195	\$ 600

⁽¹⁾ Represents carrying value, net of issuance costs.

Normal Course Issuer Bid

We announced on February 21, 2023, that the Toronto Stock Exchange ("TSX") approved a normal course issuer bid (the "2023 NCIB") permitting the purchase for cancellation of up to 55.7 million common shares, representing approximately 3% of our issued and outstanding common shares. Purchases under the 2023 NCIB commenced on February 23, 2023 and were completed in December 2023. As of December 31, 2023, MFC purchased for cancellation under the 2023 NCIB 55.7 million of its common shares at an average price of \$25.48 per common share for a total cost of \$1.4 billion.

Our previous NCIB (the "2022 NCIB") that was announced on February 1, 2022, expired on February 2, 2023. Under the 2022 NCIB, MFC purchased for cancellation 85.8 million of its common shares at an average price of \$23.99 per share for a total cost of \$2.1 billion, which represented approximately 4.4% of our issued and outstanding common shares.

During 2023, MFC purchased for cancellation 62.6 million of its common shares at an average price of \$25.47 per common share for a total cost of \$1.6 billion, including 6.9 million shares for a total cost of \$0.2 billion that were purchased under the 2022 NCIB.

We have received approval from OSFI to launch an NCIB (the “2024 NCIB”) that permits the purchase for cancellation of up to 50 million common shares, representing approximately 2.8% of our issued and outstanding common shares, commencing in February 2024. The 2024 NCIB remains subject to the approval of the TSX.

Consolidated Capital

As at December 31,
(\$ millions)

	2023	2022
Non-controlling interests	\$ 1,431	\$ 1,427
Participating policyholders' equity	257	(77)
Preferred shares and other equity	6,660	6,660
Common shareholders' equity ⁽¹⁾	40,379	40,216
Total equity	48,727	48,226
Exclude the accumulated other comprehensive gain/(loss) on cash flow hedges	26	8
Total equity excluding accumulated other comprehensive gain/(loss) on cash flow hedges	48,701	48,218
Post-tax CSM	18,503	15,251
Qualifying capital instruments	6,667	6,122
Consolidated capital⁽²⁾	\$ 73,871	\$ 69,591

⁽¹⁾ Common shareholders' equity is equal to total shareholders' equity less preferred shares and other equity.

⁽²⁾ Consolidated capital does not include \$6.1 billion (2022 – \$6.2 billion) of MFC senior debt as this form of financing does not meet OSFI's definition of regulatory capital at the MFC level. The Company has down-streamed the proceeds from this financing into operating entities in a form that qualifies as regulatory capital at the subsidiary level.

MFC's consolidated capital was \$73.9 billion as at December 31, 2023, an increase of \$4.3 billion compared with \$69.6 billion as at December 31, 2022. The increase was driven by higher post-tax CSM, an increase in total equity, and the net issuance of subordinated debt. The increase in total equity was due to growth in retained earnings, partially offset by common share buybacks.

Remittance of Capital

As part of its capital management, Manulife promotes internal capital mobility so that MFC has access to funds to meet its obligations and to optimize capital deployment. Remittances is defined as the cash remitted or made available for distribution to MFC from its subsidiaries. It is a key metric used by management to evaluate our financial flexibility. In 2023, MFC subsidiaries delivered \$5.5 billion in remittances of which Asia and U.S. operations delivered \$1.7 billion and \$1.5 billion, respectively. This result was driven by underlying cash generation and some benefits from the impact of markets, particularly on our Canadian surplus bonds, due to the decline in interest rates over the year. Remittances were \$1.4 billion lower than 2022 as prior year remittances benefited from the U.S. variable annuity transaction.

Financial Leverage Ratio

MFC's financial leverage ratio as at December 31, 2023 was 24.3%, a decrease of 0.8 percentage points from 25.1% as at December 31, 2022. The decrease in the ratio was driven by higher post-tax CSM and an increase in total equity, partially offset by the net issuance of subordinated debt.

Common Shareholder Dividends

The declaration and payment of shareholder dividends and the amount thereof are at the discretion of the Board and depend upon various factors, including the results of operations, financial conditions, future prospects of the Company, dividend payout ratio and taking into account regulatory restrictions on the payment of shareholder dividends.

Common Shareholder Dividends Paid

For the years ended December 31,
\$ per share

	2023	2022
Dividends paid	\$ 1.46	\$ 1.32

The Company offers a Dividend Reinvestment Program (“DRIP”) whereby shareholders may elect to automatically reinvest dividends in the form of MFC common shares instead of receiving cash. The offering of the program and its terms of execution are subject to the Board's discretion.

During 2023, the required common shares in connection with the DRIP were purchased on the open market with no applicable discount.

Regulatory Capital Position

MFC and MLI are regulated by OSFI and are subject to consolidated risk based capital requirements. Manulife monitors and manages its consolidated capital in compliance with the OSFI LICAT guideline. Under this regime, our available capital and other eligible capital resources are measured against a required amount of risk capital determined in accordance with the guideline. For regulatory reporting purposes under the LICAT framework, consolidated capital is adjusted for various additions or deductions to capital as mandated by the guidelines defined by OSFI.

Manulife's operating activities are conducted within MLI and its subsidiaries. MLI's LICAT ratio was 137% as at December 31, 2023, compared with 131% as at December 31, 2022. The six percentage point increase from December 31, 2022 was primarily driven by the transition to the IFRS 17 accounting basis. Other positive movements included earnings and capital initiatives, partially offset by the capital impacts of market movements, capital market actions, and shareholder dividends.

MFC's LICAT ratio was 124% as at December 31, 2023, compared with 119% as at December 31, 2022, with the increase driven by similar factors that impacted the movement in MLI's LICAT ratio. The difference between the MLI and MFC ratios is largely due to the \$6.1 billion (2022 – \$6.2 billion) of MFC senior debt outstanding that does not qualify as available capital at the MFC level, but based on the form it was down-streamed to MLI, it qualifies as regulatory capital at the MLI level.

The LICAT ratios as at December 31, 2023, resulted in excess capital of \$22.3 billion over OSFI's supervisory target ratio of 100% for MLI, and \$20.7 billion over OSFI's regulatory minimum target ratio of 90% for MFC (no supervisory target is applicable to MFC). In addition, all MLI's subsidiaries maintain capital levels in excess of local requirements.

Credit Ratings

Manulife's operating companies have strong financial strength ratings from credit rating agencies. These ratings are important factors in establishing the competitive position of insurance companies and maintaining public confidence in products being offered. Maintaining strong ratings on debt and capital instruments issued by MFC and its subsidiaries allows us to access capital markets at competitive pricing levels. Should these credit ratings decrease materially, our cost of financing may increase and our access to funding and capital through capital markets could be reduced.

During 2023, S&P, Moody's, Morningstar DBRS, Fitch and AM Best Company ("AM Best") maintained their assigned ratings of MFC and its primary insurance operating companies.

The following table summarizes the financial strength ratings of MLI and certain of its subsidiaries as at January 31, 2024.

Financial Strength Ratings

Subsidiary	Jurisdiction	S&P	Moody's	Morningstar DBRS	Fitch	AM Best
The Manufacturers Life Insurance Company	Canada	AA-	A1	AA	AA-	A+ (Superior)
John Hancock Life Insurance Company (U.S.A.)	United States	AA-	A1	Not Rated	AA-	A+ (Superior)
Manulife (International) Limited	Hong Kong	AA-	Not Rated	Not Rated	Not Rated	Not Rated
Manulife Life Insurance Company	Japan	A+	Not Rated	Not Rated	Not Rated	Not Rated
Manulife (Singapore) Pte. Ltd.	Singapore	AA-	Not Rated	Not Rated	Not Rated	Not Rated

On October 23, 2023, Fitch revised Manulife's outlook to positive from stable; the positive outlook remained unchanged as of January 31, 2024.

As of January 31, 2024, S&P, Moody's, Morningstar DBRS, and AM Best had a stable outlook on these ratings. The S&P rating and outlook for Manulife Life Insurance Company are constrained by the sovereign rating on Japan (A+/Stable).

11. Critical Actuarial and Accounting Policies

The preparation of Consolidated Financial Statements in conformity with IFRS requires management to make judgments, estimates and assumptions that affect the application of accounting policies and the reported amounts of assets and liabilities, and the disclosure of contingent assets and liabilities as at the date of the Consolidated Financial Statements, and the reported amounts of insurance service, investment result, and other revenues and expenses during the reporting periods. Actual results may differ from these estimates. The most significant estimation processes relate to evaluating assumptions used in measuring insurance and investment contract liabilities and reinsurance contract held liabilities, assessing assets for impairment, determining of pension and other post-employment benefit obligation and expense assumptions, determining income taxes and uncertain tax positions, and estimating fair values of certain invested assets. Estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognized in the year in which the estimates are revised and in any future years affected. Although some variability is inherent in these estimates, management believes that the amounts recorded are appropriate. The material accounting policies used and the most significant judgments made by management in applying these accounting policies in the preparation of the 2023 Annual Consolidated Financial Statements are described in note 1 to the Consolidated Financial Statements.

Critical Actuarial Policies – Insurance and Investment Contract Liabilities

Insurance contract liabilities are determined in Canada under IFRS 17 “Insurance Contracts”, which was issued by the International Accounting Standards Board (“IASB”) in May 2017 to be effective for years beginning on January 1, 2021. Amendments to IFRS 17 were issued in June 2020 and included a two-year deferral of the effective date. IFRS 17, as amended, was effective for years beginning on January 1, 2023, and applies to insurance contracts, reinsurance contracts issued, reinsurance contracts held, and investment contracts with discretionary participation features.

IFRS 17 establishes principles for the recognition, measurement, presentation and disclosure of insurance contracts within the scope of the Standard. The objective of IFRS 17 is to ensure that an entity provides relevant information that faithfully represents those contracts. This information provides a basis for users of financial statements to assess the effect that insurance contracts have on the entity’s financial position, financial performance, and cash flows.

Insurance contract liabilities include the fulfilment cash flows and the contractual service margin. The fulfilment cash flows comprise:

- An estimate of future cash flows
- An adjustment to reflect the time value of money and the financial risk related to the future cash flows if not included in the estimate of future cash flows
- A risk adjustment for non-financial risk

Estimates of future cash flows including any adjustments to reflect the time value of money and financial risk represent the estimated value of future policyholder benefits and settlement obligations to be paid over the term remaining on in-force policies, including costs of servicing the policies, reduced by any future amounts paid by policyholders to the Company for their policies. The determination of estimates of future cash flows involves the use of estimates and assumptions. To determine the best estimate amount, assumptions must be made for several key factors, including future mortality and morbidity rates, rates of policy termination and premium persistency, operating expenses, and certain taxes (other than income taxes). Further information on best estimate assumptions is provided in the “Best Estimate Assumptions” section below.

To reflect the time value of money and financial risk, estimates of future cash flows are generally discounted using risk-free yield curves adjusted by an illiquidity premium to reflect the liquidity characteristics of the liabilities. The Company primarily uses a deterministic projection using best estimate assumptions to determine the present value of future cash flows. However, where there are financial guarantees such as universal life minimum crediting rates guarantees, participating life zero dividend floor implicit guarantees and variable annuities guarantees, a stochastic approach to capture the asymmetry of the risk is used. For the stochastic approach the cash flows are both projected and discounted at scenario specific rates calibrated on average to be the risk-free yield curves adjusted for illiquidity. The Company disaggregates insurance finance income or expenses on insurance contracts issued for most of its group of insurance contracts between profit or loss and other comprehensive income (“OCI”). The impact of changes in market interest rates on the value of the life insurance and related reinsurance assets and liabilities are reflected in OCI to minimize accounting mismatches between the accounting for insurance assets and liabilities and supporting financial assets.

Risk adjustments for non-financial risk represent the compensation an entity requires for bearing the uncertainty about the amount and timing of the cash flows that arises from non-financial risk as the entity fulfills insurance contracts. The risk adjustment considers insurance, lapse and expense risks, includes both favourable and unfavourable outcomes, and reflects diversification benefits from the insurance contracts issued. The Company has estimated the risk adjustment using a margin approach. This approach applies a margin for adverse deviation, typically in terms of a percentage of best estimate assumptions, where future cash flows are uncertain. The resulting cash flows are discounted at rates consistent with the best estimate cash flows to arrive at the total risk adjustment. The ranges of these margins are set by the Company and reviewed periodically. The risk adjustment for non-financial risk for insurance contracts correspond to a 90 - 95% confidence level for all segments. The risk adjustment for non-financial risk leads to higher insurance contract liabilities, but increases the income recognized in later periods as the risk adjustment releases as the non-financial risk on policies decreases.

The contractual service margin represents the present value of unearned profits the entity will recognize as services are provided in the future.

Total net insurance contract liabilities were \$482.0 billion as at December 31, 2023 (December 31, 2022 – \$464.4 billion), reflecting business growth and foreign exchange impacts.

Best Estimate Assumptions

We follow established processes to determine the assumptions used in the determination of insurance contract liabilities. The nature of each risk factor and the process for setting the assumptions used in the determination are discussed below.

Mortality

Mortality relates to the occurrence of death. Mortality assumptions are based on our internal as well as industry past and emerging experience and are differentiated by sex, underwriting class, policy type and geographic market. We make assumptions about future mortality improvements using historical experience derived from population data. Reinsurance is used to offset some of our direct mortality exposure on in-force life insurance policies with the impact of the reinsurance separately accounted for in our reinsurance contract assets or liabilities. Actual mortality experience is monitored against these assumptions separately for each business. The results are favourable where mortality rates are lower than assumed for life insurance and where mortality rates are higher than assumed for payout annuities and long-term care. Overall 2023 experience was favourable (2022 – unfavourable) when compared with our assumptions.

Morbidity

Morbidity relates to the occurrence of accidents and sickness for the insured risks. Morbidity assumptions are based on our internal as well as industry past and emerging experience and are established for each type of morbidity risk and geographic market. For our JH Long Term Care business we make assumptions about future morbidity changes. Actual morbidity experience is monitored against these assumptions separately for each business. Our morbidity risk exposure relates to future expected claims costs for long-term care insurance, as well as for group benefits and certain individual health insurance products we offer. Overall 2023 experience was favourable (2022 – favourable) when compared with our assumptions.

Policy Termination and Premium Persistency

Policy termination includes lapses and surrenders, where lapses represent the termination of policies due to non-payment of premiums and surrenders represent the voluntary termination of policies by policyholders. Premium persistency represents the level of ongoing deposits on contracts where there is policyholder discretion as to the amount and timing of deposits. Policy termination and premium persistency assumptions are primarily based on our recent experience adjusted for expected future conditions. Assumptions reflect differences by type of contract within each geographic market and actual experience is monitored against these assumptions separately for each business. Overall 2023 experience was unfavourable (2022 – unfavourable) when compared with our assumptions.

Directly Attributable Expenses and Taxes

Directly attributable operating expense assumptions reflect the projected costs of maintaining and servicing in-force policies, including associated directly attributable overhead expenses. The expenses are derived from internal cost studies and are projected into the future with an allowance for inflation. For some developing businesses, there is an expectation that unit costs will decline as these businesses mature. Actual expenses are monitored against assumptions separately for each business. Overall maintenance expenses for 2023 were unfavourable (2022 – unfavourable) when compared with our assumptions. Taxes reflect assumptions for future premium taxes and other non-income related taxes.

Experience Adjusted Products

Where policies have features that allow the impact of changes in experience to be passed on to policyholders through policy dividends, experience rating refunds, credited rates or other adjustable features, the projected policyholder benefits are adjusted to reflect the projected experience. Minimum contractual guarantees and other market considerations are considered in determining the policy adjustments.

Sensitivity of Earnings to Changes in Assumptions

The following tables present information on how reasonably possible changes in assumptions made by the Company on insurance contracts' non-economic risk variables and certain economic risk variables impact contractual service margin, net income attributed to shareholders, other comprehensive income attributed to shareholders, and total comprehensive income attributed to shareholders. For non-economic risk variables, the impacts are shown separately gross and net of the impacts of reinsurance contracts held. The method used for deriving sensitivity information and significant assumptions made did not change from the previous period.

The analysis is based on a simultaneous change in assumptions across all businesses and holds all other assumptions constant. In practice, experience for each assumption will frequently vary by geographic market and business, and assumption updates are specifically made on a business and geographic basis. Actual results can differ materially from these estimates for a variety of reasons including the interaction among these factors when more than one changes, actual experience differing from the assumptions, changes in business mix, effective tax rates, and the general limitations of our internal models.

Potential impact on contractual service margin, net income attributed to shareholders, other comprehensive income attributed to shareholders, and total comprehensive income attributed to shareholders arising from changes to non-economic assumptions⁽¹⁾

As at December 31, 2023 (\$ millions, post-tax except CSM)	CSM net of NCI		Net income attributed to shareholders		Other comprehensive income attributed to shareholders		Total comprehensive income attributed to shareholders	
	Gross	Net	Gross	Net	Gross	Net	Gross	Net
Policy related assumptions								
2% adverse change in future mortality rates ^{(2),(3),(5)}								
Portfolios where an increase in rates increases insurance contract liabilities	\$ (800)	\$ (200)	\$ (400)	\$ (200)	\$ -	\$ -	\$ (400)	\$ (200)
Portfolios where a decrease in rates increases insurance contract liabilities	-	(500)	-	-	100	100	-	100
5% adverse change in future morbidity rates ^{(4),(5),(6)} (incidence and termination)	(1,500)	(1,300)	(3,300)	(3,300)	500	400	(2,800)	(2,900)
10% change in future policy termination rates ^{(3),(5)}								
Portfolios where an increase in rates increases insurance contract liabilities	(600)	(500)	(100)	(100)	(100)	(100)	(200)	(200)
Portfolios where a decrease in rates increases insurance contract liabilities	(1,200)	(800)	(400)	(300)	300	200	(100)	(100)
5% increase in future expense levels	(600)	(600)	-	-	-	-	-	-
As at December 31, 2022 (\$ millions, post-tax except CSM)	CSM net of NCI		Net income attributed to shareholders		Other comprehensive income attributed to shareholders		Total comprehensive income attributed to shareholders	
	Gross	Net	Gross	Net	Gross	Net	Gross	Net
Policy related assumptions								
2% adverse change in future mortality rates ^{(2),(3),(5)}								
Portfolios where an increase in rates increases insurance contract liabilities	\$ (1,400)	\$ (600)	\$ 100	\$ -	\$ 100	\$ -	\$ 200	\$ -
Portfolios where a decrease in rates increases insurance contract liabilities	-	(500)	(100)	-	100	100	-	100
5% adverse change in future morbidity rates ^{(4),(5),(6)} (incidence and termination)	(1,100)	(1,000)	(3,600)	(3,600)	600	600	(3,000)	(3,000)
10% change in future policy termination rates ^{(3),(5)}								
Portfolios where an increase in rates increases insurance contract liabilities	(500)	(400)	(100)	(100)	(100)	(100)	(200)	(200)
Portfolios where a decrease in rates increases insurance contract liabilities	(1,800)	(1,200)	-	(100)	400	300	400	200
5% increase in future expense levels	(800)	(700)	-	-	-	-	-	-

⁽¹⁾ The participating policy funds are largely self-supporting and experience gains or losses would generally result in changes to future dividends reducing the direct impact to the CSM and shareholder income.

⁽²⁾ An increase in mortality rates will generally increase insurance contract liabilities for life insurance contracts, whereas a decrease in mortality rates will generally increase insurance contract liabilities for policies with longevity risk such as payout annuities.

⁽³⁾ The sensitivity is measured for each direct insurance portfolio net of the impacts of any reinsurance held on the policies within that portfolio to determine if the overall insurance contract liabilities increased.

⁽⁴⁾ No amounts related to morbidity risk are included for policies where the insurance contract liability provides only for claims costs expected over a short period, generally less than one year, such as Group Life and Health.

⁽⁵⁾ The impacts of the sensitivities on LTC for morbidity, mortality and lapse do not assume any offsets from the Company's ability to contractually raise premium rates in such events, subject to state regulatory approval. In practice, we would plan to file for rate increases equal to the amount of deterioration resulting from the sensitivity.

⁽⁶⁾ This includes a 5% deterioration in incidence rates and 5% deterioration in claim termination rates.

Potential impact on contractual service margin, net income attributed to shareholders, other comprehensive income attributed to shareholders, and total comprehensive income attributed to shareholders arising from changes to non-economic assumptions on Long Term Care⁽¹⁾

As at December 31, 2023 (\$ millions, post-tax except CSM)	CSM net of NCI		Net income attributed to shareholders		Other comprehensive income attributed to shareholders		Total comprehensive income attributed to shareholders	
	Gross	Net	Gross	Net	Gross	Net	Gross	Net
Policy related assumptions								
2% adverse change in future mortality rates ^{(2),(3)}	\$ (300)	\$ (300)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
5% adverse change in future morbidity incidence rates ^{(2),(3)}	(900)	(900)	(800)	(800)	100	100	(700)	(700)
5% adverse change in future morbidity claims termination rates ^{(2),(3)}	(900)	(900)	(1,600)	(1,600)	300	300	(1,400)	(1,400)
10% adverse change in future policy termination rates ^{(2),(3)}	(400)	(400)	-	-	-	-	-	-
5% increase in future expense levels ⁽³⁾	(100)	(100)	-	-	-	-	-	-

As at December 31, 2022 (\$ millions, post-tax except CSM)	CSM net of NCI		Net income attributed to shareholders		Other comprehensive income attributed to shareholders		Total comprehensive income attributed to shareholders	
	Gross	Net	Gross	Net	Gross	Net	Gross	Net
Policy related assumptions								
2% adverse change in future mortality rates ^{(2),(3)}	\$ (400)	\$ (400)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
5% adverse change in future morbidity incidence rates ^{(2),(3)}	(700)	(700)	(1,100)	(1,100)	200	200	(900)	(900)
5% adverse change in future morbidity claims termination rates ^{(2),(3)}	(700)	(700)	(1,800)	(1,800)	300	300	(1,500)	(1,500)
10% adverse change in future policy termination rates ^{(2),(3)}	(400)	(400)	-	-	100	100	100	100
5% increase in future expense levels ⁽³⁾	(100)	(100)	-	-	-	-	-	-

⁽¹⁾ Translated from US\$ at 1.3186 for 2023 and US\$ at 1.3549 for 2022.

⁽²⁾ The impacts of the sensitivities on LTC for morbidity, mortality and lapse do not assume any offsets from the Company's ability to contractually raise premium rates in such events, subject to state regulatory approval. In practice, we would plan to file for rate increases equal to the amount of deterioration resulting from the sensitivities.

⁽³⁾ The impact of favourable changes to all the sensitivities is relatively symmetrical.

Potential impact on contractual service margin, net income attributed to shareholders, other comprehensive income attributed to shareholders, and total comprehensive income attributed to shareholders arising from changes to certain economic financial assumptions used in the determination of insurance contract liabilities⁽¹⁾

As at December 31, 2023 (\$ millions, post-tax except CSM)	CSM net of NCI	Net income attributed to shareholders	Other comprehensive income attributed to shareholders	Total comprehensive income attributed to shareholders
10 basis point reduction in ultimate spot rate	\$ (200)	\$ -	\$ (300)	\$ (300)
50 basis point increase in interest rate volatility ⁽²⁾	-	-	-	-
50 basis point increase in non-fixed income return volatility ⁽²⁾	(100)	-	-	-

As at December 31, 2022 (\$ millions, post-tax except CSM)	CSM net of NCI	Net income attributed to shareholders	Other comprehensive income attributed to shareholders	Total comprehensive income attributed to shareholders
10 basis point reduction in ultimate spot rate	\$ (300)	\$ -	\$ (300)	\$ (300)
50 basis point increase in interest rate volatility ⁽²⁾	(100)	-	-	-
50 basis point increase in non-fixed income return volatility ⁽²⁾	(100)	-	-	-

⁽¹⁾ Note that the impact of these assumptions are not linear.

⁽²⁾ Used in the determination of insurance contract liabilities with financial guarantees. This includes universal life minimum crediting rate guarantees, participating life zero dividend floor implicit guarantees, and variable annuities guarantees, where a stochastic approach is used to capture the asymmetry of the risk.

Review of Actuarial Methods and Assumptions

The Company performs a comprehensive review of actuarial methods and assumptions annually. The review is designed to reduce the Company's exposure to uncertainty by ensuring assumptions for liability risks remain appropriate. This is accomplished by monitoring experience and updating assumptions that represent a best estimate of expected future experience, and margins that are appropriate for the risks assumed. While the assumptions selected represent the Company's best estimates and assessment of risk, the ongoing monitoring of experience and changes in the economic environment are likely to result in future changes to the actuarial assumptions, which could materially impact the insurance contract liabilities. The changes implemented from the review are generally implemented in the third quarter of each year, though updates may be made outside the third quarter in certain circumstances.

2023 Review of Actuarial Methods and Assumptions

On a full year basis, the 2023 review of actuarial methods and assumptions resulted in a decrease in pre-tax fulfilment cash flows of \$3,197 million.¹ These changes resulted in an increase in pre-tax net income attributed to shareholders of \$171 million (\$105 million post-tax), an increase in pre-tax net income attributed to participating policyholders of \$173 million (\$165 million post-tax), an increase in CSM of \$2,754 million, and an increase in pre-tax other comprehensive income of \$99 million (\$73 million post-tax).

In 3Q23, the completion of the 2023 annual review of actuarial methods and assumptions resulted in a decrease in pre-tax fulfilment cash flows of \$347 million. These changes resulted in an increase in pre-tax net income attributed to shareholders of \$27 million (a decrease of \$14 million post-tax), an increase in pre-tax net income attributed to participating policyholders of \$58 million (\$74 million post-tax), an increase in CSM of \$116 million, and an increase in pre-tax other comprehensive income of \$146 million (\$110 million post-tax).

In 4Q23, we also updated our actuarial methods and assumptions which decreased the overall level of the risk adjustment for non-financial risk. This change moves the risk adjustment to approximately the middle of our existing 90 - 95% confidence level range. The risk adjustment would have exceeded the 95% confidence level in 4Q23 without making the change. This change led to a decrease in pre-tax fulfilment cash flows of \$2,850 million, an increase in pre-tax net income attributed to shareholders of \$144 million (\$119 million post-tax), an increase in pre-tax net income attributed to participating policyholders of \$115 million (\$91 million post-tax), an increase in CSM of \$2,638 million, and a decrease in pre-tax other comprehensive income of \$47 million (\$37 million post-tax).

Since the beginning of 2020, some lines of business have seen impacts to mortality and policyholder behaviour driven by the COVID-19 pandemic. Given the long-term nature of our assumptions, our 2023 experience studies have excluded experience that was materially impacted by COVID-19 as this is not seen to be indicative of the levels of actual future claims or lapses.

Impact of changes in actuarial methods and assumptions on pre-tax fulfilment cash flows⁽¹⁾

(\$ millions)	For the three and nine months ended September 30, 2023	For the three months ended December 31, 2023	For the year ended December 31, 2023
Canada variable annuity product review	\$ (133)	\$ -	\$ (133)
Mortality and morbidity updates	265	-	265
Lapse and policyholder behaviour updates	98	-	98
Methodology and other updates	(577)	(2,850)	(3,427)
Impact of changes in actuarial methods and assumptions, pre-tax	\$ (347)	\$ (2,850)	\$ (3,197)

⁽¹⁾ Excludes the portion related to non-controlling interests of \$103 million for the three and nine months ended September 30, 2023, and \$97 million for the three months ended December 31, 2023, respectively.

¹ Fulfilment cash flows include an estimate of future cash flows; an adjustment to reflect the time value of money and the financial risk related to future cash flows if not included in the estimate of future cash flows; and a risk adjustment for non-financial risk. Additional information on fulfilment cash flows can be found in note 7 of our 2023 Annual Consolidated Financial Statements.

Impact of changes in actuarial methods and assumptions on pre-tax net income attributed to shareholders, pre-tax net income attributed to participating policyholders, OCI and CSM⁽¹⁾

(\$ millions)	For the three and nine months ended September 30, 2023	For the three months ended December 31, 2023	For the year ended December 31, 2023
Portion recognized in net income (loss) attributed to:			
Participating policyholders	\$ 58	\$ 115	\$ 173
Shareholders	27	144	171
	85	259	344
Portion recognized in OCI attributed to:			
Participating policyholders	–	(21)	(21)
Shareholders	146	(26)	120
	146	(47)	99
Portion recognized in CSM	116	2,638	2,754
Impact of changes in actuarial methods and assumptions, pre-tax	\$ 347	\$ 2,850	\$ 3,197

⁽¹⁾ Excludes the portion related to non-controlling interests, of which \$72 million is related to CSM for the three and nine months ended September 30, 2023, and \$87 million is related to CSM for the three months ended December 31, 2023.

Canada variable annuity product review

The review of our variable annuity products in Canada resulted in a decrease in pre-tax fulfilment cash flows of \$133 million.

The decrease was driven by a reduction in investment management fees, partially offset by updates to product assumptions, including surrenders, incidence, and utilization, to reflect emerging experience.

Mortality and morbidity updates

Mortality and morbidity updates resulted in an increase in pre-tax fulfilment cash flows of \$265 million.

The increase was driven by a strengthening of incidence rates for certain products in Vietnam to align with emerging experience and updates to mortality assumptions in our U.S. life insurance business to reflect industry trends, as well as emerging experience. This was partially offset by updates to morbidity assumptions for certain products in Japan to reflect actual experience.

Lapse and policyholder behaviour updates

Updates to lapses and policyholder behaviour assumptions resulted in an increase in pre-tax fulfilment cash flows of \$98 million.

