



Manulife Financial Corporation

Management's Discussion and Analysis

For the three and six months ended June 30, 2021

MANAGEMENT'S DISCUSSION AND ANALYSIS

This Management's Discussion and Analysis ("MD&A") is current as of August 4, 2021, unless otherwise noted. This MD&A should be read in conjunction with our unaudited Interim Consolidated Financial Statements for the three and six months ended June 30, 2021 and the MD&A and audited Consolidated Financial Statements contained in our 2020 Annual Report.

For further information relating to our risk management practices and risk factors affecting the Company, see "Risk Factors" in our 2020 Annual Information Form, "Risk Factors and Risk Management" and "Critical Actuarial and Accounting Policies" in the MD&A in our 2020 Annual Report and the "Risk Management" note to the Consolidated Financial Statements in our most recent annual and interim reports.

In this MD&A, the terms "Company", "Manulife", "we" and "our" mean Manulife Financial Corporation ("MFC") and its subsidiaries. All amounts are reported in Canadian dollars, unless otherwise indicated.

Contents

A. TOTAL COMPANY PERFORMANCE

1. Profitability
2. Business performance
3. Financial strength
4. Revenue
5. Assets under management and administration
6. Impact of fair value accounting
7. Impact of foreign currency exchange rates
8. Business highlights
9. Mosten litigation and regulatory update
10. Annual review of actuarial methods and assumptions
11. Updates to the ultimate reinvestment rate
12. Strategic priorities

B. PERFORMANCE BY SEGMENT

1. Asia
2. Canada
3. U.S.
4. Global Wealth and Asset Management
5. Corporate and Other

C. RISK MANAGEMENT AND RISK FACTORS UPDATE

1. Variable annuity and segregated fund guarantees
2. Caution related to sensitivities
3. Publicly traded equity performance risk
4. Interest rate and spread risk sensitivities and exposure measures
5. Alternative long-duration asset performance risk
6. Credit risk exposure measures
7. Risk Factors –Strategic risk from changes in tax laws

D. CRITICAL ACTUARIAL AND ACCOUNTING POLICIES

1. Critical actuarial and accounting policies
2. Sensitivity of earnings to asset related assumptions
3. Accounting and reporting changes

E. OTHER

1. Outstanding common shares - selected information
2. Legal and regulatory proceedings
3. Performance and non-GAAP measures
4. Caution regarding forward-looking statements
5. Quarterly financial information
6. Other

A TOTAL COMPANY PERFORMANCE

A1 Profitability

(\$ millions, unless otherwise stated)	Quarterly Results			YTD Results	
	2Q21	1Q21	2Q20	2021	2020
Net income attributed to shareholders	\$ 2,646	\$ 783	\$ 727	\$ 3,429	\$ 2,023
Core earnings ⁽¹⁾	\$ 1,682	\$ 1,629	\$ 1,561	\$ 3,311	\$ 2,589
Diluted earnings per common share (\$)	\$ 1.33	\$ 0.38	\$ 0.35	\$ 1.71	\$ 1.00
Diluted core earnings per common share ("Core EPS") (\$) ⁽¹⁾	\$ 0.83	\$ 0.82	\$ 0.78	\$ 1.65	\$ 1.29
Return on common shareholders' equity ("ROE")	22.2%	6.4%	5.5%	14.3%	7.9%
Core ROE ⁽¹⁾	13.9%	13.7%	12.2%	13.8%	10.2%
Expense efficiency ratio ⁽¹⁾	46.8%	48.5%	48.9%	47.7%	53.9%

⁽¹⁾ This item is a non-GAAP measure. See "Performance and non-GAAP measures" below.

Quarterly profitability

Manulife's net income attributed to shareholders was \$2,646 million in the second quarter of 2021 ("2Q21") compared with \$727 million in the second quarter of 2020 ("2Q20"). Net income attributed to shareholders is comprised of core earnings¹ (consisting of items we believe reflect the underlying earnings capacity of the business), which amounted to \$1,682 million in 2Q21 compared with \$1,561 million in 2Q20, and items excluded from core earnings, which amounted to a net gain of \$964 million in 2Q21 compared with a net charge of \$834 million in 2Q20. The effective tax rate on net income attributed to shareholders in 2Q21 was 19% compared with nil in 2Q20, reflecting differences in the jurisdictional mix of pre-tax profits and losses.

Net income attributed to shareholders increased \$1,919 million compared with 2Q20, driven by growth in core earnings, gains from investment-related experience compared with losses in 2Q20, and larger gains from the direct impact of equity markets and interest rates. Investment-related experience gains reflected higher-than-expected returns (including fair value changes) on alternative long-duration assets ("ALDA"), primarily due to fair value gains on private equity investments, the favourable impact of fixed income reinvestment activities and favourable credit experience.

Core earnings increased \$121 million or 18% on a constant currency basis² compared with 2Q20. The increase in core earnings in 2Q21 compared with 2Q20 was driven by higher new business gains across all insurance segments, higher net fee income from higher average assets under management and administration ("average AUMA")¹ in Global Wealth and Asset Management ("Global WAM"), which benefitted from favourable market impacts and net inflows, the recognition of core investment gains¹ in the quarter (compared with nil core investment gains in 2Q20) and in-force business growth in Asia and Canada, partially offset by modestly unfavorable net policyholder experience, compared with net favourable COVID-19 impacts in 2Q20, and lower net gains on seed money investments in new segregated and mutual funds during the period. Core earnings in 2Q21 included a policyholder experience charge of \$12 million (\$15 million pre-tax) compared with gains of \$177 million (\$222 million pre-tax) in 2Q20.³ The impact of the actions to improve the capital efficiency of our legacy businesses on core earnings in 2Q21 was in-line with 2Q20.

Year-to-date profitability

Net income attributed to shareholders for the six months ended June 30, 2021 was \$3,429 million compared with \$2,023 million for the six months ended June 30, 2020. Year-to-date core earnings amounted to \$3,311 million in 2021 compared with \$2,589 million in the same period of 2020, and items excluded from year-to-date core earnings amounted to a net gain of \$118 million in 2021 compared with a net charge of \$566 million in the same

¹ This item is a non-GAAP measure. See "Performance and non-GAAP measures" below.

² Percentage growth / declines in core earnings, core general expenses, pre-tax core earnings, APE sales, gross flows, NBV, assets under management and administration, assets under management, core EBITDA and Global Wealth and Asset Management revenue are stated on a constant exchange rate basis. Constant exchange rate basis is a non-GAAP measure. See "Performance and non-GAAP measures" below.

³ Policyholder experience includes gains of \$9 million post-tax in 2Q21 (2Q20 – gains of \$17 million post-tax) from the release of margins on medical policies in Hong Kong that have lapsed for customers who have opted to change their existing policies to the new Voluntary Health Insurance Scheme ("VHIS") products. These gains did not have a material impact on core earnings as they were mostly offset by new business strain.

period of 2020. The effective tax rate on year-to-date net income attributed to shareholders was 14% in 2021 compared with 23% for the same period in 2020, reflecting differences in the jurisdictional mix of pre-tax profits and losses.

The increase of \$1,406 million in year-to-date net income attributed to shareholders in 2021 compared with 2020 reflects an increase in year-to-date core earnings of \$722 million, a net gain of \$118 million in items excluded from year-to-date core earnings in 2021 and a net charge in items excluded from year-to-date core earnings of \$566 million in 2020.

The \$722 million or 39% increase in year-to-date core earnings compared with the same period of 2020 was driven by higher new business gains, the recognition of core investment gains in the first half of 2021 (compared with nil core investment gains in the same period of 2020), higher net fee income from higher average AUMA in Global WAM, which benefitted from favourable market impacts and net inflows, in-force business growth and higher investment income in Corporate and Other, including gains from available-for-sale (“AFS”) equities and seed money investments in new segregated and mutual funds (compared with losses in the prior year), partially offset by lower yields from fixed income investments in 2021. This increase was partially offset by less favourable policyholder experience. Year-to-date net policyholder experience gains were \$37 million (\$46 million pre-tax) in 2021 compared with gains of \$135 million (\$153 million pre-tax) in the same period of 2020.¹ Actions to improve the capital efficiency of our legacy businesses resulted in \$3 million lower year-to-date core earnings in 2021 compared with 2020.

Core earnings by segment and the items excluded from core earnings are outlined in the tables below. On a year-to-date basis, the items excluded from core earnings were a net gain of \$118 million in 2021 consisting of a net gain from investment-related experience, tax related and other items and reinsurance transactions partially offset by a net charge from the direct impact of markets and a restructuring charge.

Core earnings by segment and the items excluded from core earnings are outlined in the tables below.

Core earnings by segment and components of items excluded from core earnings

Core Earnings by Segment ⁽¹⁾ (\$ millions, unaudited)	Quarterly Results			YTD Results	
	2Q21	1Q21	2Q20	2021	2020
Asia	\$ 526	\$ 570	\$ 489	\$ 1,096	\$ 980
Canada	318	264	342	582	579
U.S.	478	501	602	979	1,018
Global Wealth and Asset Management	356	312	238	668	488
Corporate and Other (excluding core investment gains)	(96)	(118)	(110)	(214)	(476)
Core investment gains ^{(1),(2)}	100	100	-	200	-
Total core earnings	\$ 1,682	\$ 1,629	\$ 1,561	\$ 3,311	\$ 2,589

⁽¹⁾ This item is a non-GAAP measure. See “Performance and non-GAAP measures” below.

⁽²⁾ As outlined in our definition of core earnings in section E3: Up to \$400 million of net favourable investment-related experience will be reported in core earnings 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 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.

¹ Year-to-date policyholder experience includes gains of \$19 million post-tax in 2021 (2020 – gains of \$34 million post-tax) from the release of margins on medical policies in Hong Kong that have lapsed for customers who have opted to change their existing policies to the new VHIS products. These gains did not have a material impact on year-to-date core earnings as they were mostly offset by new business strain.

Items excluded from core earnings (\$ millions, unaudited)	Quarterly Results			YTD Results	
	2Q21	1Q21	2Q20	2021	2020
Investment-related experience outside of core earnings ⁽¹⁾	\$ 739	\$ 77	\$ (916)	\$ 816	\$ (1,524)
Direct impact of equity markets and interest rates and variable annuity guarantee liabilities ⁽²⁾	217	(835)	73	(618)	865
<i>Direct impact of equity markets and variable annuity guarantee liabilities</i>	177	3	568	180	(741)
<i>Fixed income reinvestment rates assumed in the valuation of policy liabilities</i>	76	(832)	(1,995)	(756)	(311)
<i>Sale of AFS bonds and, impact of derivative positions in the Corporate and Other segment</i>	(36)	(6)	1,500	(42)	1,917
Reinsurance transactions ⁽³⁾	8	8	9	16	21
Restructuring charge ⁽⁴⁾	-	(115)	-	(115)	-
Tax-related items and other ⁽⁵⁾	-	19	-	19	72
Items excluded from core earnings	\$ 964	\$ (846)	\$ (834)	\$ 118	\$ (566)

⁽¹⁾ Total investment-related experience in 2Q21 was a net gain of \$839 million, compared with a net charge of \$916 million in 2Q20, and in accordance with our definition of core earnings, we included \$100 million of investment-related experience gains in core earnings and a \$739 million gain in items excluded from core earnings in 2Q21 (no core investment gains and a charge of \$916 million, respectively, in 2Q20). Investment-related experience gains in 2Q21 reflected higher-than-expected returns (including fair value changes) on alternative long-duration assets ("ALDA") primarily driven by fair value gains on private equity investments, the favourable impact of fixed income reinvestment activities and favourable credit experience. Investment-related experience charges in 2Q20 reflected lower-than-expected returns (including fair value changes) on ALDA primarily driven by fair value losses on private equity, real estate and oil and gas.

⁽²⁾ The direct impact of markets was a net gain of \$217 million in 2Q21 driven by strong equity market performance and flattening of the yield curve, partially offset by a charge on the sale of available-for-sale ("AFS") bonds. The direct impact of markets was a net gain of \$73 million in 2Q20 driven by gains on the sale of AFS bonds, a global equity market rebound, mostly offset by lower fixed income reinvestment rates. The charge in fixed income reinvestment rates reflected the narrowing of corporate spreads and the steepening of the yield curve primarily in the U.S.

⁽³⁾ Reinsurance transactions in Asia contributed gains of \$8 million and \$9 million in 2Q21 and 2Q20, respectively.

⁽⁴⁾ In the first quarter of 2021 ("1Q21"), we reported a restructuring charge of \$150 million pre-tax (\$115 million post-tax) related to actions that are expected to result in recurring annual expense savings of \$250 million (pre-tax) by 2023; \$100 million (pre-tax) of these savings are expected to emerge in 2021, growing to \$200 million (pre-tax) in 2022.¹

⁽⁵⁾ In 1Q21, we reported a gain of \$19 million related to the divestment of our Thailand operation.

The **expense efficiency ratio**² was 46.8% for 2Q21, compared with 48.9% in 2Q20. The improvement in the ratio compared with 2Q20 was driven by a 16% increase in pre-tax core earnings² and a 5% increase in general expenses included in core earnings ("core general expenses").² We continue to focus on expense discipline to achieve our goal of consistently achieving a ratio of less than 50%.

On a year-to-date basis, the expense efficiency ratio was 47.7% in 2021 compared with 53.9% in 2020. The 6.2 percentage point improvement in the ratio compared with 2020 was driven by a 38% increase in year-to-date pre-tax core earnings and a 5% increase in year-to-date core general expenses.

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

² This item is a non-GAAP measure. See "Performance and non-GAAP measures" below.

A2 Business performance⁽¹⁾

(\$ millions, unless otherwise stated) (unaudited)	Quarterly Results			YTD Results	
	2Q21	1Q21	2Q20	2021	2020
Asia APE sales	\$ 950	\$ 1,280	\$ 784	\$ 2,230	\$ 1,868
Canada APE sales	\$ 274	\$ 355	\$ 238	\$ 629	\$ 614
U.S. APE sales	\$ 191	\$ 150	\$ 154	\$ 341	\$ 295
Total APE sales	\$ 1,415	\$ 1,785	\$ 1,176	\$ 3,200	\$ 2,777
Asia new business value	\$ 399	\$ 477	\$ 298	\$ 876	\$ 654
Canada new business value	\$ 76	\$ 78	\$ 46	\$ 154	\$ 123
U.S. new business value	\$ 75	\$ 44	\$ 40	\$ 119	\$ 76
Total new business value	\$ 550	\$ 599	\$ 384	\$ 1,149	\$ 853
Global Wealth and Asset Management net flows (\$ billions)	\$ 8.6	\$ 1.4	\$ 5.1	\$ 10.0	\$ 8.3
Global Wealth and Asset Management gross flows (\$ billions)	\$ 33.7	\$ 39.7	\$ 33.1	\$ 73.4	\$ 71.2
Global Wealth and Asset Management assets under management and administration (\$ billions)	\$ 798.5	\$ 764.1	\$ 696.9	\$ 798.5	\$ 696.9

⁽¹⁾ These items are non-GAAP measures. See "Performance and non-GAAP measures" below.

