



Manulife Financial Corporation

Management's Discussion and Analysis

For the three and nine months ended September 30, 2018

MANAGEMENT'S DISCUSSION AND ANALYSIS

This Management's Discussion and Analysis ("MD&A") is current as of November 7, 2018, unless otherwise noted. This MD&A should be read in conjunction with our unaudited Interim Consolidated Financial Statements for the three and nine months ended September 30, 2018 and the MD&A and audited Consolidated Financial Statements contained in our 2017 Annual Report.

Effective January 1, 2018, the Company's reporting segments have been reorganized. Please refer to section B1 "Third quarter earnings analysis" and section F2 "Performance and Non-GAAP Measures" below for details of these changes.

For further information relating to our risk management practices and risk factors affecting the Company, see "Risk Factors" in our 2017 Annual Information Form, "Risk Management", "Risk Factors" and "Critical Accounting and Actuarial Policies" in the MD&A in our 2017 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.

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A OVERVIEW

A1 Quarterly earnings

Manulife's net income attributed to shareholders was \$1,573 million in the third quarter of 2018 ("3Q18") compared with \$1,105 million in the third quarter of 2017 ("3Q17"). 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 \$1,539 million in 3Q18 compared with \$1,085 million in 3Q17, and items excluded from core earnings, which amounted to a net gain of \$34 million in 3Q18 compared with a net gain of \$20 million in 3Q17.

Diluted earnings per common share were \$0.77 and return on common shareholders' equity ("ROE") was 15.1%, compared with \$0.54 and 10.8%, respectively, for 3Q17. Diluted core earnings per common share¹ were \$0.75 and core return on common shareholders' equity ("core ROE")¹ was 14.8%, compared with \$0.53 and 10.6%, respectively, for 3Q17.

The \$454 million increase in core earnings reflected \$130 million of net charges for notable items in 3Q17 (a \$240 million provision in our P&C business and a \$110 million gain related to taxes) which did not repeat in 3Q18. The remaining \$324 million increase was driven by improved policyholder experience, the impact of lower U.S. tax rates, greater expense efficiency, and business growth in Asia and Global Wealth and Asset Management ("Global WAM"). Core earnings in 3Q18 included net insurance and annuity policyholder experience gains of \$19 million post-tax (\$34 million pre-tax) compared with charges of \$49 million post-tax (\$69 million pre-tax) in 3Q17.²

Items excluded from core earnings:

- Total investment-related experience gains in 3Q18 were \$412 million, compared with \$111 million in 3Q17. In accordance with our definition of core earnings, we included \$100 million of investment-related experience gains in core earnings and \$312 million in items excluded from core earnings in 3Q18 (\$100 million and \$11 million, respectively, in 3Q17). The gains in 3Q18 primarily reflected higher than expected returns (including changes in fair value) on alternative long-duration assets ("ALDA"), the favourable impact of fixed income reinvestment activities on the measurement of our policy liabilities and solid credit experience. The gains in 3Q17 also reflected the favourable impact of fixed income reinvestment activities on the measurement of our policy liabilities and strong credit experience.
- A net charge of \$277 million from the direct impact of markets in 3Q18, primarily driven by narrowing corporate spreads and several small items, the largest of them being losses on the sale of available-for-sale ("AFS") bonds, widening swap spreads, and the steepening of the yield curve in Japan. The 3Q17 direct impact of markets net gain of \$47 million was related to favourable equity markets, partially offset by the direct impact of interest rates on the valuation of our policy liabilities.
- The impact of our annual review of actuarial methods and assumptions resulted in a net charge to net income attributed to shareholders of \$51 million, which was within the estimated range previously disclosed. Reserves were strengthened for policyholder experience and we recorded a net favourable impact from the review of investment assumptions and other updates. (See section E2 "Actuarial methods and assumptions" below).
- A net gain of \$124 million in 3Q18 from a true-up of our fourth quarter of 2017 ("4Q17") estimate of the impact related to U.S. Tax Reform.
- Other items netting to a charge of \$74 million, largely consisting of the impact of reinsurance transactions in 3Q18 to improve the capital efficiency of our legacy businesses (see Section A5 "Progress on improving the capital efficiency of our legacy businesses" below).