The increase was primarily driven by a detailed review of lapse assumptions for our universal life level cost of insurance products in Canada, which resulted in a reduction to the lapse rates to align with emerging trends.

Methodology and other updates

Methodology and other updates resulted in a decrease in pre-tax fulfilment cash flows of \$3,427 million.

In 3Q23, methodology and other updates resulted in a decrease in pre-tax fulfilment cash flows of \$577 million. The decrease was driven by the impact of cost-of-guarantees for participating policyholders across all segments from annual updates related to parameters, dividend recalibration, and market movements during the year, as well as modelling refinements for certain products in Asia. This was partially offset by a modelling methodology update to project future premiums on our U.S. life insurance business.

In 4Q23, methodology and other updates resulted in a decrease in pre-tax fulfilment cash flows of \$2,850 million. The decrease was driven by a decrease in the overall level of the risk adjustment for non-financial risk. This change moves the risk adjustment to approximately the middle of our existing 90-95% confidence level range.

Impact of changes in actuarial methods and assumptions on pre-tax fulfilment cash flows, net income attributed to shareholders, CSM and OCI by segment¹

For the three and nine months ended September 30, 2023

The impact of changes in actuarial methods and assumptions in Canada resulted in a decrease in pre-tax fulfilment cash flows of \$159 million. The decrease was driven by updates to our variable annuity product assumptions, as well as by updates to our valuation models for participating products, driven by the annual dividend recalibration, partially offset by a reduction in lapse rates on our universal life level cost of insurance products to reflect emerging trends. These changes resulted in an increase in pre-tax net income attributed to shareholders of \$52 million (\$37 million post-tax), an increase in CSM of \$142 million, and an increase in pre-tax other comprehensive income of \$2 million (\$1 million post-tax).

The impact of changes in actuarial methods and assumptions in the U.S. resulted in an increase in pre-tax fulfilment cash flows of \$270 million. The increase was related to our life insurance business and primarily driven by a modelling methodology update to project future premiums, as well as updates to mortality assumptions. These changes resulted in an increase in pre-tax net income attributed to shareholders of \$134 million (\$106 million post-tax), a decrease in CSM of \$600 million, and an increase in pre-tax other comprehensive income of \$196 million (\$155 million post-tax).

The impact of changes in actuarial methods and assumptions in Asia resulted in a decrease in pre-tax fulfilment cash flows of \$457 million. The decrease largely relates to participating products, primarily driven by model refinements, dividend recalibration updates, as well as annual updates to reflect market movements during the year. This, and the updates to morbidity assumptions on certain products in Japan, were partially offset by updates to incidence rates on certain products in Vietnam. These changes resulted in a decrease in pre-tax net income attributed to shareholders of \$159 million (\$157 million post-tax), an increase in CSM of \$574 million, and a decrease in pre-tax other comprehensive income of \$53 million (\$47 million post-tax).

The impact of changes in actuarial methods and assumptions in Corporate and Other (which includes our Reinsurance businesses) resulted in a decrease in pre-tax fulfilment cash flows of \$1 million. These changes resulted in no impacts to pre-tax net income attributed to shareholders or CSM, and an increase in pre-tax other comprehensive income of \$1 million (\$1 million post-tax).

For the three months ended December 31, 2023

The reduction in the risk adjustment level resulted in the following impacts by segment:

The impact of changes in actuarial methods and assumptions in Canada resulted in a decrease in pre-tax fulfilment cash flows of \$246 million. These changes resulted in an increase in pre-tax net income attributed to shareholders of \$4 million (\$3 million post-tax), an increase in pre-tax net income attributed to policyholder of \$40 million (\$29 million post-tax), an increase in CSM of \$213 million, and a decrease in pre-tax other comprehensive income of \$11 million (\$8 million post-tax).

The impact of changes in actuarial methods and assumptions in the U.S. resulted in a decrease in pre-tax fulfilment cash flows of \$91 million. These changes resulted in an increase in pre-tax net income attributed to shareholders of \$33 million (\$26 million post-tax), an increase in CSM of \$78 million, and a decrease in pre-tax other comprehensive income of \$20 million (\$15 million post-tax).

The impact of changes in actuarial methods and assumptions in Asia resulted in a decrease in pre-tax fulfilment cash flows of \$2,513 million. These changes resulted in an increase in pre-tax net income attributed to shareholders of \$107 million (\$90 million post-tax), an increase in pre-tax net income attributed to policyholders of \$75 million (\$62 million post-tax), an increase in CSM of \$2,348 million, and a decrease in pre-tax other comprehensive income of \$17 million (\$14 million post-tax).

2022 Review of Actuarial Methods and Assumptions

The completion of the 2022 annual review of actuarial methods and assumptions resulted in an increase in pre-tax fulfilment cash flows of \$192 million. These changes resulted in an increase in pre-tax net income attributed to shareholders of \$23 million (\$26 million post-tax), a decrease in pre-tax net income attributed to participating policyholders of \$26 million (\$18 million post-tax), a decrease in CSM of \$279 million, and an increase in pre-tax other comprehensive income of \$90 million (\$73 million post-tax).

Since the beginning of 2020, some lines of business have seen impacts to mortality and policyholder behaviour driven by the COVID-19 pandemic. Given the long-term nature of our assumptions, our 2022 experience studies have excluded experience that was materially impacted by COVID-19 as this is not seen to be indicative of the levels of actual future claims or lapses.

¹ Our review of actuarial methods and assumptions also impacts net income attributed to participating policyholders. The total company impact can be found in the above table.

Impact of changes in actuarial methods and assumptions on pre-tax fulfilment cash flows⁽¹⁾

For the year ended December 31, 2022
(\$ millions)

	Total
Long-term care triennial review	\$ 118
Mortality and morbidity updates	83
Lapse and policyholder behaviour updates	234
Methodology and other updates	(243)
Impact of changes in actuarial methods and assumptions, pre-tax	\$ 192

⁽¹⁾ Excludes the portion related to non-controlling interests of \$8 million.

Impact of changes in actuarial methods and assumptions on pre-tax net income attributed to shareholders, pre-tax net income attributed to participating policyholders, OCI and CSM⁽¹⁾

For the year ended December 31, 2022
(\$ millions)

	Total
Portion recognized in net income (loss) attributed to:	
Participating policyholders	\$ (26)
Shareholders	23
	(3)
Portion recognized in OCI attributed to:	
Participating policyholders	-
Shareholders	90
	90
Portion recognized in CSM	(279)
Impact of changes in actuarial methods and assumptions, pre-tax	\$ (192)

⁽¹⁾ Excludes the portion related to non-controlling interests, of which \$nil million is related to CSM.

Long-term care triennial review

U.S. Insurance completed a comprehensive long-term care ("LTC") experience study. The review included all aspects of claim assumptions, as well as the progress on future premium rate increases. The impact of the LTC review was an increase in pre-tax fulfilment cash flows of \$118 million.

The experience study showed that claim costs established in our last triennial review remain appropriate in aggregate for our older blocks of business¹ supported by robust claims data on this mature block. Pre-tax fulfilment cash flows were increased for claim costs on our newer block of business². This was driven by lower active life mortality³ supported by Company experience and a recent industry study, as well as higher utilization of benefits, which included the impact of reflecting higher inflation in the cost-of-care up to 2022. We also reviewed and updated incidence and claim termination assumptions which, on a net basis, provided a partial offset to the increase in pre-tax fulfilment cash flows on active life mortality and utilization. In addition, some policyholders are electing to reduce their benefits in lieu of paying increased premiums which resulted in a reduction in pre-tax fulfilment cash flows.

Experience continues to support the assumptions of both future morbidity and mortality improvement, resulting in no changes to these assumptions.

As of September 30, 2022, we had received actual premium increase approvals of \$2.5 billion pre-tax (US\$1.9 billion pre-tax) on a present value basis since the last triennial review in 2019. This aligns with the full amount assumed in our pre-tax fulfilment cash flows at that time and demonstrates our continued strong track record of securing premium rate increases⁴. In 2022, the review of future premium increases assumed in fulfilment cash flows resulted in a net \$2.5 billion (US\$1.9 billion) decrease in pre-tax fulfilment cash flows. This reflects expected future premium increases that are due to our 2022 review of morbidity, mortality, and lapse assumptions, as well as outstanding amounts from prior state filings. Premium increases averaging approximately 30% will be sought on about one-half of the business, excluding the carryover of 2019 amounts requested. Our assumptions reflect the estimated timing and amount of state approved premium increases.

Mortality and morbidity updates

Mortality and morbidity updates resulted in an increase in pre-tax fulfilment cash flows of \$83 million, driven by updates to morbidity assumptions in Vietnam to align with experience, partially offset by a detailed review of the mortality assumptions for our Canada insurance business.

Lapse and policyholder behaviour updates

Updates to lapses and policyholder behaviour assumptions resulted in an increase in pre-tax fulfilment cash flows of \$234 million.

¹ First generation policies issued prior to 2002.

² Second generation policies with an average issue date of 2007 and Group policies with an average issue date of 2003.

³ The mortality rate of LTC policyholders who are currently not on claim.

⁴ Actual experience obtaining premium increases could be materially different than what the Company has assumed, resulting in further increases or decreases in insurance contract liabilities, which could be material. See "Caution regarding forward-looking statements" above.

We completed a detailed review of lapse assumptions for Singapore, and increased lapse rates to align with experience on our index-linked products, which reduced projected future fee income to be received on these products.

We also increased lapse rates on Canada's term insurance products for policies approaching their renewal date, reflecting emerging experience in our study.

Methodology and other updates

Other updates resulted in a decrease in pre-tax fulfilment cash flows of \$243 million, which included updates to discount rates and policyholder dividends on participating products, as well as various other modelling and projection updates.

Impact of changes in actuarial methods and assumptions on pre-tax fulfilment cash flows, net income attributed to shareholders, CSM and OCI by segment

The impact of changes in actuarial methods and assumptions in Canada resulted in an increase in pre-tax fulfilment cash flows of \$22 million. The increase was driven by updates to the lapse assumptions for certain term insurance products, largely offset by updates to discount rates and policyholder dividends on participating products, as well as updates to mortality assumptions for our insurance business. These changes resulted in an increase in pre-tax net income attributed to shareholders of \$64 million (\$47 million post-tax), an increase in CSM of \$43 million, and a decrease in pre-tax other comprehensive income of \$96 million (\$71 million post-tax).

The impact of changes in actuarial methods and assumptions in the U.S. resulted in an increase in pre-tax fulfilment cash flows of \$108 million, driven by the triennial review of long-term care. These changes resulted in a decrease in pre-tax net income attributed to shareholders of \$16 million (\$12 million post-tax), a decrease in CSM of \$202 million, and an increase in pre-tax other comprehensive income of \$110 million (\$86 million post-tax).

The impact of changes in actuarial methods and assumptions in Asia resulted in an increase in pre-tax fulfilment cash flows of \$62 million. The increase was driven by updates to lapse assumptions in Singapore and morbidity updates in Vietnam, partially offset by various other modelling and projection updates. These changes resulted in a decrease in pre-tax net income attributed to shareholders of \$25 million (\$9 million post-tax), a decrease in CSM of \$120 million, and an increase in pre-tax other comprehensive income of \$76 million (\$58 million post-tax).

Critical Accounting Policies

Consolidation

The Company is required to consolidate the financial position and results of entities it controls. Control exists when the Company:

- Has the power to govern the financial and operating policies of the entity;
- Is exposed to a significant portion of the entity's variable returns; and
- Is able to use its power to influence variable returns from the entity.

The Company uses the same principles to assess control over any entity it is involved with. In evaluating control, potential factors assessed include the effects of:

- Substantive voting rights that are potentially or currently exercisable;
- Contractual management relationships with the entity;
- Rights and obligations resulting from policyholders to manage investments on their behalf;
- The extent of other parties' involvement in the entity, if any, the possibility for de facto control being present; and
- The effect of any legal or contractual restraints on the Company from using its power to affect its variable returns from the entity.

An assessment of control is based on arrangements in place and the assessed risk exposures at inception of the relationship. Initial evaluations are reconsidered at a later date if:

- The contractual arrangements of the entity are amended such that the Company's involvement with the entity changes;
- The Company acquires or loses power over the financial and operating policies of the entity;
- The Company acquires additional interests in the entity or its interests in an entity are diluted; or
- The Company's ability to use its power to affect its variable returns from the entity changes.

Subsidiaries are consolidated from the date on which control is obtained by the Company and cease to be consolidated from the date that control ceases. A change in control may lead to gains or losses on derecognition of a subsidiary when losing control, or on derecognition of previous interests in a subsidiary when gaining control.

Fair Value of Invested Assets

A large portion of the Company's invested assets are recorded at fair value. Refer to note 1 of the 2023 Annual Consolidated Financial Statements for a description of the methods used in determining fair values. When quoted prices in active markets are not available for a particular investment, significant judgment is required to determine an estimated fair value based on market standard valuation methodologies

including discounted cash flow methodologies, matrix pricing, consensus pricing services, or other similar techniques. The inputs to these standard valuation methodologies include: current interest rates or yields for similar instruments, credit rating of the issuer or counterparty, industry sector of the issuer, coupon rate, call provisions, sinking fund requirements, tenor (or expected tenor) of the instrument, management's assumptions regarding liquidity, volatilities and estimated future cash flows. Accordingly, the estimated fair values are based on available market information and management's judgments about the key market factors impacting these financial instruments. Financial markets are susceptible to severe events evidenced by rapid depreciation in asset values accompanied by a reduction in asset liquidity. The Company's ability to sell assets, or the price ultimately realized for these assets, depends upon the demand and liquidity in the market which increases the use of judgment in determining the estimated fair value of certain assets.

Evaluation of Invested Asset Impairment

FVOCI debt investments are carried at fair market value, with changes in fair value recorded in other comprehensive income ("OCI") with the exception of unrealized gains and losses on foreign currency translation of foreign currency denominated FVOCI debt investments which are included in net income.

Debt investments classified as FVOCI or amortized cost are reviewed on a regular basis for expected credit loss ("ECL") impairment allowances. ECL allowances are measured as the difference between amounts due according to the contractual terms of the debt security and the discounted value of cash flows that the Company expects to receive. Changes in ECL impairment allowances are recorded in the provision for credit losses included in net income.

Significant judgment is required in assessing ECL impairment allowances and fair values and recoverable values. Key matters considered include macroeconomic factors, industry specific developments, and specific issues with respect to single issuers and borrowers.

Changes in circumstances may cause future assessments of invested asset ECL impairment allowances to be materially different from current assessments, which could require additional provisions for impairment. Additional information on the process and methodology for determining the allowance for expected credit losses is included in the discussion of credit risk in notes 1 and 9 to the 2023 Annual Consolidated Financial Statements.

Derivative Financial Instruments

The Company uses derivative financial instruments ("derivatives") including swaps, forwards and futures agreements, and options to help manage current and anticipated exposures to changes in interest rates, foreign exchange rates, commodity prices and equity market prices, and to replicate permissible investments. Refer to note 5 to the 2023 Annual Consolidated Financial Statements for a description of the methods used to determine the fair value of derivatives.

The accounting for derivatives is complex and interpretations of the primary accounting guidance continue to evolve in practice. Judgment is applied in determining the availability and application of hedge accounting designations and the appropriate accounting treatment under such accounting guidance. Differences in judgment as to the availability and application of hedge accounting designations and the appropriate accounting treatment may result in a differing impact on the Consolidated Financial Statements of the Company from previous periods. Assessments of hedge effectiveness and measurements of ineffectiveness of hedging relationships are also subject to interpretations and estimations.

Hedge Accounting

The Company applies hedge accounting principles under IFRS 9 to certain economic hedge transactions that qualify for hedge accounting. The Company evaluates the economic relationship between the hedged item and the hedging instrument, assesses the effect of credit risk on the economic relationship and determines the hedge ratio between the hedged item and hedging instrument to identify qualifying hedge accounting relationships.

The Company designates fair value hedges to hedge interest rate exposure on fixed rate assets and liabilities. In certain instances, the Company hedges fair value exposure due to both foreign exchange and interest rate risk using cross currency swaps.

The Company designates interest rate derivatives under cash flow hedges to hedge interest rate exposure in variable rate financial instruments. In addition, the Company may use non-functional currency denominated long-term debt, forward currency contracts and cross currency swaps to mitigate the foreign exchange translation risk of net investments in foreign operations.

The Company applies the cost of hedging option for certain hedge accounting relationships, as such changes in forward points and foreign currency basis spreads are excluded from the hedge accounting relationships and are accounted for as a separate component in equity.

Employee Future Benefits

The Company maintains defined contribution and defined benefit pension plans and other post-employment plans for employees and agents, including registered (tax qualified) pension plans that are typically funded, as well as supplemental non-registered (non-qualified) pension plans for executives, retiree welfare plans and disability welfare plans that are typically not funded. The largest defined benefit pension and retiree welfare plans in the U.S. and Canada are the material plans that are discussed herein and in note 16 to the 2023 Annual Consolidated Financial Statements.

Due to the long-term nature of defined benefit pension and retiree welfare plans, the calculation of the defined benefit obligation and net benefit cost depends on various assumptions such as discount rates, salary increase rates, cash balance interest crediting rates, health care cost trend rates and rates of mortality. These assumptions are determined by management and are reviewed annually. The key assumptions, as well as the sensitivity of the defined benefit obligation to changes in these assumptions, are presented in note 16 to the 2023 Annual Consolidated Financial Statements.

Changes in assumptions and differences between actual and expected experience give rise to actuarial gains and losses that affect the amount of the defined benefit obligation and OCI. For 2023, the amount recorded in OCI was a loss of \$5 million (2022 – loss of \$49 million) for the defined benefit pension plans and a gain of \$10 million (2022 – gain of \$34 million) for the retiree welfare plans.

Contributions to the registered (tax qualified) defined benefit pension plans are made in accordance with the applicable U.S. and Canadian regulations. During 2023, the Company contributed \$3 million (2022 – \$3 million) to these plans. As at December 31, 2023, the difference between the fair value of assets and the defined benefit obligation for these plans was a surplus of \$422 million (2022 – surplus of \$441 million). For 2024, the contributions to the plans are expected to be approximately \$2 million.

The Company's supplemental pension plans for executives are not funded; benefits under these plans are paid as they become due. During 2023, the Company paid benefits of \$56 million (2022 – \$56 million) under these plans. As at December 31, 2023, the defined benefit obligation for these plans, which is reflected as a liability in the balance sheet, amounted to \$546 million (2022 – \$561 million).

The Company's retiree welfare plans are partially funded, although there are no regulations or laws governing or requiring the funding of these plans. As at December 31, 2023, the difference between the fair value of plan assets and the defined benefit obligation for these plans was a surplus of \$76 million (2022 – surplus of \$57 million).

Income Taxes

The Company is subject to income tax laws in various jurisdictions. Tax laws are complex and potentially subject to different interpretations by the taxpayer and the relevant tax authority. The provision for income taxes represents management's interpretation of the relevant tax laws and its estimate of current and future income tax implications of the transactions and events during the period. A deferred tax asset or liability results from temporary differences between carrying values of assets and liabilities and their respective tax basis. Deferred tax assets and liabilities are recorded based on expected future tax rates and management's assumptions regarding the expected timing of the reversal of such temporary differences. The realization of deferred tax assets depends upon the existence of sufficient taxable income within the carryback or carryforward periods under the tax law in the applicable tax jurisdiction. A deferred tax asset is recognized to the extent that future realization of the tax benefit is probable. Deferred tax assets are reviewed at each reporting date and are reduced to the extent that it is no longer probable that the tax benefit will be realized. At December 31, 2023, we had \$6,739 million of deferred tax assets (December 31, 2022 – \$6,708 million). Factors in management's determination include, among others, the following:

- Future taxable income exclusive of reversing temporary differences and carryforwards;
- Future reversals of existing taxable temporary differences;
- Taxable income in prior carryback years; and
- Tax planning strategies.

The Company may be required to change its provision for income taxes if the ultimate deductibility of certain items is successfully challenged by taxing authorities or if estimates used in determining the amount of deferred tax assets to recognize change significantly, or when receipt of new information indicates the need for adjustment in the recognition of deferred tax assets. Additionally, future events, such as changes in tax laws, tax regulations, or interpretations of such laws or regulations, could have an impact on the provision for income tax, deferred tax balances, actuarial liabilities (see Critical Actuarial and Accounting Policies – Expenses and Taxes above) and the effective tax rate. Any such changes could significantly affect the amounts reported in the Consolidated Financial Statements in the year these changes occur.

Goodwill and Intangible Assets

At December 31, 2023, under IFRS we had \$5,919 million of goodwill (December 31, 2022 – \$6,014 million) and \$4,391 million of intangible assets (\$1,825 million of which are intangible assets with indefinite lives) (December 31, 2022 – \$4,505 million and \$1,861 million, respectively). Goodwill and intangible assets with indefinite lives are tested for impairment at the cash generating unit level ("CGU") or group of CGUs level. A CGU comprises the smallest group of assets that are capable of generating largely independent cash flows and is either a business segment or a level below. The tests performed in 2023 demonstrated that there was no impairment of goodwill or intangible assets with indefinite lives (2022 – \$nil). Changes in discount rates and cash flow projections used in the determination of recoverable values or reductions in market-based earnings multiples may result in impairment charges in the future, which could be material.

Impairment charges could occur in the future as a result of changes in economic conditions. The goodwill testing for 2024 will be updated based on the conditions that exist in 2024 and may result in impairment charges, which could be material.

12. Controls and Procedures

Disclosure Controls and Procedures

Our disclosure controls and procedures are designed to provide reasonable assurance that information required to be disclosed by us is recorded, processed, summarized, and reported accurately and completely and within the time periods specified under Canadian and U.S. securities laws. Our process includes controls and procedures that are designed to ensure that information is accumulated and communicated to management, including the CEO and CFO, to allow timely decisions regarding required disclosure.

As of December 31, 2023, management evaluated the effectiveness of its disclosure controls and procedures as defined under the rules adopted by the U.S. Securities and Exchange Commission and the Canadian securities regulatory authorities. This evaluation was performed under the supervision of the Audit Committee, the CEO and CFO. Based on that evaluation, the CEO and CFO concluded that our disclosure controls and procedures were effective as of December 31, 2023.

MFC's Audit Committee has reviewed this MD&A and the 2023 Consolidated Financial Statements and MFC's Board approved these reports prior to their release.

Management's Report on Internal Control over Financial Reporting

Management is responsible for establishing and maintaining adequate internal control over financial reporting. The Company's internal control system was designed to provide reasonable assurance to management and the Board regarding the preparation and fair presentation of published financial statements in accordance with generally accepted accounting principles. All internal control systems, no matter how well designed, have inherent limitations. Therefore, even those systems determined to be effective can provide only reasonable assurance with respect to financial statement preparation and presentation.

Management maintains a comprehensive system of controls intended to ensure that transactions are executed in accordance with management's authorization, assets are safeguarded, and financial records are reliable. Management also takes steps to ensure that information and communication flows are effective and to monitor performance, including performance of internal control procedures.

Management assessed the effectiveness of the Company's internal control over financial reporting as of December 31, 2023 based on the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission 2013 framework in Internal Control – Integrated Framework. Based on this assessment, management believes that, as of December 31, 2023, the Company's internal control over financial reporting is effective.

The effectiveness of the Company's internal control over financial reporting as of December 31, 2023 has been audited by Ernst & Young LLP, the Company's independent registered public accounting firm that also audited the Consolidated Financial Statements of the Company for the year ended December 31, 2023. Their report expressed an unqualified opinion on the effectiveness of the Company's internal control over financial reporting as of December 31, 2023.

Changes in Internal Control over Financial Reporting

No changes were made in our internal control over financial reporting during the year ended December 31, 2023 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting except that, in connection with the adoption of IFRS 17 and IFRS 9, the Company made significant updates and modifications to existing internal controls and implemented a number of new internal controls. These changes include controls over new and existing systems, including technological systems, and controls that were implemented or modified in our actuarial and accounting processes to address the risks associated with the newly adopted accounting standards.

13. Non-GAAP and Other Financial Measures

The Company prepares its Consolidated Financial Statements in accordance with International Financial Reporting Standards (“IFRS”) as issued by the International Accounting Standards Board. We use a number of non-GAAP and other financial measures to evaluate overall performance and to assess each of our businesses. This section includes information required by National Instrument 52-112 – *Non-GAAP and Other Financial Measures Disclosure* in respect of “specified financial measures” (as defined therein).

Non-GAAP financial measures include core earnings (loss); pre-tax core earnings; core earnings available to common shareholders; core earnings before income taxes, depreciation and amortization (“core EBITDA”); total expenses; core expenses; total expenditures; core expenditures; transitional net income (loss) attributed to shareholders; transitional net income (loss) attributed to shareholders (before tax); transitional net income (loss) before income taxes; transitional net income (loss); common shareholders’ transitional net income; Drivers of Earnings (“DOE”) line items for net investment result, other, income tax (expenses) recoveries and transitional net income attributed to participating policyholders and NCI; core DOE line items for core net insurance service result, core net investment result, other core earnings, and core income tax (expenses) recoveries; post-tax contractual service margin (“post-tax CSM”); post-tax contractual service margin net of NCI (“post-tax CSM net of NCI”); Manulife Bank net lending assets; Manulife Bank average net lending assets; assets under management (“AUM”); assets under management and administration (“AUMA”); Global WAM managed AUMA; core revenue; adjusted book value; and net annualized fee income. In addition, non-GAAP financial measures include the following stated on a constant exchange rate (“CER”) basis: any of the foregoing non-GAAP financial measures; net income attributed to shareholders; and common shareholders’ net income.

Non-GAAP ratios include core return on shareholders’ equity (“core ROE”); diluted core earnings per common share (“core EPS”); transitional return on common shareholders’ equity (“transitional ROE”); transitional basic earnings per common share (“transitional basic EPS”); transitional diluted earnings per common share (“transitional diluted EPS”); financial leverage ratio; adjusted book value per common share; common share core dividend payout ratio (“dividend payout ratio”); expense efficiency ratio; expenditure efficiency ratio; core EBITDA margin; effective tax rate on core earnings; effective tax rate on transitional net income attributed to shareholders; and net annualized fee income yield on average AUMA. In addition, non-GAAP ratios include the percentage growth/decline on a CER basis in any of the above non-GAAP financial measures and non-GAAP ratios; net income attributed to shareholders; common shareholders’ net income; pre-tax net income attributed to shareholders; general expenses; DOE line item for net insurance service result; CSM; CSM net of NCI; impact of new insurance business; new business CSM net of NCI; basic earnings per common share (“basic EPS”); and diluted earnings per common share (“diluted EPS”).

Other specified financial measures include assets under administration (“AUA”); consolidated capital; embedded value (“EV”); new business value (“NBV”); new business value margin (“NBV margin”); sales; annualized premium equivalent (“APE”) sales; gross flows; net flows; average assets under management and administration (“average AUMA”); Global WAM average managed AUMA; average assets under administration; remittances; any of the foregoing specified financial measures stated on a CER basis; and percentage growth/decline in any of the foregoing specified financial measures on a CER basis. In addition, we provide an explanation below of the components of core DOE line items other than the change in expected credit loss, the items that comprise certain items excluded from core earnings, and the components of CSM movement other than the new business CSM.

Our reporting currency for the Company is Canadian dollars and U.S. dollars is the functional currency for Asia and U.S. segment results. Financial measures presented in U.S. dollars are calculated in the same manner as the Canadian dollar measures. These amounts are translated to U.S. dollars using the period end rate of exchange for financial measures such as AUMA and the CSM balance and the average rates of exchange for the respective quarter for periodic financial measures such as our income statement, core earnings and items excluded from core earnings, transitional net income measures, and line items in our CSM movement schedule and DOE. Year-to-date or full year periodic financial measures presented in U.S. dollars are calculated as the sum of the quarterly results translated to U.S. dollars. See section 1 “Impact of Foreign Currency Exchange Rates” of the MD&A above for the Canadian to U.S. dollar quarterly and full year rates of exchange.

Non-GAAP financial measures and non-GAAP ratios are not standardized financial measures under GAAP and, therefore, might not be comparable to similar financial measures disclosed by other issuers. Therefore, they should not be considered in isolation or as a substitute for any other financial information prepared in accordance with GAAP.

Core earnings (loss) is a financial measure which we believe aids investors in better understanding the long-term earnings capacity and valuation of the business. Core earnings allows investors to focus on the Company’s operating performance by excluding the impact of market related gains or losses, changes in actuarial methods and assumptions that flow directly through income as well as a number of other items, outlined below, that we believe are material, but do not reflect the underlying earnings capacity of the business. For example, due to the long-term nature of our business, the mark-to-market movements in equity markets, interest rates including impacts on hedge accounting ineffectiveness, foreign currency exchange rates and commodity prices as well as the change in the fair value of ALDA from period-to-period can, and frequently do, have a substantial impact on the reported amounts of our assets, insurance contract liabilities and net income attributed to shareholders. These reported amounts may not be realized if markets move in the opposite direction in a subsequent period. This makes it very difficult for investors to evaluate how our businesses are performing from period-to-period and to compare our performance with other issuers.

We believe that core earnings better reflect the underlying earnings capacity and valuation of our business. We use core earnings and core EPS as key metrics in our short-term incentive plans at the total Company and operating segment level. We also base our mid- and long-term strategic priorities on core earnings.