Annualized premium equivalent ("APE") sales¹ were \$1.4 billion in 2Q21, an increase of 30% compared with 2Q20. In Asia, APE sales increased 34% driven by growth in Asia Other² and Hong Kong, partially offset by lower sales in Japan. While COVID-19 impacts on sales have moderated, there continued to be varying degrees of adverse impacts on select markets across the region. Asia Other APE sales increased 66%, driven by higher sales with double-digit growth in both bancassurance and agency channels. In Hong Kong, APE sales increased 7% reflecting continued strong domestic demand and emerging demand from mainland Chinese visitors. In Japan, APE sales declined 4% as a result of lower corporate-owned life insurance ("COLI") product sales. In Canada, APE sales increased 15%, primarily driven by higher sales of lower risk segregated fund products, higher retail insurance sales and higher small and mid-size group insurance sales, partially offset by the non-recurrence of a large affinity markets sale in 2Q20 and lower large case group insurance sales. In the U.S., APE sales increased 40%, due to higher customer demand across all product lines. APE sales of products with the John Hancock Vitality PLUS feature in 2Q21 increased 27% compared with 2Q20, as the feature continues to be a differentiator in the market.

Year-to-date APE sales of \$3.2 billion in 2021 were 21% higher than the same period of 2020, driven by higher sales in across all segments.

New business value ("NBV")¹ was \$550 million in 2Q21, an increase of 57% compared with 2Q20. In Asia, NBV increased 48% to \$399 million driven by higher sales volumes in Asia Other, favourable interest rates, higher sales volumes and product management actions in Hong Kong and expense management actions and favourable product mix in Japan due to a shift away from lower margin COLI products. In Canada, NBV of \$76 million was up 65% from 2Q20, primarily due to the impact of higher sales volumes and more favourable margins. In the U.S., NBV of \$75 million was up 110% from 2Q20, primarily driven by higher sales volumes and favourable margins.

Year-to-date NBV was \$1,149 million in 2021, an increase of 43% compared with the same period of 2020 largely due to higher APE sales volume and favourable product mix.

Global Wealth and Asset Management reported net inflows¹ of \$8.6 billion in 2Q21 compared with net inflows of \$5.1 billion in 2Q20. Net inflows in Retail were \$7.3 billion in 2Q21 compared with net outflows of \$1.0 billion in 2Q20, driven by double-digit growth in gross flows¹ across all geographies, and lower mutual fund redemptions in the U.S. Net inflows in Institutional Asset Management were \$1.9 billion in 2Q21 compared with net inflows of \$6.5 billion in 2Q20, driven by Canada, from the non-recurrence of a \$6.9 billion sale in 2Q20, partially offset by a \$1.0 billion sale to an existing client in the current quarter. Net outflows in

¹ This item is a non-GAAP measure. See "Performance and non-GAAP measures" below.

² Asia Other excludes Japan and Hong Kong.

Retirement were \$0.6 billion in 2Q21 compared with net outflows of \$0.3 billion in 2Q20, reflecting higher member withdrawals partially offset by growth in new plan sales and member contributions.

Year-to-date net inflows were \$10.0 billion in 2021, compared with \$8.3 billion in same period of 2020. The increase was primarily driven by Retail from higher gross flows across all geographies and lower mutual fund redemptions in the U.S., as well as lower institutional redemptions in the U.S. and a \$1.0 billion institutional sale to an existing client in Canada. This increase was partially offset by a \$9.4 billion institutional redemption in Asia and the non-recurrence of a \$6.9 billion institutional sale in Canada in 2020.

A3 Financial strength

(unaudited)	Quarterly Results			YTD Results	
	2Q21	1Q21	2Q20	2021	2020
MLI's LICAT ratio	137%	137%	155%	137%	155%
Financial leverage ratio	25.9%	29.5%	26.0%	25.9%	26.0%
Consolidated capital (\$ billions) ⁽¹⁾	\$ 61.4	\$ 59.5	\$ 61.8	\$ 61.4	\$ 61.8
Book value per common share (\$)	\$ 24.76	\$ 23.40	\$ 25.14	\$ 24.76	\$ 25.14
Book value per common share excluding AOCI (\$)	\$ 22.89	\$ 21.84	\$ 20.36	\$ 22.89	\$ 20.36

⁽¹⁾ This item is a non-GAAP measure. See "Performance and non-GAAP measures" below.

The Life Insurance Capital Adequacy Test ("LICAT") ratio for The Manufacturers Life Insurance Company ("MLI") as at June 30, 2021 was 137%, unchanged from March 31, 2021. Favourable impacts from market movements, mainly from lower risk-free rates and from ALDA gains, were offset by the impact of capital redemptions of \$2.1 billion.

MFC's LICAT ratio was 127% as at June 30, 2021, compared with 124% as at March 31, 2021. The difference between the MLI and MFC ratios as at June 30, 2021 was largely due to the \$4.8 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 more favorable movement in the MFC ratio compared with the MLI ratio was mainly due to the redemption of senior debt in 2Q21, which impacted MLI unfavorably, but not MFC.

MFC's financial leverage ratio as at June 30, 2021 was 25.9%, a decrease of 3.6 percentage points from 29.5% as at March 31, 2021. The decrease in the ratio was driven by the redemption of debt and capital instruments of \$2.1 billion, growth in retained earnings, and the favourable impact of lower interest rates on the value of AFS debt securities, partially offset by the unfavourable impact of a stronger Canadian dollar.

MFC's consolidated capital¹ was \$61.4 billion as at June 30, 2021, an increase of \$0.3 billion compared with \$61.1 billion as at December 31, 2020. The increase was primarily driven by growth in retained earnings and net capital issuances, partially offset by a reduction in the value of AFS debt securities due to higher interest rates and the impact of a stronger Canadian dollar.

Cash and cash equivalents and marketable securities² was \$254.6 billion as at June 30, 2021 compared with \$262.9 billion as at December 31, 2020. The reduction was primarily driven by the impact of higher interest rates on the market values of fixed income instruments.

Book value per common share as at June 30, 2021 was \$24.76, a 1% decrease compared with \$25.00 as at December 31, 2020. Book value per common share excluding accumulated other comprehensive income ("AOCI") was \$22.89 as at June 30, 2021, a 5% increase compared with \$21.74 as at December 31, 2020. The number of common shares outstanding was 1,942 million as at June 30, 2021 and was 1,940 million as at December 31, 2020.

¹ This item is a non-GAAP measure. See "Performance and non-GAAP measures" below.

² 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.

A4 Revenue

(\$ millions, unaudited)	Quarterly Results			YTD Results	
	2Q21	1Q21	2Q20	2021	2020
Gross premiums	\$ 10,614	\$ 10,992	\$ 9,538	\$ 21,606	\$ 20,263
Premiums ceded to reinsurers	(1,200)	(1,384)	(1,305)	(2,584)	(2,675)
Net premium income	9,414	9,608	8,233	19,022	17,588
Investment income	4,099	3,214	5,262	7,313	8,546
Other revenue	2,760	2,637	2,365	5,397	5,345
Revenue before realized and unrealized investment gains and losses	16,273	15,459	15,860	31,732	31,479
Realized and unrealized gains and losses on assets supporting insurance and investment contract liabilities and on the macro hedge program ⁽¹⁾	9,551	(17,056)	11,626	(7,505)	16,184
Total revenue	\$ 25,824	\$ (1,597)	\$ 27,486	\$ 24,227	\$ 47,663

⁽¹⁾ See section A6 "Impact of fair value accounting". Also see section A1 "Profitability - Items excluded from core earnings" for information on the direct impact of equity markets and interest rates and variable annuity guarantee liabilities.

Total revenue in 2Q21 was \$25.8 billion compared with \$27.5 billion in 2Q20. The amount of revenue reported in any fiscal period can be significantly affected by fair value accounting, which can materially impact the reported realized and unrealized investment gains or losses on assets supporting insurance and investment contract liabilities and on the macro hedge program, a component of revenue (see "Impact of fair value accounting" below). Accordingly, we discuss specific drivers of revenue in each segment before realized and unrealized investment gains and losses in section B "Performance by Segment" below.

2Q21 revenue before realized and unrealized investment gains and losses of \$16.3 billion increased \$0.4 billion compared with 2Q20 driven primarily by higher premiums from an increase in new business volumes and recurring premium growth from in-force business, partially offset by lower investment income, primarily due to realized losses in Corporate and Other on the sale of AFS bonds in 2021 compared to gains in the same period of 2020.

Net realized and unrealized investment gains and losses on assets supporting insurance and investment contract liabilities and on the macro hedge program was a net gain of \$9.6 billion in 2Q21 compared with a net gain of \$11.6 billion in 2Q20. The 2Q21 gain was primarily driven by the impact of interest rate declines in North America and Asia, overall growth in equity markets, and fair value gains in other invested assets. The 2Q20 gain was primarily due to the net impact of interest rate declines and improving equity markets in North America.

On a year-to-date basis, revenue before net realized and unrealized investment gains and losses of \$31.7 billion was \$0.3 billion higher than the same period of 2020 due to similar factors noted above as well as higher year-to-date investment income as a result of the non-recurrence of sharp declines in oil and gas prices in the first quarter of 2020 ("1Q20"). Net realized and unrealized investment gains and losses on assets supporting insurance and investment contract liabilities and on the macro hedge program was a net charge of \$7.5 billion in 2021 compared with a net gain of \$16.2 billion in 2020. The year-to-date charge in 2021 was primarily due to the impact of interest rate increases in North America and Asia partially offset by overall growth in equity markets, and fair value gains in other invested assets. The key driver of the fair value impact on a year-to-date basis in 2020 was the impact of interest rate declines in North America and net gains from derivatives hedging our equity exposure.

See "Impact of fair value accounting" below. Also, see section A1 for additional information on the impact on 2Q21 net income attributed to shareholders from the direct impact of equity markets and interest rates and variable annuity guarantee liabilities.

A5 Assets under management and administration ("AUMA")¹

AUMA as at June 30, 2021 was \$1.3 trillion, an increase of 6% compared with December 31, 2020, primarily due to the favourable impact of markets and year-to-date net inflows.

¹ This item is a non-GAAP measure. See "Performance and non-GAAP measures" below.

A6 Impact of fair value accounting

Fair value accounting policies affect the measurement of both our assets and our liabilities. The difference between the reported amounts of our assets and liabilities determined as of the balance sheet date and the immediately preceding balance sheet date in accordance with the applicable fair value accounting principles is reported as investment-related experience and the direct impact of equity markets and interest rates and variable annuity guarantees, each of which impacts net income attributed to shareholders (see “Profitability” section above for discussion of 2Q21 experience).

Net realized and unrealized investment gains on assets supporting insurance and investment contract liabilities and on the macro hedge program were \$9.6 billion for 2Q21 (2Q20 – net gains of \$11.6 billion) and on a year-to-date basis, were net losses of \$7.5 billion for 2021 (2020 – net gains of \$16.2 billion). See “Revenue” section above for discussion of results.

As outlined in “Critical Actuarial and Accounting Policies” in the MD&A in our 2020 Annual Report, net insurance contract liabilities under IFRS are determined using Canadian Asset Liability Method (“CALM”), as required by the Canadian Institute of Actuaries (“CIA”). The measurement of policy liabilities includes the estimated value of future policyholder benefits and settlement obligations to be paid over the term remaining on in-force policies, including the costs of servicing the policies, reduced by the future expected policy revenues and future expected investment income on assets supporting the policies. Investment returns are projected using current asset portfolios and projected reinvestment strategies. Experience gains and losses are reported when current period activity differs from what was assumed in the policy liabilities at the beginning of the period. We classify gains and losses by assumption type. For example, current period investing activities that increase (decrease) the future expected investment income on assets supporting the policies will result in an investment-related experience gain (loss). See description of investment-related experience in “Performance and non-GAAP measures” below.

As noted in “Critical Actuarial and Accounting Policies – Future Accounting and Reporting Changes” in the MD&A in our 2020 Annual Report, IFRS 17 “Insurance Contracts” will replace IFRS 4 and therefore CALM effective for years beginning on January 1, 2023. The new standard will materially change the recognition and measurement of insurance contracts and the corresponding presentation and disclosures in the Company’s Financial Statements. The measurement of the discount rate used to estimate the present value of insurance contract liabilities and the reporting of new business gains are among the more significant changes. Under IFRS 17, new business gains are recorded on the balance sheet (in the contractual service margin component of the insurance contract liability) and are amortized into income as services are provided. We reported \$278 million (post-tax) of new business gains in net income attributed to shareholders in 2Q21 (2Q20 – \$161 million) and \$558 million (post-tax) for year-to-date 2021 (2020 – \$311 million).

A7 Impact of foreign currency exchange rates

Changes in foreign currency exchange rates from 2Q20 to 2Q21, primarily due to a stronger Canadian dollar compared with the U.S. dollar, decreased core earnings by \$159 million in 2Q21. Changes in foreign currency exchange rates decreased year-to-date core earnings by \$230 million in 2021 compared with the same period of 2020. The impact of foreign currency exchange rates on items excluded from core earnings does not provide relevant information given the nature of those items.

A8 Business highlights

In Asia, we continued to invest in the recruitment, training and education of our agents and announced a three-year partnership with LIMRA, a leading global trade association for the financial services industry, in order to further recruit best-in-class agents across Asia. This partnership complements our newly launched Manulife Business Academy, which will provide a region-wide unified learning and development platform for our growing number of agents. In Canada, we launched the Manulife *Vitality* HealthyMind reward program to help our individual insurance customers improve their mental and emotional wellbeing. In the U.S., we released US\$125 million of capital through our Annuity Guaranteed Minimum Withdrawal Benefit offer program. Global WAM’s

managed AUMA¹ totaled more than \$1 trillion, reflecting our track record of positive net flows and strong investment performance², as well as growth in assets managed on behalf of the Company's other segments. Further, our Global WAM business secured an Alternative Investment Fund Managers ("AIFM") license to offer on-shore private market funds in our key European markets, positioning us to drive the expansion and offering of our private market investment capabilities within Europe.