A2 Year-to-date earnings

Our net income attributed to shareholders for the 9 months ended September 30, 2018 was \$4,207 million compared with \$3,710 million for the 9 months ended September 30, 2017. Year-to-date core earnings amounted to \$4,273 million in 2018 compared with \$3,360 million in the same period of 2017, and items excluded from year-to-date core earnings amounted to a net charge of \$66 million in 2018 compared with a net gain of \$350 million in the same period of 2017.

Year-to-date diluted earnings per common share were \$2.05 and ROE was 13.9% in 2018 compared with \$1.81 and 12.3%, respectively, for the same period of 2017. Year-to-date diluted core earnings per common share were \$2.09 and core ROE was 14.1% in 2018 compared with \$1.63 and 11.1%, respectively, for the same period of 2017.

The \$913 million increase in core earnings on a year-to-date basis reflects similar factors as described above for 3Q18 and included core investment gains¹ of \$300 million in both 2018 and 2017. Items excluded from core earnings are outlined in the table in section B1 and the key drivers of the \$416 million unfavourable variance were the direct impact of markets and the second quarter of 2018 ("2Q18") restructuring charge.

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

² Effective the first quarter of 2018 ("1Q18"), policyholder experience is being reported excluding minority interest. Comparative prior periods have been updated.

A3 Sales

Annualized premium equivalent (“APE”) sales¹ were \$1.4 billion in 3Q18, an increase of 8%² compared with 3Q17. In Asia, APE sales increased 13% from 3Q17 driven by growth in Japan, Hong Kong and Asia Other³. The improvement compared with recent quarters is a result of the successful launch of a new corporate-owned life insurance term product in Japan. In Canada, APE sales declined 14% from 3Q17. The recently-launched participating product (“Manulife Par”) in individual insurance drove an 18% increase in APE sales in the business, which was more than offset by lower group insurance APE sales due to variability in the large-case market. In the U.S., APE sales increased 14% from 3Q17 driven by product enhancements to our indexed universal life offerings. Year-to-date APE sales of \$4.1 billion in 2018 were 9% lower than the same period of 2017, primarily due to lower APE sales in Canada and the U.S.

New business value (“NBV”) ¹ was \$452 million in 3Q18, an increase of 31% compared with 3Q17. The increase in NBV was driven by strong growth in each of our insurance segments. In Asia, NBV increased 29% from 3Q17 to \$382 million due to higher APE sales, an improvement in product mix, and scale benefits. In Canada, NBV increased 27% from 3Q17 primarily due to higher individual insurance APE sales of the recently-launched Manulife Par product and pricing actions in 3Q17 to improve margins. In the U.S., NBV increased 72% from 3Q17, reflecting higher APE sales and a favourable product mix. Year-to-date NBV was \$1,247 million in 2018, an increase of 18% compared with the same period of 2017.

Wealth and asset management (“WAM”) gross flows¹ were \$27.1 billion in 3Q18, a decrease of 3% compared with 3Q17. The decline was driven by lower gross flows from retail money market funds in mainland China. This was partially offset by the closing of an institutional \$1.2 billion U.S. real estate mandate, and higher new plan deposits in our North American retirement businesses. Year-to-date gross flows of \$92.7 billion in 2018 were 4% higher than the same period of 2017, driven by increases across all business lines in Canada, and growth in our institutional asset management business in Asia and the U.S, partially offset by lower gross flows from retail money market funds in mainland China and lower retail gross flows in the U.S.

Wealth and asset management net flows¹ were \$0.4 billion in 3Q18 compared with \$4.2 billion in 3Q17. The decline in net flows compared with 3Q17 was due to higher redemptions in our North American retail businesses and the redemption of two large fixed income mandates totaling \$1.0 billion in institutional asset management in Canada. Year-to-date net flows of \$10.5 billion in 2018, were \$4.1 billion lower than of the same period of 2017. The drivers of the year-to-date variance include the impact of the termination of three large-case plans in our U.S retirement business in 2Q18 and the redemption of the two fixed income mandates as noted above partially offset by higher gross flows.