We have updated our definition of core earnings to reflect the change in the recognition, measurement and presentation of insurance contract liabilities and financial assets and liabilities under IFRS 17 and IFRS 9, respectively, and have also replaced the nomenclature of the items included in core earnings and the net income items excluded from core earnings to conform with the nomenclature under IFRS 17 and IFRS 9.

Core earnings includes the expected return on our invested assets and any other gains (charges) from market experience are included in net income but excluded from core earnings. The expected return for fixed income assets is based on the related book yields. For ALDA and public equities, the expected return reflects our long-term view of asset class performance. These returns for ALDA and public equities vary by asset class and range from 3.25% to 11.5%, leading to an average return of between 9.0% to 9.5% on these assets as of December 31, 2023.

While core earnings is relevant to how we manage our business and offers a consistent methodology, it is not insulated from macroeconomic factors which can have a significant impact. See below for reconciliation of core earnings to net income attributed to shareholders and income before income taxes. Net income attributed to shareholders excludes net income attributed to participating policyholders and non-controlling interests.

Any future changes to the core earnings definition referred to below, will be disclosed.

Items included in core earnings:

1. Expected insurance service result on in-force policies, including expected release of the risk adjustment, CSM recognized for service provided, and expected earnings from short-term products measured under the premium allocation approach (“PAA”).
2. Impacts from the initial recognition of new contracts (onerous contracts, including the impact of the associated reinsurance contracts).
3. Insurance experience gains or losses that flow directly through net income.
4. Operating and investment expenses compared with expense assumptions used in the measurement of insurance and investment contract liabilities.
5. Expected investment earnings, which is the difference between expected return on our invested assets and the associated finance income or expense from the insurance contract liabilities.
6. Net provision for ECL on FVOCI and amortized cost debt instruments.
7. Expected asset returns on surplus investments.
8. All earnings for the Global WAM segment, except for applicable net income items excluded from core earnings as noted below.
9. All earnings for the Manulife Bank business, except for applicable net income items excluded from core earnings as noted below.
10. Routine or non-material legal settlements.
11. All other items not specifically excluded.
12. Tax on the above items.
13. All tax related items except the impact of enacted or substantively enacted income tax rate changes and taxes on items excluded from core earnings.

Net income items excluded from core earnings:

1. Market experience gains (losses) including the items listed below:
 - Gains (charges) on general fund public equity and ALDA investments from returns being different than expected.
 - Gains (charges) on derivatives not in hedging relationships, or gains (charges) resulting from hedge accounting ineffectiveness.
 - Realized gains (charges) from the sale of FVOCI debt instruments.
 - Market related gains (charges) on onerous contracts measured using the variable fee approach (e.g. variable annuities, unit linked, participating insurance) net of the performance on any related hedging instruments.
 - Gains (charges) related to certain changes in foreign exchange rates.
2. Changes in actuarial methods and assumptions used in the measurement of insurance contract liabilities that flow directly through income.
 - The Company reviews actuarial methods and assumptions annually, and this process is designed to reduce the Company’s exposure to uncertainty by ensuring assumptions remain appropriate. This is accomplished by monitoring experience and selecting assumptions which represent a current view of expected future experience and ensuring that the risk adjustment is appropriate for the risks assumed.
 - Changes related to the ultimate spot rate within the discount curves are included in the market experience gains (losses).
3. The impact on the measurement of insurance and investment contract assets and liabilities and reinsurance contract held assets and liabilities from changes in product features and new or changes to in-force reinsurance contracts, if material.

4. The fair value changes in long-term investment plan (“LTIP”) obligations for Global WAM investment management.
5. Goodwill impairment charges.
6. Gains or losses on acquisition and disposition of a business.
7. Material one-time only adjustments, including highly unusual/extraordinary and material legal settlements and restructuring charges, or other items that are material and exceptional in nature.
8. Tax on the above items.
9. Net income (loss) attributed to participating shareholders and non-controlling interests.
10. Impact of enacted or substantially enacted income tax rate changes.

As noted in section 1 “Implementation of IFRS 17 and IFRS 9” above, our 2022 quarterly and full year results are not directly comparable with 2023 results because IFRS 9 hedge accounting and expected credit loss (“ECL”) principles are applied prospectively effective January 1, 2023. Accordingly, we have presented comparative quarterly and full year 2022 core earnings and our transitional net income metrics (see “Transitional net income to shareholders” paragraph below) inclusive of IFRS 9 hedge accounting and expected credit loss principles as if IFRS had allowed such principles to be implemented for 2022 (the “IFRS 9 transitional impacts”).

Transitional net income (loss) attributed to shareholders is a financial measure where our 2022 net income attributed to shareholders includes the effects of the IFRS 9 transitional impacts which we believe will assist investors in evaluating our operational performance because the associated adjustments are reported in our 2023 net income attributed to shareholders. **Transitional net income (loss) before income taxes, Transitional net income (loss), Transitional net income (loss) attributed to shareholders before income taxes and Common shareholders’ transitional net income (loss)** similarly include the effect of the IFRS 9 transitional impacts on our income (loss) before income taxes, net income (loss), net income (loss) attributed to shareholders before income taxes and common shareholders’ net income (loss), respectively. Transitional financial measures are temporary and will only be reported for 2022 comparative periods in our annual 2023 MD&A.

Reconciliation of core earnings to net income attributed to shareholders

	2023					
(\$ millions, post-tax and based on actual foreign exchange rates in effect in the applicable reporting period, unless otherwise stated)	Asia	Canada	U.S.	Global WAM	Corporate and Other	Total
Income (loss) before income taxes	\$ 2,244	\$ 1,609	\$ 751	\$ 1,497	\$ 351	\$ 6,452
Income tax (expenses) recoveries						
Core earnings	(279)	(378)	(402)	(204)	99	(1,164)
Items excluded from core earnings	(161)	5	290	6	179	319
Income tax (expenses) recoveries	(440)	(373)	(112)	(198)	278	(845)
Net income (post-tax)	1,804	1,236	639	1,299	629	5,607
Less: Net income (post-tax) attributed to						
Non-controlling interests ("NCI")	141	-	-	2	1	144
Participating policyholders	315	45	-	-	-	360
Net income (loss) attributed to shareholders (post-tax)	1,348	1,191	639	1,297	628	5,103
Less: Items excluded from core earnings (post-tax)						
Market experience gains (losses)	(553)	(341)	(1,196)	10	290	(1,790)
Changes in actuarial methods and assumptions that flow directly through income	(68)	41	132	-	-	105
Restructuring charge	-	-	-	(36)	-	(36)
Reinsurance transactions, tax related items and other	(79)	4	(56)	2	269	140
Core earnings (post-tax)	\$ 2,048	\$ 1,487	\$ 1,759	\$ 1,321	\$ 69	\$ 6,684
Income tax on core earnings (see above)	279	378	402	204	(99)	1,164
Core earnings (pre-tax)	\$ 2,327	\$ 1,865	\$ 2,161	\$ 1,525	\$ (30)	\$ 7,848

Core earnings, CER basis and U.S. dollars

	2023					
(Canadian \$ millions, post-tax and based on actual foreign exchange rates in effect in the applicable reporting period, unless otherwise stated)	Asia	Canada	U.S.	Global WAM	Corporate and Other	Total
Core earnings (post-tax)	\$ 2,048	\$ 1,487	\$ 1,759	\$ 1,321	\$ 69	\$ 6,684
CER adjustment ⁽¹⁾	(10)	-	15	7	2	14
Core earnings, CER basis (post-tax)	\$ 2,038	\$ 1,487	\$ 1,774	\$ 1,328	\$ 71	\$ 6,698
Income tax on core earnings, CER basis ⁽²⁾	277	378	405	204	(99)	1,165
Core earnings, CER basis (pre-tax)	\$ 2,315	\$ 1,865	\$ 2,179	\$ 1,532	\$ (28)	\$ 7,863
Core earnings (U.S. dollars) – Asia and U.S. segments						
Core earnings (post-tax)⁽³⁾, US \$	\$ 1,518		\$ 1,304			
CER adjustment US \$ ⁽¹⁾	(21)		-			
Core earnings, CER basis (post-tax), US \$	\$ 1,497		\$ 1,304			

⁽¹⁾ The impact of updating foreign exchange rates to that which was used in 4Q23.

⁽²⁾ Income tax on core earnings adjusted to reflect the foreign exchange rates for the Statement of Income in effect for 4Q23.

⁽³⁾ Core earnings (post-tax) in Canadian \$ is translated to US \$ using the US \$ Statement of Income exchange rate for the four respective quarters that make up 2023 core earnings.

Reconciliation of core earnings and transitional net income attributed to shareholders to net income attributed to shareholders

2022

(\$ millions, post-tax and based on actual foreign exchange rates in effect in the applicable reporting period, unless otherwise stated)	Asia	Canada	U.S.	Global WAM	Corporate and Other	Total
Income (loss) before income taxes	\$ 910	\$ (969)	\$ (3,011)	\$ 1,291	\$ (1,359)	\$ (3,138)
Income tax (expenses) recoveries						
Core earnings	(264)	(335)	(341)	(222)	116	(1,046)
Items excluded from core earnings	(54)	845	1,036	52	326	2,205
Income tax (expenses) recoveries	(318)	510	695	(170)	442	1,159
Net income (post-tax)	592	(459)	(2,316)	1,121	(917)	(1,979)
Less: Net income (post-tax) attributed to						
Non-controlling interests	120	-	-	-	1	121
Participating policyholders	(211)	44	-	-	-	(167)
Net income (loss) attributed to shareholders (post-tax)	683	(503)	(2,316)	1,121	(918)	(1,933)
IFRS 9 transitional impacts (post-tax)	(36)	1,701	3,764	-	2	5,431
Transitional net income (loss) attributed to shareholders (post-tax)	647	1,198	1,448	1,121	(916)	3,498
Less: Items excluded from core earnings (post-tax)						
Market experience gains (losses)	(1,141)	(196)	(93)	(260)	(895)	(2,585)
Changes in actuarial methods and assumptions that flow directly through income	(9)	47	(12)	-	-	26
Restructuring charge	-	-	-	-	-	-
Reinsurance transactions, tax related items and other	(15)	(40)	(13)	82	242	256
Core earnings (post-tax)	\$ 1,812	\$ 1,387	\$ 1,566	\$ 1,299	\$ (263)	\$ 5,801
Income tax on core earnings (see above)	263	335	341	222	(116)	1,045
Core earnings (pre-tax)	\$ 2,075	\$ 1,722	\$ 1,907	\$ 1,521	\$ (379)	\$ 6,846

Core earnings, CER basis and U.S. dollars

2022

(Canadian \$ millions, post-tax and based on actual foreign exchange rates in effect in the applicable reporting period, unless otherwise stated)	Asia	Canada	U.S.	Global WAM	Corporate and Other	Total
Core earnings (post-tax)	\$ 1,812	\$ 1,387	\$ 1,566	\$ 1,299	\$ (263)	\$ 5,801
CER adjustment ⁽¹⁾	30	-	69	40	(5)	134
Core earnings, CER basis (post-tax)	\$ 1,842	\$ 1,387	\$ 1,635	\$ 1,339	\$ (268)	\$ 5,935
Income tax on core earnings, CER basis ⁽²⁾	267	335	356	226	(116)	1,068
Core earnings, CER basis (pre-tax)	\$ 2,109	\$ 1,722	\$ 1,991	\$ 1,565	\$ (384)	\$ 7,003
Core earnings (U.S. dollars) – Asia and U.S. segments						
Core earnings (post-tax)⁽³⁾, US \$	\$ 1,392		\$ 1,202			
CER adjustment US \$ ⁽¹⁾	(39)		-			
Core earnings, CER basis (post-tax), US \$	\$ 1,353		\$ 1,202			

⁽¹⁾ The impact of updating foreign exchange rates to that which was used in 4Q23.

⁽²⁾ Income tax on core earnings adjusted to reflect the foreign exchange rates for the Statement of Income in effect for 4Q23.

⁽³⁾ Core earnings (post-tax) in Canadian \$ is translated to US \$ using the US \$ Statement of Income exchange rate for the four respective quarters that make up 2022 core earnings.

Reconciliation of core earnings to net income attributed to shareholders

	4Q23					
(\$ millions, post-tax and based on actual foreign exchange rates in effect in the applicable reporting period, unless otherwise stated)	Asia	Canada	U.S.	Global WAM	Corporate and Other	Total
Income (loss) before income taxes	\$ 847	\$ 498	\$ 244	\$ 424	\$ 110	\$ 2,123
Income tax (expenses) recoveries						
Core earnings	(76)	(87)	(113)	(55)	37	(294)
Items excluded from core earnings	(33)	(29)	67	(3)	(30)	(28)
Income tax (expenses) recoveries	(109)	(116)	(46)	(58)	7	(322)
Net income (post-tax)	738	382	198	366	117	1,801
Less: Net income (post-tax) attributed to						
Non-controlling interests ("NCI")	37	-	-	1	1	39
Participating policyholders	86	17	-	-	-	103
Net income (loss) attributed to shareholders (post-tax)	615	365	198	365	116	1,659
Less: Items excluded from core earnings (post-tax)						
Market experience gains (losses)	-	9	(279)	51	86	(133)
Changes in actuarial methods and assumptions that flow directly through income	89	4	26	-	-	119
Restructuring charge	-	-	-	(36)	-	(36)
Reinsurance transactions, tax related items and other	(38)	-	(23)	(3)	-	(64)
Core earnings (post-tax)	\$ 564	\$ 352	\$ 474	\$ 353	\$ 30	\$ 1,773
Income tax on core earnings (see above)	76	87	113	55	(37)	294
Core earnings (pre-tax)	\$ 640	\$ 439	\$ 587	\$ 408	\$ (7)	\$ 2,067

Core earnings, CER basis and U.S. dollars

	4Q23					
(Canadian \$ millions, post-tax and based on actual foreign exchange rates in effect in the applicable reporting period, unless otherwise stated)	Asia	Canada	U.S.	Global WAM	Corporate and Other	Total
Core earnings (post-tax)	\$ 564	\$ 352	\$ 474	\$ 353	\$ 30	\$ 1,773
CER adjustment ⁽¹⁾	-	-	-	-	-	-
Core earnings, CER basis (post-tax)	\$ 564	\$ 352	\$ 474	\$ 353	\$ 30	\$ 1,773
Income tax on core earnings, CER basis ⁽²⁾	76	87	113	55	(37)	294
Core earnings, CER basis (pre-tax)	\$ 640	\$ 439	\$ 587	\$ 408	\$ (7)	\$ 2,067
Core earnings (U.S. dollars) – Asia and U.S. segments						
Core earnings (post-tax)⁽³⁾, US \$	\$ 414		\$ 349			
CER adjustment US \$ ⁽¹⁾	-		-			
Core earnings, CER basis (post-tax), US \$	\$ 414		\$ 349			

⁽¹⁾ The impact of updating foreign exchange rates to that which was used in 4Q23.

⁽²⁾ Income tax on core earnings adjusted to reflect the foreign exchange rates for the Statement of Income in effect for 4Q23.

⁽³⁾ Core earnings (post-tax) in Canadian \$ is translated to US \$ using the US \$ Statement of Income exchange rate for 4Q23.

Reconciliation of core earnings to net income attributed to shareholders

	3Q23					
(\$ millions, post-tax and based on actual foreign exchange rates in effect in the applicable reporting period, unless otherwise stated)	Asia	Canada	U.S.	Global WAM	Corporate and Other	Total
Income (loss) before income taxes	\$ 439	\$ 376	\$ 68	\$ 366	\$ (75)	\$ 1,174
Income tax (expenses) recoveries						
Core earnings	(62)	(109)	(93)	(59)	30	(293)
Items excluded from core earnings	(73)	15	97	11	294	344
Income tax (expenses) recoveries	(135)	(94)	4	(48)	324	51
Net income (post-tax)	304	282	72	318	249	1,225
Less: Net income (post-tax) attributed to						
Non-controlling interests ("NCI")	25	-	-	-	-	25
Participating policyholders	195	(8)	-	-	-	187
Net income (loss) attributed to shareholders (post-tax)	84	290	72	318	249	1,013
Less: Items excluded from core earnings (post-tax)						
Market experience gains (losses)	(286)	(159)	(476)	(43)	(58)	(1,022)
Changes in actuarial methods and assumptions that flow directly through income	(157)	37	106	-	-	(14)
Restructuring charge	-	-	-	-	-	-
Reinsurance transactions, tax related items and other	5	4	-	-	297	306
Core earnings (post-tax)	\$ 522	\$ 408	\$ 442	\$ 361	\$ 10	\$ 1,743
Income tax on core earnings (see above)	62	109	93	59	(30)	293
Core earnings (pre-tax)	\$ 584	\$ 517	\$ 535	\$ 420	\$ (20)	\$ 2,036

Core earnings, CER basis and U.S. dollars

	3Q23					
(Canadian \$ millions, post-tax and based on actual foreign exchange rates in effect in the applicable reporting period, unless otherwise stated)	Asia	Canada	U.S.	Global WAM	Corporate and Other	Total
Core earnings (post-tax)	\$ 522	\$ 408	\$ 442	\$ 361	\$ 10	\$ 1,743
CER adjustment ⁽¹⁾	5	-	6	4	-	15
Core earnings, CER basis (post-tax)	\$ 527	\$ 408	\$ 448	\$ 365	\$ 10	\$ 1,758
Income tax on core earnings, CER basis ⁽²⁾	62	109	95	59	(30)	295
Core earnings, CER basis (pre-tax)	\$ 589	\$ 517	\$ 543	\$ 424	\$ (20)	\$ 2,053
Core earnings (U.S. dollars) – Asia and U.S. segments						
Core earnings (post-tax)⁽³⁾, US \$	\$ 390		\$ 329			
CER adjustment US \$ ⁽¹⁾	(3)		-			
Core earnings, CER basis (post-tax), US \$	\$ 387		\$ 329			

⁽¹⁾ The impact of updating foreign exchange rates to that which was used in 4Q23.

⁽²⁾ Income tax on core earnings adjusted to reflect the foreign exchange rates for the Statement of Income in effect for 4Q23.

⁽³⁾ Core earnings (post-tax) in Canadian \$ is translated to US \$ using the US \$ Statement of Income exchange rate for 3Q23.

Reconciliation of core earnings to net income attributed to shareholders

	2Q23					
(\$ millions, post-tax and based on actual foreign exchange rates in effect in the applicable reporting period, unless otherwise stated)	Asia	Canada	U.S.	Global WAM	Corporate and Other	Total
Income (loss) before income taxes	\$ 345	\$ 312	\$ 220	\$ 362	\$ 197	\$ 1,436
Income tax (expenses) recoveries						
Core earnings	(73)	(97)	(110)	(45)	18	(307)
Items excluded from core earnings	(18)	33	73	1	(47)	42
Income tax (expenses) recoveries	(91)	(64)	(37)	(44)	(29)	(265)
Net income (post-tax)	254	248	183	318	168	1,171
Less: Net income (post-tax) attributed to						
Non-controlling interests ("NCI")	25	-	-	1	-	26
Participating policyholders	99	21	-	-	-	120
Net income (loss) attributed to shareholders (post-tax)	130	227	183	317	168	1,025
Less: Items excluded from core earnings (post-tax)						
Market experience gains (losses)	(297)	(147)	(275)	(7)	156	(570)
Changes in actuarial methods and assumptions that flow directly through income	-	-	-	-	-	-
Restructuring charge	-	-	-	-	-	-
Reinsurance transactions, tax related items and other	(46)	-	-	4	-	(42)
Core earnings (post-tax)	\$ 473	\$ 374	\$ 458	\$ 320	\$ 12	\$ 1,637
Income tax on core earnings (see above)	73	97	110	45	(18)	307
Core earnings (pre-tax)	\$ 546	\$ 471	\$ 568	\$ 365	\$ (6)	\$ 1,944

Core earnings, CER basis and U.S. dollars

	2Q23					
(Canadian \$ millions, post-tax and based on actual foreign exchange rates in effect in the applicable reporting period, unless otherwise stated)	Asia	Canada	U.S.	Global WAM	Corporate and Other	Total
Core earnings (post-tax)	\$ 473	\$ 374	\$ 458	\$ 320	\$ 12	\$ 1,637
CER adjustment ⁽¹⁾	(5)	-	8	2	-	5
Core earnings, CER basis (post-tax)	\$ 468	\$ 374	\$ 466	\$ 322	\$ 12	\$ 1,642
Income tax on core earnings, CER basis ⁽²⁾	71	97	111	45	(17)	307
Core earnings, CER basis (pre-tax)	\$ 539	\$ 471	\$ 577	\$ 367	\$ (5)	\$ 1,949
Core earnings (U.S. dollars) – Asia and U.S. segments						
Core earnings (post-tax)⁽³⁾, US \$	\$ 353		\$ 341			
CER adjustment US \$ ⁽¹⁾	(9)		-			
Core earnings, CER basis (post-tax), US \$	\$ 344		\$ 341			

⁽¹⁾ The impact of updating foreign exchange rates to that which was used in 4Q23.

⁽²⁾ Income tax on core earnings adjusted to reflect the foreign exchange rates for the Statement of Income in effect for 4Q23.

⁽³⁾ Core earnings (post-tax) in Canadian \$ is translated to US \$ using the US \$ Statement of Income exchange rate for 2Q23.

Reconciliation of core earnings to net income attributed to shareholders

(\$ millions, post-tax and based on actual foreign exchange rates in effect in the applicable reporting period, unless otherwise stated)	1Q23					
	Asia	Canada	U.S.	Global WAM	Corporate and Other	Total
Income (loss) before income taxes	\$ 613	\$ 423	\$ 219	\$ 345	\$ 119	\$ 1,719
Income tax (expenses) recoveries						
Core earnings	(68)	(85)	(86)	(45)	14	(270)
Items excluded from core earnings	(37)	(14)	53	(3)	(38)	(39)
Income tax (expenses) recoveries	(105)	(99)	(33)	(48)	(24)	(309)
Net income (post-tax)	508	324	186	297	95	1,410
Less: Net income (post-tax) attributed to						
Non-controlling interests ("NCI")	54	-	-	-	-	54
Participating policyholders	(65)	15	-	-	-	(50)
Net income (loss) attributed to shareholders (post-tax)	519	309	186	297	95	1,406
Less: Items excluded from core earnings (post-tax)						
Market experience gains (losses)	30	(44)	(166)	9	106	(65)
Changes in actuarial methods and assumptions that flow directly through income	-	-	-	-	-	-
Restructuring charge	-	-	-	-	-	-
Reinsurance transactions, tax related items and other	-	-	(33)	1	(28)	(60)
Core earnings (post-tax)	\$ 489	\$ 353	\$ 385	\$ 287	\$ 17	\$ 1,531
Income tax on core earnings (see above)	68	85	86	45	(14)	270
Core earnings (pre-tax)	\$ 557	\$ 438	\$ 471	\$ 332	\$ 3	\$ 1,801

Core earnings, CER basis and U.S. dollars

(Canadian \$ millions, post-tax and based on actual foreign exchange rates in effect in the applicable reporting period, unless otherwise stated)	1Q23					
	Asia	Canada	U.S.	Global WAM	Corporate and Other	Total
Core earnings (post-tax)	\$ 489	\$ 353	\$ 385	\$ 287	\$ 17	\$ 1,531
CER adjustment ⁽¹⁾	(10)	-	3	1	-	(6)
Core earnings, CER basis (post-tax)	\$ 479	\$ 353	\$ 388	\$ 288	\$ 17	\$ 1,525
Income tax on core earnings, CER basis ⁽²⁾	67	85	86	45	(14)	269
Core earnings, CER basis (pre-tax)	\$ 546	\$ 438	\$ 474	\$ 333	\$ 3	\$ 1,794
Core earnings (U.S. dollars) – Asia and U.S. segments						
Core earnings (post-tax)⁽³⁾, US \$	\$ 361		\$ 285			
CER adjustment US \$ ⁽¹⁾	(9)		-			
Core earnings, CER basis (post-tax), US \$	\$ 352		\$ 285			

⁽¹⁾ The impact of updating foreign exchange rates to that which was used in 4Q23.

⁽²⁾ Income tax on core earnings adjusted to reflect the foreign exchange rates for the Statement of Income in effect for 4Q23.

⁽³⁾ Core earnings (post-tax) in Canadian \$ is translated to US \$ using the US \$ Statement of Income exchange rate for 1Q23.

Reconciliation of core earnings and transitional net income attributed to shareholders to net income attributed to shareholders

	4Q22					
(\$ millions, post-tax and based on actual foreign exchange rates in effect in the applicable reporting period, unless otherwise stated)	Asia	Canada	U.S.	Global WAM	Corporate and Other	Total
Income (loss) before income taxes	\$ 403	\$ (37)	\$ (68)	\$ 461	\$ (62)	\$ 697
Income tax (expenses) recoveries						
Core earnings	(82)	(81)	(96)	(47)	71	(235)
Items excluded from core earnings	(21)	67	120	(13)	308	461
Income tax (expenses) recoveries	(103)	(14)	24	(60)	379	226
Net income (post-tax)	300	(51)	(44)	401	317	923
Less: Net income (post-tax) attributed to						
Non-controlling interests	32	-	-	-	1	33
Participating policyholders	(47)	22	-	-	-	(25)
Net income (loss) attributed to shareholders (post-tax)	315	(73)	(44)	401	316	915
IFRS 9 transitional impacts (post-tax)	178	193	(62)	-	4	313
Transitional net income (loss) attributed to shareholders (post-tax)	493	120	(106)	401	320	1,228
Less: Items excluded from core earnings (post-tax)						
Market experience gains (losses)	12	(136)	(514)	45	(62)	(655)
Changes in actuarial methods and assumptions that flow directly through income	-	-	-	-	-	-
Restructuring charge	-	-	-	-	-	-
Reinsurance transactions, tax related items and other	(15)	(40)	-	82	313	340
Core earnings (post-tax)	\$ 496	\$ 296	\$ 408	\$ 274	\$ 69	\$ 1,543
Income tax on core earnings (see above)	82	81	96	47	(71)	235
Core earnings (pre-tax)	\$ 578	\$ 377	\$ 504	\$ 321	\$ (2)	\$ 1,778

Core earnings, CER basis and U.S. dollars

	4Q22					
(Canadian \$ millions, post-tax and based on actual foreign exchange rates in effect in the applicable reporting period, unless otherwise stated)	Asia	Canada	U.S.	Global WAM	Corporate and Other	Total
Core earnings (post-tax)	\$ 496	\$ 296	\$ 408	\$ 274	\$ 69	\$ 1,543
CER adjustment ⁽¹⁾	(1)	-	1	-	-	-
Core earnings, CER basis (post-tax)	\$ 495	\$ 296	\$ 409	\$ 274	\$ 69	\$ 1,543
Income tax on core earnings, CER basis ⁽²⁾	81	82	95	48	(71)	235
Core earnings, CER basis (pre-tax)	\$ 576	\$ 378	\$ 504	\$ 322	\$ (2)	\$ 1,778
Core earnings (U.S. dollars) – Asia and U.S. segments						
Core earnings (post-tax)⁽³⁾, US \$	\$ 365		\$ 301			
CER adjustment US \$ ⁽¹⁾	(1)		-			
Core earnings, CER basis (post-tax), US \$	\$ 364		\$ 301			

⁽¹⁾ The impact of updating foreign exchange rates to that which was used in 4Q23.

⁽²⁾ Income tax on core earnings adjusted to reflect the foreign exchange rates for the Statement of Income in effect for 4Q23.

⁽³⁾ Core earnings (post-tax) in Canadian \$ is translated to US \$ using the US \$ Statement of Income exchange rate for 4Q22.

Segment core earnings by business line or geographic source

(\$ millions, post-tax and based on actual foreign exchange rates in effect in the applicable reporting period, unless otherwise stated)

Asia

(US \$ millions)	Quarterly Results					Full Year Results	
	4Q23	3Q23	2Q23	1Q23	4Q22	2023	2022
Hong Kong	\$ 218	\$ 190	\$ 161	\$ 159	\$ 153	\$ 728	\$ 668
Japan	79	87	81	62	76	309	308
Asia Other ⁽¹⁾	119	119	119	137	126	494	419
International High Net Worth						72	75
Mainland China						49	29
Singapore						161	136
Vietnam						133	109
Other Emerging Markets ⁽²⁾						79	70
Regional Office	(2)	(6)	(8)	3	10	(13)	(3)
Total Asia core earnings	\$ 414	\$ 390	\$ 353	\$ 361	\$ 365	\$ 1,518	\$ 1,392

⁽¹⁾ Core earnings for Asia Other is reported by country annually, on a full year basis.

⁽²⁾ Other Emerging Markets includes Indonesia, the Philippines, Malaysia, Thailand, Cambodia and Myanmar.

(US \$ millions), CER basis ⁽¹⁾	Quarterly Results					Full Year Results	
	4Q23	3Q23	2Q23	1Q23	4Q22	2023	2022
Hong Kong	\$ 218	\$ 190	\$ 161	\$ 159	\$ 152	\$ 728	\$ 668
Japan	79	85	76	56	74	296	274
Asia Other ⁽²⁾	119	118	115	134	128	486	414
International High Net Worth						72	75
Mainland China						47	27
Singapore						160	140
Vietnam						129	105
Other Emerging Markets ⁽³⁾						78	67
Regional Office	(2)	(6)	(8)	3	10	(13)	(3)
Total Asia core earnings, CER basis	\$ 414	\$ 387	\$ 344	\$ 352	\$ 364	\$ 1,497	\$ 1,353

⁽¹⁾ Core earnings adjusted to reflect the foreign exchange rates for the Statement of Income in effect for 4Q23.

⁽²⁾ Core earnings for Asia Other is reported by country annually, on a full year basis.