In addition, we continued to make progress on our digital journey in 2Q21. In Asia, we entered into a new digital collaboration with Rewardz, a rewards aggregator and management solution, to further incentivize customers in our MOVE program to be physically active. In Canada, we became the first Canadian company to use artificial intelligence in underwriting mortgage creditor insurance. In the U.S., we integrated our underwriting decision engine with iPipeline, a leading provider of no code / low code content-based digital solutions for the life insurance and financial services industry, to accelerate the life insurance application process. This new approach will dramatically reduce the life insurance sales cycle and offers a less intrusive way to collect medical history data with required signatures. In our Global WAM business, we launched a new retirement mobile app for all U.S. plan members. The new app gives members the ability to enroll in their plan, view account details, make changes to their account, and use additional financial tools that provide them with guidance on their retirement saving strategies and financial priorities.

A9 Mosten litigation and regulatory update

In our third quarter of 2018 MD&A, we disclosed developments in the litigation Mosten Investment LP ("Mosten") brought against the Company in Saskatchewan. The basis of the claims by Mosten has been that life insurers can be compelled to accept unlimited premium payments into certain universal life policies and associated side accounts. In effect, Mosten was seeking to use insurance policies to invest sizeable sums that have no connection to the insurance coverage.

On October 4, 2018 Manulife issued a press release regarding certain short-selling activity relating to the Mosten litigation, stating that the short seller's report was an attempt to profit at the expense of our shareholders. We further stated that we disagree with the conclusions of the report and that we continue to believe that Mosten's position is legally unfounded as we firmly believe that the consumers purchasing universal life policies, and the insurers issuing these policies, never intended to have the policies function as deposit or securities contracts. On October 29, 2018, the Government of Saskatchewan published new regulations that limit the amount of premiums a life insurer may receive or accept for deposit in certain life insurance policies and associated side accounts. In his March 15, 2019 decision, the trial judge accepted Manulife's position on the interpretation of the policies, namely that they do not permit making unlimited deposits for investment purposes unrelated to the payment of life insurance premiums. The trial judge also ruled that the 2018 regulations had prospective effect only with respect to new policies issued after the date of the regulation.

In its March 10, 2021 decision, the Saskatchewan Court of Appeal rejected the trial judge's interpretation of the policies but, ruling in Manulife's favour, held that the 2018 regulations (and subsequent 2020 regulations) operate prospectively in a manner that prohibits Saskatchewan-licensed insurers from accepting deposits that do not relate to the payment of life insurance premiums, thereby preventing Mosten from using existing or new insurance policies as an investment vehicle. Similar legislation has been enacted by the governments of Ontario, Prince Edward Island, Alberta, New Brunswick, Nova Scotia and Quebec. On May 10, 2021 Manulife received notice that Mosten has sought leave to appeal the Saskatchewan Court of Appeal's decision regarding the regulations to the Supreme Court of Canada. Manulife has opposed Mosten's application for leave to appeal and has also sought leave to cross-appeal the Saskatchewan Court of Appeal's decision regarding interpretation of the policies to the Supreme Court of Canada.

¹ Global WAM managed assets under management and administration includes assets managed by Global WAM for the Company's other segments of \$235 billion as at June 30, 2021.

² Investment performance for the 3- and 5- year period ending June 30, 2021 reflects 74% and 79%, respectively, of assets outperforming their peers or their respective index, and is based on assets under management of \$606 billion. The \$606 billion represents Global WAM managed AUMA excluding 3rd party products, liability-driven invested assets, Private Markets strategies, and passive strategies, as well as certain assets managed on behalf of the Company's other segments and select Retirement assets in Canada.

A10 Annual review of actuarial methods and assumptions

In the third quarter of 2021 (“3Q21”), we will complete our annual review of actuarial methods and assumptions. While this review is not complete, preliminary indications suggest a roughly neutral impact in 3Q21.¹ Assumptions being reviewed this year include expense assumptions derived from our global study, mortality and lapse assumptions for U.S. Insurance, U.S. variable annuity assumptions, and investment return and corporate bond default assumptions. Per our definition of core earnings, any impact of this review will be reported in items excluded from core earnings. Please see “Performance and non-GAAP measures” section below.

A11 Updates to the ultimate reinvestment rate

In June 2021, the Canadian Actuarial Standards Board (“ASB”) issued a new promulgation with reductions to the Ultimate Reinvestment Rate (“URR”) and updates to the calibration criteria for stochastic risk-free rates. The updated standard includes a reduction of 15 basis points in the URR and a corresponding change to stochastic risk-free rate modeling and is effective October 15, 2021. We expect to adopt this standard in 3Q21 and estimate that it will reduce net income attributed to shareholders by approximately \$550 million (post-tax).¹ Per our definition of core earnings, the impact of this change will be reported in items excluded from core earnings, as the direct impact of equity markets and interest rates and variable annuity guarantee liabilities. Please see “Performance and non-GAAP measures” section below. See section C4 “Interest rate and spread risk sensitivities and exposure measures” for additional information.

A12 Strategic priorities¹

At Manulife’s Investor Day on June 29, 2021, we announced that we have entered a new phase of our strategy, with a greater focus on accelerating growth of our highest potential businesses and a commitment to meaningful metrics to measure our progress through to 2025. We are confident our five strategic priorities remain the right areas of focus to achieve our ambition of being the most digital, customer-centric global company in our industry.

- **Accelerate Growth** – we remain committed to generating two-thirds of core earnings from our highest potential businesses by 2022 and will target a 75% contribution by 2025. We also aspire to generate one-half of core earnings from our Asia region (Asia segment and Asia WAM) by 2025.
- **Digital, Customer Leader** – we remain committed to a Net Promoter Score (“NPS”)² of +31 by 2022, and will target NPS of +37 by 2025. We also introduced a new metric, straight-through-processing (“STP”)³, which represents customer interactions that are completely digital, and aim to achieve STP of 88% by 2025.
- **Expense Efficiency** – we have already delivered on our original 2022 target of \$1 billion in expense efficiencies. We remain focused on driving efficient growth and are committed to consistently achieving an expense efficiency ratio of less than 50% by 2022 and beyond.
- **Portfolio Optimization** – we have already surpassed our original target to release \$5 billion of capital by 2022 and will continue to focus on portfolio optimization. Together with a focus on increasing the core earnings from our highest potential businesses, we will continue to focus on optimizing our legacy businesses in the next phase of our strategy and we plan to reduce the combined contributions from long-term care insurance and variable annuities businesses to less than 15% of core earnings by 2025 through organic optimization.
- **High Performing Team** – we are committed to enabling a high performing team and maintaining our top quartile employee engagement compared to global financial services and insurance peers.

¹ See “Caution regarding forward-looking statements”.

² Relationship Net Promoter Score. In 2021, we adjusted the weightings in our relationship NPS methodology to more closely align with our focus on our highest potential businesses with 2Q21 NPS of +19. This adjustment had no impact on the 2017 NPS baseline of +1 and would have modestly increased the score in 2018, 2019, and 2020.

³ Straight-through processing includes money movement.

We also announced that we remain committed to our medium-term targets including: core EPS¹ growth of 10% to 12% over the medium term, core ROE¹ of 13% or more, a leverage ratio of 25%, and a common share dividend payout ratio of 30% to 40% of core earnings.

B PERFORMANCE BY SEGMENT

B1 Asia

(\$ millions, unless otherwise stated) <i>Canadian dollars</i>	Quarterly Results			YTD Results	
	2Q21	1Q21	2Q20	2021	2020
Net income attributed to shareholders ⁽¹⁾	\$ 633	\$ 957	\$ 377	\$ 1,590	\$ 472
Core earnings ⁽¹⁾	526	570	489	1,096	980
Annualized premium equivalent sales	950	1,280	784	2,230	1,868
New business value	399	477	298	876	654
Revenue	9,122	5,840	8,511	14,962	12,988
Revenue before realized and unrealized investment gains and losses ⁽²⁾	6,603	7,221	5,391	13,824	12,230
Assets under management (\$ billions) ⁽³⁾	141.9	137.0	132.1	141.9	132.1
<i>U.S. dollars</i>					
Net income attributed to shareholders ⁽¹⁾	US\$ 515	US\$ 755	US\$ 272	US\$ 1,270	US\$ 343
Core earnings ⁽¹⁾	427	450	353	877	718
Annualized premium equivalent sales	773	1,010	567	1,783	1,373
New business value	325	376	215	701	480
Revenue	7,426	4,610	6,145	12,036	9,474
Revenue before realized and unrealized investment gains and losses ⁽²⁾	5,376	5,701	3,893	11,077	8,979
Assets under management (\$ billions) ⁽³⁾	114.6	108.9	96.9	114.6	96.9

⁽¹⁾ See "Performance and non-GAAP measures" for a reconciliation between net income (loss) attributed to shareholders and core earnings.

⁽²⁾ See section A6 "Impact of fair value accounting".

⁽³⁾ This item is a non-GAAP measure. See "Performance and non-GAAP measures" below.

Asia's net income attributed to shareholders was \$633 million in 2Q21 compared with \$377 million in 2Q20. Net income attributed to shareholders is comprised of core earnings, which was \$526 million in 2Q21 compared with \$489 million in 2Q20, and items excluded from core earnings, which amounted to a net gain of \$107 million in 2Q21 compared with a net charge of \$112 million in 2Q20. 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 \$62 million unfavourable impact due to changes in 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\$515 million in 2Q21 compared with US\$272 million in 2Q20 and core earnings were US\$427 million in 2Q21 compared with US\$353 million in 2Q20. Items excluded from core earnings were a net gain of US\$88 million in 2Q21 compared with a net charge of US\$81 million in 2Q20 (see a reconciliation of net income (loss) attributed to shareholders to core earnings in "Performance and non-GAAP measures" below).

Core earnings in 2Q21 increased 20% compared with 2Q20, driven by higher new business volumes and favourable product mix, in-force business growth, and a dampened impact of COVID-19 in the quarter, partially offset by unfavourable policyholder experience and US\$5 million of lower investment income on allocated capital (see Corporate and Other Segment).

Year-to-date net income attributed to shareholders was US\$1,270 million in 2021 compared with US\$343 million in the same period of 2020. Year-to-date core earnings of US\$877 million in 2021 increased 20% compared with the same period of 2020 due to similar factors noted above, including US\$10 million of lower investment income on allocated capital (see Corporate and Other Segment). Items excluded from year-to-date core earnings were a net gain of US\$393 million in 2021 compared with a net charge of US\$375 million for the same period of 2020 (see a reconciliation of net income (loss) attributed to shareholders to core earnings in "Performance and non-GAAP

¹ This item is a non-GAAP measure. See "Performance and non-GAAP measures" below.

measures” below). Expressed in Canadian dollars, year-to-date core earnings reflected a net \$86 million unfavourable impact of changes in foreign currency exchange rates versus the Canadian dollar.

APE sales in 2Q21 were US\$773 million, an increase of 34% compared with 2Q20, driven by growth in Asia Other and Hong Kong, partially offset by lower sales in Japan. While COVID-19 impacts on sales have moderated, there continued to be varying degrees of adverse impacts on select markets across the region. NBV in 2Q21 was US\$325 million, a 48% increase compared with 2Q20, reflecting growth in Asia Other, Hong Kong and Japan. Year-to-date APE sales were US\$1,783 million in 2021, an increase of 27% compared with the same period of 2020 driven by double-digit growth in both bancassurance and agency channels. Year-to-date NBV was US\$701 million in 2021, a 44% increase compared with the same period of 2020, primarily reflecting the growth in APE sales, improved product mix and favourable interest rates. New business value margin (“NBV margin”)¹ was 44.6% in 2Q21 compared with 41.0% in 2Q20.

- Hong Kong APE sales in 2Q21 were US\$196 million, a 7% increase compared with 2Q20 reflecting continued strong domestic demand and emerging demand from mainland Chinese visitors. Sales continued to be dampened by COVID-19 containment measures. Hong Kong NBV was US\$148 million in 2Q21 an increase of 46% compared with 2Q20 due to higher sales volumes, favourable interest rates and product management actions. Hong Kong NBV margin was 75.8% in 2Q21, an increase of 20.2 percentage points compared with 2Q20.
- Japan APE sales in 2Q21 were US\$107 million, a decrease of 4% compared with 2Q20 as a result of lower COLI product sales. Japan NBV in 2Q21 of US\$24 million increased 13% compared with 2Q20 due to expense management actions and favourable product mix from a shift away from lower margin COLI products. Japan NBV margin was 23.0% in 2Q21, an increase of 3.6 percentage points compared with 2Q20.
- Asia Other APE sales in 2Q21 were US\$470 million, a 66% increase compared with 2Q20. We experienced higher sales, with double-digit growth in both bancassurance and agency channels. Our actions to mitigate the impact of COVID-19 in Asia Other, such as enhancing the digital capabilities of our distributors, have contributed to the sales growth in 2Q21. Asia Other NBV in 2Q21 of US\$153 million increased 59% compared with 2Q20, primarily due to higher sales volumes. Asia Other NBV margin was 35.7% in 2Q21, a decrease of 4.3 percentage points compared with 2Q20.

Assets under management¹ were US\$114.6 billion as at June 30, 2021, an increase of US\$5.9 billion or 8% compared with December 31, 2020, due to net customer inflows of US\$6.6 billion.

Revenue was US\$7.4 billion in 2Q21 compared with US\$6.1 billion in 2Q20. Revenue before realized and unrealized investment gains and losses was US\$5.4 billion in 2Q21, an increase of US\$1.5 billion compared with 2Q20, driven by an increase in new business volumes and recurring premium growth from in-force business. Year-to-date revenue was US\$12.0 billion in 2021 compared with US\$9.5 billion in the same period of 2020. Year-to-date revenue before realized and unrealized investment gains and losses was US\$11.1 billion in 2021, compared with US\$9.0 billion in the same period of 2020.

Business highlights – In 2Q21, we continued to invest in the recruitment, training and education of our agents and announced a three-year partnership with LIMRA, a leading global trade association for the financial services industry, in order to further recruit best-in-class agents across Asia. This partnership complements our newly launched Manulife Business Academy, which will provide a region-wide unified learning and development platform for our growing number of agents. In addition, as part of our commitment to support a healthy community, we entered into a new digital collaboration with Rewardz, a rewards aggregator and management solution, to further incentivize customers in our MOVE program to be physically active.