A4 Capital related items

The Office of the Superintendent of Financial Institutions’ Life Insurance Capital Adequacy Test (“LICAT”) regulatory capital regime, came into effect in Canada on January 1, 2018, replacing the Minimum Continuing Capital and Surplus framework. As at September 30, 2018, the LICAT ratio for The Manufacturers Life Insurance Company (“MLI”) was 134%, compared with 132% as at June 30, 2018. The ratio increased two percentage points compared with June 30, 2018 due to favorable earnings and the reduction of ALDA in our portfolio asset mix, partially offset by the impact of interest rate and corporate spread movements.

MFC’s LICAT ratio was 123% as at September 30, 2018 compared with 121% as at June 30, 2018. The difference between the MLI and MFC ratios as at September 30, 2018 was largely due to the \$4.5 billion of MFC senior debt outstanding that does not qualify as available capital at the MFC level.

MFC’s financial leverage ratio as at September 30, 2018 was 29.2%, a decrease of 0.2 percentage points from the June 30, 2018 ratio of 29.4%, as growth in retained earnings more than offset the impact of a stronger Canadian dollar.

A5 Progress on improving the capital efficiency of our legacy businesses

During the quarter we reinsured our legacy U.S. individual pay-out annuities business (the portion related to the New York business will close separately, subject to regulatory approval) and the mortality and lapse risk on a portion of our Canadian legacy universal life policies. Additionally, in the fourth quarter of 2018 (“4Q18”) we reinsured our legacy U.S. group pay-out annuities business (the portion related to the New York business will close separately, subject to regulatory approval). In aggregate, these reinsurance agreements are expected to release over \$1 billion in capital (\$35 million was released in 3Q18, \$585 million is expected to be released in 4Q18, and \$470 million is expected to be released over the next 12 months

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

² Percentage growth / declines in APE sales, gross flows, NBV, assets under management and administration, core earnings, assets under management and core EBITDA 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 Asia Other excludes Japan and Hong Kong.

as we further refine our U.S. asset portfolio post-transaction). This represents significant progress towards our target of releasing \$5 billion in capital from our legacy businesses by 2022.¹

In addition, ALDA dispositions contributed approximately \$0.6 billion to regulatory capital in 3Q18, for a total year-to-date contribution of approximately \$1.3 billion in 2018. As outlined in 4Q17, we made a decision to reduce the allocation to ALDA in our portfolio asset mix supporting our North American legacy businesses, resulting in a 4Q17 \$1 billion post-tax charge, and stated that this decision is expected to reduce risk and lower volatility in our legacy businesses and free up approximately \$2 billion in capital over the next 12-18 months as the ALDA is sold.¹

A6 Expense efficiency²

In 3Q18, we reported an expense efficiency ratio of 49.5% compared with 57.1% in 3Q17. Growth of general expenses included in core earnings was 4%, while pre-tax core earnings grew 41%, resulting in a 7.6 percentage point improvement in our expense efficiency ratio.

A7 Mosten litigation and Saskatchewan regulatory update

On October 4, 2018 a U.S. based investment firm announced it had taken a short position on Manulife's common shares and published a report on 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 is 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 stating that the report was a short seller's 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. Given the new Saskatchewan regulations, Manulife and the other life insurers involved in similar matters plan to make submissions to the court, asking it to dismiss the claims that life insurers can be compelled to accept unlimited premium payments. Manulife believes the regulations should accelerate the resolution, in its favour, of the principal matters in the litigation that Mosten brought against the Company in Saskatchewan. With respect to any possible remaining ancillary matters in the litigation, Manulife continues to believe that it will prevail and that those matters are insignificant in any event.

Because the public policy concern addressed in Saskatchewan is equally relevant across Canada, the Canadian Life and Health Insurance Association, which intervened in the litigation on behalf of the industry, plans to request other provincial and territorial governments to take comparable regulatory steps to avoid unnecessary, costly litigation in other jurisdictions.