⁽³⁾ Other Emerging Markets includes Indonesia, the Philippines, Malaysia, Thailand, Cambodia and Myanmar.

Canada

(Canadian \$ in millions)	Quarterly Results					Full Year Results	
	4Q23	3Q23	2Q23	1Q23	4Q22	2023	2022
Insurance	\$ 258	\$ 310	\$ 276	\$ 257	\$ 206	\$ 1,101	\$ 984
Annuities	48	48	55	53	45	204	238
Manulife Bank	46	50	43	43	45	182	165
Total Canada core earnings	\$ 352	\$ 408	\$ 374	\$ 353	\$ 296	\$ 1,487	\$ 1,387

U.S.

(US \$ in millions)	Quarterly Results					Full Year Results	
	4Q23	3Q23	2Q23	1Q23	4Q22	2023	2022
U.S. Insurance	\$ 300	\$ 283	\$ 293	\$ 257	\$ 259	\$ 1,133	\$ 1,016
U.S. Annuities	49	46	48	28	42	171	186
Total U.S. core earnings	\$ 349	\$ 329	\$ 341	\$ 285	\$ 301	\$ 1,304	\$ 1,202

Global WAM by business line

(Canadian \$ in millions)	Quarterly Results					Full Year Results	
	4Q23	3Q23	2Q23	1Q23	4Q22	2023	2022
Retirement	\$ 203	\$ 192	\$ 186	\$ 164	\$ 156	\$ 745	\$ 673
Retail	127	135	119	121	130	502	571
Institutional asset management	23	34	15	2	(12)	74	55
Total Global WAM core earnings	\$ 353	\$ 361	\$ 320	\$ 287	\$ 274	\$ 1,321	\$ 1,299

(Canadian \$ in millions), CER basis ⁽¹⁾	Quarterly Results					Full Year Results	
	4Q23	3Q23	2Q23	1Q23	4Q22	2023	2022
Retirement	\$ 203	\$ 195	\$ 187	\$ 165	\$ 155	\$ 750	\$ 697
Retail	127	136	120	121	130	504	583
Institutional asset management	23	34	15	2	(11)	74	59
Total Global WAM core earnings, CER basis	\$ 353	\$ 365	\$ 322	\$ 288	\$ 274	\$ 1,328	\$ 1,339

⁽¹⁾ Core earnings adjusted to reflect the foreign exchange rates for the Statement of Income in effect for 4Q23.

Global WAM by geographic source

(Canadian \$ in millions)	Quarterly Results					Full Year Results	
	4Q23	3Q23	2Q23	1Q23	4Q22	2023	2022
Asia	\$ 109	\$ 108	\$ 103	\$ 84	\$ 79	\$ 404	\$ 336
Canada	100	94	96	88	78	378	401
U.S.	144	159	121	115	117	539	562
Total Global WAM core earnings	\$ 353	\$ 361	\$ 320	\$ 287	\$ 274	\$ 1,321	\$ 1,299

(Canadian \$ in millions), CER basis ⁽¹⁾	Quarterly Results					Full Year Results	
	4Q23	3Q23	2Q23	1Q23	4Q22	2023	2022
Asia	\$ 109	\$ 110	\$ 104	\$ 84	\$ 80	\$ 407	\$ 350
Canada	100	94	96	88	78	378	401
U.S.	144	161	122	116	116	543	588
Total Global WAM core earnings, CER basis	\$ 353	\$ 365	\$ 322	\$ 288	\$ 274	\$ 1,328	\$ 1,339

⁽¹⁾ Core earnings adjusted to reflect the foreign exchange rates for the Statement of Income in effect for 4Q23.

Core earnings available to common shareholders is a financial measure that is used in the calculation of core ROE and core EPS. It is calculated as core earnings (post-tax) less preferred share dividends.

(\$ millions, post-tax and based on actual foreign exchange rates in effect in the applicable reporting period, unless otherwise stated)	Quarterly Results					Full Year Results	
	4Q23	3Q23	2Q23	1Q23	4Q22	2023	2022
Core earnings	\$ 1,773	\$ 1,743	\$ 1,637	\$ 1,531	\$ 1,543	\$ 6,684	\$ 5,801
Less: Preferred share dividends	(99)	(54)	(98)	(52)	(97)	(303)	(260)
Core earnings available to common shareholders	1,674	1,689	1,539	1,479	1,446	6,381	5,541
CER adjustment ⁽¹⁾	-	15	5	(6)	-	14	134
Core earnings available to common shareholders, CER basis	\$ 1,674	\$ 1,704	\$ 1,544	\$ 1,473	\$ 1,446	\$ 6,395	\$ 5,675

⁽¹⁾ The impact of updating foreign exchange rates to that which was used in 4Q23.

Core ROE measures profitability using core earnings available to common shareholders as a percentage of the capital deployed to earn the core earnings. The Company calculates core ROE using average common shareholders' equity quarterly, as the average of common shareholders' equity at the start and end of the quarter, and annually, as the average of the quarterly average common shareholders' equity for the year.

(\$ millions, unless otherwise stated)	Quarterly Results					Full Year Results	
	4Q23	3Q23	2Q23	1Q23	4Q22	2023	2022
Core earnings available to common shareholders	\$ 1,674	\$ 1,689	\$ 1,539	\$ 1,479	\$ 1,446	\$ 6,381	\$ 5,541
Annualized core earnings available to common shareholders (post-tax)	\$ 6,641	\$ 6,701	\$ 6,173	\$ 5,998	\$ 5,737	\$ 6,381	\$ 5,541
Average common shareholders' equity (see below)	\$ 40,563	\$ 39,897	\$ 39,881	\$ 40,465	\$ 40,667	\$ 40,201	\$ 39,726
Core ROE (annualized) (%)	16.4%	16.8%	15.5%	14.8%	14.1%	15.9%	14.0%
Average common shareholders' equity							
Total shareholders' and other equity	\$ 47,039	\$ 47,407	\$ 45,707	\$ 47,375	\$ 46,876	\$ 47,039	\$ 46,876
Less: Preferred shares and other equity	6,660	6,660	6,660	6,660	6,660	6,660	6,660
Common shareholders' equity	\$ 40,379	\$ 40,747	\$ 39,047	\$ 40,715	\$ 40,216	\$ 40,379	\$ 40,216
Average common shareholders' equity	\$ 40,563	\$ 39,897	\$ 39,881	\$ 40,465	\$ 40,667	\$ 40,201	\$ 39,726

Core EPS is equal to core earnings available to common shareholders divided by diluted weighted average common shares outstanding.

Core earnings related to strategic priorities

The Company measures its progress on certain strategic priorities using core earnings. These strategic priorities include core earnings from highest potential businesses, core earnings from Asia region, and core earnings from long-term care insurance ("LTC") and variable annuities ("VA") businesses. The core earnings for these businesses is calculated consistent with our definition of core earnings.

Highest potential businesses

For the years ended December 31,

(\$ millions and post-tax, unless otherwise stated)	2023	2022
Core earnings highest potential businesses ⁽¹⁾	\$ 4,039	\$ 3,556
Core earnings – All other businesses	2,645	2,245
Core earnings	6,684	5,801
Items excluded from core earnings	(1,581)	(2,303)
Net income (loss) attributed to shareholders / Transitional	\$ 5,103	\$ 3,498
Less: IFRS 9 transitional impacts (post-tax)	–	5,431
Net income (loss) attributed to shareholders	\$ 5,103	\$ (1,933)
Highest potential businesses core earnings contribution	60%	61%

⁽¹⁾ Includes core earnings from Asia and Global WAM segments, Canada Group Benefits, and behavioural insurance products.

Asia region

For the years ended December 31,

(\$ millions and post-tax, unless otherwise stated)	2023	2022
Core earnings of Asia region ⁽¹⁾	\$ 2,452	\$ 2,147
Core earnings – All other businesses	4,232	3,654
Core earnings	6,684	5,801
Items excluded from core earnings	(1,581)	(2,303)
Net income (loss) attributed to shareholders / Transitional	\$ 5,103	\$ 3,498
Less: IFRS 9 transitional impacts (post-tax)	–	5,431
Net income (loss) attributed to shareholders	\$ 5,103	\$ (1,933)
Asia region core earnings contribution	37%	37%

⁽¹⁾ Includes core earnings from Asia segment and Global WAM's business in Asia.

LTC and VA businesses

For the years ended December 31,

(\$ millions and post-tax, unless otherwise stated)

	2023	2022
Core earnings of LTC & VA businesses ⁽¹⁾	\$ 821	\$ 932
Core earnings – All other businesses	5,863	4,869
Core earnings	6,684	5,801
Items excluded from core earnings	(1,581)	(2,303)
Net income (loss) attributed to shareholders / Transitional	\$ 5,103	\$ 3,498
Less: IFRS 9 transitional impacts (post-tax)	–	5,431
Net income (loss) attributed to shareholders	\$ 5,103	\$ (1,933)
LTC and VA core earnings contribution	12%	16%

⁽¹⁾ Includes core earnings from U.S. long-term care and Asia, Canada and U.S. variable annuities businesses.

The **effective tax rate on core earnings** is equal to income tax on core earnings divided by pre-tax core earnings. The **effective tax rate on transitional net income attributed to shareholders** is equal to income tax on transitional net income attributed to shareholders divided by pre-tax transitional net income attributed to shareholders.

Common share core dividend payout ratio is a ratio that measures the percentage of core earnings paid to common shareholders as dividends. It is calculated as dividends per common share divided by core EPS.

	Quarterly Results					Full Year Results	
	4Q23	3Q23	2Q23	1Q23	4Q22	2023	2022
Per share dividend	\$ 0.37	\$ 0.37	\$ 0.37	\$ 0.37	\$ 0.33	\$ 1.46	\$ 1.32
Core EPS	\$ 0.92	\$ 0.92	\$ 0.83	\$ 0.79	\$ 0.77	\$ 3.47	\$ 2.90
Common share core dividend payout ratio	40%	40%	44%	46%	43%	42%	46%

Drivers of Earnings (“DOE”) is used to identify the primary sources of gains or losses in each reporting period. It is one of the key tools we use to understand and manage our business. The DOE has replaced the Source of Earnings that was disclosed under OSFI’s Source of Earnings Disclosure (Life Insurance Companies) guideline. The DOE line items are comprised of amounts that have been included in our financial statements. The DOE shows the sources of net income (loss) attributed to shareholders and the core DOE shows the sources of core earnings and the items excluded from core earnings, reconciled to net income attributed to shareholders. We have included transitional non-GAAP financial measures for our 2022 comparative quarterly results. The elements of the core earnings view are described below:

Net Insurance Service Result represents the net income attributed to shareholders associated with providing insurance service to policyholders within the period. This includes lines attributed to core earnings including:

- **Expected earnings on insurance contracts** which includes the release of risk adjustment for expired non-financial risk, the CSM recognized for service provided and expected earnings on short-term PAA insurance business.
- **Impact of new insurance business** relates to income at initial recognition from new insurance contracts. Losses would occur if the group of new insurance contracts was onerous at initial recognition. If reinsurance contracts provide coverage for the direct insurance contracts, then the loss is offset by a corresponding gain on reinsurance contracts held.
- **Insurance experience gains (losses)** arise from items such as claims, persistency, and expenses, where the actual experience in the current period differs from the expected results assumed in the insurance and investment contract liabilities. Generally, this line would be driven by claims and expenses, as persistency experience relates to future service and would be offset by changes to the carrying amount of the contractual service margin unless the group is onerous, in which case the impact of persistency experience would be included in core earnings.
- **Other** represents pre-tax net income on residual items in the insurance result section.

Net Investment Result represents the net income attributed to shareholders associated with investment results within the period. Note that results associated with Global WAM and Manulife Bank are shown on separate DOE lines. However within the income statement, the results associated with these businesses would impact the total investment result. This section includes lines attributed to core earnings including:

- **Expected investment earnings**, which is the difference between expected asset returns and the associated finance income or expense from insurance contract liabilities, net of investment expenses.
- **Change in expected credit loss**, which is the gain or charge to net income attributed to shareholders for credit losses to bring the allowance for credit losses to a level management considers adequate for expected credit-related losses on its portfolio.
- **Expected earnings on surplus** reflects the expected investment return on surplus assets.
- **Other** represents pre-tax net income on residual items in the investment result section.

Global WAM is the pre-tax net income from the Global Wealth and Asset Management segment, adjusted for applicable items excluded from core earnings as noted in the core earnings (loss) section above.

Manulife Bank is the pre-tax net income from Manulife Bank, adjusted for applicable items excluded from core earnings as noted in the core earnings (loss) section above.

Other represents net income associated with items outside of the net insurance service result, net investment result, Global WAM and Manulife Bank. Other includes lines attributed to core earnings such as:

- **Non-directly attributable expenses** are expenses incurred by the Company which are not directly attributable to fulfilling insurance contracts. Non-directly attributable expenses excludes non-directly attributable investment expenses as they are included in the net investment result.
- **Other** represents pre-tax net income on residual items in the Other section. Most notably this would include the cost of financing debt issued by Manulife.

Net income attributed to shareholders includes the following items excluded from core earnings:

- **Market experience gains (losses)** related to items excluded from core earnings that relate to changes in market variables.
- **Changes in actuarial methods and assumptions that flow directly through income** related to updates in the methods and assumptions used to value insurance contract liabilities.
- **Restructuring charges** includes a charge taken to reorganize operations.
- **Reinsurance transactions, tax-related items and other** include the impacts of new or changes to in-force reinsurance contracts, the impact of enacted or substantially enacted income tax rate changes and other amounts defined as items excluded from core earnings not specifically captured in the lines above.

All of the above items are discussed in more detail in our definition of items excluded from core earnings.

Drivers of Earnings (“DOE”) – 2023

(\$ millions, pre-tax and based on actual foreign exchange rates in effect in the applicable reporting period, unless otherwise stated)

	2023					
	Asia	Canada	U.S.	Global WAM	Corporate and Other	Total
Net insurance service result	\$ 1,941	\$ 1,193	\$ 607	\$ –	\$ 236	\$ 3,977
Net investment result	478	252	233	–	919	1,882
Global WAM	–	–	–	1,497	–	1,497
Manulife Bank	–	251	–	–	–	251
Other	(175)	(87)	(89)	–	(804)	(1,155)
Net income (loss) before income taxes	2,244	1,609	751	1,497	351	6,452
Income tax (expenses) recoveries	(440)	(373)	(112)	(198)	278	(845)
Net income (loss)	1,804	1,236	639	1,299	629	5,607
Less: Net income (loss) attributed to NCI	(141)	–	–	(2)	(1)	(144)
Less: Net income (loss) attributed to participating policyholders	(315)	(45)	–	–	–	(360)
Net income (loss) attributed to shareholders (post-tax)	\$ 1,348	\$ 1,191	\$ 639	\$ 1,297	\$ 628	\$ 5,103

Reconciliations of DOE line items to the consolidated financial statements and DOE presentation

	2023					
	Asia	Canada	U.S.	Global WAM	Corporate and Other	Total
Net insurance service result reconciliation						
Total insurance service result—financial statements	\$ 1,941	\$ 1,193	\$ 607	\$ –	\$ 236	\$ 3,977
Less: Insurance service result attributed to:						
Items excluded from core earnings	–	19	(55)	–	(3)	(39)
NCI	87	–	–	–	1	88
Participating policyholders	308	107	–	–	–	415
Core net insurance result	\$ 1,546	\$ 1,067	\$ 662	\$ –	\$ 238	\$ 3,513
Core net insurance result, CER adjustment ⁽¹⁾	(3)	–	6	–	2	5
Core net insurance result, CER basis	\$ 1,543	\$ 1,067	\$ 668	\$ –	\$ 240	\$ 3,518
Total investment result reconciliation						
Total investment result per financial statements	\$ 478	\$ 1,717	\$ 233	\$ (946)	\$ 1,476	\$ 2,958
Less: Reclassify net investment result in each of Manulife Bank in Canada and Global WAM to its own line of the DOE	–	(1,445)	–	946	–	(499)
Less: Consolidation adjustments ⁽²⁾	–	–	–	–	(557)	(557)
Less: Other	–	(20)	–	–	–	(20)
Net investment result	478	252	233	–	919	1,882
Less: Net investment result attributed to:						
Items excluded from core earnings	(605)	(345)	(1,296)	–	298	(1,948)
NCI	92	–	–	–	–	92
Participating policyholders	74	(17)	–	–	–	57
Core net investment result	917	614	1,529	–	621	3,681
Core net investment result, CER adjustment ⁽¹⁾	(11)	–	13	–	–	2
Core net investment result, CER basis	\$ 906	\$ 614	\$ 1,542	\$ –	\$ 621	\$ 3,683
Manulife Bank and Global WAM by DOE line reconciliation						
Manulife Bank and Global WAM net income attributed to shareholders	–	251	–	1,496	–	1,747
Less: Manulife Bank and Global WAM attributed to:						
Items excluded from core earnings	–	2	–	(29)	–	(27)
Core earnings in Manulife Bank and Global WAM	–	249	–	1,525	–	1,774
Core earnings in Manulife Bank and Global WAM, CER adjustment ⁽¹⁾	–	–	–	7	–	7
Core earnings in Manulife Bank and Global WAM, CER basis	\$ –	\$ 249	\$ –	\$ 1,532	\$ –	\$ 1,781

⁽¹⁾ The impact of updating foreign exchange rates to that which was used in 4Q23.

⁽²⁾ Consolidation adjustments in Other DOE line reclassified to net investment result DOE line.

Drivers of Earnings (“DOE”) – 2023 (continued)

2023

	Asia	Canada	U.S.	Global WAM	Corporate and Other	Total
Other reconciliation						
Other revenue per financial statements	\$ 67	\$ 272	\$ 79	\$ 6,709	\$ (381)	\$ 6,746
General expenses per financial statements	(220)	(514)	(156)	(2,931)	(509)	(4,330)
Commission related to non-insurance contracts	(10)	(55)	3	(1,322)	39	(1,345)
Interest expense per financial statements	(12)	(1,004)	(15)	(13)	(510)	(1,554)
Total financial statements values included in Other	(175)	(1,301)	(89)	2,443	(1,361)	(483)
Less: Reclassify Other in each of Manulife Bank in Canada and Global WAM to its own line of the DOE	-	1,194	-	(2,443)	-	(1,249)
Less: Consolidation adjustments ⁽¹⁾	-	-	-	-	557	557
Other	-	20	-	-	-	20
Other	(175)	(87)	(89)	-	(804)	(1,155)
Less: Other attributed to:						
Items excluded from core earnings	(7)	(2)	(59)	(2)	85	15
NCI	4	-	-	2	-	6
Participating policyholders	(2)	(12)	-	-	-	(14)
Add: Par earnings transfer to shareholders	34	8	-	-	-	42
Core Other	(136)	(65)	(30)	-	(889)	(1,120)
Core Other, CER adjustment ⁽²⁾	2	-	(1)	-	-	1
Core Other, CER basis	\$ (134)	\$ (65)	\$ (31)	\$ -	\$ (889)	\$ (1,119)
Income tax recoveries (expenses) reconciliation						
Income tax recoveries (expenses) per financial statements	\$ (440)	\$ (373)	\$ (112)	\$ (198)	\$ 278	\$ (845)
Less: Income tax recoveries (expenses) attributed to:						
Items excluded from core earnings	(89)	30	290	7	179	417
NCI	(42)	-	-	(1)	-	(43)
Participating policyholders	(30)	(25)	-	-	-	(55)
Core income tax recoveries (expenses)	(279)	(378)	(402)	(204)	99	(1,164)
Core income tax recoveries (expenses), CER adjustment ⁽²⁾	2	-	(3)	-	-	(1)
Core income tax recoveries (expenses), CER basis	\$ (277)	\$ (378)	\$ (405)	\$ (204)	\$ 99	\$ (1,165)
Net income (loss) before income taxes, CER basis⁽³⁾						
Net insurance service result	\$ 1,940	\$ 1,194	\$ 611	\$ -	\$ 239	\$ 3,984
Net investment result	484	252	235	-	919	1,890
Global WAM	-	-	-	1,502	-	1,502
Manulife Bank	-	251	-	-	-	251
Other	(174)	(87)	(90)	2	(805)	(1,154)
Net income (loss) before income taxes, CER basis	\$ 2,250	\$ 1,610	\$ 756	\$ 1,504	\$ 353	\$ 6,473

⁽¹⁾ Consolidation adjustments in Other DOE line reclassified to net investment result DOE line.

⁽²⁾ The impact of updating foreign exchange rates to that which was used in 4Q23.

⁽³⁾ DOE on a CER basis adjusted to reflect the foreign exchange rates for the Statement of Income in effect for 4Q23.

Drivers of Earnings (“DOE”) – 2022

(\$ millions, pre-tax and based on actual foreign exchange rates in effect in the applicable reporting period, unless otherwise stated)

	2022					
	Asia	Canada	U.S.	Global WAM	Corporate and Other	Total
Net insurance service result	\$ 1,554	\$ 1,190	\$ 533	\$ –	\$ (117)	\$ 3,160
Transitional net investment result	(484)	380	1,272	–	(392)	776
Global WAM	–	–	–	1,291	–	1,291
Manulife Bank	–	215	–	–	–	215
Other	(275)	(85)	(52)	–	(847)	(1,259)
Transitional net income (loss) before income taxes	795	1,700	1,753	1,291	(1,356)	4,183
Transitional income tax (expenses) recoveries	(237)	(458)	(305)	(170)	441	(729)
Transitional net income (loss)	558	1,242	1,448	1,121	(915)	3,454
Less: Transitional net income (loss) attributed to NCI	(114)	–	–	–	(1)	(115)
Less: Transitional net income (loss) attributed to participating policyholders	203	(44)	–	–	–	159
Transitional net income (loss) attributed to shareholders (post-tax)	\$ 647	\$ 1,198	\$ 1,448	\$ 1,121	\$ (916)	\$ 3,498

Reconciliations of DOE line items to the consolidated financial statements and DOE presentation

	2022					
	Asia	Canada	U.S.	Global WAM	Corporate and Other	Total
Net insurance service result reconciliation						
Total insurance service result—financial statements	\$ 1,554	\$ 1,190	\$ 533	\$ –	\$ (117)	\$ 3,160
Less: Insurance service result attributed to:						
Items excluded from core earnings	(34)	28	179	–	(2)	171
NCI	70	–	–	–	–	70
Participating policyholders	(73)	132	–	–	–	59
Core net insurance result	\$ 1,591	\$ 1,030	\$ 354	\$ –	\$ (115)	\$ 2,860
Core net insurance result, CER adjustment ⁽¹⁾	34	–	14	–	(6)	42
Core net insurance result, CER basis	\$ 1,625	\$ 1,030	\$ 368	\$ –	\$ (121)	\$ 2,902
Transitional net investment result reconciliation						
Total investment result per financial statements	\$ (370)	\$ (1,300)	\$ (3,493)	\$ (1,200)	\$ (6)	\$ (6,369)
IFRS 9 transitional impacts	(114)	2,667	4,765	–	4	7,322
Total including transitional impacts	(484)	1,367	1,272	(1,200)	(2)	953
Less: Reclassify net investment result in each of Manulife Bank in Canada and Global WAM to its own line of the DOE	–	(977)	–	1,200	–	223
Less: Consolidation adjustments ⁽²⁾	–	–	–	–	(390)	(390)
Less: Other	–	(10)	–	–	–	(10)
Transitional net investment result	\$ (484)	\$ 380	\$ 1,272	\$ –	\$ (392)	\$ 776
Less: Transitional net investment result attributed to:						
Items excluded from core earnings	(1,158)	(131)	(316)	–	(717)	(2,322)
NCI	51	–	–	–	–	51
Participating policyholders	(54)	(31)	–	–	–	(85)
Core net investment result	677	542	1,588	–	325	3,132
Core net investment result, CER adjustment ⁽¹⁾	3	–	72	–	–	75
Core net investment result, CER basis	\$ 680	\$ 542	\$ 1,660	\$ –	\$ 325	\$ 3,207
Manulife Bank and Global WAM by DOE line reconciliation						
Manulife Bank and Global WAM net income attributed to shareholders	\$ –	\$ 215	\$ –	\$ 1,291	\$ –	\$ 1,506
Less: Manulife Bank and Global WAM attributed to:						
Items excluded from core earnings	–	(15)	–	(230)	–	(245)
Core earnings in Manulife Bank and Global WAM	\$ –	\$ 230	\$ –	\$ 1,521	\$ –	\$ 1,751
Core earnings in Manulife Bank and Global WAM, CER adjustment ⁽¹⁾	–	–	–	44	–	44
Core earnings in Manulife Bank and Global WAM, CER basis	\$ –	\$ 230	\$ –	\$ 1,565	\$ –	\$ 1,795

⁽¹⁾ The impact of updating foreign exchange rates to that which was used in 4Q23.

⁽²⁾ Consolidation adjustments in Other DOE line reclassified to net investment result DOE line.

Drivers of Earnings (“DOE”) – 2022 (continued)

2022

	Asia	Canada	U.S.	Global WAM	Corporate and Other	Total
Other reconciliation						
Other revenue per financial statements	\$ 56	\$ 262	\$ 101	\$ 6,391	\$ (624)	\$ 6,186
General expenses per financial statements	(303)	(518)	(140)	(2,583)	(187)	(3,731)
Commission related to non-insurance contracts	(15)	(55)	4	(1,310)	43	(1,333)
Interest expense per financial statements	(12)	(548)	(16)	(7)	(468)	(1,051)
Total financial statements values included in Other	(274)	(859)	(51)	2,491	(1,236)	71
Less: Reclassify Other in each of Manulife Bank in Canada and Global WAM to its own line of the DOE	-	762	-	(2,491)	-	(1,729)
Less: Consolidation adjustments ⁽¹⁾	-	-	-	-	389	389
Other	(1)	12	(1)	-	-	10
Other	(275)	(85)	(52)	-	(847)	(1,259)
Less: Other attributed to:						
Items excluded from core earnings	(29)	-	(17)	-	(258)	(304)
NCI	7	-	-	-	-	7
Participating policyholders	(14)	(1)	-	-	-	(15)
Add: Par earnings transfer to shareholders	46	4	-	-	-	50
Core Other	(193)	(80)	(35)	-	(589)	(897)
Core Other, CER adjustment ⁽²⁾	(3)	-	(2)	-	1	(4)
Core Other, CER basis	\$ (196)	\$ (80)	\$ (37)	\$ -	\$ (588)	\$ (901)
Income tax recoveries (expenses) reconciliation						
Income tax recoveries (expenses) per financial statements	\$ (318)	\$ 510	\$ 695	\$ (170)	\$ 442	\$ 1,159
IFRS 9 transitional impacts	81	(968)	(1,000)	-	(1)	(1,888)
Transitional income tax recoveries (expenses)	(237)	(458)	(305)	(170)	441	(729)
Less: Transitional income tax recoveries (expenses) attributed to:						
Items excluded from core earnings	54	(71)	36	52	325	396
NCI	(12)	-	-	-	-	(12)
Participating policyholders	(16)	(52)	-	-	-	(68)
Core income tax recoveries (expenses)	(263)	(335)	(341)	(222)	116	(1,045)
Core income tax recoveries (expenses), CER adjustment ⁽²⁾	(4)	-	(15)	(4)	-	(23)
Core income tax recoveries (expenses), CER basis	\$ (267)	\$ (335)	\$ (356)	\$ (226)	\$ 116	\$ (1,068)
Net income (loss) attributed to NCI	\$ 120	\$ -	\$ -	\$ -	\$ 1	\$ 121
IFRS 9 transitional impacts	(6)	-	-	-	-	(6)
Transitional net income (loss) to NCI	\$ 114	\$ -	\$ -	\$ -	\$ 1	\$ 115
Net income (loss) attributed to participating policyholders	\$ (211)	\$ 44	\$ -	\$ -	\$ -	\$ (167)
IFRS 9 transitional impacts	8	-	-	-	-	8
Transitional net income (loss) to participating policyholders	\$ (203)	\$ 44	\$ -	\$ -	\$ -	\$ (159)
Transitional net income (loss) before income taxes, CER basis⁽³⁾	\$ 1,572	\$ 1,190	\$ 560	\$ -	\$ (122)	\$ 3,200
Net insurance service result	(466)	380	1,375	-	(391)	898
Global WAM	-	-	-	1,332	-	1,332
Manulife Bank	-	215	-	-	-	215
Other	(280)	(85)	(56)	-	(847)	(1,268)
Transitional net income (loss) before income taxes, CER basis	\$ 826	\$ 1,700	\$ 1,879	\$ 1,332	\$ (1,360)	\$ 4,377

⁽¹⁾ Consolidation adjustments in Other DOE line reclassified to net investment result DOE line.

⁽²⁾ The impact of updating foreign exchange rates to that which was used in 4Q23.

⁽³⁾ DOE on a CER basis adjusted to reflect the foreign exchange rates for the Statement of Income in effect for 4Q23.