¹ This item is a non-GAAP measure. See “Performance and non-GAAP measures” below.

B2 Canada

(\$ millions, unless otherwise stated)	Quarterly Results			YTD Results	
	2Q21	1Q21	2Q20	2021	2020
Net income (loss) attributed to shareholders ⁽¹⁾	\$ 783	\$ (19)	\$ 142	\$ 764	\$ (724)
Core earnings ⁽¹⁾	318	264	342	582	579
Annualized premium equivalent sales	274	355	238	629	614
Manulife Bank average net lending assets (\$ billions) ⁽²⁾	22.8	22.8	22.5	22.8	22.4
Revenue	5,932	(2,577)	7,934	3,355	11,319
Revenue before realized and unrealized investment income gains and losses ⁽³⁾	3,920	3,550	3,404	7,470	6,479
Assets under management (\$ billions)	157.5	152.4	156.4	157.5	156.4

⁽¹⁾ See "Performance and non-GAAP measures" below for a reconciliation between net income (loss) attributed to shareholders and core earnings.

⁽²⁾ This item is a non-GAAP measure. See "Performance and non-GAAP measures" below.

⁽³⁾ See section A6 "Impact of fair value accounting".

Canada's 2Q21 net income attributed to shareholders was \$783 million compared with \$142 million in 2Q20. Net income attributed to shareholders is comprised of core earnings, which were \$318 million in 2Q21 compared with \$342 million in 2Q20, and items excluded from core earnings, which amounted to a net gain of \$465 million in 2Q21 compared with a net charge of \$200 million in 2Q20 (see a reconciliation of net income (loss) attributed to shareholders to core earnings in "Performance and non-GAAP measures" below).

Core earnings decreased \$24 million or 7% compared with 2Q20, as higher in-force earnings and higher sales in our retail insurance business were more than offset by less favourable policyholder experience in our insurance businesses, driven by the favourable impact of COVID-19 containment measures in 2Q20, and \$24 million of lower investment income on allocated capital.

Year-to-date net income attributed to shareholders was \$764 million in 2021 compared with a year-to-date net loss attributed to shareholders of \$724 million in the same period of 2020 and year-to-date core earnings were \$582 million in 2021 compared with \$579 million in the same period of 2020. The increase in year-to-date core earnings of \$3 million was driven by business growth and higher retail sales in our individual insurance business, partially offset by \$48 million of lower investment income on allocated capital. Items excluded from year-to-date core earnings were a net gain of \$182 million in 2021 compared with a net charge of \$1,303 million for the same period of 2020 (see a reconciliation of net income (loss) attributed to shareholders to core earnings in "Performance and non-GAAP measures" below).

APE sales of \$274 million in 2Q21 increased by \$36 million or 15% compared with 2Q20, primarily driven by higher sales of lower risk segregated fund products, higher retail insurance sales and higher small and mid-size group insurance sales, partially offset by the non-recurrence of a large affinity markets sale in 2Q20 and lower large case group insurance sales. Year-to-date APE sales in 2021 were \$629 million, \$15 million or 2% higher than in the same period of 2020, driven by similar factors noted above.

- Individual insurance APE sales in 2Q21 of \$101 million decreased \$1 million or 1% compared with 2Q20, primarily due to the non-recurrence of a large affinity markets sale in 2Q20, mostly offset by higher par product sales in 2Q21, which were adversely impacted by COVID-19 in the prior year.
- Group insurance APE sales in 2Q21 of \$94 million increased \$7 million or 8% compared with 2Q20, primarily due to higher small and mid-size business sales, partially offset by lower large-case sales.
- Annuities APE sales in 2Q21 of \$79 million increased \$30 million or 61% compared with 2Q20, due to higher sales in our lower risk segregated funds. We are focused on growth in lower risk segregated fund products, which accounted for 88% of annuities APE sales in 2Q21.

Manulife Bank average net lending assets¹ for the quarter were \$22.8 billion as at June 30, 2021, consistent with the quarter ended December 31, 2020.

¹ This item is a non-GAAP measure. See "Performance and non-GAAP measures" below.

Assets under management were \$157.5 billion as at June 30, 2021, a decrease of \$1.8 billion or 1% from December 31, 2020, due to the unfavourable impact of market movements primarily from higher interest rates, partially offset by equity market growth.

Revenue in 2Q21 was \$5.9 billion compared with \$7.9 billion in 2Q20. Revenue before realized and unrealized investment gains and losses was \$3.9 billion in 2Q21, an increase of \$0.5 billion compared with 2Q20 due to higher investment income and growth in premiums. Year-to-date revenue was \$3.4 billion in 2021 compared with \$11.3 billion in the same period of 2020, a decrease of \$7.9 billion compared with the same period of 2020 driven by year-to-date realized and unrealized losses in 2021 compared with gains in the prior year. Year-to-date revenue before realized and unrealized investment gains and losses was \$7.5 billion in 2021, an increase of 15% compared with the same period of 2020 due to higher investment income primarily as a result of the non recurrence of sharp declines in oil and gas prices in the first quarter of 2020 (“1Q20”).

Business highlights – In 2Q21, we further advanced digital solutions across our businesses and continued to offer a differentiated customer experience. We launched the Manulife *Vitality* HealthyMind reward program to help our individual insurance customers improve their mental and emotional wellbeing. We became the first Canadian company to use artificial intelligence in underwriting mortgage creditor insurance.

B3 U.S.

(\$ millions, unless otherwise stated) <i>Canadian dollars</i>	Quarterly Results			YTD Results	
	2Q21	1Q21	2Q20	2021	2020
Net income attributed to shareholders ⁽¹⁾	\$ 793	\$ 96	\$ (1,580)	\$ 889	\$ 272
Core earnings ⁽¹⁾	478	501	602	979	1,018
Annualized premium equivalent sales	191	150	154	341	295
Revenue	8,882	(5,992)	7,604	2,890	18,267
Revenue before realized and unrealized investment income gains and losses ⁽²⁾	3,915	3,533	3,585	7,448	7,635
Assets under management (\$ billions)	233.7	228.2	248.5	233.7	248.5
<i>U.S. dollars</i>					
Net income attributed to shareholders ⁽¹⁾	US\$ 646	US\$ 76	US\$ (1,140)	US\$ 722	US\$ 237
Core earnings ⁽¹⁾	389	396	434	785	744
Annualized premium equivalent sales	155	119	111	274	216
Revenue	7,232	(4,733)	5,488	2,499	13,417
Revenue before realized and unrealized investment income gains and losses ⁽²⁾	3,185	2,791	2,586	5,976	5,598
Assets under management (\$ billions)	188.5	181.5	182.3	188.5	182.3

⁽¹⁾ See “Performance and non-GAAP measures” below for a reconciliation between net income (loss) attributed to shareholders and core earnings.

⁽²⁾ See section A6 “Impact of fair value accounting”.

U.S. 2Q21 net income attributed to shareholders was \$793 million compared with a net loss attributed to shareholders of \$1,580 million in 2Q20. Net income attributed to shareholders is comprised of core earnings, which amounted to \$478 million in 2Q21 compared with \$602 million in 2Q20, and items excluded from core earnings, which amounted to a net gain of \$315 million in 2Q21 compared with a net charge of \$2,182 million in 2Q20. 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 \$61 million unfavourable impact from the weakening of the U.S. dollar compared with the Canadian dollar.

Expressed in U.S. dollars, the functional currency of the segment, 2Q21 net income attributed to shareholders was US\$646 million compared with a net loss attributed to shareholders of US\$1,140 million in 2Q20, core earnings were US\$389 million in 2Q21 compared with US\$434 million in 2Q20, and items excluded from core earnings were a net gain of US\$257 million in 2Q21 compared with a net charge of US\$1,574 million in 2Q20 (see a reconciliation of net income (loss) attributed to shareholders to core earnings in “Performance and non-GAAP measures” below).

Core earnings decreased US\$45 million or 10% compared with 2Q20, primarily driven by a less favourable impact from COVID-19 on long-term care policyholder experience and a US\$30 million decrease in investment income on allocated capital, partially offset by higher new business volumes.

Year-to-date net income attributed to shareholders was US\$722 million in 2021 compared with US\$237 million in the same period of 2020 and year-to-date core earnings were US\$785 million in 2021 compared with US\$744 million in the same period of 2020. Year-to-date core earnings increased US\$41 million due to higher new business volumes and in-force earnings as well as higher gains from the Annuity Guaranteed Minimum Withdrawal Benefit offer program, partially offset by a US\$59 million decrease in investment income on allocated capital and modestly unfavourable policyholder experience. Compared to 2020, unfavourable life insurance policyholder experience, which included COVID-19 related claims in both periods, was partially offset by favourable long-term care policyholder experience primarily due to the impact of COVID-19, and favourable annuities policyholder experience. Items excluded from year-to-date core earnings were a net charge of US\$63 million in 2021 compared with a net charge of US\$507 million for the same period of 2020 (see a reconciliation of net income (loss) attributed to shareholders to core earnings in “Performance and non-GAAP measures” below). Expressed in Canadian dollars, year-to-date core earnings reflected a \$92 million unfavourable impact of changes in foreign currency exchange rates versus the Canadian dollar.

APE sales in 2Q21 of US\$155 million increased 40% compared with 2Q20, due to higher customer demand across all product lines, primarily domestic indexed universal life, variable universal life and international sales. APE sales of products with the John Hancock Vitality PLUS feature in 2Q21 increased 27% compared with 2Q20 as the feature continues to be a differentiator in the market reflecting greater consumer interest in improving baseline health. Year-to-date APE sales in 2021 of US\$274 million increased 27% compared with the same period of 2020 due to similar factors. The year-to-date increase also reflects the impact of COVID-19, with the increased demand for protection making our Vitality feature a desirable solution in the current environment.

Assets under management as at June 30, 2021 were US\$188.5 billion, consistent with December 31, 2020. The favourable impact from equity markets was offset by the continued run-off of the annuity business and the unfavourable impact of higher interest rates on asset values.

Revenue in 2Q21 was US\$7.2 billion compared with US\$5.5 billion in 2Q20. Revenue before net realized and unrealized investment gains and losses was US\$3.2 billion in 2Q21 compared with US\$2.6 billion in 2Q20. The US\$0.6 billion increase was driven by market impacts in investment income, as well as higher net premiums in life insurance. Year-to-date revenue was US\$2.5 billion in 2021, a decrease compared with US\$13.4 billion in the same period of 2020. The US\$10.9 billion decrease was driven by mark-to-market losses in 1Q21 compared to gains in the previous year. Year-to-date revenue before realized and unrealized investment gains and losses was US\$6.0 billion in 2021 compared with US\$5.6 billion in the same period of 2020.

Business highlights – In 2Q21, we:

- integrated our underwriting decision engine with iPipeline, a leading provider of no code / low code content-based digital solutions for the life insurance and financial services industry, to accelerate the life insurance application process. This new approach will dramatically reduce the life insurance sales cycle and offers a less intrusive way to collect medical history data with required signatures, and
- released US\$125 million of capital through our Annuity Guaranteed Minimum Withdrawal Benefit offer program and over US\$325 million since the start of the program in the fourth quarter of 2019.

B4 Global Wealth and Asset Management

(\$ millions, unless otherwise stated)	Quarterly Results			YTD Results	
	2Q21	1Q21	2Q20	2021	2020
Net income attributed to shareholders ⁽¹⁾	\$ 356	\$ 312	\$ 238	\$ 668	\$ 488
Core earnings ⁽¹⁾	356	312	238	668	488
Core EBITDA ⁽²⁾	521	469	381	990	771
Core EBITDA margin(%) ⁽²⁾	32.4%	30.7%	28.0%	31.6%	27.7%
Sales					
Wealth and asset management gross flows	33,739	39,709	33,071	73,448	71,243
Wealth and asset management net flows	8,628	1,357	5,149	9,985	8,307
Revenue	1,607	1,527	1,361	3,134	2,787
Assets under management and administration (\$ billions)	798.5	764.1	696.9	798.5	696.9
Average assets under management and administration (\$ billions) ⁽³⁾	775.8	765.0	672.0	771.2	677.0

⁽¹⁾ See "Performance and non-GAAP measures" below for a reconciliation between net income (loss) attributed to shareholders and core earnings.

⁽²⁾ Core EBITDA and core EBITDA margin are non-GAAP measures. Core EBITDA is core earnings before interest, taxes, depreciation and amortization and core EBITDA margin is core EBITDA divided by total revenue. See "Performance and non-GAAP measures" below.

⁽³⁾ Average assets under management and administration ("average AUMA") is a non-GAAP measure reflecting the average of Global WAM's AUMA during the reporting period. See "Performance and non-GAAP measures" below.

Global Wealth and Asset Management's net income attributed to shareholders was \$356 million in 2Q21 compared with \$238 million in 2Q20. Net income attributed to shareholders is comprised of core earnings, which were \$356 million in 2Q21 compared with \$238 million in 2Q20 and items excluded from core earnings, which were nil in both 2Q21 and 2Q20 (see a reconciliation of net income (loss) attributed to shareholders to core earnings in "Performance and non-GAAP measures" below).

Core earnings in 2Q21 increased 62% compared with 2Q20 reflecting growth in net fee income driven by higher average assets under management and administration, from the favourable impact of markets and net inflows, as well as favourable business mix. This increase was partially offset by higher general expenses mainly from growth in business volume.

Core EBITDA¹ was \$521 million in 2Q21, an increase of 48% compared with 2Q20, driven by the same factors as noted above. Core EBITDA margin¹ was 32.4% in 2Q21, an increase of 440 basis points compared with 2Q20, driven by a combination of higher net fee income, operational benefits from increased scale and disciplined expense management.

Year-to-date net income attributed to shareholders was \$668 million in 2021 compared with \$488 million in the same period of 2020 and year-to-date core earnings were \$668 million in 2021 compared with \$488 million in the same period of 2020. The increase in year-to-date core earnings of \$180 million or 45% reflected growth in net fee income driven by higher average assets under management and administration, from the favourable impact of markets and net inflows, partially offset by higher general expenses mainly from growth in business volumes and higher incentive compensation. Items excluded from year-to-date core earnings were nil in both 2021 and 2020 (see a reconciliation of net income (loss) attributed to shareholders to core earnings in "Performance and non-GAAP measures" below).

Year-to-date core EBITDA was \$990 million in 2021 compared with \$771 million in the same period of 2020. The increase in year-to-date core EBITDA of \$219 million or 36% driven by the factors noted above. Year-to-date core EBITDA margin was 31.6% in 2021 compared with 27.7% in the same period of 2020. The increase of 390 basis points was driven by the factors as noted above.

Wealth and asset management gross flows were \$33.7 billion in 2Q21, an increase of 10% compared with 2Q20. By business line, the results were:

- Retirement gross flows in 2Q21 were \$11.4 billion, an increase of 20% compared with 2Q20, driven by higher new plan sales and member contributions.

¹ This item is a non-GAAP measure. See "Performance and non-GAAP measures" below.

- Retail gross flows in 2Q21 were \$18.5 billion, an increase of 50% compared with 2Q20, reflecting double-digit growth in gross flows across all geographies. In the U.S., the increase was driven by strong intermediary sales and portfolio rebalancing by several large advisors. In Asia, the increase was driven by higher gross flows in Japan, Indonesia, China, and Singapore. In Canada, the increase was driven by higher gross flows across the product line-up.
- Institutional Asset Management gross flows in 2Q21 were \$3.8 billion, a decrease of 57% compared with 2Q20, driven by Canada, from the non-recurrence of a \$6.9 billion sale in 2Q20 partially offset by a \$1.0 billion sale to an existing client in the current quarter.

Year-to-date gross flows were \$73.4 billion in 2021, an increase of 9% compared with the same period of 2020, driven by higher retail gross flows across all geographies, partially offset by the non-recurrence of a \$6.9 billion sale in Institutional Asset Management in 2020.

Wealth and asset management net inflows were \$8.6 billion in 2Q21, compared with net inflows of \$5.1 billion in 2Q20. By business line, the results were:

- Retirement net outflows were \$0.6 billion in 2Q21 compared with net outflows of \$0.3 billion in 2Q20, reflecting higher member withdrawals, partially offset by growth in new plan sales and member contributions.
- Retail net inflows were \$7.3 billion in 2Q21 compared with net outflows of \$1.0 billion in 2Q20, driven by double-digit growth in gross flows across all geographies as noted above, and lower mutual fund redemptions in the U.S.
- Institutional Asset Management net inflows were \$1.9 billion in 2Q21 compared with net inflows of \$6.5 billion in 2Q20, driven by Canada, from the non-recurrence of a \$6.9 billion sale in 2Q20 partially offset by a \$1.0 billion sale to an existing client in the current quarter.

Year-to-date net inflows were \$10.0 billion in 2021, compared with \$8.3 billion in same period of 2020. The increase was primarily driven by Retail from higher gross flows across all geographies and lower mutual fund redemptions in the U.S., as well as lower institutional redemptions in the U.S. and a \$1.0 billion institutional sale to an existing client in Canada. This increase was partially offset by a \$9.4 billion institutional redemption in Asia and the non-recurrence of a \$6.9 billion institutional sale in Canada in 2020.

Assets under management and administration of \$798.5 billion as at June 30, 2021 increased 8% compared with December 31, 2020. The increase in AUMA was driven by the favourable impact of markets and year-to-date net inflows of \$10 billion. Global WAM also managed \$235.2 billion in assets for the Company's other segments as at June 30, 2021. Including those managed assets, AUMA managed by Global WAM was \$1,033.8 billion as at June 30, 2021 compared with \$984.4¹ billion as at December 31, 2020.

Revenue in 2Q21 was \$1.6 billion, an increase of 28% compared with 2Q20, driven by growth in fee income from higher average assets under management and administration and favourable business mix. Year-to-date revenue in 2021 was \$3.1 billion, an increase of 19% compared with the same period of 2020 driven by growth in fee income from higher average assets under management and administration.

Business highlights – In 2Q21, we:

- achieved Global WAM managed assets under management and administration of more than \$1 trillion, reflecting our track record of positive net flows and strong investment performance², as well as growth in assets managed on behalf of the Company's other segments,
- secured an Alternative Investment Fund Managers (AIFM) license to offer on-shore private market funds in our key European markets, positioning us drive the expansion and offering of our private market investment capabilities within Europe, and

¹ Effective January 1, 2021, Manulife's AUMA managed by Global WAM includes certain private equity, private credit and infrastructure asset classes. Total AUMA managed by Global WAM as at December 31, 2020 has been restated for comparability.

² Investment performance for the 3- and 5- year period ending June 30, 2021 reflects 74% and 79%, respectively, of assets outperforming their peers or their respective index, and is based on assets under management of \$606 billion. The \$606 billion represents Global WAM managed AUMA excluding 3rd party products, liability-driven invested assets, Private Markets strategies, and passive strategies, as well as certain assets managed on behalf of the Company's other segments and select Retirement assets in Canada.

- launched a new retirement mobile app for all U.S. plan members. The new app gives members the ability to enroll in their plan, view account details, make changes to their account, and use additional financial tools that provide them with guidance on their retirement saving strategies and financial priorities.

B5 Corporate and Other

(\$ millions, unless otherwise stated)	Quarterly Results			YTD Results	
	2Q21	1Q21	2Q20	2021	2020
Net income (loss) attributed to shareholders ⁽¹⁾	\$ 81	\$ (563)	\$ 1,550	\$ (482)	\$ 1,515
Core loss excluding core investment gains ⁽¹⁾	\$ (96)	\$ (118)	\$ (110)	\$ (214)	\$ (476)
Core investment gains	100	100	-	200	-
Total core gain (loss)	\$ 4	\$ (18)	\$ (110)	\$ (14)	\$ (476)
Revenue	\$ 281	\$ (395)	\$ 2,076	\$ (114)	\$ 2,302

⁽¹⁾ See "Performance and non-GAAP measures" for a reconciliation between net income (loss) attributed to shareholders and core earnings.

Corporate and Other is composed 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 the operating segments); our Property and Casualty ("P&C") Reinsurance business; as well as run-off reinsurance operations including variable annuities and accident and health.

For segment reporting purposes, settlement costs for macro equity hedges and other non-operating items are included in Corporate and Other earnings. This segment is also where we reclassify favourable investment-related experience to core earnings from items excluded from core earnings, subject to certain limits (see "Performance and non-GAAP measures" below). In each of the operating segments, we report all investment-related experience in items excluded from core earnings.

Corporate and Other reported a net income attributed to shareholders of \$81 million in 2Q21 compared with a net income attributed to shareholders of \$1,550 million in 2Q20. The core gain was \$4 million in 2Q21 compared with a core loss of \$110 million in 2Q20 and the items excluded from core earnings amounted to a net gain of \$77 million in 2Q21 compared with a net gain of \$1,660 million in 2Q20 (see a reconciliation of net income (loss) attributed to shareholders to core earnings in "Performance and non-GAAP measures" below).

The \$114 million decrease in core loss was primarily related to \$100 million of core investment gains compared with nil core investment gains in 2Q20 partially offset by the net impact of; lower yields on fixed income investments, lower net gains on seed money investments in segregated funds and mutual funds, gains on sales of AFS equities, and the commensurate \$83 million lower interest on allocated capital to operating segments in 2Q21.

The gain of \$77 million in items excluded from core loss in 2Q21 was mostly due to the direct impact of markets, partially offset by the reclassification of \$100 million of the total Company's favourable investment-related experience to core earnings.

On a year-to-date basis, the net loss attributed to shareholders was \$482 million in 2021 compared with a net gain attributed to shareholders of \$1,515 million in the same period of 2020. The year-to-date core loss was \$14 million in 2021 compared with \$476 million in the same period of 2020. The favourable variance in the year-to-date core loss of \$462 million was primarily attributable to \$200 million of core investment gains in the first half of 2021 compared with nil in the same period of 2020, lower interest on allocated capital to operating segments of \$160 million in the first half of 2021, gains from AFS equities and seed money investments compared to losses in the prior year, partially offset by lower yields on fixed income investments. Items excluded from the year-to-date core loss were a net loss of \$468 million in 2021 compared with a net gain of \$1,991 million in the same period of 2020 (see reconciliation of net income (loss) attributed to shareholders to core earnings in "Performance and non-GAAP measures" below).

Revenue in 2Q21 was a gain of \$281 million compared with a gain of \$2,076 million in 2Q20. The variance of \$1,795 million loss was primarily driven by realized losses on the sale of AFS bonds in 2021 compared to gains in the same period of 2020, lower gains from seed money investments and lower yield on fixed income investments,

partially offset by higher gains on derivative positions in 2021. These amounts were partially offset by lower interest on allocated capital and gains from AFS equities compared to losses in the prior year.

Year-to-date revenue was a loss of \$114 million in 2021 compared with a gain of \$2,302 million in the same period of 2020. The unfavourable variance was largely due to realized losses on AFS bonds in 2021 compared to gains in the same period of 2020, and lower yield on fixed income investments and derivative income, partially offset by gains from AFS equities and seed money investments compared to losses in the prior year and lower interest on allocated capital.

C RISK MANAGEMENT AND RISK FACTORS UPDATE

This section provides an update to our risk management practices and risk factors outlined in the MD&A in our 2020 Annual Report (“2020 MD&A”). Text and tables in this section of the MD&A represent our disclosure on market and liquidity risk in accordance with IFRS 7 “Financial Instruments – Disclosures”. 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 unaudited Interim Consolidated Financial Statements.

C1 Variable annuity and segregated fund guarantees

As described in the MD&A in our 2020 Annual Report, 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 guaranteed values. Depending on future equity market levels, liabilities on current in-force business would be due primarily in the period from 2021 to 2041.

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 section C3 “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 (\$ millions)	June 30, 2021 ⁽¹⁾			December 31, 2020 ⁽¹⁾		
	Guarantee value ⁽¹⁾	Fund value	Amount at risk ^{(1),(2),(3)}	Guarantee value ⁽¹⁾	Fund value	Amount at risk ^{(1),(2),(3)}
Guaranteed minimum income benefit	\$ 4,396	\$ 3,637	\$ 911	\$ 4,555	\$ 3,642	\$ 1,064
Guaranteed minimum withdrawal benefit	39,393	42,008	2,385	42,570	44,075	3,128
Guaranteed minimum accumulation benefit	19,027	19,536	6	18,463	18,945	8
Gross living benefits ⁽⁴⁾	62,816	65,181	3,302	65,588	66,662	4,200
Gross death benefits ⁽⁵⁾	10,917	21,341	626	10,652	19,548	710
Total gross of reinsurance	73,733	86,522	3,928	76,240	86,210	4,910
Living benefits reinsured	3,770	3,130	766	3,917	3,157	895
Death benefits reinsured	632	544	259	685	534	282
Total reinsured	4,402	3,674	1,025	4,602	3,691	1,177
Total, net of reinsurance	\$ 69,331	\$ 82,848	\$ 2,903	\$ 71,638	\$ 82,519	\$ 3,733

⁽¹⁾ Guaranteed Value and Net Amount at Risk in respect of guaranteed minimum withdrawal business in Canada and the U.S. have been updated in 2021 to reflect the time value of money of these claims. This methodology change also had a minor impact on the allocation of fund values between living benefits and death benefits. See footnotes 4 and 5. Values at December 31, 2020 have been restated to reflect this revised methodology.

⁽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 June 30, 2021 was \$2,903 million (December 31, 2020 – \$3,733 million) of which: US\$1,404 million (December 31, 2020 – US\$1,839 million) was on our U.S. business, \$975 million (December 31, 2020 – \$1,159 million) was on our Canadian business, US\$61 million (December 31, 2020 – US\$71 million) was on our Japan business and US\$91 million (December 31, 2020 – US\$111 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.

C2 Caution related to sensitivities

In this document, 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 and the actuarial factors, investment activity and investment returns assumed in the determination of policy liabilities. 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 actuarial and investment return and future investment activity assumptions; actual experience differing from the 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 net income attributed to shareholders or on MLI's LICAT total ratio will be as indicated.

Market movements affect LICAT capital sensitivities both through income and other components of the regulatory capital framework. For example, LICAT is affected by changes to other comprehensive income.

C3 Publicly traded equity performance risk

As outlined in our 2020 Annual Report, 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 policy 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 liabilities (see pages 55 and 56 of our 2020 Annual Report).

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 table below shows the potential impact on net income attributed to shareholders resulting from an immediate 10%, 20% and 30% change in market values of publicly traded equities followed by a return to the expected level of growth assumed in the valuation of policy liabilities. If market values were to remain flat for an entire year, the potential impact would be roughly equivalent to an immediate decline in market values equal to the expected level of annual growth assumed in the valuation of policy liabilities. Further, if after market values dropped 10%, 20% or 30% they continued to decline, remained flat, or grew more slowly than assumed in the valuation the potential impact on net income attributed to shareholders could be considerably more than shown. Refer to section D2 "Sensitivity of earnings to asset related assumptions" for more information on the level of growth assumed and on the net income sensitivity to changes in these long-term assumptions. 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 profit or loss on 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 are rebalanced at 5% intervals. In addition, we assume that the macro hedge assets are rebalanced in line with 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 Standards of Practice for the valuation of insurance contract liabilities and guidance published by the CIA constrain the investment return assumptions for public equities and certain ALDA assets based on historical return benchmarks for public equities. The potential impact on net income attributed to shareholders does not take into account possible changes to investment return assumptions resulting from the impact of declines in public equity market values on these historical return benchmarks.

Potential immediate impact on net income attributed to shareholders arising from changes to public equity returns^{(1),(2),(3)}

As at June 30, 2021 (\$ millions)	-30%	-20%	-10%	+10%	+20%	+30%
Underlying sensitivity to net income attributed to shareholders⁽⁴⁾						
Variable annuity guarantees	\$ (2,650)	\$ (1,530)	\$ (660)	\$ 480	\$ 840	\$ 1,100
General fund equity investments ⁽⁵⁾	(1,280)	(860)	(430)	440	870	1,300
Total underlying sensitivity before hedging	(3,930)	(2,390)	(1,090)	920	1,710	2,400
Impact of macro and dynamic hedge assets ⁽⁶⁾	2,050	1,190	500	(500)	(890)	(1,200)
Net potential impact on net income attributed to shareholders after impact of hedging	\$ (1,880)	\$ (1,200)	\$ (590)	\$ 420	\$ 820	\$ 1,200
As at December 31, 2020						
(\$ millions)	-30%	-20%	-10%	+10%	+20%	+30%
Underlying sensitivity to net income attributed to shareholders⁽⁴⁾						
Variable annuity guarantees	\$ (3,150)	\$ (1,850)	\$ (800)	\$ 600	\$ 1,040	\$ 1,350
General fund equity investments ⁽⁵⁾	(1,350)	(840)	(410)	380	760	1,130
Total underlying sensitivity before hedging	(4,500)	(2,690)	(1,210)	980	1,800	2,480
Impact of macro and dynamic hedge assets ⁽⁶⁾	2,420	1,410	600	(620)	(1,110)	(1,480)
Net potential impact on net income attributed to shareholders after impact of hedging	\$ (2,080)	\$ (1,280)	\$ (610)	\$ 360	\$ 690	\$ 1,000

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

(2) The tables above show the potential impact on net income attributed to shareholders resulting from an immediate 10%, 20% and 30% change in market values of publicly traded equities followed by a return to the expected level of growth assumed in the valuation of policy liabilities, excluding impacts from asset-based fees earned on assets under management and policyholder account value.