Drivers of Earnings (“DOE”) – 4Q23

(\$ millions, pre-tax and based on actual foreign exchange rates in effect in the applicable reporting period, unless otherwise stated)

	4Q23					Total
	Asia	Canada	U.S.	Global WAM	Corporate and Other	
Net insurance service result	\$ 644	\$ 306	\$ 195	\$ –	\$ 91	\$ 1,236
Net investment result	285	137	72	–	182	676
Global WAM	–	–	–	425	–	425
Manulife Bank	–	72	–	–	–	72
Other	(82)	(17)	(23)	(1)	(163)	(286)
Net income (loss) before income taxes	847	498	244	424	110	2,123
Income tax (expenses) recoveries	(109)	(116)	(46)	(58)	7	(322)
Net income (loss)	738	382	198	366	117	1,801
Less: Net income (loss) attributed to NCI	(37)	–	–	(1)	(1)	(39)
Less: Net income (loss) attributed to participating policyholders	(86)	(17)	–	–	–	(103)
Net income (loss) attributed to shareholders (post-tax)	\$ 615	\$ 365	\$ 198	\$ 365	\$ 116	\$ 1,659

Reconciliations of DOE line items to the consolidated financial statements and DOE presentation

	4Q23					Total
	Asia	Canada	U.S.	Global WAM	Corporate and Other	
Net insurance service result reconciliation						
Total insurance service result—financial statements	\$ 644	\$ 306	\$ 195	\$ –	\$ 91	\$ 1,236
Less: Insurance service result attributed to:						
Items excluded from core earnings	130	12	21	–	(2)	161
NCI	19	–	–	–	1	20
Participating policyholders	60	39	–	–	–	99
Core net insurance result	435	255	174	–	92	956
Core net insurance result, CER adjustment ⁽¹⁾	–	–	–	–	–	–
Core net insurance result, CER basis	\$ 435	\$ 255	\$ 174	\$ –	\$ 92	\$ 956
Total investment result reconciliation						
Total investment result per financial statements	\$ 285	\$ 511	\$ 72	\$ (139)	\$ 344	\$ 1,073
Less: Reclassify net investment result in each of Manulife Bank in Canada and Global WAM to its own line of the DOE	–	(377)	–	139	–	(238)
Less: Consolidation adjustments ⁽²⁾	–	–	–	–	(162)	(162)
Less: Other	–	3	–	–	–	3
Net investment result	285	137	72	–	182	676
Less: Net investment result attributed to:						
Items excluded from core earnings	(47)	9	(359)	–	39	(358)
NCI	37	–	–	–	–	37
Participating policyholders	50	(10)	–	–	–	40
Core net investment result	245	138	431	–	143	957
Core net investment result, CER adjustment ⁽¹⁾	–	–	–	–	–	–
Core net investment result, CER basis	\$ 245	\$ 138	\$ 431	\$ –	\$ 143	\$ 957
Manulife Bank and Global WAM by DOE line reconciliation						
Manulife Bank and Global WAM net income attributed to shareholders	\$ –	\$ 72	\$ –	\$ 424	\$ –	\$ 496
Less: Manulife Bank and Global WAM attributed to:						
Items excluded from core earnings	–	8	–	16	–	24
Core earnings in Manulife Bank and Global WAM	–	64	–	408	–	472
Core earnings in Manulife Bank and Global WAM, CER adjustment ⁽¹⁾	–	–	–	–	–	–
Core earnings in Manulife Bank and Global WAM, CER basis	\$ –	\$ 64	\$ –	\$ 408	\$ –	\$ 472

⁽¹⁾ The impact of updating foreign exchange rates to that which was used in 4Q23.

⁽²⁾ Consolidation adjustments in Other DOE line reclassified to net investment result DOE line.

Drivers of Earnings (“DOE”) – 4Q23 (continued)

	4Q23					Total
	Asia	Canada	U.S.	Global WAM	Corporate and Other	
Other reconciliation						
Other revenue per financial statements	\$ (16)	\$ 75	\$ 8	\$ 1,688	\$ (36)	\$ 1,719
General expenses per financial statements	(59)	(136)	(28)	(793)	(164)	(1,180)
Commission related to non-insurance contracts	(3)	(12)	1	(330)	9	(335)
Interest expense per financial statements	(4)	(246)	(4)	(2)	(134)	(390)
Total financial statements values included in Other	(82)	(319)	(23)	563	(325)	(186)
Less: Reclassify Other in each of Manulife Bank in Canada and Global WAM to its own line of the DOE	-	305	-	(564)	-	(259)
Less: Consolidation adjustments ⁽¹⁾	-	-	-	-	162	162
Other	-	(3)	-	-	-	(3)
Other	(82)	(17)	(23)	(1)	(163)	(286)
Less: Other attributed to:						
Items excluded from core earnings	(26)	4	(5)	(2)	79	50
NCI	(2)	-	-	1	-	(1)
Participating policyholders	(4)	(1)	-	-	-	(5)
Add: Par earnings transfer to shareholders	10	2	-	-	-	12
Core Other	(40)	(18)	(18)	-	(242)	(318)
Core Other, CER adjustment ⁽²⁾	-	-	-	-	-	-
Core Other, CER basis	\$ (40)	\$ (18)	\$ (18)	\$ -	\$ (242)	\$ (318)
Income tax recoveries (expenses) reconciliation						
Income tax recoveries (expenses) per financial statements	\$ (109)	\$ (116)	\$ (46)	\$ (58)	\$ 7	\$ (322)
Less: Income tax recoveries (expenses) attributed to:						
Items excluded from core earnings	(6)	(20)	67	(3)	(30)	8
NCI	(17)	-	-	-	-	(17)
Participating policyholders	(10)	(9)	-	-	-	(19)
Core income tax recoveries (expenses)	(76)	(87)	(113)	(55)	37	(294)
Core income tax recoveries (expenses), CER adjustment ⁽²⁾	-	-	-	-	-	-
Core income tax recoveries (expenses), CER basis	\$ (76)	\$ (87)	\$ (113)	\$ (55)	\$ 37	\$ (294)
Net income (loss) before income taxes, CER basis⁽³⁾						
Net insurance service result	\$ 644	\$ 306	\$ 195	\$ -	\$ 91	\$ 1,236
Net investment result	285	137	72	-	182	676
Global WAM	-	-	-	425	-	425
Manulife Bank	-	72	-	-	-	72
Other	(82)	(17)	(23)	(1)	(163)	(286)
Net income (loss) before income taxes, CER basis	\$ 847	\$ 498	\$ 244	\$ 424	\$ 110	\$ 2,123

⁽¹⁾ Consolidation adjustments in Other DOE line reclassified to net investment result DOE line.

⁽²⁾ The impact of updating foreign exchange rates to that which was used in 4Q23.

⁽³⁾ DOE on a CER basis adjusted to reflect the foreign exchange rates for the Statement of Income in effect for 4Q23.

Drivers of Earnings (“DOE”) – 3Q23

(\$ millions, pre-tax and based on actual foreign exchange rates in effect in the applicable reporting period, unless otherwise stated)

	3Q23					
	Asia	Canada	U.S.	Global WAM	Corporate and Other	Total
Net insurance service result	\$ 467	\$ 366	\$ 108	\$ –	\$ 64	\$ 1,005
Net investment result	4	(14)	(45)	–	142	87
Global WAM	–	–	–	365	–	365
Manulife Bank	–	55	–	–	–	55
Other	(32)	(31)	5	1	(281)	(338)
Net income (loss) before income taxes	439	376	68	366	(75)	1,174
Income tax (expenses) recoveries	(135)	(94)	4	(48)	324	51
Net income (loss)	304	282	72	318	249	1,225
Less: Net income (loss) attributed to NCI	(25)	–	–	–	–	(25)
Less: Net income (loss) attributed to participating policyholders	(195)	8	–	–	–	(187)
Net income (loss) attributed to shareholders (post-tax)	\$ 84	\$ 290	\$ 72	\$ 318	\$ 249	\$ 1,013

Reconciliations of DOE line items to the consolidated financial statements and DOE presentation

	3Q23					
	Asia	Canada	U.S.	Global WAM	Corporate and Other	Total
Net insurance service result reconciliation						
Total insurance service result - financial statements	\$ 467	\$ 366	\$ 108	\$ –	\$ 64	\$ 1,005
Less: Insurance service result attributed to:						
Items excluded from core earnings	(112)	11	(51)	–	(1)	(153)
NCI	15	–	–	–	–	15
Participating policyholders	177	21	–	–	–	198
Core net insurance result	387	334	159	–	65	945
Core net insurance result, CER adjustment ⁽¹⁾	4	–	2	–	1	7
Core net insurance result, CER basis	\$ 391	\$ 334	\$ 161	\$ –	\$ 66	\$ 952
Total investment result reconciliation						
Total investment result per financial statements	\$ 4	\$ 389	\$ (45)	\$ (303)	\$ 273	\$ 318
Less: Reclassify net investment result in each of Manulife Bank in Canada and Global WAM to its own line of the DOE	–	(380)	–	303	–	(77)
Less: Consolidation adjustments ⁽²⁾	–	–	–	–	(131)	(131)
Less: Other	–	(23)	–	–	–	(23)
Net investment result	4	(14)	(45)	–	142	87
Less: Net investment result attributed to:						
Items excluded from core earnings	(274)	(130)	(418)	–	(5)	(827)
NCI	17	–	–	–	–	17
Participating policyholders	28	(21)	–	–	–	7
Core net investment result	233	137	373	–	147	890
Core net investment result, CER adjustment ⁽¹⁾	1	(1)	6	–	–	6
Core net investment result, CER basis	\$ 234	\$ 136	\$ 379	\$ –	\$ 147	\$ 896
Manulife Bank and Global WAM by DOE line reconciliation						
Manulife Bank and Global WAM net income attributed to shareholders	\$ –	\$ 55	\$ –	\$ 365	\$ –	\$ 420
Less: Manulife Bank and Global WAM attributed to:						
Items excluded from core earnings	–	(11)	–	(55)	–	(66)
Core earnings in Manulife Bank and Global WAM	–	66	–	420	–	486
Core earnings in Manulife Bank and Global WAM, CER adjustment ⁽¹⁾	–	–	–	4	–	4
Core earnings in Manulife Bank and Global WAM, CER basis	\$ –	\$ 66	\$ –	\$ 424	\$ –	\$ 490

⁽¹⁾ The impact of updating foreign exchange rates to that which was used in 4Q23.

⁽²⁾ Consolidation adjustments in Other DOE line reclassified to net investment result DOE line.

Drivers of Earnings (“DOE”) – 3Q23 (continued)

3Q23

	Asia	Canada	U.S.	Global WAM	Corporate and Other	Total
Other reconciliation						
Other revenue per financial statements	\$ 26	\$ 53	\$ 31	\$ 1,709	\$ (174)	\$ 1,645
General expenses per financial statements	(52)	(128)	(29)	(703)	(129)	(1,041)
Commission related to non-insurance contracts	(3)	(14)	6	(334)	9	(336)
Interest expense per financial statements	(3)	(290)	(3)	(1)	(119)	(416)
Total financial statements values included in Other	(32)	(379)	5	671	(413)	(148)
Less: Reclassify Other in each of Manulife Bank in Canada and Global WAM to its own line of the DOE	–	325	–	(670)	–	(345)
Less: Consolidation adjustments ⁽¹⁾	–	–	–	–	132	132
Other	–	23	–	–	–	23
Other	(32)	(31)	5	1	(281)	(338)
Less: Other attributed to:						
Items excluded from core earnings	5	(4)	2	–	(49)	(46)
NCI	2	–	–	1	–	3
Participating policyholders	3	(5)	–	–	–	(2)
Add: Par earnings transfer to shareholders	6	2	–	–	–	8
Core Other	(36)	(20)	3	–	(232)	(285)
Core Other, CER adjustment ⁽²⁾	–	1	–	–	(1)	–
Core Other, CER basis	\$ (36)	\$ (19)	\$ 3	\$ –	\$ (233)	\$ (285)
Income tax recoveries (expenses) reconciliation						
Income tax recoveries (expenses) per financial statements	\$ (135)	\$ (94)	\$ 4	\$ (48)	\$ 324	\$ 51
Less: Income tax recoveries (expenses) attributed to:						
Items excluded from core earnings	(58)	16	97	12	294	361
NCI	(9)	–	–	(1)	–	(10)
Participating policyholders	(6)	(1)	–	–	–	(7)
Core income tax recoveries (expenses)	(62)	(109)	(93)	(59)	30	(293)
Core income tax recoveries (expenses), CER adjustment ⁽²⁾	–	–	(2)	–	–	(2)
Core income tax recoveries (expenses), CER basis	\$ (62)	\$ (109)	\$ (95)	\$ (59)	\$ 30	\$ (295)
Net income (loss) before income taxes, CER basis⁽³⁾						
Net insurance service result	\$ 473	\$ 366	\$ 109	\$ –	\$ 66	\$ 1,014
Net investment result	3	(14)	(45)	–	141	85
Global WAM	–	–	–	369	–	369
Manulife Bank	–	55	–	–	–	55
Other	(33)	(31)	6	–	(281)	(339)
Net income (loss) before income taxes, CER basis	\$ 443	\$ 376	\$ 70	\$ 369	\$ (74)	\$ 1,184

⁽¹⁾ Consolidation adjustments in Other DOE line reclassified to net investment result DOE line.

⁽²⁾ The impact of updating foreign exchange rates to that which was used in 4Q23.

⁽³⁾ DOE on a CER basis adjusted to reflect the foreign exchange rates for the Statement of Income in effect for 4Q23.

Drivers of Earnings (“DOE”) – 2Q23

(\$ millions, pre-tax and based on actual foreign exchange rates in effect in the applicable reporting period, unless otherwise stated)

	2Q23					
	Asia	Canada	U.S.	Global WAM	Corporate and Other	Total
Net insurance service result	\$ 460	\$ 262	\$ 131	\$ –	\$ 34	\$ 887
Net investment result	(96)	12	105	–	351	372
Global WAM	–	–	–	362	–	362
Manulife Bank	–	59	–	–	–	59
Other	(19)	(21)	(16)	–	(188)	(244)
Net income (loss) before income taxes	345	312	220	362	197	1,436
Income tax (expenses) recoveries	(91)	(64)	(37)	(44)	(29)	(265)
Net income (loss)	254	248	183	318	168	1,171
Less: Net income (loss) attributed to NCI	(25)	–	–	(1)	–	(26)
Less: Net income (loss) attributed to participating policyholders	(99)	(21)	–	–	–	(120)
Net income (loss) attributed to shareholders (post-tax)	\$ 130	\$ 227	\$ 183	\$ 317	\$ 168	\$ 1,025

Reconciliations of DOE line items to the consolidated financial statements and DOE presentation

	2Q23					
	Asia	Canada	U.S.	Global WAM	Corporate and Other	Total
Net insurance service result reconciliation						
Total insurance service result - financial statements	\$ 460	\$ 262	\$ 131	\$ –	\$ 34	\$ 887
Less: Insurance service result attributed to:						
Items excluded from core earnings	(44)	(4)	(26)	–	1	(73)
NCI	13	–	–	–	–	13
Participating policyholders	122	21	–	–	–	143
Core net insurance result	369	245	157	–	33	804
Core net insurance result, CER adjustment ⁽¹⁾	(3)	(1)	4	–	1	1
Core net insurance result, CER basis	\$ 366	\$ 244	\$ 161	\$ –	\$ 34	\$ 805
Total investment result reconciliation						
Total investment result per financial statements	\$ (96)	\$ 354	\$ 105	\$ (244)	\$ 478	\$ 597
Less: Reclassify net investment result in each of Manulife Bank in Canada and Global WAM to its own line of the DOE	–	(342)	–	244	–	(98)
Less: Consolidation adjustments ⁽²⁾	–	–	–	–	(127)	(127)
Less: Other	–	–	–	–	–	–
Net investment result	(96)	12	105	–	351	372
Less: Net investment result attributed to:						
Items excluded from core earnings	(318)	(184)	(319)	–	183	(638)
NCI	14	–	–	–	–	14
Participating policyholders	(7)	14	–	–	–	7
Core net investment result	215	182	424	–	168	989
Core net investment result, CER adjustment ⁽¹⁾	(5)	1	5	–	–	1
Core net investment result, CER basis	\$ 210	\$ 183	\$ 429	\$ –	\$ 168	\$ 990
Manulife Bank and Global WAM by DOE line reconciliation						
Manulife Bank and Global WAM net income attributed to shareholders	\$ –	\$ 59	\$ –	\$ 362	\$ –	\$ 421
Less: Manulife Bank and Global WAM attributed to:						
Items excluded from core earnings	–	–	–	(3)	–	(3)
Core earnings in Manulife Bank and Global WAM	–	59	–	365	–	424
Core earnings in Manulife Bank and Global WAM, CER adjustment ⁽¹⁾	–	–	–	2	–	2
Core earnings in Manulife Bank and Global WAM, CER basis	\$ –	\$ 59	\$ –	\$ 367	\$ –	\$ 426

⁽¹⁾ The impact of updating foreign exchange rates to that which was used in 4Q23.

⁽²⁾ Consolidation adjustments in Other DOE line reclassified to net investment result DOE line.

Drivers of Earnings (“DOE”) – 2Q23 (continued)

2Q23

	Asia	Canada	U.S.	Global WAM	Corporate and Other	Total
Other reconciliation						
Other revenue per financial statements	\$ 47	\$ 72	\$ 16	\$ 1,647	\$ (91)	\$ 1,691
General expenses per financial statements	(61)	(127)	(25)	(709)	(101)	(1,023)
Commission related to non-insurance contracts	(2)	(13)	(3)	(329)	11	(336)
Interest expense per financial statements	(3)	(236)	(4)	(5)	(133)	(381)
Total financial statements values included in Other	(19)	(304)	(16)	604	(314)	(49)
Less: Reclassify Other in each of Manulife Bank in Canada and Global WAM to its own line of the DOE	–	283	–	(604)	–	(321)
Less: Consolidation adjustments ⁽¹⁾	–	–	–	–	126	126
Other	–	–	–	–	–	–
Other	(19)	(21)	(16)	–	(188)	(244)
Less: Other attributed to:						
Items excluded from core earnings	23	(1)	(3)	–	19	38
NCI	4	–	–	–	–	4
Participating policyholders	1	(3)	–	–	–	(2)
Add: Par earnings transfer to shareholders	9	2	–	–	–	11
Core Other	(38)	(15)	(13)	–	(207)	(273)
Core Other, CER adjustment ⁽²⁾	1	–	–	–	–	1
Core Other, CER basis	\$ (37)	\$ (15)	\$ (13)	\$ –	\$ (207)	\$ (272)
Income tax recoveries (expenses) reconciliation						
Income tax recoveries (expenses) per financial statements	\$ (91)	\$ (64)	\$ (37)	\$ (44)	\$ (29)	\$ (265)
Less: Income tax recoveries (expenses) attributed to:						
Items excluded from core earnings	(4)	42	73	1	(47)	65
NCI	(6)	–	–	–	–	(6)
Participating policyholders	(8)	(9)	–	–	–	(17)
Core income tax recoveries (expenses)	(73)	(97)	(110)	(45)	18	(307)
Core income tax recoveries (expenses), CER adjustment ⁽²⁾	2	–	(1)	–	(1)	–
Core income tax recoveries (expenses), CER basis	\$ (71)	\$ (97)	\$ (111)	\$ (45)	\$ 17	\$ (307)
Net income (loss) before income taxes, CER basis⁽³⁾						
Net insurance service result	\$ 457	\$ 262	\$ 134	\$ –	\$ 34	\$ 887
Net investment result	(81)	12	106	–	352	389
Global WAM	–	–	–	364	–	364
Manulife Bank	–	59	–	–	–	59
Other	(19)	(21)	(17)	–	(188)	(245)
Net income (loss) before income taxes, CER basis	\$ 357	\$ 312	\$ 223	\$ 364	\$ 198	\$ 1,454

⁽¹⁾ Consolidation adjustments in Other DOE line reclassified to net investment result DOE line.

⁽²⁾ The impact of updating foreign exchange rates to that which was used in 4Q23.

⁽³⁾ DOE on a CER basis adjusted to reflect the foreign exchange rates for the Statement of Income in effect for 4Q23.

Drivers of Earnings (“DOE”) – 1Q23

(\$ millions, pre-tax and based on actual foreign exchange rates in effect in the applicable reporting period, unless otherwise stated)

	1Q23					
	Asia	Canada	U.S.	Global WAM	Corporate and Other	Total
Net insurance service result	\$ 370	\$ 259	\$ 173	\$ –	\$ 47	\$ 849
Net investment result	285	117	101	–	244	747
Global WAM	–	–	–	345	–	345
Manulife Bank	–	65	–	–	–	65
Other	(42)	(18)	(55)	–	(172)	(287)
Net income (loss) before income taxes	613	423	219	345	119	1,719
Income tax (expenses) recoveries	(105)	(99)	(33)	(48)	(24)	(309)
Net income (loss)	508	324	186	297	95	1,410
Less: Net income (loss) attributed to NCI	(54)	–	–	–	–	(54)
Less: Net income (loss) attributed to participating policyholders	65	(15)	–	–	–	50
Net income (loss) attributed to shareholders (post-tax)	\$ 519	\$ 309	\$ 186	\$ 297	\$ 95	\$ 1,406

Reconciliations of DOE line items to the consolidated financial statements and DOE presentation

	1Q23					
	Asia	Canada	U.S.	Global WAM	Corporate and Other	Total
Net insurance service result reconciliation						
Total insurance service result - financial statements	\$ 370	\$ 259	\$ 173	\$ –	\$ 47	\$ 849
Less: Insurance service result attributed to:						
Items excluded from core earnings	26	–	1	–	(1)	26
NCI	40	–	–	–	–	40
Participating policyholders	(51)	26	–	–	–	(25)
Core net insurance result	355	233	172	–	48	808
Core net insurance result, CER adjustment ⁽¹⁾	(5)	1	–	–	–	(4)
Core net insurance result, CER basis	\$ 350	\$ 234	\$ 172	\$ –	\$ 48	\$ 804
Total investment result reconciliation						
Total investment result per financial statements	\$ 285	\$ 463	\$ 101	\$ (260)	\$ 381	\$ 970
Less: Reclassify net investment result in each of Manulife Bank in Canada and Global WAM to its own line of the DOE	–	(346)	–	260	–	(86)
Less: Consolidation adjustments ⁽²⁾	–	–	–	–	(137)	(137)
Less: Other	–	–	–	–	–	–
Net investment result	285	117	101	–	244	747
Less: Net investment result attributed to:						
Items excluded from core earnings	34	(40)	(200)	–	81	(125)
NCI	24	–	–	–	–	24
Participating policyholders	3	–	–	–	–	3
Core net investment result	224	157	301	–	163	845
Core net investment result, CER adjustment ⁽¹⁾	(8)	–	2	–	1	(5)
Core net investment result, CER basis	\$ 216	\$ 157	\$ 303	\$ –	\$ 164	\$ 840
Manulife Bank and Global WAM by DOE line reconciliation						
Manulife Bank and Global WAM net income attributed to shareholders	\$ –	\$ 65	\$ –	\$ 345	\$ –	\$ 410
Less: Manulife Bank and Global WAM attributed to:						
Items excluded from core earnings	–	5	–	13	–	18
Core earnings in Manulife Bank and Global WAM	–	60	–	332	–	392
Core earnings in Manulife Bank and Global WAM, CER adjustment ⁽¹⁾	–	–	–	1	–	1
Core earnings in Manulife Bank and Global WAM, CER basis	\$ –	\$ 60	\$ –	\$ 333	\$ –	\$ 393

⁽¹⁾ The impact of updating foreign exchange rates to that which was used in 4Q23.

⁽²⁾ Consolidation adjustments in Other DOE line reclassified to net investment result DOE line.

Drivers of Earnings (“DOE”) – 1Q23 (continued)

1Q23

	Asia	Canada	U.S.	Global WAM	Corporate and Other	Total
Other reconciliation						
Other revenue per financial statements	\$ 10	\$ 72	\$ 24	\$ 1,665	\$ (80)	\$ 1,691
General expenses per financial statements	(48)	(123)	(74)	(726)	(115)	(1,086)
Commission related to non-insurance contracts	(2)	(16)	(1)	(329)	10	(338)
Interest expense per financial statements	(2)	(232)	(4)	(5)	(124)	(367)
Total financial statements values included in Other	(42)	(299)	(55)	605	(309)	(100)
Less: Reclassify Other in each of Manulife Bank in Canada and Global WAM to its own line of the DOE	-	281	-	(605)	-	(324)
Less: Consolidation adjustments ⁽¹⁾	-	-	-	-	137	137
Other	-	-	-	-	-	-
Other	(42)	(18)	(55)	-	(172)	(287)
Less: Other attributed to:						
Items excluded from core earnings	(9)	(1)	(53)	-	36	(27)
NCI	-	-	-	-	-	-
Participating policyholders	(2)	(3)	-	-	-	(5)
Add: Par earnings transfer to shareholders	9	2	-	-	-	11
Core Other	(22)	(12)	(2)	-	(208)	(244)
Core Other, CER adjustment ⁽²⁾	2	(1)	1	-	(1)	1
Core Other, CER basis	\$ (20)	\$ (13)	\$ (1)	\$ -	\$ (209)	\$ (243)
Income tax recoveries (expenses) reconciliation						
Income tax recoveries (expenses) per financial statements	\$ (105)	\$ (99)	\$ (33)	\$ (48)	\$ (24)	\$ (309)
Less: Income tax recoveries (expenses) attributed to:						
Items excluded from core earnings	(21)	(8)	53	(3)	(38)	(17)
NCI	(10)	-	-	-	-	(10)
Participating policyholders	(6)	(6)	-	-	-	(12)
Core income tax recoveries (expenses)	(68)	(85)	(86)	(45)	14	(270)
Core income tax recoveries (expenses), CER adjustment ⁽²⁾	1	-	-	-	-	1
Core income tax recoveries (expenses), CER basis	\$ (67)	\$ (85)	\$ (86)	\$ (45)	\$ 14	\$ (269)
Net income (loss) before income taxes, CER basis⁽³⁾						
Net insurance service result	\$ 365	\$ 259	\$ 174	\$ -	\$ 48	\$ 846
Net investment result	278	117	101	-	244	740
Global WAM	-	-	-	345	-	345
Manulife Bank	-	65	-	-	-	65
Other	(41)	(18)	(54)	-	(173)	(286)
Net income (loss) before income taxes, CER basis	\$ 602	\$ 423	\$ 221	\$ 345	\$ 119	\$ 1,710

⁽¹⁾ Consolidation adjustments in Other DOE line reclassified to net investment result DOE line.

⁽²⁾ The impact of updating foreign exchange rates to that which was used in 4Q23.

⁽³⁾ DOE on a CER basis adjusted to reflect the foreign exchange rates for the Statement of Income in effect for 4Q23.

Drivers of Earnings (“DOE”) – 4Q22

(\$ millions, pre-tax and based on actual foreign exchange rates in effect in the applicable reporting period, unless otherwise stated)

	4Q22					
	Asia	Canada	U.S.	Global WAM	Corporate and Other	Total
Net insurance service result	\$ 485	\$ 301	\$ 126	\$ –	\$ 49	\$ 961
Transitional net investment result	169	(69)	(259)	–	62	(97)
Global WAM	–	–	–	461	–	461
Manulife Bank	–	72	–	–	–	72
Other	(39)	(27)	(15)	–	(167)	(248)
Transitional net income (loss) before income taxes	615	277	(148)	461	(56)	1,149
Transitional income tax (expenses) recoveries	(122)	(135)	42	(60)	377	102
Transitional net income (loss)	493	142	(106)	401	321	1,251
Less: Transitional net income (loss) attributed to NCI	(34)	–	–	–	(1)	(35)
Less: Transitional net income (loss) attributed to participating policyholders	34	(22)	–	–	–	12
Transitional net income (loss) attributed to shareholders (post-tax)	\$ 493	\$ 120	\$ (106)	\$ 401	\$ 320	\$ 1,228

Reconciliations of DOE line items to the consolidated financial statements and DOE presentation

	4Q22					
	Asia	Canada	U.S.	Global WAM	Corporate and Other	Total
Net insurance service result reconciliation						
Total insurance service result—financial statements	\$ 485	\$ 301	\$ 126	\$ –	\$ 49	\$ 961
Less: Insurance service result attributed to:						
Items excluded from core earnings	69	1	10	–	(1)	79
NCI	18	–	–	–	–	18
Participating policyholders	15	84	–	–	–	99
Core net insurance result	383	216	116	–	50	765
Core net insurance result, CER adjustment ⁽¹⁾	1	–	–	–	(1)	–
Core net insurance result, CER basis	\$ 384	\$ 216	\$ 116	\$ –	\$ 49	\$ 765
Transitional net investment result reconciliation						
Total investment result per financial statements	\$ (45)	\$ (60)	\$ (179)	\$ (149)	\$ 157	\$ (276)
IFRS 9 transitional impacts	214	312	(80)	–	7	453
Total including transitional impacts	169	252	(259)	(149)	164	177
Less: Reclassify net investment result in each of Manulife Bank in Canada and Global WAM to its own line of the DOE	–	(324)	–	149	–	(175)
Less: Consolidation adjustments ⁽²⁾	–	–	–	–	(102)	(102)
Less: Other	–	3	–	–	–	3
Transitional net investment result	169	(69)	(259)	–	62	(97)
Less: Transitional net investment result attributed to:						
Items excluded from core earnings	(54)	(189)	(662)	–	(75)	(980)
NCI	31	–	–	–	–	31
Participating policyholders	(15)	(2)	–	–	–	(17)
Core net investment result	207	122	403	–	137	869
Core net investment result, CER adjustment ⁽¹⁾	(2)	1	1	–	–	–
Core net investment result, CER basis	\$ 205	\$ 123	\$ 404	\$ –	\$ 137	\$ 869
Manulife Bank and Global WAM by DOE line reconciliation						
Manulife Bank and Global WAM net income attributed to shareholders	\$ –	\$ 72	\$ –	\$ 461	\$ –	\$ 533
Less: Manulife Bank and Global WAM attributed to:						
Items excluded from core earnings	–	5	–	140	–	145
Core earnings in Manulife Bank and Global WAM	–	67	–	321	–	388
Core earnings in Manulife Bank and Global WAM, CER adjustment ⁽¹⁾	–	–	–	1	–	1
Core earnings in Manulife Bank and Global WAM, CER basis	\$ –	\$ 67	\$ –	\$ 322	\$ –	\$ 389

⁽¹⁾ The impact of updating foreign exchange rates to that which was used in 4Q23.