(3) Please refer to section D2 "Sensitivity of earnings to asset related assumptions" for more information on the level of growth assumed and on the net income sensitivity to changes in these long-term assumptions.

(4) Defined as earnings sensitivity to a change in public equity markets including settlements on reinsurance contracts, but before the offset of hedge assets or other risk mitigants.

(5) This impact for general fund equity investments includes general fund investments supporting our policy liabilities, investment in seed money investments (in segregated and mutual funds made by Corporate and Other segment) and the impact on policy liabilities related to the projected future fee income on variable universal life and other unit linked products. The impact does not include: (i) any potential impact on public equity weightings; (ii) any gains or losses on AFS public equities held in the Corporate and Other segment; or (iii) any gains or losses on public equity investments held in Manulife Bank. 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.

(6) Includes the impact of rebalancing equity hedges in the macro and dynamic hedging program. The impact of dynamic hedge rebalancing represents the impact of rebalancing equity hedges for dynamically hedged variable annuity guarantee best estimate liabilities at 5% intervals, but does not include any impact in respect of other sources of hedge ineffectiveness (e.g. fund tracking, realized volatility and equity, interest rate correlations different from expected among other factors).

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

Potential immediate impact on MLI's LICAT total ratio arising from public equity returns different than the expected returns assumed in the valuation of policy liabilities^{(1),(2),(3)}

Percentage points	Impact on MLI's LICAT total ratio					
	-30%	-20%	-10%	+10%	+20%	+30%
June 30, 2021	(2)	(1)	-	1	2	2
December 31, 2020	(3)	(1)	(1)	-	-	(1)

(1) See "Caution related to sensitivities" above. In addition, estimates exclude changes to the net actuarial gains/losses with respect to the Company's pension obligations as a result of changes in equity markets, as the impact on the quoted sensitivities is not considered to be material.

(2) The potential impact is shown assuming that the change in value of the hedge assets does not completely offset the change in the dynamically hedged variable annuity guarantee liabilities. The estimated amount that would not be completely offset relates to our practices of not hedging the provisions for adverse deviation and of rebalancing equity hedges for dynamically hedged variable annuity liabilities at 5% intervals.

(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.

C4 Interest rate and spread risk sensitivities and exposure measures

As at June 30, 2021, we estimated the sensitivity of our net income attributed to shareholders to a 50 basis point parallel decline in interest rates to be a charge of \$100 million, and to a 50 basis point parallel increase in interest rates to be neutral.

The table below shows the potential impact on net income attributed to shareholders from a 50 basis point parallel move in interest rates. This includes a change of 50 basis points 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, and with a floor of zero on government rates where government rates are not currently negative, relative to the rates assumed in the valuation of policy liabilities, including embedded derivatives. For variable annuity guarantee liabilities that are dynamically hedged, it is assumed that interest rate hedges are rebalanced at 20 basis point intervals.

As the sensitivity to a 50 basis point change in interest rates includes any associated change in the applicable reinvestment scenarios, the impact of changes to interest rates for less than, or more than 50 basis points is unlikely to be linear. Furthermore, our sensitivities are not consistent across all regions in which we operate, and the impact of yield curve changes will vary depending upon the geography where the change occurs.

Reinvestment assumptions used in the valuation of policy liabilities tend to amplify the negative effects of a decrease in interest rates and dampen the positive effects of interest rate increases. This is because the reinvestment assumptions used in the valuation of our insurance liabilities are based on interest rate scenarios and calibration criteria set by the Canadian Actuarial Standards Board. Therefore, in any particular quarter, changes to the reinvestment assumptions are not fully aligned to changes in current market interest rates especially when there is a significant change in the shape of the interest rate curve. As a result, the impact from non-parallel movements may be materially different from the estimated impact of parallel movements. For example, if long-term interest rates increase more than short-term interest rates (sometimes referred to as a steepening of the yield curve) in North America, the decrease in the value of our swaps may be greater than the decrease in the value of our insurance liabilities. This could result in a charge to net income attributed to shareholders in the short-term even though the rising and steepening of the yield curve, if sustained, may have a positive long-term economic impact.

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 impact on net income attributed to shareholders does not take into account any future potential changes to our ultimate reinvestment rate assumptions ("URR") or calibration criteria for stochastic risk-free rates. In June 2021, the Canadian Actuarial Standards Board ("ASB") issued a new promulgation with reductions to the Ultimate Reinvestment Rate ("URR") and updates to the calibration criteria for stochastic risk-free rates. The updated standard includes a reduction of 15 basis points in the URR and a corresponding change to stochastic risk-free rate modeling and is effective October 15, 2021. At June 30, 2021, the current long-term URR for risk-free rates in Canada is prescribed at 3.05% and we use the same assumption for the U.S. Our assumption for Japan is 1.6%. We expect to adopt this standard in 3Q21 and estimate that it will reduce net income attributed to shareholders by approximately \$550 million (post-tax).¹

The potential impact on net income attributable to shareholders does not take into account other potential impacts of lower interest rate levels, for example, increased strain on the sale of new business or lower interest earned on our surplus assets. The impact also does not reflect any unrealized gains or losses on AFS fixed income assets held in our Corporate and Other segment. Changes in the market value of these assets may provide a natural economic offset to the interest rate risk arising from our product liabilities. In order for there to also be an

¹ See "Caution regarding forward-looking statements".

accounting offset, the Company would need to realize a portion of the AFS fixed income asset unrealized gains or losses. It is not certain we would realize any of the unrealized gains or losses available.

The impact does not reflect any potential effect of changing interest rates to the value of our ALDA assets. Rising interest rates could negatively impact the value of our ALDA (see “Critical Actuarial and Accounting Policies – Fair Value of Invested Assets”, on page 91 of our 2020 Annual Report). More information on ALDA assets can be found under the section C5 “Alternative long-duration asset performance risk”.

Under LICAT, changes in unrealized gains or losses in our AFS bond portfolio resulting from interest rate shocks tend to dominate capital sensitivities. As a result, the reduction in interest rates improves LICAT total ratios and vice-versa.

The following table shows the potential impact on net income attributed to shareholders including the change in the market value of AFS fixed income assets held in our Corporate and Other segment, which could be realized through the sale of these assets.

Potential impact on net income attributed to shareholders and MLI’s LICAT total ratio of an immediate parallel change in interest rates relative to rates assumed in the valuation of policy liabilities^{(1),(2),(3),(4)}

As at	June 30, 2021		December 31, 2020	
	-50bp	+50bp	-50bp	+50bp
Net income attributed to shareholders (\$ millions)				
Excluding change in market value of AFS fixed income assets held in the Corporate and Other segment	\$ (100)	\$ nil	\$ nil	\$ (100)
From fair value changes in AFS fixed income assets held in the Corporate and Other segment, if realized	1,900	(1,700)	2,100	(1,900)
MLI’s LICAT total ratio (Percentage points)				
LICAT total ratio change in percentage points ⁽⁵⁾	5	(4)	8	(7)

⁽¹⁾ See “Caution related to sensitivities” above. In addition, estimates exclude changes to the net actuarial gains/losses with respect to the Company’s pension obligations as a result of changes in interest rates, as the impact on the quoted sensitivities is not considered to be material.

⁽²⁾ 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.

⁽³⁾ The amount of gain or loss that can be realized on AFS fixed income assets held in the Corporate and Other segment will depend on the aggregate amount of unrealized gain or loss.

⁽⁴⁾ Sensitivities are based on projected asset and liability cash flows and the impact of realizing fair value changes in AFS fixed income is based on the holdings at the end of the period.

⁽⁵⁾ LICAT impacts include realized and unrealized fair value changes in AFS fixed income assets. LICAT impacts do not reflect the impact of the scenario switch discussed below.

The following tables show the potential impact on net income attributed to shareholders resulting from a change in corporate spreads and swap spreads over government bond rates for all maturities across all markets with a floor of zero on the total interest rate, relative to the spreads assumed in the valuation of policy liabilities.

Potential impact on net income attributed to shareholders and MLI's LICAT total ratio arising from changes to corporate spreads and swap spreads relative to spreads assumed in the valuation of policy liabilities^{(1),(2),(3)}

Corporate spreads ^{(4),(5)} As at	June 30, 2021		December 31, 2020	
	-50bp	+50bp	-50bp	+50bp
Net income attributed to shareholders (\$ millions) ⁽⁶⁾	\$ (600)	\$ 500	\$ (1,000)	\$ 900
MLI's LICAT total ratio (change in percentage points) ⁽⁷⁾	(4)	4	(4)	4

Swap spreads As at	June 30, 2021		December 31, 2020	
	-20bp	+20bp	-20bp	+20bp
Net income attributed to shareholders (\$ millions)	\$ nil	\$ nil	\$ nil	\$ nil
MLI's LICAT total ratio (change in percentage points) ⁽⁷⁾	nil	nil	nil	nil

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

⁽²⁾ The impact on net income attributed to shareholders assumes no gains or losses are realized on our AFS fixed income assets held in the Corporate and Other segment and excludes the impact of changes in segregated fund bond values due to changes in credit spreads. 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 corporate and swap spreads.

⁽³⁾ Sensitivities are based on projected asset and liability cash flows.

⁽⁴⁾ Corporate spreads are assumed to grade to the long-term average over five years.

⁽⁵⁾ As the sensitivity to a 50 basis point decline in corporate spreads includes the impact of a change in deterministic reinvestment scenarios where applicable, the impact of changes to corporate spreads for less than, or more than, the amounts indicated are unlikely to be linear.

⁽⁶⁾ The sensitivity on net income attributed to shareholders due to changes in corporate spreads decreased significantly as at June 30, 2021 compared with December 31, 2020, as the rise in risk-free interest rates reduced projected reinvestments in the actuarial valuation models.

⁽⁷⁾ LICAT impacts include realized and unrealized fair value change in AFS fixed income assets. 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 do not reflect the impact of the scenario switch discussed below.

LICAT Scenario Switch

Typically, a reduction in interest rates improves LICAT capital ratios and vice-versa. However, when interest rates decline 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 guidelines for LICAT.

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.

We estimate the potential impact of a switch in the scenarios would be approximately a one-time six percentage point decrease in MLI's total LICAT ratio. 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 OSFI Advisory effective January 1, 2021.

The potential negative impact of a switch in scenarios is not reflected in the stated risk-free rate and corporate spread sensitivities, as it is a one-time impact. After this one-time event, further decreases in risk-free interest rates would continue to improve the LICAT capital position, similar to the sensitivity above.

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 increases in interest rates and/or corporate spreads.

¹ LICAT geographic locations include North America, the United Kingdom, Europe, Japan, and Other Region.

C5 Alternative long-duration asset performance risk

The following table shows the potential impact on net income attributed to shareholders resulting from an immediate 10% change in market values of ALDA followed by a return to the expected level of growth assumed in the valuation of policy liabilities. If market values were to remain flat for an entire year, the potential impact would be roughly equivalent to an immediate decline in market values equal to the expected level of annual growth assumed in the valuation of policy liabilities. Further, if after market values dropped 10% they continued to decline, remained flat, or grew more slowly than assumed in the valuation of policy liabilities, the potential impact on net income attributed to shareholders could be considerably more than shown. Refer to section D2 “Sensitivity of earnings to asset related assumptions”, for more information on the level of growth assumed and on the net income sensitivity to changes in these long-term assumptions.

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

Potential impact on net income attributed to shareholders and MLI LICAT arising from changes in ALDA returns^{(1),(2),(3),(4),(5),(6)}

As at (\$ millions)	June 30, 2021		December 31, 2020	
	-10%	+10%	-10%	+10%
Net income attributed to shareholders				
Real estate, agriculture and timber assets	\$ (1,400)	\$ 1,300	\$ (1,600)	\$ 1,400
Private equities and other ALDA	(1,900)	1,800	(2,000)	1,900
Total	\$ (3,300)	\$ 3,100	\$ (3,600)	\$ 3,300
MLI's LICAT total ratio (change in percentage points)	(4)	3	(5)	4

⁽¹⁾ See “Caution Related to Sensitivities” above.

⁽²⁾ This impact is calculated as at a point-in-time impact and does not include: (i) any potential impact on ALDA weightings; or (ii) any gains or losses on ALDA held in the Corporate and Other segment.

⁽³⁾ 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 ALDA returns. For some classes of ALDA, where there is not an appropriate long-term benchmark available, the return assumptions used in valuation are not permitted by the Standards of Practice and CIA guidance to result in a lower reserve than an assumption based on a historical return benchmark for public equities in the same jurisdiction.

⁽⁴⁾ Net income impact does not consider any impact of the market correction on assumed future return assumptions.

⁽⁵⁾ Please refer to section D2 “Sensitivity of earnings to asset related assumptions” for more information on the level of growth assumed and on the net income sensitivity to changes in these long-term assumptions.

⁽⁶⁾ The impact of changes to the portfolio asset mix supporting our North American legacy businesses are reflected in the sensitivities when the changes take place.

C6 Credit risk exposure measures

Allowances for losses on loans are established taking into consideration normal historical credit loss levels and future expectations, with an allowance for adverse deviations. Additionally, we make general provisions for credit losses from future asset impairments in the determination of policy liabilities. The amount of the provision for credit losses included in policy liabilities is established through regular monitoring of all credit related exposures, considering such information as general market conditions, industry and borrower specific credit events and any other relevant trends or conditions. To the extent that an asset is written off, or disposed of, any allowance and general provisions for credit losses are released.

Our general provision for credit losses included in policyholder liabilities as at June 30, 2021 was \$4,182 million compared with \$4,387 million as at December 31, 2020. This provision represents 1.6% of our fixed income assets¹ supporting policy liabilities reported on our Consolidated Statements of Financial Position as at June 30, 2021.

The impact of a 50% increase in fixed income credit default rates over the next year in excess of the rates assumed in policy liabilities, would reduce net income attributed to shareholders by \$75 million as at June 30, 2021 and December 31, 2020.

Credit downgrades of fixed income investments would adversely impact our regulatory capital, as required capital levels for these investments are based on the credit quality of each instrument. In addition, credit downgrades

¹ Includes debt securities, private placements and mortgages.

could also lead to a higher general provision for credit losses than had been assumed in policy liabilities, resulting in an increase in policy liabilities and a reduction in net income attributed to shareholders. The estimated impact of a one-notch¹ ratings downgrade across 25% of fixed income assets would result in an increase to policy liabilities and a decrease to our net income attributed to shareholders of \$300 million post-tax. This ratings downgrade would result in a one percentage point reduction to our LICAT ratio.

Approximately 58% of the impact on our policy liabilities and net income attributed to shareholders relates to fixed income assets rated BBB and below.

The table below shows net impaired assets and allowances for loan losses.

Net Impaired Assets and Loan Losses

As at (\$ millions, unless otherwise stated)	June 30, 2021	December 31, 2020
Net impaired fixed income assets	\$ 219	\$ 296
Net impaired fixed income assets as a % of total invested assets	0.054%	0.072%
Allowance for loan losses	\$ 53	\$ 107

C7 Risk Factors – Strategic risk from changes in tax laws

In our 2020 MD&A, we outlined risk factors that could impact on our financial plans and ability to implement our business strategy. The macro-economic environment can be significantly impacted by the actions of both the government sector, including central banks, and the private sector. 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 policy liabilities. This could have a material adverse effect on our business, results of operations and financial condition.

On July 1, 2021, 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. The two pillars include a new approach to allocating certain profits amongst countries and a global minimum income tax of not less than 15%. The detailed technical rules are scheduled to be released in October 2021 and are expected to be effective in 2023, pending enactment of domestic tax laws and amendment of bilateral tax treaties in 2022. The Company is closely monitoring developments and potential impacts, in particular issues unique to the insurance industry.

D CRITICAL ACTUARIAL AND ACCOUNTING POLICIES

D1 Critical actuarial and accounting policies

Our significant accounting policies are described in note 1 to our Consolidated Financial Statements for the year ended December 31, 2020. The critical actuarial and accounting policies and estimation processes relate to the determination of insurance and investment contract liabilities, assessment of control over other entities for consolidation, estimation of fair value of invested assets, evaluation of invested asset impairment, accounting for derivative financial instruments, determination of pension and other post-employment benefit obligations and expenses, accounting for income taxes and uncertain tax positions and valuation and impairment of goodwill and intangible assets as described on pages 84 to 93 of our 2020 Annual Report.

D2 Sensitivity of earnings to asset related assumptions

When the assumptions underlying our determination of policy liabilities are updated to reflect recent and emerging experience or change in outlook, the result is a change in the value of policy liabilities which in turn affects net income attributed to shareholders. The sensitivity of net income attributed to shareholders to changes in certain

¹ A one-notch downgrade is equivalent to a ratings downgrade from A to A- or BBB- to BB+.

asset related assumptions underlying policy liabilities is shown below and assumes that there is a simultaneous change in the assumptions across all business units.

For changes in asset related assumptions, the sensitivity is shown net of the corresponding impact on income of the change in the value of the assets supporting policy liabilities. In practice, experience for each assumption will frequently vary by geographic market and business, and assumption updates are made on a business/geographic specific 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, changes in actuarial and investment return and future investment activity assumptions, actual experience differing from the assumptions, changes in business mix, effective tax rates and other market factors, and the general limitations of our internal models.

Potential impact on net income attributed to shareholders arising from changes to asset related assumptions supporting actuarial liabilities

As at (\$ millions)	Increase (decrease) in after-tax net income attributed to shareholders			
	June 30, 2021		December 31, 2020	
	Increase	Decrease	Increase	Decrease
Asset related assumptions updated periodically in valuation basis changes				
100 basis point change in future annual returns for public equities ⁽¹⁾	\$ 500	\$ (500)	\$ 500	\$ (500)
100 basis point change in future annual returns for ALDA ⁽²⁾	3,800	(4,600)	4,200	(5,200)
100 basis point change in equity volatility assumption for stochastic segregated fund modelling ⁽³⁾	(200)	200	(200)	200

⁽¹⁾ The sensitivity to public equity returns above includes the impact on both segregated fund guarantee reserves and on other policy liabilities. Expected long-term annual market growth assumptions for public equities are based on long-term historical observed experience and compliance with actuarial standards. As at June 30, 2021, the growth rates inclusive of dividends in the major markets used in the stochastic valuation models for valuing segregated fund guarantees are 9.2% per annum in Canada, 9.6% per annum in the U.S. and 6.2% per annum in Japan. Growth assumptions for European equity funds are market-specific and vary between 8.3% and 9.9%.

⁽²⁾ ALDA include commercial real estate, timber, farmland, infrastructure and private equities, some of which relate to oil and gas. Expected long-term return assumptions for ALDA and public equity are set in accordance with the Standards of Practice for the valuation of insurance contract liabilities and guidance published by the CIA. Annual best estimate return assumptions for ALDA and public equity include market growth rates and annual income, such as rent, production proceeds and dividends, and will vary based on our holding period. Over a 20-year horizon, our best estimate return assumptions range between 5.25% and 11.65%, with an average of 9.3% based on the current asset mix backing our guaranteed insurance and annuity business as of June 30, 2021. Our return assumptions including the margins for adverse deviations in our valuation, which take into account the uncertainty of achieving the returns, range between 2.5% and 7.5%, with an average of 6.1% based on the asset mix backing our guaranteed insurance and annuity business as of June 30, 2021.

⁽³⁾ Volatility assumptions for public equities are based on long-term historical observed experience and compliance with actuarial standards. The resulting volatility assumptions are 16.5% per annum in Canada and 17.1% per annum in the U.S. for large-cap public equities, and 19.1% per annum in Japan. For European equity funds, the volatility varies between 16.3% and 17.7%.

D3 Accounting and reporting changes

For accounting and reporting changes during the quarter, refer to note 2 of our unaudited Interim Consolidated Financial Statements for the three and six months ended June 30, 2021.

E OTHER

E1 Outstanding common shares - selected information

As at July 31, 2021 MFC had 1,942,128,040 common shares outstanding.

E2 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 12 of our unaudited Interim Consolidated Financial Statements for the three and six months ended June 30, 2021.

E3 Performance and non-GAAP measures

We use a number of non-GAAP financial measures to measure overall performance and to assess each of our businesses. A financial measure is considered a non-GAAP measure for Canadian securities law purposes if it is presented other than in accordance with generally accepted accounting principles used for the Company's audited financial statements. Non-GAAP measures include: core earnings (loss); core return on common shareholders' equity ("core ROE"); diluted core earnings per common share ("core EPS"); pre-tax core earnings; core earnings

before income taxes, depreciation and amortization (“core EBITDA”); core EBITDA margin; core investment gains; core general expenses; constant exchange rate basis (measures that are reported on a constant exchange rate basis include percentage growth/decline in core earnings, core general expenses, pre-tax core earnings, sales, annualized premium equivalent (“APE”) sales, gross flows, core EBITDA, new business value (“NBV”), assets under management, assets under management and administration (“AUMA”), and Global Wealth and Asset Management revenue); assets under administration; expense efficiency ratio; assets under management and administration; assets under management; average AUMA, consolidated capital; embedded value; new business value; new business value margin (“NBV margin”); net fee income yield on assets under management and administration; net annualized fee income; sales; APE sales; gross flows; net flows; and Manulife Bank average net lending assets. Non-GAAP financial measures are not defined terms under GAAP and, therefore, are unlikely to be comparable to similar terms used 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 non-GAAP 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 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.

We believe that core earnings better reflect the underlying earnings capacity and valuation of our business. We use core earnings as the basis for management planning and reporting and, along with net income attributed to shareholders, as a key metric used in our short and mid-term incentive plans at the total Company and operating segment level.

While core earnings is relevant to how we manage our business and offers a consistent methodology, it is not insulated from macro-economic factors which can have a significant impact. See “Quarterly Financial Information” below for reconciliation of core earnings to net income (loss) attributed to shareholders.

Any future changes to the core earnings definition referred to below, will be disclosed.

Items included in 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 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 throughout 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 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 calculated from the introduction of core earnings in 2012 to the end of 2020 was \$380 million, a decrease from the average of \$527 million (2012-2019) due to losses on investment-related experience (compared with average gains in prior years, including the core investment gains).
- 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 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 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 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. As noted in the “Critical actuarial and accounting policies” section of our 2020 MD&A, policy liabilities for IFRS are valued in Canada under standards established by the Actuarial Standards Board. 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, 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. Impact of enacted or substantially enacted income tax rate changes.

The following table summarizes for the past eight quarters core earnings and net income (loss) attributed to shareholders.

Total Company

(\$ millions, unaudited)	Quarterly Results							
	2Q21	1Q21	4Q20	3Q20	2Q20	1Q20	4Q19	3Q19
Core earnings (loss)								
Asia	\$ 526	\$ 570	\$ 571	\$ 559	\$ 489	\$ 491	\$ 494	\$ 520
Canada	318	264	316	279	342	237	288	318
U.S.	478	501	479	498	602	416	489	471
Global Wealth and Asset Management	356	312	304	308	238	250	265	281
Corporate and Other (excluding core investment gains)	(96)	(118)	(196)	(191)	(110)	(366)	(159)	(163)
Core investment gains	100	100	-	-	-	-	100	100
Total core earnings	1,682	1,629	1,474	1,453	1,561	1,028	1,477	1,527
Items to reconcile core earnings (loss) to net income (loss) attributed to shareholders:								
Investment-related experience outside of core earnings	739	77	585	147	(916)	(608)	182	(289)
Direct impact of equity markets and interest rates and variable annuity guarantee liabilities	217	(835)	(323)	390	73	792	(389)	(494)
Change in actuarial methods and assumptions	-	-	-	(198)	-	-	-	(21)
Reinsurance transactions	8	8	44	276	9	12	(34)	-
Restructuring charge	-	(115)	-	-	-	-	-	-
Tax-related items and other	-	19	-	-	-	72	(8)	-
Net income (loss) attributed to shareholders	\$2,646	\$ 783	\$1,780	\$2,068	\$ 727	\$1,296	\$1,228	\$ 723

Asia

(\$ millions, unaudited)	Quarterly Results							
	2Q21	1Q21	4Q20	3Q20	2Q20	1Q20	4Q19	3Q19
Asia core earnings	\$ 526	\$ 570	\$ 571	\$ 559	\$ 489	\$ 491	\$ 494	\$ 520
Items to reconcile core earnings to net income (loss) attributed to shareholders:								
Investment-related experience outside of core earnings	121	72	127	81	(40)	50	46	(13)
Direct impact of equity markets and interest rates and variable annuity guarantee liabilities	(22)	288	(88)	44	(81)	(458)	96	(372)
Change in actuarial methods and assumptions	-	-	-	(41)	-	-	-	(7)
Reinsurance transactions	8	8	29	8	9	12	-	-
Tax-related items and other	-	19	-	-	-	-	-	-
Net income (loss) attributed to shareholders	\$ 633	\$ 957	\$ 639	\$ 651	\$ 377	\$ 95	\$ 636	\$ 128

Canada

(\$ millions, unaudited)	Quarterly Results							
	2Q21	1Q21	4Q20	3Q20	2Q20	1Q20	4Q19	3Q19
Canada core earnings	\$ 318	\$ 264	\$ 316	\$ 279	\$ 342	\$ 237	\$ 288	\$ 318
Items to reconcile core earnings to net income (loss) attributed to shareholders:								
Investment-related experience outside of core earnings	207	(65)	332	(28)	(186)	(378)	69	(47)
Direct impact of equity markets and interest rates and variable annuity guarantee liabilities	258	(218)	(35)	(43)	(14)	(725)	(97)	(335)
Change in actuarial methods and assumptions	-	-	-	77	-	-	-	(108)
Reinsurance transactions	-	-	15	6	-	-	(34)	-
Tax-related items and other	-	-	-	-	-	-	-	-
Net income (loss) attributed to shareholders	\$ 783	\$ (19)	\$ 628	\$ 291	\$ 142	\$ (866)	\$ 226	\$ (172)

U.S.

(\$ millions, unaudited)	Quarterly Results							
	2Q21	1Q21	4Q20	3Q20	2Q20	1Q20	4Q19	3Q19
U.S. core earnings	\$ 478	\$ 501	\$ 479	\$ 498	\$ 602	\$ 416	\$ 489	\$ 471
Items to reconcile core earnings to net income (loss) attributed to shareholders:								
Investment-related experience outside of core earnings	506	160	110	121	(682)	(266)	177	(134)
Direct impact of equity markets and interest rates and variable annuity guarantee liabilities	(191)	(565)	(483)	311	(1,500)	1,702	(515)	(66)
Change in actuarial methods and assumptions	-	-	-	(301)	-	-	-	71
Reinsurance transactions	-	-	-	262	-	-	-	-
Tax-related items and other	-	-	-	-	-	-	(8)	-
Net income (loss) attributed to shareholders	\$ 793	\$ 96	\$ 106	\$ 891	\$ (1,580)	\$1,852	\$ 143	\$ 342

Global Wealth and Asset Management

(\$ millions, unaudited)	Quarterly Results							
	2Q21	1Q21	4Q20	3Q20	2Q20	1Q20	4Q19	3Q19
Global WAM core earnings	\$ 356	\$ 312	\$ 304	\$ 308	\$ 238	\$ 250	\$ 265	\$ 281
Items to reconcile core earnings to net income (loss) attributed to shareholders:								
Tax-related items and other	-	-	-	-	-	-	-	-
Net income (loss) attributed to shareholders	\$ 356	\$ 312	\$ 304	\$ 308	\$ 238	\$ 250	\$ 265	\$ 281

Corporate and Other

(\$ millions, unaudited)	Quarterly Results							
	2Q21	1Q21	4Q20	3Q20	2Q20	1Q20	4Q19	3Q19
Corporate and Other core income (loss) (excluding core investment gains)⁽¹⁾	\$ (96)	\$(118)	\$(196)	\$(191)	\$(110)	\$(366)	\$(159)	\$(163)
Core investment gains (loss)	100	100	-	-	-	-	100	100
Total core earnings (loss)	4	(18)	(196)	(191)	(110)	(366)	(59)	(63)
Other items to reconcile core earnings (loss) to net income (loss) attributed to shareholders:								
Investment-related experience outside of core earnings	(95)	(90)	16	(27)	(8)	(14)	(110)	(95)
Direct impact of equity markets and interest rates	172	(340)	283	78	1,668	273	127	279
Changes in actuarial methods and assumptions	-	-	-	67	-	-	-	23
Tax-related items and other	-	-	-	-	-	72	-	-
Restructuring charge	-	(115)	-	-	-	-	-	-
Net income (loss) attributed to shareholders	\$ 81	\$(563)	\$ 103	\$ (73)	\$1,550	\$ (35)	\$ (42)	\$ 144

⁽¹⁾ The Corporate and Other segment includes earnings on assets backing capital net of amounts allocated to operating segments.