⁽²⁾ Consolidation adjustments in Other DOE line reclassified to net investment result DOE line.

Drivers of Earnings (“DOE”) – 4Q22 (continued)

4Q22

	Asia	Canada	U.S.	Global WAM	Corporate and Other	Total
Other reconciliation						
Other revenue per financial statements	\$ 15	\$ 67	\$ 17	\$ 1,646	\$ (74)	\$ 1,671
General expenses per financial statements	(42)	(135)	(29)	(715)	(81)	(1,002)
Commission related to non-insurance contracts	(3)	(14)	2	(316)	11	(320)
Interest expense per financial statements	(8)	(196)	(4)	(5)	(124)	(337)
Total financial statements values included in Other	(38)	(278)	(14)	610	(268)	12
Less: Reclassify Other in each of Manulife Bank in Canada and Global WAM to its own line of the DOE	-	252	-	(610)	-	(358)
Less: Consolidation adjustments ⁽¹⁾	-	-	-	-	101	101
Other	(1)	(1)	(1)	-	-	(3)
Other	(39)	(27)	(15)	-	(167)	(248)
Less: Other attributed to:						
Items excluded from core earnings	-	-	-	-	22	22
NCI	-	-	-	-	-	-
Participating policyholders	(7)	(1)	-	-	-	(8)
Add: Par earnings transfer to shareholders	20	(2)	-	-	-	18
Core Other	(12)	(28)	(15)	-	(189)	(244)
Core Other, CER adjustment ⁽²⁾	(1)	-	(1)	-	1	(1)
Core Other, CER basis	\$ (13)	\$ (28)	\$ (16)	\$ -	\$ (188)	\$ (245)
Income tax recoveries (expenses) reconciliation						
Income tax recoveries (expenses) per financial statements	\$ (102)	\$ (14)	\$ 23	\$ (60)	\$ 379	\$ 226
IFRS 9 transitional impacts	(20)	(121)	19	-	(2)	(124)
Transitional income tax recoveries (expenses)	(122)	(135)	42	(60)	377	102
Less: Transitional income tax recoveries (expenses) attributed to:						
Items excluded from core earnings	(18)	6	138	(13)	306	419
NCI	(13)	-	-	-	-	(13)
Participating policyholders	(9)	(60)	-	-	-	(69)
Core income tax recoveries (expenses)	(82)	(81)	(96)	(47)	71	(235)
Core income tax recoveries (expenses), CER adjustment ⁽²⁾	1	(1)	1	(1)	-	-
Core income tax recoveries (expenses), CER basis	\$ (81)	\$ (82)	\$ (95)	\$ (48)	\$ 71	\$ (235)
Net income (loss) attributed to NCI	\$ 32	\$ -	\$ -	\$ -	\$ 1	\$ 33
IFRS 9 transitional impacts	2	-	-	-	-	2
Transitional net income (loss) to NCI	\$ 34	\$ -	\$ -	\$ -	\$ 1	\$ 35
Net income (loss) attributed to participating policyholders	\$ (47)	\$ 22	\$ -	\$ -	\$ -	\$ (25)
IFRS 9 transitional impacts	13	-	-	-	-	13
Transitional net income (loss) to participating policyholders	\$ (34)	\$ 22	\$ -	\$ -	\$ -	\$ (12)
Transitional net income (loss) before income taxes, CER basis⁽³⁾						
Net insurance service result	\$ 487	\$ 301	\$ 127	\$ -	\$ 49	\$ 964
Net investment result	166	(69)	(260)	-	62	(101)
Global WAM	-	-	-	458	-	458
Manulife Bank	-	72	-	-	-	72
Other	(41)	(27)	(16)	-	(167)	(251)
Transitional net income (loss) before income taxes, CER basis	\$ 612	\$ 277	\$ (149)	\$ 458	\$ (56)	\$ 1,142

⁽¹⁾ Consolidation adjustments in Other DOE line reclassified to net investment result DOE line.

⁽²⁾ The impact of updating foreign exchange rates to that which was used in 4Q23.

⁽³⁾ DOE on a CER basis adjusted to reflect the foreign exchange rates for the Statement of Income in effect for 4Q23.

The contractual service margin (“CSM”) is a liability that represents future unearned profits on insurance contracts written. It is a component of our insurance and reinsurance contract liabilities on our Statement of Financial Position. Organic and inorganic changes in CSM include amounts attributed to participating shareholders and non-controlling interests. **CSM growth** is the percentage change in the CSM net of NCI compared with a prior period on a constant exchange rate basis.

Changes in CSM that are classified as organic include the following impacts:

- **Impact of new business** is the impact on CSM from insurance contracts initially recognized in the period and includes acquisition expense related gains (losses) which impact the CSM in the period. It excludes the impact on CSM from entering into new in-force reinsurance contracts which would generally be considered a management action;
- **Expected movement related to finance income or expenses** includes interest accreted on the CSM during the period and the expected change in the CSM on VFA contracts if returns are as expected;
- **CSM recognized for service provided** is the portion of the CSM that is recognized in net income for service provided in the period; and
- **Insurance experience gains (losses) and other** is primarily the change in the CSM balance from experience variances that relate to future periods. This includes persistency experience and changes in future period cash flows caused by other current period experience.

Changes in CSM that are classified as inorganic include:

- **Changes in actuarial methods and assumptions that adjust the CSM;**
- **Effect of movement in exchange rates** over the reporting period;
- **Impact of markets;** and
- **Reinsurance transactions, tax-related and other items** that reflects the impact related to future cash flows from items such as gains or losses on disposition of a business, the impact of enacted or substantially enacted income tax rate changes, material one-time only adjustments that are exceptional in nature and other amounts not specifically captured in the previous inorganic items.

Post-tax CSM is used in the definition of financial leverage ratio and consolidated capital and is calculated as the CSM adjusted for the marginal income tax rate in the jurisdictions that report a CSM balance. **Post-tax CSM net of NCI** is used in the adjusted book value per share calculation and is calculated as the CSM excluding non-controlling interests adjusted for the marginal income tax rate in the jurisdictions that report this balance.

New business CSM is the impact of new business defined above, excluding CSM attributed to non-controlling interests. **New business CSM growth** is the percentage change in the New business CSM net of NCI compared with a prior period on a constant exchange rate basis.

CSM and post-tax CSM information

(\$ millions and based on actual foreign exchange rates in effect in the applicable reporting period, unless otherwise stated)

As at	Dec 31, 2023	Sept 30, 2023	June 30, 2023	Mar 31, 2023	Dec 31, 2022
CSM	\$ 21,301	\$ 18,149	\$ 18,103	\$ 18,200	\$ 17,977
Less: CSM for NCI	(861)	(780)	(680)	(733)	(694)
CSM, net of NCI	\$ 20,440	\$ 17,369	\$ 17,423	\$ 17,467	\$ 17,283
CER adjustment ⁽¹⁾	380	116	324	(171)	(138)
CSM, net of NCI, CER basis	\$ 20,820	\$ 17,485	\$ 17,747	\$ 17,296	\$ 17,145
CSM by segment					
Asia	\$ 12,617	\$ 10,030	\$ 9,630	\$ 9,678	\$ 9,420
Asia NCI	861	780	680	733	694
Canada	4,060	3,662	3,656	3,659	3,675
U.S.	3,738	3,651	4,106	4,080	4,136
Corporate and Other	25	26	31	50	52
CSM	\$ 21,301	\$ 18,149	\$ 18,103	\$ 18,200	\$ 17,977
CSM, CER adjustment⁽¹⁾					
Asia	\$ 269	\$ 100	\$ 207	\$ (195)	\$ (157)
Asia NCI	12	12	22	(33)	(23)
Canada	-	-	-	-	-
U.S.	110	16	117	24	19
Corporate and Other	-	-	-	-	-
Total	\$ 391	\$ 128	\$ 346	\$ (204)	\$ (161)
CSM, CER basis					
Asia	\$ 12,886	\$ 10,130	\$ 9,837	\$ 9,483	\$ 9,263
Asia NCI	873	792	702	700	671
Canada	4,060	3,662	3,656	3,659	3,675
U.S.	3,848	3,667	4,223	4,104	4,155
Corporate and Other	25	26	31	50	52
Total CSM, CER basis	\$ 21,692	\$ 18,277	\$ 18,449	\$ 17,996	\$ 17,816
Post-tax CSM					
CSM	\$ 21,301	\$ 18,149	\$ 18,103	\$ 18,200	\$ 17,977
Marginal tax rate on CSM	(2,798)	(2,474)	(2,645)	(2,724)	(2,726)
Post-tax CSM	\$ 18,503	\$ 15,675	\$ 15,458	\$ 15,476	\$ 15,251
CSM, net of NCI	\$ 20,440	\$ 17,369	\$ 17,423	\$ 17,467	\$ 17,283
Marginal tax rate on CSM net of NCI	(2,692)	(2,377)	(2,546)	(2,617)	(2,624)
Post-tax CSM net of NCI	\$ 17,748	\$ 14,992	\$ 14,877	\$ 14,850	\$ 14,659

⁽¹⁾ The impact of reflecting CSM and CSM net of NCI using the foreign exchange rates for the Statement of Financial Position in effect for 4Q23.

New business CSM detail, CER basis

(\$ millions pre-tax, and based on actual foreign exchange rates in effect in the applicable reporting period, unless otherwise stated)

	Quarterly Results					Full Year Results	
	4Q23	3Q23	2Q23	1Q23	4Q22	2023	2022
New business CSM, net of NCI							
Hong Kong	\$ 199	\$ 167	\$ 191	\$ 119	\$ 110	\$ 676	\$ 437
Japan	42	29	19	36	28	126	140
Asia Other	173	206	222	146	186	747	732
<i>International High Net Worth</i>						231	197
<i>Mainland China</i>						138	12
<i>Singapore</i>						244	189
<i>Vietnam</i>						87	305
<i>Other Emerging Markets</i>						47	29
Asia	414	402	432	301	324	1,549	1,309
Canada	70	51	57	46	47	224	199
U.S.	142	54	103	95	71	394	387
Total new business CSM net of NCI	626	507	592	442	442	2,167	1,895
Asia NCI	39	46	38	19	-	142	20
Total impact of new insurance business in CSM	\$ 665	\$ 553	\$ 630	\$ 461	\$ 442	\$ 2,309	\$ 1,915
New business CSM, net of NCI, CER adjustment^{(1),(2)}							
Hong Kong	\$ -	\$ 3	\$ 3	\$ 1	\$ -	\$ 7	\$ 20
Japan	-	(1)	(1)	(3)	(1)	(5)	(10)
Asia Other	-	5	(1)	(3)	2	1	22
<i>International High Net Worth</i>						3	7
<i>Mainland China</i>						-	-
<i>Singapore</i>						2	13
<i>Vietnam</i>						(2)	3
<i>Other Emerging Markets</i>						(2)	(1)
Asia	-	7	1	(5)	1	3	32
Canada	-	-	-	-	-	-	-
U.S.	-	1	1	1	-	3	20
Total new business CSM net of NCI	-	8	2	(4)	1	6	52
Asia NCI	-	-	-	(1)	(1)	(1)	(1)
Total impact of new insurance business in CSM	\$ -	\$ 8	\$ 2	\$ (5)	\$ -	\$ 5	\$ 51
New business CSM net of NCI, CER basis							
Hong Kong	\$ 199	\$ 170	\$ 194	\$ 120	\$ 110	\$ 683	\$ 457
Japan	42	28	18	33	27	121	130
Asia Other	173	211	221	143	188	748	754
<i>International High Net Worth</i>						234	204
<i>Mainland China</i>						138	12
<i>Singapore</i>						246	202
<i>Vietnam</i>						85	308
<i>Other Emerging Markets</i>						45	28
Asia	414	409	433	296	325	1,552	1,341
Canada	70	51	57	46	47	224	199
U.S.	142	55	104	96	71	397	407
Total new business CSM net of NCI, CER basis	626	515	594	438	443	2,173	1,947
Asia NCI, CER basis	39	46	38	18	(1)	141	19
Total impact of new insurance business in CSM, CER basis	\$ 665	\$ 561	\$ 632	\$ 456	\$ 442	\$ 2,314	\$ 1,966

⁽¹⁾ The impact of updating foreign exchange rates to that which was used in 4Q23.

⁽²⁾ New business CSM for Asia Other is reported by country annually, on a full year basis. Other Emerging Markets within Asia Other include Indonesia, the Philippines, Malaysia, Thailand, Cambodia and Myanmar.

The Company also uses financial performance measures that are prepared on a **constant exchange rate basis**, which exclude the impact of currency fluctuations (from local currency to Canadian dollars at a total Company level and from local currency to U.S. dollars in Asia). Such financial measures may be stated on a constant exchange rate basis or the percentage growth/decline in the financial measure on a constant exchange rate basis, using the income statement and balance sheet exchange rates effective for the fourth quarter of 2023.

Information supporting constant exchange rate basis for GAAP and non-GAAP financial measures is presented below and throughout this section.

Basic EPS and diluted EPS, CER basis is equal to common shareholders' net income on a CER basis divided by the weighted average common shares outstanding and diluted weighted common shares outstanding, respectively.

General expenses, CER basis

(\$ millions, and based on actual foreign exchange rates in effect in the applicable reporting period, unless otherwise stated)

	Quarterly Results					Full Year Results	
	4Q23	3Q23	2Q23	1Q23	4Q22	2023	2022
General expenses	\$ 1,180	\$ 1,042	\$ 1,022	\$ 1,086	\$ 1,002	\$ 4,330	\$ 3,731
CER adjustment ⁽¹⁾	-	9	8	3	4	20	100
General expenses, CER basis	\$ 1,180	\$ 1,051	\$ 1,030	\$ 1,089	\$ 1,006	\$ 4,350	\$ 3,831

⁽¹⁾ The impact of updating foreign exchange rates to that which was used in 4Q23.

Net income financial measures on a CER basis

(\$ Canadian millions, post-tax and based on actual foreign exchange rates in effect in the applicable reporting period, unless otherwise stated)

	Quarterly Results					Full Year Results	
	4Q23	3Q23	2Q23	1Q23	4Q22	2023	2022
Net income (loss) attributed to shareholders:							
Asia	\$ 615	\$ 84	\$ 130	\$ 519	\$ 315	\$ 1,348	\$ 683
Canada	365	290	227	309	(73)	1,191	(503)
U.S.	198	72	183	186	(44)	639	(2,316)
Global WAM	365	318	317	297	401	1,297	1,121
Corporate and Other	116	249	168	95	316	628	(918)
Total net income (loss) attributed to shareholders	1,659	1,013	1,025	1,406	915	5,103	(1,933)
Preferred share dividends and other equity distributions	(99)	(54)	(98)	(52)	(97)	(303)	(260)
Common shareholders' net income (loss)	\$ 1,560	\$ 959	\$ 927	\$ 1,354	\$ 818	\$ 4,800	\$ (2,193)
CER adjustment⁽¹⁾							
Asia	\$ -	\$ 2	\$ 13	\$ 1	\$ 19	\$ 16	\$ 274
Canada	-	1	1	(2)	(2)	-	78
U.S.	-	-	11	1	(2)	12	(160)
Global WAM	-	4	4	-	(1)	8	16
Corporate and Other	-	(7)	(9)	(1)	(11)	(17)	(86)
Total net income (loss) attributed to shareholders	-	-	20	(1)	3	19	122
Preferred share dividends and other equity distributions	-	-	-	-	-	-	-
Common shareholders' net income (loss)	\$ -	\$ -	\$ 20	\$ (1)	\$ 3	\$ 19	\$ 122
Net income (loss) attributed to shareholders, CER basis							
Asia	\$ 615	\$ 86	\$ 143	\$ 520	\$ 334	\$ 1,364	\$ 957
Canada	365	291	228	307	(75)	1,191	(425)
U.S.	198	72	194	187	(46)	651	(2,476)
Global WAM	365	322	321	297	400	1,305	1,137
Corporate and Other	116	242	159	94	305	611	(1,004)
Total net income (loss) attributed to shareholders, CER basis	1,659	1,013	1,045	1,405	918	5,122	(1,811)
Preferred share dividends and other equity distributions, CER basis	(99)	(54)	(98)	(52)	(97)	(303)	(260)
Common shareholders' net income (loss), CER basis	\$ 1,560	\$ 959	\$ 947	\$ 1,353	\$ 821	\$ 4,819	\$ (2,071)
Asia net income attributed to shareholders, U.S. dollars							
Asia net income (loss) attributed to shareholders, US \$(²)	\$ 452	\$ 63	\$ 96	\$ 384	\$ 231	\$ 995	\$ 516
CER adjustment, US \$(¹)	-	-	9	(2)	14	7	186
Asia net income (loss) attributed to shareholders, U.S. \$, CER basis⁽¹⁾	\$ 452	\$ 63	\$ 105	\$ 382	\$ 245	\$ 1,002	\$ 702
Net income (loss) attributed to shareholders (pre-tax)							
Net income (loss) attributed to shareholders (post-tax)	\$ 1,659	\$ 1,013	\$ 1,025	\$ 1,406	\$ 915	\$ 5,103	\$ (1,933)
Tax on net income attributed to shareholders	288	(67)	242	287	(307)	750	(1,241)
Net income (loss) attributed to shareholders (pre-tax)	1,947	946	1,267	1,693	608	5,853	(3,174)
CER adjustment ⁽¹⁾	-	7	21	(9)	4	19	(110)
Net income (loss) attributed to shareholders (pre-tax), CER basis	\$ 1,947	\$ 953	\$ 1,288	\$ 1,684	\$ 612	\$ 5,872	\$ (3,284)

⁽¹⁾ The impact of updating foreign exchange rates to that which was used in 4Q23.

⁽²⁾ Asia net income attributed to shareholders (post-tax) in Canadian dollars is translated to U.S. dollars using the U.S. dollar Statement of Income rate for the reporting period.

Transitional net income financial measures on a CER basis

(\$ Canadian millions, post-tax and based on actual foreign exchange rates in effect in the applicable reporting period, unless otherwise stated)

	Quarterly Results				Full Year Results
	4Q22	3Q22	2Q22	1Q22	2022
Transitional net income (loss) attributed to shareholders:					
Asia	\$ 493	\$ 176	\$ (227)	\$ 205	\$ 647
Canada	120	481	271	326	1,198
U.S.	(106)	314	355	885	1,448
Global WAM	401	287	150	283	1,121
Corporate and Other	320	(481)	(381)	(374)	(916)
Total transitional net income (loss) attributed to shareholders	1,228	777	168	1,325	3,498
Preferred share dividends and other equity distributions	(97)	(51)	(60)	(52)	(260)
Common shareholders' transitional net income (loss)	\$ 1,131	\$ 726	\$ 108	\$ 1,273	\$ 3,238
CER adjustment⁽¹⁾					
Asia	\$ 14	\$ 32	\$ 34	\$ 62	\$ 142
Canada	(3)	13	7	12	29
U.S.	(2)	16	(4)	58	68
Global WAM	(1)	8	2	8	17
Corporate and Other	(10)	(23)	(22)	(31)	(86)
Total CER adjustment—transitional net income attributed to shareholders	(2)	46	17	109	170
Preferred share dividends and other equity distributions	—	—	—	—	—
Common shareholders' transitional net income (loss)	\$ (2)	\$ 46	\$ 17	\$ 109	\$ 170
Transitional net income (loss) attributed to shareholders, CER basis					
Asia	\$ 507	\$ 208	\$ (193)	\$ 267	\$ 789
Canada	117	494	278	338	1,227
U.S.	(108)	330	351	943	1,516
Global WAM	400	295	152	291	1,138
Corporate and Other	310	(504)	(403)	(405)	(1,002)
Total transitional net income (loss) attributed to shareholders, CER basis	1,226	823	185	1,434	3,668
Preferred share dividends and other equity distributions, CER basis	(97)	(51)	(60)	(52)	(260)
Common shareholders' net income (loss), CER basis	\$ 1,129	\$ 772	\$ 125	\$ 1,382	\$ 3,408
Asia transitional net income attributed to shareholders, U.S. dollars					
Asia transitional net income (loss) attributed to shareholders, US \$ ⁽²⁾	\$ 363	\$ 134	\$ (177)	\$ 161	\$ 481
CER adjustment, US \$ ⁽¹⁾	9	19	35	35	98
Asia transitional net income (loss) attributed to shareholders, U.S. \$, CER basis⁽¹⁾	\$ 372	\$ 153	\$ (142)	\$ 196	\$ 579
Transitional net income (loss) attributed to shareholders (pre-tax)					
Transitional net income (loss) attributed to shareholders (post-tax)	\$ 1,228	\$ 777	\$ 168	\$ 1,325	\$ 3,498
Tax on transitional net income attributed to shareholders	(184)	200	230	403	649
Transitional net income (loss) attributed to shareholders (pre-tax)	1,044	977	398	1,728	4,147
CER adjustment ⁽¹⁾	(6)	29	62	121	206
Transitional net income (loss) attributed to shareholders (pre-tax), CER basis	\$ 1,038	\$ 1,006	\$ 460	\$ 1,849	\$ 4,353

⁽¹⁾ The impact of updating foreign exchange rates to that which was used in 4Q23.

⁽²⁾ Asia transitional net income attributed to shareholders (post-tax) in Canadian dollars is translated to U.S. dollars using the U.S. dollar Statement of Income rate for the reporting period.

Transitional ROE measures profitability in 2022 using common shareholders' transitional net income (loss) as a percentage of capital deployed to earn that income. The Company calculates transitional ROE using average common shareholders' equity quarterly, as the average of common shareholders' equity at the start and end of the quarter, and annually, as the average of the quarterly average common shareholders' equity for the year. Transitional ROE is a temporary measure and will only be reported for 2022 comparative periods in our annual 2023 MD&A.

(\$ millions, unless otherwise stated)	Quarterly Results				Full Year Results
	4Q22	3Q22	2Q22	1Q22	2022
Total transitional net income (loss) attributed to shareholders	\$ 1,228	\$ 777	\$ 168	\$ 1,325	\$ 3,498
Preferred share dividends and other equity distributions	(97)	(51)	(60)	(52)	(260)
Common shareholders transitional net income (loss)	\$ 1,131	\$ 726	\$ 108	\$ 1,273	\$ 3,238
Annualized common shareholders transitional net income (loss)	\$ 4,487	\$ 2,876	\$ 437	\$ 5,163	\$ 3,238
Average common shareholders' equity	\$ 40,667	\$ 40,260	\$ 39,095	\$ 38,881	\$ 39,726
Transitional ROE (annualized) (%)	11.0%	7.1%	1.1%	13.3%	8.2%

Transitional basic EPS and transitional diluted EPS is equal to transitional common shareholders' net income divided by the weighted average common shares outstanding and diluted weighted common shares outstanding, respectively. **Transitional basic EPS and transitional diluted EPS, CER basis** is equal to transitional common shareholders' net income on a CER basis divided by the weighted average common shares outstanding and diluted weighted common shares outstanding, respectively. Each of these EPS measures are temporary and will only be reported for 2022 comparative periods in our annual 2023 MD&A.

AUMA is a financial measure of the size of the Company. It is comprised of AUM and AUA. AUM includes assets of the General Account, consisting of total invested assets and segregated funds net assets, and external client assets for which we provide investment management services, consisting of mutual fund, institutional asset management and other fund net assets. AUA are assets for which we provide administrative services only. Assets under management and administration is a common industry metric for wealth and asset management businesses.

Our Global WAM business also manages assets on behalf of other segments of the Company. **Global WAM-managed AUMA** is a financial measure equal to the sum of Global WAM's AUMA and assets managed by Global WAM on behalf of other segments. It is an important measure of the assets managed by Global WAM.

AUM and AUMA reconciliations

(Canadian \$ in millions, and based on actual foreign exchange rates in effect in the applicable reporting period, unless otherwise stated)

As at	CAD \$						US \$(4)	
	December 31, 2023						December 31, 2023	
	Asia	Canada	U.S.	Global WAM	Corporate and Other	Total	Asia	U.S.
Total invested assets								
Manulife Bank net lending assets	\$ -	\$ 25,321	\$ -	\$ -	\$ -	\$ 25,321	\$ -	\$ -
Derivative reclassification(1)	-	-	-	-	3,201	3,201	-	-
Invested assets excluding above items	144,433	86,135	133,959	7,090	17,071	388,688	109,533	101,592
Total	144,433	111,456	133,959	7,090	20,272	417,210	109,533	101,592
Segregated funds net assets								
Segregated funds net assets – Institutional	-	-	-	3,328	-	3,328	-	-
Segregated funds net assets – Other(2)	24,854	36,085	68,585	244,738	(46)	374,216	18,846	52,014
Total	24,854	36,085	68,585	248,066	(46)	377,544	18,846	52,014
AUM per financial statements	169,287	147,541	202,544	255,156	20,226	794,754	128,379	153,606
Mutual funds	-	-	-	277,365	-	277,365	-	-
Institutional asset management(3)	-	-	-	119,161	-	119,161	-	-
Other funds	-	-	-	15,435	-	15,435	-	-
Total AUM	169,287	147,541	202,544	667,117	20,226	1,206,715	128,379	153,606
Assets under administration	-	-	-	182,046	-	182,046	-	-
Total AUMA	\$ 169,287	\$ 147,541	\$ 202,544	\$ 849,163	\$ 20,226	\$ 1,388,761	\$ 128,379	\$ 153,606
Total AUMA, US \$(4)						\$ 1,053,209		
Total AUMA	\$ 169,287	\$ 147,541	\$ 202,544	\$ 849,163	\$ 20,226	\$ 1,388,761		
CER adjustment(5)	-	-	-	-	-	-		
Total AUMA, CER basis	\$ 169,287	\$ 147,541	\$ 202,544	\$ 849,163	\$ 20,226	\$ 1,388,761		
Global WAM Managed AUMA								
Global WAM AUMA				\$ 849,163				
AUM managed by Global WAM for Manulife's other segments				205,814				
Total				\$ 1,054,977				

(1) Corporate and Other consolidation adjustment related to net derivative assets reclassified from total invested assets to other lines on the Statement of Financial Position.

(2) Corporate and Other segregated funds net asset represents elimination of amounts held by the Company.

(3) Institutional asset management excludes Institutional segregated funds net assets.

(4) US \$ AUMA is calculated as total AUMA in Canadian \$ divided by the US \$ exchange rate in effect at the end of the quarter.

(5) The impact of updating foreign exchange rates to that which was used in 4Q23.

As at	CAD \$						US \$(4)	
	September 30, 2023						September 30, 2023	
	Asia	Canada	U.S.	Global WAM	Corporate and Other	Total	Asia	U.S.
Total invested assets								
Manulife Bank net lending assets	\$ -	\$ 25,123	\$ -	\$ -	\$ -	\$ 25,123	\$ -	\$ -
Derivative reclassification(1)	-	-	-	-	8,141	8,141	-	-
Invested assets excluding above items	135,820	78,377	128,790	6,723	15,762	365,472	100,438	95,259
Total	135,820	103,500	128,790	6,723	23,903	398,736	100,438	95,259
Segregated funds net assets								
Segregated funds net assets – Institutional	-	-	-	3,477	-	3,477	-	-
Segregated funds net assets – Other(2)	23,769	34,448	64,796	230,469	(47)	353,435	17,587	47,926
Total	23,769	34,448	64,796	233,946	(47)	356,912	17,587	47,926
AUM per financial statements	159,589	137,948	193,586	240,669	23,856	755,648	118,025	143,185
Mutual funds	-	-	-	266,069	-	266,069	-	-
Institutional asset management(3)	-	-	-	111,754	-	111,754	-	-
Other funds	-	-	-	14,359	-	14,359	-	-
Total AUM	159,589	137,948	193,586	632,851	23,856	1,147,830	118,025	143,185
Assets under administration	-	-	-	173,897	-	173,897	-	-
Total AUMA	\$ 159,589	\$ 137,948	\$ 193,586	\$ 806,748	\$ 23,856	\$ 1,321,727	\$ 118,025	\$ 143,185
Total AUMA, US \$(4)						\$ 977,609		
Total AUMA	\$ 159,589	\$ 137,948	\$ 193,586	\$ 806,748	\$ 23,856	\$ 1,321,727		
CER adjustment(5)	(1,150)	-	(4,758)	(12,683)	-	(18,591)		
Total AUMA, CER basis	\$ 158,439	\$ 137,948	\$ 188,828	\$ 794,065	\$ 23,856	\$ 1,303,136		
Global WAM Managed AUMA								
Global WAM AUMA				\$ 806,748				
AUM managed by Global WAM for Manulife's other segments				201,407				
Total				\$ 1,008,155				

Note: For footnotes (1) to (5), refer to the "AUM and AUMA reconciliation" table as at December 31, 2023 above.