Core return on common shareholders' equity ("core ROE") is a non-GAAP profitability measure that presents 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.

Diluted core earnings per common share ("core EPS") is core earnings available to common shareholders expressed per diluted weighted average common share outstanding.

The Company also uses financial performance measures that are prepared on a **constant exchange rate basis**, which are non-GAAP measures that 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). Quarterly amounts stated on a constant exchange rate basis in this MD&A are calculated, as appropriate, using the income statement and balance sheet exchange rates effective for 2Q21. Measures that are reported on a constant exchange rate basis include growth in core earnings, core general expenses, pre-tax core earnings, sales, APE sales, gross flows, net flows, core EBITDA, new business value, assets under management, assets under management and administration, average assets under management and administration and Global Wealth and Asset Management revenue.

Assets under management and administration (“AUMA”) is a non-GAAP measure of the size of the Company. It is comprised of the non-GAAP measures assets under management (“AUM”), which includes both assets of general account and external client assets for which we provide investment management services, and assets under administration (“AUA”), which includes assets for which we provide administrative services only. Assets under management and administration is a common industry metric for WAM businesses.

Assets under management and administration

As at (\$ millions)	June 30, 2021	March 31, 2021	June 30, 2020
Total invested assets	\$ 405,209	\$ 397,948	\$ 413,864
Segregated funds net assets	383,845	371,682	342,043
Assets under management per financial statements	789,054	769,630	755,907
Mutual funds	265,110	249,137	213,125
Institutional advisory accounts (excluding segregated funds)	99,983	96,989	108,036
Other funds	12,232	11,611	9,722
Total assets under management	1,166,379	1,127,367	1,086,790
Other assets under administration	174,376	167,558	149,511
Currency impact	-	(13,219)	(79,628)
AUMA at constant exchange rates	\$ 1,340,755	\$ 1,281,706	\$ 1,156,673

Average assets under management and administration (“average AUMA”) is a non-GAAP measure of 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 Wealth and Asset Management 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.

Manulife Bank average net lending assets is a non-GAAP measure of the average of Manulife Bank’s loans and mortgages, net of allowances, otherwise known as net lending assets. It is a measure of the size of Manulife Bank’s portfolio of loans and mortgages and is used to analyze and explain its earnings. It is calculated as the quarter-end average of the opening and the ending balance of net lending assets.

Consolidated capital is a non-GAAP measure. It serves as a foundation of our capital management activities at the MFC level. For regulatory reporting purposes, the numbers are further adjusted for various additions or deductions to capital as mandated by the guidelines used by OSFI. Consolidated capital is calculated as the sum of (i) total equity excluding accumulated other comprehensive income (“AOCI”) on cash flow hedges; and (ii) liabilities for capital instruments.

Consolidated capital

As at (\$ millions)	June 30, 2021	March 31, 2021	June 30, 2020
Total equity	\$ 54,254	\$ 51,992	\$ 53,476
Add AOCI loss on cash flow hedges	166	117	329
Add qualifying capital instruments	6,936	7,432	7,950
Consolidated capital	\$ 61,356	\$ 59,541	\$ 61,755

Core EBITDA is a non-GAAP 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 under the CALM. 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.

Core EBITDA margin is a non-GAAP 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 total revenue from these businesses. 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.

Global Wealth and Asset Management

(\$ millions, unaudited)	Quarterly Results							
	2Q21	1Q21	4Q20	3Q20	2Q20	1Q20	4Q19	3Q19
Core EBITDA	\$ 521	\$ 469	\$ 459	\$ 446	\$ 381	\$ 390	\$ 391	\$ 404
Amortization of deferred acquisition costs and other depreciation	(79)	(79)	(78)	(80)	(81)	(80)	(78)	(78)
Amortization of deferred sales commissions	(22)	(26)	(20)	(21)	(22)	(22)	(19)	(19)
Core earnings before income taxes	420	364	361	345	278	288	294	307
Core income tax (expense) recovery	(64)	(52)	(57)	(37)	(40)	(38)	(29)	(26)
Core earnings	\$ 356	\$ 312	\$ 304	\$ 308	\$ 238	\$ 250	\$ 265	\$ 281
Core EBITDA	\$ 521	\$ 469	\$ 459	\$ 446	\$ 381	\$ 390	\$ 391	\$ 404
Revenue	\$1,607	\$1,527	\$1,497	\$1,465	\$1,361	\$1,426	\$1,433	\$1,409
Core EBITDA Margin	32.4%	30.7%	30.7%	30.4%	28.0%	27.3%	27.3%	28.7%

Expense efficiency ratio is a non-GAAP measure which Manulife uses to measure progress towards our target to be more efficient. Efficiency ratio is defined as pre-tax general expenses included in core earnings ("core general expenses") divided by the sum of core earnings before income taxes ("pre-tax core earnings") and core general expenses.

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. The adjusted net worth is the IFRS shareholders' equity adjusted for goodwill and intangibles, fair value of surplus assets, the carrying value of debt and preferred shares, and local statutory balance sheet, regulatory reserve, and capital for Manulife's Asian business. The value of in-force business in Canada and the U.S. is the present value of expected future IFRS earnings 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 our Global WAM, Manulife Bank and Property and Casualty Reinsurance businesses.

Net annualized fee income yield on average AUMA ("Net fee income yield") is a measure that represents the net annualized fee income from Global WAM channels over average AUMA. This measure provides information on the Global WAM's adjusted return generated from managing AUMA.

Net annualized fee income 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 the number of days in the reporting period.

New business value ("NBV") is the change in embedded value as a result of sales in the reporting period. NBV is calculated as the present value of shareholders' interests in expected future distributable earnings, after the cost of capital, 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 short-term Property and Casualty 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 excluding non-controlling interests. APE is calculated as 100% of annualized first year premiums for recurring premium products, and as 10% of single premiums for single premium products. Both NBV and APE used in the NBV margin calculation are after non-controlling interests and exclude our Global WAM, Manulife Bank and Property and Casualty Reinsurance businesses. 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.

APE sales are comprised of 100% of regular premiums/deposits and 10% of single premiums/deposits for both insurance and insurance-based wealth accumulation products.

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 1Q13, subsequent deposits into existing U.S. Variable Annuity contracts are not reported as sales. Asia variable annuity deposits are included in APE sales.

Bank new lending volumes include bank loans and mortgages authorized in the period.

Gross flows is a new business measure presented for our Global WAM business and includes all deposits into mutual funds, college savings 529 plans, 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, college savings 529 plans, group pension/retirement savings products, private wealth and institutional asset management products. 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 gross flows exceed redemptions, net flows will be positive and will be referred to as net inflows. Conversely, when redemptions exceed gross flows, net flows will be negative and will be referred to as net outflows.

E4 Caution regarding forward-looking statements

From time to time, 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 the expected annual savings related to actions taken in the first quarter of 2021, the estimated impact of our annual review of actuarial methods and assumptions, the estimated impact of changes to the Ultimate Reinvestment Rate issued by the Canadian Actuarial Standards Board on net income attributed to shareholders, the next phase of our strategy and 2025 supplemental goals related to our highest potential businesses, net promoter score, straight-through-processing, portfolio optimization, our long-term care and variable annuities businesses, and our medium-term targets for core ROE, leverage ratio, common share dividend payout ratio and core EPS growth, 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, currency rates, investment losses and defaults, market liquidity and creditworthiness of guarantors, reinsurers and counterparties); the severity, duration and spread of the COVID-19 outbreak, as well as actions that have been, or may be taken by governmental authorities to contain COVID-19 or to treat its impact; 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 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 available-for-sale; 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; 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; our ability to protect our intellectual property and exposure to claims of infringement; and our inability to withdraw cash from subsidiaries.

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 Update” and “Critical Actuarial and Accounting Policies”, under “Risk Factors and Risk Management” and “Critical Actuarial and Accounting Policies” in the Management’s Discussion and Analysis in our most recent annual report and, in the “Risk Management” note to the consolidated financial statements in our most recent annual and interim reports and 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.

E5 Quarterly financial information

The following table provides summary information related to our eight most recently completed quarters.

As at and for the three months ended (\$ millions, except per share amounts or otherwise stated, unaudited)	Jun 30, 2021	Mar 31, 2021	Dec 31, 2020	Sept 30, 2020	Jun 30, 2020	Mar 31, 2020	Dec 31, 2019	Sept 30, 2019
Revenue								
Premium income								
Life and health insurance	\$ 8,716	\$ 8,986	\$ 8,651	\$ 5,302	\$ 7,560	\$ 8,454	\$ 8,373	\$ 8,309
Annuities and pensions ⁽¹⁾	698	622	672	704	673	901	865	1,026
Net premium income	9,414	9,608	9,323	6,006	8,233	9,355	9,238	9,335
Investment income	4,099	3,214	4,366	3,521	5,262	3,284	4,004	3,932
Realized and unrealized gains and losses on assets supporting insurance and investment contract liabilities ⁽²⁾	9,551	(17,056)	1,683	1,100	11,626	4,558	(4,503)	6,592
Other revenue	2,760	2,637	2,497	2,749	2,365	2,980	2,433	2,770
Total revenue	\$25,824	\$(1,597)	\$17,869	\$13,376	\$27,486	\$20,177	\$11,172	\$22,629
Income (loss) before income taxes	\$ 3,292	\$ 872	\$ 2,065	\$ 2,170	\$ 832	\$ 1,704	\$ 1,225	\$ 715
Income tax (expense) recovery	(610)	(7)	(224)	(381)	7	(597)	(89)	(100)
Net income (loss)	\$ 2,682	\$ 865	\$ 1,841	\$ 1,789	\$ 839	\$ 1,107	\$ 1,136	\$ 615
Net income (loss) attributed to shareholders	\$ 2,646	\$ 783	\$ 1,780	\$ 2,068	\$ 727	\$ 1,296	\$ 1,228	\$ 723
Reconciliation of core earnings to net income attributed to shareholders								
Total core earnings ⁽³⁾	\$ 1,682	\$ 1,629	\$ 1,474	\$ 1,453	\$ 1,561	\$ 1,028	\$ 1,477	\$ 1,527
Other items to reconcile net income attributed to shareholders to core earnings ⁽⁴⁾ :								
Investment-related experience outside of core earnings	739	77	585	147	(916)	(608)	182	(289)
Direct impact of equity markets, interest rates and variable annuity guarantee liabilities	217	(835)	(323)	390	73	792	(389)	(494)
Change in actuarial methods and assumptions	-	-	-	(198)	-	-	-	(21)
Reinsurance transactions	8	8	44	276	9	12	(34)	-
Restructuring charge	-	(115)	-	-	-	-	-	-
Tax-related items and other	-	19	-	-	-	72	(8)	-
Net income (loss) attributed to shareholders	\$ 2,646	\$ 783	\$ 1,780	\$ 2,068	\$ 727	\$ 1,296	\$ 1,228	\$ 723
Basic earnings (loss) per common share	\$ 1.33	\$ 0.38	\$ 0.90	\$ 1.04	\$ 0.35	\$ 0.64	\$ 0.61	\$ 0.35
Diluted earnings (loss) per common share	\$ 1.33	\$ 0.38	\$ 0.89	\$ 1.04	\$ 0.35	\$ 0.64	\$ 0.61	\$ 0.35
Segregated funds deposits	\$10,301	\$12,395	\$ 9,741	\$ 9,158	\$ 8,784	\$11,215	\$ 9,417	\$ 9,160
Total assets (in billions)	\$ 879	\$ 859	\$ 880	\$ 876	\$ 866	\$ 831	\$ 809	\$ 812
Weighted average common shares (in millions)	1,942	1,941	1,940	1,940	1,939	1,943	1,948	1,961
Diluted weighted average common shares (in millions)	1,946	1,945	1,943	1,942	1,941	1,947	1,953	1,965
Dividends per common share	\$ 0.280	\$ 0.280	\$ 0.280	\$ 0.280	\$ 0.280	\$ 0.280	\$ 0.250	\$ 0.250
CDN\$ to US\$1 - Statement of Financial Position	1.2394	1.2575	1.2732	1.3339	1.3628	1.4187	1.2988	1.3243
CDN\$ to US\$1 - Statement of Income	1.2282	1.2660	1.3030	1.3321	1.3854	1.3449	1.3200	1.3204

⁽¹⁾ Includes ceded premiums related to the reinsurance of a block of our legacy U.S. Bank-Owned Life Insurance of US\$2.4 billion in the third quarter of 2020.

⁽²⁾ For fixed income assets supporting insurance and investment contract liabilities and for equities supporting pass-through products and derivatives related to variable hedging programs, the impact of realized and unrealized gains (losses) on the assets is largely offset in the change in insurance and investment contract liabilities.

⁽³⁾ Core earnings is a non-GAAP measure. See "Performance and non-GAAP measures" above.

⁽⁴⁾ For explanations of other items, see "Items excluded from core earnings" table in section A1 "Profitability" and for an operating segment split of these items see the 8 quarter trend tables in "Performance and non-GAAP measures" which reconcile net income (loss) attributed to shareholders to core earnings.

E6 Other

No changes were made in our internal control over financial reporting during the six months ended June 30, 2021, that have materially affected or are reasonably likely to materially affect our internal control over financial reporting.

As in prior quarters, MFC's Audit Committee reviewed this MD&A and the unaudited interim financial report and MFC's Board of Directors approved this MD&A prior to its release.