As at	CAD \$						US \$(4)	
	June 30, 2023						June 30, 2023	
	Asia	Canada	U.S.	Global WAM	Corporate and Other	Total	Asia	U.S.
Total invested assets								
Manulife Bank net lending assets	\$ -	\$ 25,003	\$ -	\$ -	\$ -	\$ 25,003	\$ -	\$ -
Derivative reclassification ⁽¹⁾	-	-	-	-	3,895	3,895	-	-
Invested assets excluding above items	135,208	83,026	132,133	5,464	18,699	374,530	102,166	99,855
Total	135,208	108,029	132,133	5,464	22,594	403,428	102,166	99,855
Segregated funds net assets								
Segregated funds net assets – Institutional	-	-	-	3,564	-	3,564	-	-
Segregated funds net assets – Other ⁽²⁾	24,052	35,993	67,303	235,113	(44)	362,417	18,182	50,862
Total	24,052	35,993	67,303	238,677	(44)	365,981	18,182	50,862
AUM per financial statements	159,260	144,022	199,436	244,141	22,550	769,409	120,348	150,717
Mutual funds	-	-	-	267,835	-	267,835	-	-
Institutional asset management ⁽³⁾	-	-	-	112,491	-	112,491	-	-
Other funds	-	-	-	14,674	-	14,674	-	-
Total AUM	159,260	144,022	199,436	639,141	22,550	1,164,409	120,348	150,717
Assets under administration	-	-	-	180,430	-	180,430	-	-
Total AUMA	\$ 159,260	\$ 144,022	\$ 199,436	\$ 819,571	\$ 22,550	\$ 1,344,839	\$ 120,348	\$ 150,717
Total AUMA, US \$(4)						\$ 1,016,277		
Total AUMA	\$ 159,260	\$ 144,022	\$ 199,436	\$ 819,571	\$ 22,550	\$ 1,344,839		
CER adjustment ⁽⁵⁾	844	-	(691)	(1,189)	-	(1,036)		
Total AUMA, CER basis	\$ 160,104	\$ 144,022	\$ 198,745	\$ 818,382	\$ 22,550	\$ 1,343,803		
Global WAM Managed AUMA								
Global WAM AUMA				\$ 819,571				
AUM managed by Global WAM for Manulife's other segments				203,825				
Total				\$ 1,023,396				

Note: For footnotes (1) to (5), refer to the "AUM and AUMA reconciliation" table as at December 31, 2023 above.

As at	CAD \$						US \$ ⁽⁴⁾	
	March 31, 2023						March 31, 2023	
	Asia	Canada	U.S.	Global WAM	Corporate and Other	Total	Asia	U.S.
Total invested assets								
Manulife Bank net lending assets	\$ -	\$ 24,747	\$ -	\$ -	\$ -	\$ 24,747	\$ -	\$ -
Derivative reclassification ⁽¹⁾	-	-	-	-	3,488	3,488	-	-
Invested assets excluding above items	138,029	82,733	136,454	5,565	21,460	384,241	102,014	100,827
Total	138,029	107,480	136,454	5,565	24,948	412,476	102,014	100,827
Segregated funds net assets								
Segregated funds net assets – Institutional	-	-	-	3,718	-	3,718	-	-
Segregated funds net assets – Other ⁽²⁾	24,203	36,374	67,935	231,860	(46)	360,326	17,893	50,197
Total	24,203	36,374	67,935	235,578	(46)	364,044	17,893	50,197
AUM per financial statements	162,232	143,854	204,389	241,143	24,902	776,520	119,907	151,024
Mutual funds	-	-	-	267,767	-	267,767	-	-
Institutional asset management ⁽³⁾	-	-	-	113,781	-	113,781	-	-
Other funds	-	-	-	14,302	-	14,302	-	-
Total AUM	162,232	143,854	204,389	636,993	24,902	1,172,370	119,907	151,024
Assets under administration	-	-	-	177,510	-	177,510	-	-
Total AUMA	\$ 162,232	\$ 143,854	\$ 204,389	\$ 814,503	\$ 24,902	\$ 1,349,880	\$ 119,907	\$ 151,024
Total AUMA, US \$⁽⁴⁾						\$ 997,399		
Total AUMA	\$ 162,232	\$ 143,854	\$ 204,389	\$ 814,503	\$ 24,902	\$ 1,349,880		
CER adjustment ⁽⁵⁾	(5,870)	-	(5,241)	(16,714)	-	(27,825)		
Total AUMA, CER basis	\$ 156,362	\$ 143,854	\$ 199,148	\$ 797,789	\$ 24,902	\$ 1,322,055		
Global WAM Managed AUMA								
Global WAM AUMA				\$ 814,503				
AUM managed by Global WAM for Manulife's other segments				208,013				
Total				\$ 1,022,516				

Note: For footnotes (1) to (5), refer to the "AUM and AUMA reconciliation" table as at December 31, 2023 above.

As at	CAD \$						US \$(4)	
	December 31, 2022						December 31, 2022	
	Asia	Canada	U.S.	Global WAM	Corporate and Other	Total	Asia	U.S.
Total invested assets								
Manulife Bank net lending assets	\$ -	\$ 24,779	\$ -	\$ -	\$ -	\$ 24,779	\$ -	\$ -
Derivative reclassification ⁽¹⁾	-	-	-	-	5,701	5,701	-	-
Invested assets excluding above items	132,808	82,150	133,635	5,752	15,317	369,662	98,007	98,628
Total	132,808	106,929	133,635	5,752	21,018	400,142	98,007	98,628
Segregated funds net assets								
Segregated funds net assets – Institutional	-	-	-	3,719	-	3,719	-	-
Segregated funds net assets – Other ⁽²⁾	23,227	35,695	65,490	220,471	(40)	348,843	17,138	48,333
Total	23,227	35,695	65,490	224,190	(40)	348,562	17,138	48,333
AUM per financial statements	156,035	142,624	199,125	229,942	20,978	748,704	115,145	146,961
Mutual funds	-	-	-	258,273	-	258,273	-	-
Institutional asset management ⁽³⁾	-	-	-	109,740	-	109,740	-	-
Other funds	-	-	-	13,617	-	13,617	-	-
Total AUM	156,035	142,624	199,125	611,572	20,978	1,130,334	115,145	146,961
Assets under administration	-	-	-	170,768	-	170,768	-	-
Total AUMA	\$ 156,035	\$ 142,624	\$ 199,125	\$ 782,340	\$ 20,978	\$ 1,301,102	\$ 115,145	\$ 146,961
Total AUMA, US \$(4)						\$ 960,259		
Total AUMA	\$ 156,035	\$ 142,624	\$ 199,125	\$ 782,340	\$ 20,978	\$ 1,301,102		
CER adjustment ⁽⁵⁾	(5,632)	-	(5,343)	(16,437)	-	(27,412)		
Total AUMA, CER basis	\$ 150,403	\$ 142,624	\$ 193,782	\$ 765,903	\$ 20,978	\$ 1,273,690		
Global WAM Managed AUMA								
Global WAM AUMA				\$ 782,340				
AUM managed by Global WAM for Manulife's other segments				201,920				
Total				\$ 984,260				

Note: For footnotes (1) to (5), refer to the "AUM and AUMA reconciliation" table as at December 31, 2023 above.

Global WAM AUMA and Managed AUMA by business line and geographic source

(\$ millions, and based on actual foreign exchange rates in effect in the applicable reporting period, unless otherwise stated)

As at	Dec 31, 2023	Sept 30, 2023	June 30, 2023	Mar 31, 2023	Dec 31, 2022
Global WAM AUMA by business line					
Retirement	\$ 431,601	\$ 410,433	\$ 419,380	\$ 413,769	\$ 395,108
Retail	292,629	278,372	281,814	281,198	271,351
Institutional asset management	124,933	117,943	118,377	119,536	115,881
Total	\$ 849,163	\$ 806,748	\$ 819,571	\$ 814,503	\$ 782,340
Global WAM AUMA by business line, CER basis⁽¹⁾					
Retirement	\$ 431,601	\$ 402,570	\$ 418,219	\$ 405,460	\$ 386,836
Retail	292,629	274,485	281,457	275,827	266,039
Institutional asset management	124,933	117,010	118,706	116,502	113,028
Total	\$ 849,163	\$ 794,065	\$ 818,382	\$ 797,789	\$ 765,903
Global WAM AUMA by geographic source					
Asia	\$ 115,523	\$ 113,642	\$ 112,283	\$ 115,819	\$ 110,724
Canada	233,351	219,518	226,087	223,045	213,802
U.S.	500,289	473,588	481,201	475,639	457,814
Total	\$ 849,163	\$ 806,748	\$ 819,571	\$ 814,503	\$ 782,340
Global WAM AUMA by geographic source, CER basis⁽¹⁾					
Asia	\$ 115,523	\$ 112,655	\$ 112,784	\$ 111,316	\$ 106,562
Canada	233,351	219,518	226,087	223,045	213,802
U.S.	500,289	461,892	479,511	463,428	445,539
Total	\$ 849,163	\$ 794,065	\$ 818,382	\$ 797,789	\$ 765,903
Global WAM Managed AUMA by business line					
Retirement	\$ 431,601	\$ 410,433	\$ 419,380	\$ 413,769	\$ 395,108
Retail	368,843	351,384	357,539	358,098	346,200
Institutional asset management	254,533	246,338	246,477	250,649	242,952
Total	\$ 1,054,977	\$ 1,008,155	\$ 1,023,396	\$ 1,022,516	\$ 984,260
Global WAM Managed AUMA by business line, CER basis⁽¹⁾					
Retirement	\$ 431,601	\$ 402,570	\$ 418,219	\$ 405,460	\$ 386,836
Retail	368,843	346,349	357,003	351,516	339,646
Institutional asset management	254,533	242,718	246,427	244,753	237,206
Total	\$ 1,054,977	\$ 991,637	\$ 1,021,649	\$ 1,001,729	\$ 963,688
Global WAM Managed AUMA by geographic source					
Asia	\$ 191,238	\$ 188,098	\$ 185,198	\$ 191,720	\$ 183,893
Canada	282,487	266,935	274,957	272,101	261,756
U.S.	581,252	553,122	563,241	558,695	538,611
Total	\$ 1,054,977	\$ 1,008,155	\$ 1,023,396	\$ 1,022,516	\$ 984,260
Global WAM Managed AUMA by geographic source, CER basis⁽¹⁾					
Asia	\$ 191,238	\$ 185,278	\$ 185,448	\$ 185,276	\$ 177,764
Canada	282,487	266,935	274,957	272,101	261,756
U.S.	581,252	539,424	561,244	544,352	524,168
Total	\$ 1,054,977	\$ 991,637	\$ 1,021,649	\$ 1,001,729	\$ 963,688

⁽¹⁾ AUMA adjusted to reflect the foreign exchange rates for the Statement of Financial Position in effect for 4Q23.

Average assets under management and administration (“average AUMA”) is the average of Global WAM’s AUMA during the reporting period. It is a measure used in analyzing and explaining fee income and earnings of our Global WAM segment. It is calculated as the average of the opening balance of AUMA and the ending balance of AUMA using daily balances where available and month-end or quarter-end averages when daily averages are unavailable. Similarly, Global WAM **average managed AUMA and average AUA** are the average of Global WAM’s managed AUMA and AUA, respectively, and are calculated in a manner consistent with average AUMA.

Manulife Bank net lending assets is a financial measure equal to the sum of Manulife Bank's loans and mortgages, net of allowances.

Manulife Bank average net lending assets is a financial measure which is calculated as the quarter-end average of the opening and the ending balance of net lending assets. Both of these financial measures are a measure of the size of Manulife Bank's portfolio of loans and mortgages and are used to analyze and explain its earnings.

As at (\$ millions)	Dec 31, 2023	Sept 30, 2023	June 30, 2023	Mar 31, 2023	Dec 31, 2022
Mortgages	\$ 52,421	\$ 51,012	\$ 51,459	\$ 52,128	\$ 51,765
Less: mortgages not held by Manulife Bank	29,536	28,402	29,088	30,087	29,767
Total mortgages held by Manulife Bank	22,885	22,610	22,371	22,041	21,998
Loans to Bank clients	2,436	2,513	2,632	2,706	2,781
Manulife Bank net lending assets	\$ 25,321	\$ 25,123	\$ 25,003	\$ 24,747	\$ 24,779
Manulife Bank average net lending assets					
Beginning of period	\$ 25,123	\$ 25,003	\$ 24,747	\$ 24,779	\$ 24,637
End of period	25,321	25,123	25,003	24,747	24,779
Manulife Bank average net lending assets by quarter	\$ 25,222	\$ 25,063	\$ 24,875	\$ 24,763	\$ 24,708
Manulife Bank average net lending assets – full year	\$ 25,050				\$ 24,113

Financial leverage ratio is a debt-to-equity ratio. With the adoption of IFRS 17 on January 1, 2023, the calculation of financial leverage ratio was updated to include the CSM on a post-tax basis, and prior period comparatives were updated. The ratio is calculated as the sum of long-term debt, capital instruments and preferred shares and other equity instruments divided by the sum of long-term debt, capital instruments, equity and post-tax CSM.

Adjusted book value is the sum of common shareholders' equity and post-tax CSM net of NCI. It is an important measure for monitoring growth and measuring insurance businesses' value. **Adjusted book value per common share** is calculated by dividing adjusted book value by the number of common shares outstanding at the end of the period.

As at (\$ millions)	Dec 31, 2023	Sept 30, 2023	June 30, 2023	Mar 31, 2023	Dec 31, 2022
Common shareholders' equity	\$ 40,379	\$ 40,747	\$ 39,047	\$ 40,715	\$ 40,216
Post-tax CSM, net of NCI	17,748	14,992	14,877	14,850	14,659
Adjusted book value	\$ 58,127	\$ 55,739	\$ 53,924	\$ 55,565	\$ 54,875

Consolidated capital serves as a foundation of our capital management activities at the MFC level. Consolidated capital is calculated as the sum of: (i) total equity excluding accumulated other comprehensive income ("AOCI") on cash flow hedges; (ii) post-tax CSM; and (iii) certain other capital instruments that qualify as regulatory capital. For regulatory reporting purposes under the LICAT framework, the numbers are further adjusted for various additions or deductions to capital as mandated by the guidelines defined by OSFI.

As at (\$ millions)	Dec 31, 2023	Sept 30, 2023	June 30, 2023	Mar 31, 2023	Dec 31, 2022
Total equity	\$ 48,727	\$ 49,035	\$ 47,156	\$ 48,751	\$ 48,226
Less: AOCI gain/(loss) on cash flow hedges	26	47	–	(38)	8
Total equity excluding AOCI on cash flow hedges	48,701	48,988	47,156	48,789	48,218
Post-tax CSM	18,503	15,675	15,458	15,476	15,251
Qualifying capital instruments	6,667	6,702	6,662	7,317	6,122
Consolidated capital	\$ 73,871	\$ 71,365	\$ 69,276	\$ 71,582	\$ 69,591

Core EBITDA is a financial measure which Manulife uses to better understand the long-term earnings capacity and valuation of our Global WAM business on a basis more comparable to how the profitability of global asset managers is generally measured. Core EBITDA presents core earnings before the impact of interest, taxes, depreciation, and amortization. Core EBITDA excludes certain acquisition expenses related to insurance contracts in our retirement businesses which are deferred and amortized over the expected lifetime of the customer relationship. Core EBITDA was selected as a key performance indicator for our Global WAM business, as EBITDA is widely used among asset management peers, and core earnings is a primary profitability metric for the Company overall.

Reconciliation of Global WAM core earnings to core EBITDA and Global WAM core EBITDA by business line and geographic source

(\$ millions, pre-tax and based on actual foreign exchange rates in effect in the applicable reporting period, unless otherwise stated)

	Quarterly Results					Full Year Results	
	4Q23	3Q23	2Q23	1Q23	4Q22	2023	2022
Global WAM core earnings (post-tax)	\$ 353	\$ 361	\$ 320	\$ 287	\$ 274	\$ 1,321	\$ 1,299
Add back taxes, acquisition costs, other expenses and deferred sales commissions							
Core income tax (expenses) recoveries (see above)	55	59	45	45	47	204	222
Amortization of deferred acquisition costs and other depreciation	45	41	40	40	43	166	154
Amortization of deferred sales commissions	21	19	19	21	25	80	98
Core EBITDA	\$ 474	\$ 480	\$ 424	\$ 393	\$ 389	\$ 1,771	\$ 1,773
CER adjustment ⁽¹⁾	-	4	3	1	1	8	51
Core EBITDA, CER basis	\$ 474	\$ 484	\$ 427	\$ 394	\$ 390	\$ 1,779	\$ 1,824
Core EBITDA by business line							
Retirement	\$ 265	\$ 242	\$ 233	\$ 217	\$ 211	\$ 957	\$ 883
Retail	175	190	168	171	181	704	796
Institutional asset management	34	48	23	5	(3)	110	94
Total	\$ 474	\$ 480	\$ 424	\$ 393	\$ 389	\$ 1,771	\$ 1,773
Core EBITDA by geographic source							
Asia	\$ 135	\$ 132	\$ 125	\$ 113	\$ 108	\$ 505	\$ 455
Canada	152	146	148	136	129	582	617
U.S.	187	202	151	144	152	684	701
Total	\$ 474	\$ 480	\$ 424	\$ 393	\$ 389	\$ 1,771	\$ 1,773
Core EBITDA by business line, CER basis⁽²⁾							
Retirement	\$ 265	\$ 244	\$ 235	\$ 218	\$ 211	\$ 962	\$ 912
Retail	175	191	168	171	183	705	813
Institutional asset management	34	49	24	5	(4)	112	99
Total, CER basis	\$ 474	\$ 484	\$ 427	\$ 394	\$ 390	\$ 1,779	\$ 1,824
Core EBITDA by geographic source, CER basis⁽²⁾							
Asia	\$ 135	\$ 133	\$ 127	\$ 112	\$ 108	\$ 507	\$ 472
Canada	152	146	148	136	129	582	617
U.S.	187	205	152	146	153	690	735
Total, CER basis	\$ 474	\$ 484	\$ 427	\$ 394	\$ 390	\$ 1,779	\$ 1,824

⁽¹⁾ The impact of updating foreign exchange rates to that which was used in 4Q23.

⁽²⁾ Core EBITDA adjusted to reflect the foreign exchange rates for the Statement of Income in effect for 4Q23.

Core EBITDA margin is a financial measure which Manulife uses to better understand the long-term profitability of our Global WAM business on a more comparable basis to how profitability of global asset managers are measured. Core EBITDA margin presents core earnings before the impact of interest, taxes, depreciation, and amortization divided by core revenue from these businesses. **Core revenue** is used to calculate our core EBITDA margin, and is equal to the sum of pre-tax other revenue and investment income in Global WAM included in core EBITDA, and it excludes such items as revenue related to integration and acquisitions and market experience gains (losses). Core EBITDA margin was selected as a key performance indicator for our Global WAM business, as EBITDA margin is widely used among asset management peers, and core earnings is a primary profitability metric for the Company overall.

(\$ millions, unless otherwise stated)	Quarterly Results					Full Year Results	
	4Q23	3Q23	2Q23	1Q23	4Q22	2023	2022
Core EBITDA margin							
Core EBITDA	\$ 474	\$ 480	\$ 424	\$ 393	\$ 389	\$ 1,771	\$ 1,773
Core revenue	\$ 1,842	\$ 1,783	\$ 1,722	\$ 1,756	\$ 1,646	\$ 7,103	\$ 6,516
Core EBITDA margin	25.7%	26.9%	24.6%	22.4%	23.6%	24.9%	27.2%
Global WAM core revenue							
Other revenue per financial statements	\$ 1,719	\$ 1,645	\$ 1,691	\$ 1,691	\$ 1,671	\$ 6,746	\$ 6,186
Less: Other revenue in segments other than Global WAM	31	(64)	44	26	26	37	(205)
Other revenue in Global WAM (fee income)	\$ 1,688	\$ 1,709	\$ 1,647	\$ 1,665	\$ 1,645	\$ 6,709	\$ 6,391
Investment income per financial statements	\$ 4,497	\$ 4,028	\$ 4,135	\$ 3,520	\$ 4,271	\$ 16,180	\$ 15,204
Realized and unrealized gains (losses) on assets supporting insurance and investment contract liabilities per financial statements	2,674	(2,430)	950	1,944	(2,453)	3,138	(13,646)
Total investment income	7,171	1,598	5,085	5,464	1,818	19,318	1,558
Less: Investment income in segments other than Global WAM	6,941	1,578	5,010	5,357	1,672	18,886	1,659
Investment income in Global WAM	\$ 230	\$ 20	\$ 75	\$ 107	\$ 146	\$ 432	\$ (101)
Total other revenue and investment income in Global WAM	\$ 1,918	\$ 1,729	\$ 1,722	\$ 1,772	\$ 1,791	\$ 7,141	\$ 6,290
Less: Total revenue reported in items excluded from core earnings							
Market experience gains (losses)	63	(54)	7	12	55	28	(316)
Revenue related to integration and acquisitions	13	-	(7)	4	90	10	90
Global WAM core revenue	\$ 1,842	\$ 1,783	\$ 1,722	\$ 1,756	\$ 1,646	\$ 7,103	\$ 6,516

Expense measures

With the adoption of IFRS 17, we have replaced core general expenses with two new measures: core expenses and core expenditures. Under IFRS 17, expenses previously reported in general expenses are now reported as:

1. General expenses that flow directly through income;
2. Directly attributable maintenance expenses, which are reported in insurance service expenses and flow directly through income;
3. Directly attributable acquisition expenses for contracts measured using the PAA method which are reported in insurance service expenses, and flow directly through income; and
4. Directly attributable acquisition expenses that are capitalized into the CSM.

Total expenses include items 1 to 3 above and **total expenditures** include items 1 to 4 above.

Core expenses is used to calculate our expense efficiency ratio and is equal to total expenses that are included in core earnings and excludes such items as material legal provisions for settlements, restructuring charges and expenses related to integration and acquisitions.

(\$ millions, and based on actual foreign exchange rates in effect in the applicable reporting period, unless otherwise stated)

	Quarterly Results					Full Year Results	
	4Q23	3Q23	2Q23	1Q23	4Q22	2023	2022
Core expenses							
General expenses – Statements of Income	\$ 1,180	\$ 1,042	\$ 1,022	\$ 1,086	\$ 1,002	\$ 4,330	\$ 3,731
Directly attributable acquisition expense for contracts measured using the PAA method ⁽¹⁾	42	37	35	33	15	147	58
Directly attributable maintenance expense ⁽¹⁾	565	544	550	546	577	2,205	2,039
Total expenses	1,787	1,623	1,607	1,665	1,594	6,682	5,828
Less: General expenses included in items excluded from core earnings							
Restructuring charge	46	–	–	–	–	46	–
Integration and acquisition	8	–	–	–	18	8	26
Legal provisions and Other expenses	8	1	9	60	–	78	40
Total	62	1	9	60	18	132	66
Core expenses	\$ 1,725	\$ 1,622	\$ 1,598	\$ 1,605	\$ 1,576	\$ 6,550	\$ 5,762
CER adjustment ⁽²⁾	–	12	8	(4)	3	16	119
Core expenses, CER basis	\$ 1,725	\$ 1,634	\$ 1,606	\$ 1,601	\$ 1,579	\$ 6,566	\$ 5,881
Total expenses	\$ 1,787	\$ 1,623	\$ 1,607	\$ 1,665	\$ 1,594	\$ 6,682	\$ 5,828
CER adjustment ⁽²⁾	–	12	7	(3)	3	16	121
Total expenses, CER basis	\$ 1,787	\$ 1,635	\$ 1,614	\$ 1,662	\$ 1,597	\$ 6,698	\$ 5,949

⁽¹⁾ Expenses are components of insurance service expenses on the Statements of Income that flow directly through income.

⁽²⁾ The impact of updating foreign exchange rates to that which was used in 4Q23.

Core expenditures is used to calculate our expenditure efficiency ratio and is equal to total expenditures excluding such items as material legal provisions for settlements, restructuring charges and expenses related to integration and acquisitions. Total expenditures is equal to the sum of total expenses and costs that are directly attributable to the acquisition of new business that are capitalized into the CSM.

(\$ millions, and based on actual foreign exchange rates in effect in the applicable reporting period, unless otherwise stated)

	Quarterly Results					Full Year Results	
	4Q23	3Q23	2Q23	1Q23	4Q22	2023	2022
Core expenditures							
Total expenses	\$ 1,787	\$ 1,623	\$ 1,607	\$ 1,665	\$ 1,594	\$ 6,682	\$ 5,828
Directly attributable acquisition expenses capitalized through the CSM ⁽¹⁾	524	489	501	507	532	2,021	1,909
Total expenditures	2,311	2,112	2,108	2,172	2,126	8,703	7,737
Less: General expenses included in items excluded from core earnings (see core expenses reconciliation above)	62	1	9	60	18	132	66
Core expenditures	\$ 2,249	\$ 2,111	\$ 2,099	\$ 2,112	\$ 2,108	\$ 8,571	\$ 7,671
CER adjustment ⁽²⁾	–	16	5	(12)	1	9	136
Core expenditures, CER basis	\$ 2,249	\$ 2,127	\$ 2,104	\$ 2,100	\$ 2,109	\$ 8,580	\$ 7,807
Total expenditures	\$ 2,311	\$ 2,112	\$ 2,108	\$ 2,172	\$ 2,126	\$ 8,703	\$ 7,737
CER adjustment ⁽²⁾	–	15	3	(10)	1	8	138
Total expenditures, CER basis	\$ 2,311	\$ 2,127	\$ 2,111	\$ 2,162	\$ 2,127	\$ 8,711	\$ 7,875

⁽¹⁾ Expenses are components of insurance service expenses on the Statements of Income and are then capitalized to CSM.

⁽²⁾ The impact of updating foreign exchange rates to that which was used in 4Q23.

Expense efficiency ratio is a financial measure which Manulife uses to measure progress towards our target to be more efficient. It is defined as core expenses divided by the sum of core earnings before income taxes (“pre-tax core earnings”) and core expenses.

Expenditure efficiency ratio is a financial measure which Manulife uses to measure progress towards our target to be more efficient. It is defined as core expenditures divided by the sum of core earnings before income taxes (“pre-tax core earnings”) and core expenditures.

Embedded value (“EV”) is a measure of the present value of shareholders’ interests in the expected future distributable earnings on in-force business reflected in the Consolidated Statements of Financial Position of Manulife, excluding any value associated with future new business. EV is calculated as the sum of the adjusted net worth and the value of in-force business calculated as at December 31. The adjusted net worth is the IFRS shareholders’ equity adjusted for goodwill and intangible assets, fair value of surplus assets, the fair value of debt, preferred shares, and other equity, and local statutory balance sheet, regulatory reserve, and capital for our Asian businesses. The value of in-force business in Canada and the U.S. is the present value of expected future IFRS earnings, on an IFRS 4 basis, on in-force business less the present value of the cost of holding capital to support the in-force business under the LICAT framework. The value of in-force business in Asia reflects local statutory earnings and capital requirements. The value of in-force business excludes Global WAM, Bank or P&C Reinsurance businesses.

Net annualized fee income yield on average AUMA (“Net fee income yield”) is a financial measure that represents the net annualized fee income from Global WAM channels over average AUMA. This measure provides information on Global WAM’s adjusted return generated from managing AUMA.

Net annualized fee income is a financial measure that represents Global WAM income before income taxes, adjusted to exclude items unrelated to net fee income, including general expenses, investment income, non-AUMA related net benefits and claims, and net premium taxes. It also excludes the components of Global WAM net fee income from managing assets on behalf of other segments. This measure is annualized based on the number of days in the year divided by the number of days in the reporting period.

Reconciliation of income before income taxes to net fee income yield

(\$ millions, unless otherwise stated)	Quarterly Results					Full Year Results	
	4Q23	3Q23	2Q23	1Q23	4Q22	2023	2022
Income before income taxes	\$ 2,123	\$ 1,174	\$ 1,436	\$ 1,719	\$ 697	\$ 6,452	\$ (3,138)
Less: Income before income taxes for segments other than Global WAM	1,699	808	1,074	1,374	236	4,955	(4,429)
Global WAM income before income taxes	424	366	362	345	461	1,497	1,291
Items unrelated to net fee income	648	717	674	676	527	2,715	2,653
Global WAM net fee income	1,072	1,083	1,036	1,021	988	4,212	3,944
Less: Net fee income from other segments	174	171	142	136	134	623	547
Global WAM net fee income excluding net fee income from other segments	898	912	894	885	854	3,589	3,397
Net annualized fee income	\$ 3,563	\$ 3,618	\$ 3,584	\$ 3,589	\$ 3,388	\$ 3,589	\$ 3,397
Average Assets under Management and Administration	\$ 816,706	\$ 813,157	\$ 814,945	\$ 804,455	\$ 779,642	\$ 812,662	\$ 790,268
Net fee income yield (bps)	43.6	44.5	44.0	44.6	43.5	44.2	43.0

New business value (“NBV”) is the change in embedded value as a result of sales in the reporting period. The definition of NBV has changed for periods beginning after 2022 as follows:

- adopting IFRS 17 in the calculation of expected future distributable earnings in Canada, and international high net worth business, which was reclassified to the Asia segment in 2023; and
- changing the basis for calculating expected future distributable earnings in the U.S. from IFRS to local capital requirements.

NBV for periods beginning after December 31, 2022 is calculated as the present value of shareholders' interests in expected future distributable earnings in accordance with IFRS 17, after the cost of capital calculated under the LICAT framework in Canada and the local capital requirements in the U.S. and Asia, on actual new business sold in the period using assumptions that are consistent with the assumptions used in the calculation of embedded value.

NBV for periods prior to January 1, 2023 is calculated as the present value of shareholders' interests in expected future distributable earnings in accordance with IFRS 4 "Insurance Contracts", after the cost of capital calculated under the LICAT framework in Canada and the U.S. and the local capital requirements in Asia, on actual new business sold in the period using assumptions that are consistent with the assumptions used in the calculation of embedded value.

NBV excludes businesses with immaterial insurance risks, such as the Company's Global WAM, Manulife Bank and the P&C Reinsurance businesses. NBV is a useful metric to evaluate the value created by the Company's new business franchise.

New business value margin ("NBV margin") is calculated as NBV divided by APE sales excluding non-controlling interests. APE sales are calculated as 100% of regular premiums and deposits sales and 10% of single premiums and deposits sales. NBV margin is a useful metric to help understand the profitability of our new business.

Sales are measured according to product type:

For individual insurance, sales include 100% of new annualized premiums and 10% of both excess and single premiums. For individual insurance, new annualized premiums reflect the annualized premium expected in the first year of a policy that requires premium payments for more than one year. Single premium is the lump sum premium from the sale of a single premium product, e.g. travel insurance. Sales are reported gross before the impact of reinsurance.

For group insurance, sales include new annualized premiums and administrative services only premium equivalents on new cases, as well as the addition of new coverages and amendments to contracts, excluding rate increases.

Insurance-based wealth accumulation product sales include all new deposits into variable and fixed annuity contracts. As we discontinued sales of new variable annuity contracts in the U.S. in the first quarter of 2013, subsequent deposits into existing U.S. variable annuity contracts are not reported as sales. Asia variable annuity deposits are included in APE sales.

APE sales are comprised of 100% of regular premiums and deposits and 10% of excess and single premiums and deposits for both insurance and insurance-based wealth accumulation products.

Gross flows is a new business measure presented for our Global WAM business and includes all deposits into mutual funds, group pension/retirement savings products, private wealth and institutional asset management products. Gross flows is a common industry metric for WAM businesses as it provides a measure of how successful the businesses are at attracting assets.

Net flows is presented for our Global WAM business and includes gross flows less redemptions for mutual funds, group pension/retirement savings products, private wealth and institutional asset management products. In addition, net flows include the net flows of exchange traded funds and non-proprietary products sold by Manulife Securities. Net flows is a common industry metric for WAM businesses as it provides a measure of how successful the businesses are at attracting and retaining assets. When net flows are positive, they are referred to as net inflows. Conversely, negative net flows are referred to as net outflows.

Remittances is defined as the cash remitted or made available for distribution to MFC from its subsidiaries. It is a key metric used by management to evaluate our financial flexibility.

Non-GAAP Measures for 2017

Non-GAAP financial measures include 2017 core earnings (loss), pre-tax 2017 core earnings and 2017 core general expenses.

Non-GAAP ratios include the 2017 expense efficiency ratio.

With the implementation of IFRS 17 and IFRS 9 in 2023, we have made revisions to the definition of the above non-GAAP financial measures and non-GAAP ratios. Please refer to Section 1 for an explanation of the implementation of IFRS 17 and IFRS 9 for more information and the above definitions of 2023 core earnings and expense measures for an explanation of the change to the definition of core earnings and the expense efficiency ratio in 2023.

The definitions and reconciliations of the above measures for 2017 are included below.

2017 core earnings (loss) is a financial measure which we believe aids investors in better understanding the long-term earnings capacity and valuation of the business. 2017 core earnings allows investors to focus on the Company's operating performance by excluding the direct impact of changes in equity markets and interest rates, changes in actuarial methods and assumptions as well as a number of other items, outlined below, that we believe are material, but do not reflect the underlying earnings capacity of the business. For example, due to the long-term nature of our business, the mark-to-market movements of equity markets, interest rates, foreign currency exchange rates and commodity prices from period-to-period can, and frequently do, have a substantial impact on the reported amounts of our assets, liabilities and net income attributed to shareholders. These reported amounts are not actually realized at the time and may never be

realized if the markets move in the opposite direction in a subsequent period. This makes it very difficult for investors to evaluate how our businesses are performing from period-to-period and to compare our performance with other issuers.

While core earnings is relevant to how we manage our business and offers a consistent methodology, it is not insulated from macroeconomic factors which can have a significant impact. See below for reconciliation of 2017 core earnings to net income attributed to shareholders and income before income taxes. Net income attributed to shareholders excludes net income attributed to participating policyholders and non-controlling interests.

The items included in 2017 core earnings and items excluded from 2017 core earnings are determined in accordance with the methodology under OSFI's Source of Earnings Disclosure (Life Insurance Companies) guideline that was in effect at that time, and are listed below.

Items included in 2017 core earnings:

1. Expected earnings on in-force policies, including expected release of provisions for adverse deviation, fee income, margins on group business and spread business such as Manulife Bank and asset fund management.
2. Macro hedging costs based on expected market returns.
3. New business strain and gains.
4. Policyholder experience gains or losses.
5. Acquisition and operating expenses compared with expense assumptions used in the measurement of policy liabilities.
6. Up to \$400 million of net favourable investment-related experience reported in a single year, which are referred to as "core investment gains". This means up to \$100 million in the first quarter, up to \$200 million on a year-to-date basis in the second quarter, up to \$300 million on a year-to-date basis in the third quarter and up to \$400 million on a full year basis in the fourth quarter. Any investment-related experience losses reported in a quarter will be offset against the net year-to-date investment-related experience gains with the difference being included in 2017 core earnings subject to a maximum of the year-to-date core investment gains and a minimum of zero, which reflects our expectation that investment-related experience will be positive through-the-business cycle. To the extent any investment-related experience losses cannot be fully offset in a quarter, they will be carried forward to be offset against investment-related experience gains in subsequent quarters in the same year, for purposes of determining core investment gains. Investment-related experience relates to fixed income investing, ALDA returns, credit experience and asset mix changes other than those related to a strategic change. An example of a strategic asset mix change is outlined below.
 - This favourable and unfavourable investment-related experience is a combination of reported investment experience as well as the impact of investing activities on the measurement of our policy liabilities. We do not attribute specific components of investment-related experience to amounts included or excluded from 2017 core earnings.
 - The \$400 million threshold represents the estimated average annualized amount of net favourable investment-related experience that the Company reasonably expects to achieve through-the-business cycle based on historical experience. It is not a forecast of expected net favourable investment-related experience for any given fiscal year.
 - Our average net annualized investment-related experience, including core investment gains, calculated from the introduction of core earnings in 2012 to the end of 2017 was \$475 million (2012 to the end of 2016 was \$456 million).
 - The decision announced on December 22, 2017 to reduce the allocation to ALDA in the portfolio asset mix supporting our legacy businesses was the first strategic asset mix change since we introduced the core earnings metric in 2012. We refined our description of investment-related experience in 2017 to note that asset mix changes other than those related to a strategic change are taken into consideration in the investment-related experience component of core investment gains.
 - While historical investment return time horizons may vary in length based on underlying asset classes generally exceeding 20 years, for purposes of establishing the threshold, we look at a business cycle that is five or more years and includes a recession. We monitor the appropriateness of the threshold as part of our annual five-year planning process and would adjust it, either to a higher or lower amount, in the future if we believed that our threshold was no longer appropriate.
 - Specific criteria used for evaluating a potential adjustment to the threshold may include, but are not limited to, the extent to which actual investment-related experience differs materially from actuarial assumptions used in measuring insurance contract liabilities, material market events, material dispositions or acquisitions of assets, and regulatory or accounting changes.

Core investment gains are reported in the Corporate and Other segment, with an offsetting adjustment to investment-related experience gains and losses in items excluded from 2017 core earnings.

7. Earnings on surplus other than mark-to-market items. Gains on available-for-sale ("AFS") equities and seed money investments in segregated and mutual funds are included in 2017 core earnings.
8. Routine or non-material legal settlements.
9. All other items not specifically excluded.
10. Tax on the above items.
11. All tax related items except the impact of enacted or substantively enacted income tax rate changes.

Items excluded from 2017 core earnings:

1. The direct impact of equity markets and interest rates and variable annuity guarantee liabilities includes the items listed below.
 - The earnings impact of the difference between the net increase (decrease) in variable annuity liabilities that are dynamically hedged and the performance of the related hedge assets. Our variable annuity dynamic hedging strategy is not designed to completely offset the sensitivity of insurance and investment contract liabilities to all risks or measurements associated with the guarantees embedded in these products for a number of reasons, including: provisions for adverse deviation, fund performance, the portion of the interest rate risk that is not dynamically hedged, realized equity and interest rate volatilities and changes to policyholder behaviour.
 - Gains (charges) on variable annuity guarantee liabilities not dynamically hedged.
 - Gains (charges) on general fund equity investments supporting policy liabilities and on fee income.
 - Gains (charges) on macro equity hedges relative to expected costs. The expected cost of macro hedges is calculated using the equity assumptions used in the valuation of insurance and investment contract liabilities.
 - Gains (charges) on higher (lower) fixed income reinvestment rates assumed in the valuation of insurance and investment contract liabilities.
 - Gains (charges) on sale of AFS bonds and open derivatives not in hedging relationships in the Corporate and Other segment.
2. Net favourable investment-related experience in excess of \$400 million per annum or net unfavourable investment-related experience on a year-to-date basis.
3. Mark-to-market gains or losses on assets held in the Corporate and Other segment other than gains on AFS equities and seed money investments in new segregated or mutual funds.
4. Changes in actuarial methods and assumptions. Policy liabilities for IFRS are valued in Canada under standards established by the Actuarial Standards Board that were in effect at that time. The standards require a comprehensive review of actuarial methods and assumptions to be performed annually. The review is designed to reduce the Company's exposure to uncertainty by ensuring assumptions for both asset related and liability related risks remain appropriate and is accomplished by monitoring experience and selecting assumptions which represent a current best estimate view of expected future experience, and margins that are appropriate for the risks assumed. Changes related to ultimate reinvestment rates ("URR") are included in the direct impact of equity markets and interest rates and variable annuity guarantee liabilities. By excluding the results of the annual reviews, 2017 core earnings assist investors in evaluating our operational performance and comparing our operational performance from period to period with other global insurance companies because the associated gain or loss is not reflective of current year performance and not reported in net income in most actuarial standards outside of Canada.
5. The impact on the measurement of policy liabilities of changes in product features or new reinsurance transactions, if material.
6. Goodwill impairment charges.
7. Gains or losses on disposition of a business.
8. Material one-time only adjustments, including highly unusual/extraordinary and material legal settlements or other items that are material and exceptional in nature.
9. Tax on the above items.
10. Net income (loss) attributed to participating policyholders and non-controlling interests.
11. Impact of enacted or substantially enacted income tax rate changes.

Reconciliation of income (loss) before income taxes to 2017 core earnings

For the year ended December 31, 2017, our financial statements reported income before income taxes of \$2,501 million, income tax expense of \$239 million and net income of \$2,262 million. Income tax expense was comprised of an income tax expense of \$1,137 million on 2017 core earnings and an income tax recovery of \$898 million on items excluding 2017 core earnings. Net income of \$2,262 million was comprised of net income attributed to shareholders of \$2,104 million and net income attributed to NCI of \$194 million partially offset by a net loss attributed to participating policyholders of \$36 million.

2017 core earnings for the year ended December 31, 2017 of \$4,565 million reflected total net income attributed to shareholders of \$2,104 million less a charge of \$2,461 million from items excluded from 2017 core earnings. Items excluded from 2017 core earnings primarily consisted of a charge from the impact related to U.S. tax reform of \$1,777 million, and a charge related to the decision to change portfolio asset mix supporting our legacy businesses of \$1,032 million, partially offset by a gain from the direct impact of markets of \$209 million, investment-related experience gains outside of 2017 core earnings of \$167 million and a number of smaller items. Items excluded from 2017 core earnings were disclosed under OSFI's Source of Earnings Disclosure (Life Insurance Companies) guideline that was in effect at that time.

Pre-tax 2017 core earnings was \$5,702 million, equal to the sum of 2017 core earnings of \$4,565 million and tax on 2017 core earnings of \$1,137 million.

2017 core earnings related to strategic priorities for the year ended December 31, 2017

The Company measures its progress on certain strategic priorities using 2017 core earnings. These strategic priorities include 2017 core earnings from highest potential businesses, 2017 core earnings from Asia region, and 2017 core earnings from long-term care insurance

("LTC") and variable annuities ("VA") businesses. The 2017 core earnings for these businesses is calculated consistent with our definition of 2017 core earnings.

Highest potential businesses

For the year ended December 31, 2017

(\$ millions, post-tax and based on actual foreign exchange rates in effect in the applicable reporting period)

2017 core earnings of highest potential businesses ⁽¹⁾	\$ 2,475
2017 core earnings – All other businesses excl. core investment gains	1,690
Core investment gains ⁽²⁾	400
2017 core earnings	4,565
Items excluded from 2017 core earnings	(2,461)
Net income (loss) attributed to shareholders	\$ 2,104
Highest potential businesses 2017 core earnings contribution	54%

⁽¹⁾ Includes 2017 core earnings from Asia and Global WAM segments, Canada group benefits, and behavioural insurance products.

⁽²⁾ This item is disclosed under OSFI's Source of Earnings guideline in effect at such time.

Asia region

For the year ended December 31, 2017

(\$ millions, post-tax and based on actual foreign exchange rates in effect in the applicable reporting period)

2017 core earnings of Asia region ⁽¹⁾	\$ 1,663
2017 core earnings – All other businesses excl. core investment gains	2,502
Core investment gains ⁽²⁾	400
2017 core earnings	4,565
Items excluded from 2017 core earnings	(2,461)
Net income (loss) attributed to shareholders	\$ 2,104
Asia region 2017 core earnings contribution	36%

⁽¹⁾ Includes 2017 core earnings from Asia segment and Global WAM's business in Asia.

⁽²⁾ This item is disclosed under OSFI's Source of Earnings guideline in effect at such time.

LTC and VA businesses

For the year ended December 31, 2017

(\$ millions, post-tax and based on actual foreign exchange rates in effect in the applicable reporting period)

2017 core earnings of LTC and VA businesses ⁽¹⁾	\$ 1,112
2017 core earnings – All other businesses excl. core investment gains	3,053
Core investment gains ⁽²⁾	400
2017 core earnings	4,565
Items excluded from 2017 core earnings	(2,461)
Net income (loss) attributed to shareholders	\$ 2,104
LTC and VA businesses 2017 core earnings contribution	24%

⁽¹⁾ Includes 2017 core earnings from U.S. long-term care and Asia, Canada and U.S. variable annuities businesses.

⁽²⁾ This item is disclosed under OSFI's Source of Earnings guideline in effect at such time.

2017 expense efficiency ratio is a financial measure which Manulife uses to measure progress towards our target to be more efficient. It is defined as 2017 core general expenses divided by the sum of 2017 core earnings before income taxes ("pre-tax 2017 core earnings") and 2017 core general expenses. **2017 core general expenses** is used to calculate our 2017 expense efficiency ratio and is equal to pre-tax general expenses included in 2017 core earnings and excludes such items as material legal provisions for settlements, restructuring charges and expenses related to integration and acquisitions.

The 2017 expense efficiency ratio for the year ended December 31, 2017 was 55.4%. 2017 core general expenses were \$7,091 million consisting of total general expenses on our financial statements for the year ended December 31, 2017 of \$7,233 million less \$142 million of general expenses included in items excluded from 2017 core earnings. General expenses included in items excluded from 2017 core earnings include integration and acquisition costs of \$81 million and legal provisions and other of \$61 million. Pre-tax 2017 core earnings were \$5,702 million as noted above.

2017 core earnings available to common shareholders

2017 core earnings available to common shareholders is \$4,406 million consisting of 2017 core earnings of \$4,565 million less preferred share dividends of \$159 million.

14. Additional Disclosures

Contractual Obligations

In the normal course of business, the Company enters into contracts that give rise to obligations fixed by agreement as to the timing and dollar amount of payment.

As at December 31, 2023, the Company's contractual obligations and commitments were as follows:

Payments due by period (\$ millions)	Total	Less than 1 year	1 to 3 years	3 to 5 years	Over 5 years
Long-term debt ⁽¹⁾	\$ 9,578	\$ 226	\$ 2,099	\$ 1,207	\$ 6,046
Liabilities for capital instruments ⁽¹⁾	9,644	861	597	671	7,515
Investment commitments	15,117	5,408	4,570	3,953	1,186
Lease liabilities	350	100	133	68	49
Insurance contract liabilities ⁽²⁾	1,110,645	3,400	12,312	20,169	1,074,764
Reinsurance contract held liabilities ⁽²⁾	8,448	332	952	1,067	6,097
Investment contract liabilities ⁽¹⁾	276,411	268,537	2,978	1,408	3,488
Deposits from Bank clients	21,616	16,814	2,963	1,839	–
Other	26,590	7,612	5,173	12,677	1,128
Total contractual obligations	\$ 1,478,399	\$ 303,290	\$ 31,777	\$ 43,059	\$ 1,100,273

⁽¹⁾ The contractual payments include principal, interest and distributions; and reflect the amounts payable up to and including the final contractual maturity date. The contractual payments reflect the amounts payable from January 1, 2024 up to and including the final contractual maturity date. In the case of floating rate obligations, the floating rate index is based on the interest rates as at December 31, 2023 and is assumed to remain constant to the final contractual maturity date. For the 4.061% MFC Subordinated notes, the reset rate is equal to the Secured Overnight Financing Rate ("SOFR") Swap Rate as at December 31, 2023, plus a spread adjustment of 0.26161%, plus 1.647%. For the 3.00% MFC Subordinated notes, the reset rate is equal to the Singapore Overnight Rate Average ("SORA") Swap Rate as at December 31, 2023, plus a spread adjustment of 0.31120%, plus 0.832%. The Company may have the contractual right to redeem or repay obligations prior to maturity and if such right is exercised, total contractual obligations paid and the timing of payment could vary significantly from the amounts and timing included in the table.

⁽²⁾ Insurance contract liabilities cash flows include estimates related to the timing and payment of death and disability claims, policy surrenders, policy maturities, annuity payments, minimum guarantees on segregated fund products, policyholder dividends, commissions and premium taxes offset by contractual future premiums on in-force contracts and exclude amounts from insurance contract liabilities for account of segregated fund holders. These estimated cash flows are based on the best estimate assumptions used in the determination of insurance contract liabilities. These amounts are undiscounted. Reinsurance contract held liabilities cash flows include estimates related to the timing and payment of future reinsurance premiums offset by recoveries on in-force reinsurance agreements. Due to the use of assumptions, actual cash flows may differ from these estimates (see "Insurance and Investment Contract Liabilities"). Cash flows include embedded derivatives measured separately at fair value.

Legal and Regulatory Proceedings

We are regularly involved in legal actions, both as a defendant and as a plaintiff. Information on legal and regulatory proceedings can be found in note 19 of the 2023 Annual Consolidated Financial Statements.

Quarterly Financial Information

The following table provides summary information related to our eight most recently completed quarters. With the adoption of IFRS 17 and IFRS 9 on January 1, 2023, we have provided quarterly 2023 and restated quarterly 2022 information based on the new standards. See section 1 “Implementation of IFRS 17 and IFRS 9” above for additional information.

As at and for the three months ended

(\$ millions, except per share amounts or otherwise stated)

	Dec 31, 2023	Sept 30, 2023	June 30, 2023	Mar 31, 2023	Dec 31, 2022	Sept 30, 2022	June 30, 2022	Mar 31, 2022
Revenue								
Insurance revenue	\$ 6,414	\$ 6,215	\$ 5,580	\$ 5,763	\$ 6,128	\$ 5,560	\$ 5,732	\$ 5,698
Net investment result	6,784	1,265	4,819	5,153	1,440	2,439	(2,454)	(1,088)
Other revenue	1,719	1,645	1,691	1,691	1,671	1,547	1,446	1,522
Total revenue	\$ 14,917	\$ 9,125	\$ 12,090	\$ 12,607	\$ 9,239	\$ 9,546	\$ 4,724	\$ 6,132
Income (loss) before income taxes	\$ 2,123	\$ 1,174	\$ 1,436	\$ 1,719	\$ 697	\$ 484	\$ (2,656)	\$ (1,663)
Income tax (expense) recovery	(322)	51	(265)	(309)	226	(60)	553	440
Net income (loss)	\$ 1,801	\$ 1,225	\$ 1,171	\$ 1,410	\$ 923	\$ 424	\$ (2,103)	\$ (1,223)
Net income (loss) attributed to shareholders	\$ 1,659	\$ 1,013	\$ 1,025	\$ 1,406	\$ 915	\$ 491	\$ (2,119)	\$ (1,220)
Basic earnings (loss) per common share	\$ 0.86	\$ 0.53	\$ 0.50	\$ 0.73	\$ 0.43	\$ 0.23	\$ (1.13)	\$ (0.66)
Diluted earnings (loss) per common share	\$ 0.86	\$ 0.52	\$ 0.50	\$ 0.73	\$ 0.43	\$ 0.23	\$ (1.13)	\$ (0.66)
Segregated funds deposits	\$ 10,361	\$ 10,172	\$ 10,147	\$ 11,479	\$ 10,165	\$ 9,841	\$ 10,094	\$ 12,328
Total assets (in billions)	\$ 876	\$ 836	\$ 851	\$ 862	\$ 834	\$ 818	\$ 810	\$ 865
Weighted average common shares (in millions)	1,810	1,826	1,842	1,858	1,878	1,902	1,921	1,938
Diluted weighted average common shares (in millions)	1,814	1,829	1,846	1,862	1,881	1,904	1,924	1,942
Dividends per common share	\$ 0.365	\$ 0.365	\$ 0.365	\$ 0.365	\$ 0.330	\$ 0.330	\$ 0.330	\$ 0.330
CDN\$ to US\$1 – Statement of Financial Position	1.3186	1.3520	1.3233	1.3534	1.3549	1.3740	1.2900	1.2496
CDN\$ to US\$1 – Statement of Income	1.3612	1.3411	1.3430	1.3524	1.3575	1.3057	1.2765	1.2663

Selected Annual Financial Information

The following table provides selected annual financial information related to our three most recently completed years. With the adoption of IFRS 17 and IFRS 9 on January 1, 2023, we have provided 2023 and restated 2022 information based on the new standards. See section 1 "Implementation of IFRS 17 and IFRS 9" above for additional information. Information has not been restated prior to January 1, 2022 and as a result, 2021 information is based on what was reported in that year.

As at and for the years ended December 31,
(\$ millions, except per share amounts)

	2023	2022	2021 ⁽¹⁾
Revenue			
Asia	\$ 11,996	\$ 6,051	
Canada	13,793	7,299	
U.S.	15,322	11,048	
Global Wealth and Asset Management	5,896	5,267	
Corporate and Other	1,732	(24)	
Total revenue	\$ 48,739	\$ 29,641	
Total assets	\$ 875,574	\$ 833,689	
Revenue			
Asia			\$ 29,571
Canada			12,366
U.S.			13,256
Global Wealth and Asset Management			6,541
Corporate and Other			87
Total revenue			\$ 61,821
Total assets			\$ 917,643
Long-term financial liabilities			
Long-term debt	\$ 6,071	\$ 6,234	\$ 4,882
Capital instruments	6,667	6,122	6,980
Total financial liabilities	\$ 12,738	\$ 12,356	\$ 11,862
Dividend per common share	\$ 1.46	\$ 1.32	\$ 1.17
Cash dividend per Class A Share, Series 2	1.1625	1.1625	1.1625
Cash dividend per Class A Share, Series 3	1.125	1.125	1.125
Cash dividend per Class 1 Share, Series 3	0.5870	0.5870	0.5658
Cash dividend per Class 1 Share, Series 4	1.4946	0.6814	0.3814
Cash dividend per Class 1 Share, Series 5 ⁽²⁾	-	-	0.9728
Cash dividend per Class 1 Share, Series 7 ⁽⁴⁾	-	0.2695	1.078
Cash dividend per Class 1 Share, Series 9	1.4945	1.1894	1.0878
Cash dividend per Class 1 Share, Series 11	1.4505	1.1828	1.1828
Cash dividend per Class 1 Share, Series 13	1.2245	1.1035	1.1035
Cash dividend per Class 1 Share, Series 15	0.9465	0.9465	0.9465
Cash dividend per Class 1 Share, Series 17	0.950	0.950	0.950
Cash dividend per Class 1 Share, Series 19	0.9188	0.9188	0.9188
Cash dividend per Class 1 Share, Series 21 ⁽³⁾	-	-	0.70
Cash dividend per Class 1 Share, Series 23 ⁽⁵⁾	-	0.3031	1.2125
Cash dividend per Class 1 Share, Series 25	1.3303	1.175	1.175

⁽¹⁾ 2021 total revenue and total assets results are not restated for IFRS 17 and IFRS 9.

⁽²⁾ MFC redeemed in full the Class 1 Series 5 preferred shares at par, on December 19, 2021, the earliest redemption date.

⁽³⁾ MFC redeemed in full the Class 1 Series 21 preferred shares at par, on June 19, 2021, the earliest redemption date.

⁽⁴⁾ MFC redeemed in full the Class 1 Series 7 preferred shares at par, on March 19, 2022, the earliest redemption date.

⁽⁵⁾ MFC redeemed in full the Class 1 Series 23 preferred shares at par, on March 19, 2022, the earliest redemption date.

Revenue

Total revenue in 4Q23 was \$14.9 billion compared with \$9.2 billion in 4Q22. The increase in total revenue of \$5.7 billion was primarily due to an increase in net investment income due to net realized and unrealized gains in 4Q23 compared with losses in 4Q22. Results by segment include:

- Asia total revenue increased \$2.6 billion in 4Q23 compared with 4Q22, due to higher net investment income driven by higher net realized and unrealized gains on invested assets and higher investment income.
- Canada total revenue increased \$2.0 billion in 4Q23 compared with 4Q22, driven by higher net investment income due to net realized and unrealized gains on invested assets in 4Q23 compared with losses in 4Q22.

- U.S. total revenue increased \$0.8 billion in 4Q23 compared with 4Q22, driven by higher net investment income due to net realized and unrealized losses on invested assets in 4Q22, partially offset by lower investment income.
- Global WAM total revenue increased \$0.1 billion in 4Q23 compared with 4Q22, primarily due to higher fee income from growth in average AUMA and an increase in fee spreads, partially offset by the non-recurrence of a gain on our acquisition of the remaining equity interest in MFM in 2022.
- Corporate and Other total revenue increased \$0.2 billion in 4Q23 compared with 4Q22, primarily driven by an increase in net investment income from lower realized losses on the sale of FVOCI debt instruments in 4Q23 compared with 4Q22, a more favourable impact of markets on derivatives and other assets, and higher yields on debt instruments.

On a full year basis, total revenue in 2023 was \$48.7 billion compared with \$29.6 billion in 2022. The increase in total revenue of \$19.1 billion was due to higher net investment income mainly from net realized and unrealized gains in 2023 compared with losses in 2022, along with higher insurance revenue and other revenue. Results by segment include:

- Asia total revenue increased \$5.9 billion in 2023 compared with 2022 due to similar reasons as noted above.
- Canada total revenue increased \$6.5 billion in 2023 compared with 2022, driven by higher net investment income, due to net realized and unrealized gains on invested assets in 2023 compared with losses in 2022 and higher investment income, as well as higher insurance revenue.
- U.S. total revenue increased \$4.3 billion in 2023 compared with 2022, driven by higher net investment income due to similar reasons as noted above.
- Global WAM total revenue increased \$0.6 billion in 2023 compared with 2022, primarily driven by higher fee income, from an increase in fee spreads, growth in average AUMA and higher performance fees in Institutional Asset Management, as well as the favourable impact of a weaker Canadian dollar compared with the U.S. dollar, and gains on seed money investments in 2023 compared with losses in 2022. This was partially offset by the non-recurrence of a gain on our acquisition of the remaining equity interest in MFM in 2022.
- Corporate and Other total revenue increased \$1.8 billion in 2023 compared with 2022, primarily driven by similar reasons noted above and a more favourable impact of markets on equities.

Revenue

Revenue (\$ millions)	Quarterly Results		Full Year Results	
	4Q23	4Q22	2023	2022
Insurance revenue	\$ 6,414	\$ 6,128	\$ 23,972	\$ 23,118
Net investment income	6,784	1,440	18,021	337
Other revenue	1,719	1,671	6,746	6,186
Total revenue	\$ 14,917	\$ 9,239	\$ 48,739	\$ 29,641
Asia	\$ 3,572	\$ 990	\$ 11,996	\$ 6,051
Canada	4,663	2,648	13,793	7,299
U.S.	4,566	3,814	15,322	11,048
Global Wealth and Asset Management	1,632	1,530	5,896	5,267
Corporate and Other	484	257	1,732	(24)
Total revenue	\$ 14,917	\$ 9,239	\$ 48,739	\$ 29,641

Differences between IFRS and Hong Kong Financial Reporting Standards

Manulife's Consolidated Financial Statements are presented in accordance with IFRS. Upon issuance of IFRS 17 "Insurance Contracts" effective January 1, 2023, there is no longer any material difference between IFRS and Hong Kong Financial Reporting Standards.

IFRS and Hong Kong Regulatory Requirements

Insurers in Hong Kong are required by the Insurance Authority to meet minimum solvency requirements. As at December 31, 2023, the Company's business that falls within the scope of these requirements has sufficient assets to meet the minimum solvency requirements under both Hong Kong regulatory requirements and IFRS.

Outstanding Common Shares

As at January 31, 2024, MFC had 1,806,118,020 common shares outstanding.

Additional Information Available

Additional information relating to Manulife, including MFC's Annual Information Form, is available on the Company's website at www.manulife.com and on the SEDAR+ website at www.sedarplus.ca.