A8 Strategic priorities¹

As outlined in our 2Q18 MD&A, at Manulife's Investor Day on June 27, 2018, we stated our ambition of delivering top quartile shareholder returns and introduced mid-term targets for our strategic priorities:

1. **Optimizing our portfolio to make sure we're putting our capital to best use** – We have set a target to free up \$5 billion in capital from legacy businesses by 2022. The updated target includes \$2 billion from the decision to reduce the allocation of ALDA in our portfolio asset mix supporting our North American legacy businesses that we announced in late 2017.
2. **Managing our costs to be competitive and create value** – We have set a target to achieve a 50% expense efficiency ratio and \$1 billion in expense saving and avoidance by 2022.
3. **Accelerating growth in our highest-potential businesses** – We have set a target to generate two-thirds of core earnings from high potential businesses by 2022.
4. **Focused on putting our customers first** – We have set a target to improve our net promoter score by 30 percentage points by 2022.
5. **Fostering a high performing team and culture** – We have set a target to achieve top quartile employee engagement by 2022.

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

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

B FINANCIAL HIGHLIGHTS

(\$ millions, unless otherwise stated, unaudited)	Quarterly Results			YTD Results	
	3Q18	2Q18	3Q17	2018	2017
Net income attributed to shareholders	\$ 1,573	\$ 1,262	\$ 1,105	\$ 4,207	\$ 3,710
Preferred share dividends	(42)	(44)	(39)	(125)	(119)
Common shareholders' net income	\$ 1,531	\$ 1,218	\$ 1,066	\$ 4,082	\$ 3,591
Core earnings⁽¹⁾	\$ 1,539	\$ 1,431	\$ 1,085	\$ 4,273	\$ 3,360
Basic earnings (loss) per common share (\$)	\$ 0.77	\$ 0.61	\$ 0.54	\$ 2.06	\$ 1.82
Diluted earnings (loss) per common share (\$)	\$ 0.77	\$ 0.61	\$ 0.54	\$ 2.05	\$ 1.81
Diluted core earnings per common share (\$) ⁽¹⁾	\$ 0.75	\$ 0.70	\$ 0.53	\$ 2.09	\$ 1.63
Return on common shareholders' equity ("ROE")	15.1%	12.3%	10.8%	13.9%	12.3%
Core ROE ⁽¹⁾	14.8%	14.0%	10.6%	14.1%	11.1%
Sales ⁽¹⁾					
Annualized premium equivalent sales	\$ 1,439	\$ 1,245	\$ 1,300	\$ 4,071	\$ 4,457
Wealth and asset management gross flows	\$ 27,128	\$ 29,102	\$ 27,024	\$ 92,696	\$ 89,726
Wealth and asset management net flows	\$ 448	\$ 92	\$ 4,177	\$ 10,517	\$ 14,634
New business value ⁽¹⁾	\$ 452	\$ 411	\$ 336	\$ 1,247	\$ 1,060
Assets under management and administration (\$ billions) ⁽¹⁾	\$ 1,117	\$ 1,118	\$ 1,036	\$ 1,117	\$ 1,036
Capital (\$ billions) ⁽¹⁾	\$ 54.4	\$ 54.3	\$ 51.8	\$ 54.4	\$ 51.8
MLI's LICAT ratio	134%	132%	-	134%	-
MLI's MCCR ratio	-	-	234%	-	234%
Expense efficiency ratio ⁽¹⁾	49.5%	51.2%	57.1%	50.9%	55.3%

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

B1 Third quarter earnings analysis

Effective January 1, 2018, the Company introduced Global Wealth and Asset Management segment as a primary reporting segment. This reflects organizational changes made to drive better alignment with our strategic priorities as well as to increase focus and leverage scale in our global wealth and asset management businesses.

Our reporting segments are:

- **Asia** – providing insurance products and insurance-based wealth accumulation products in Asia.
- **Canada** – providing insurance products, insurance-based wealth accumulation products, and banking services in Canada.
- **U.S.** – providing life insurance products and administering in-force long-term care and insurance-based wealth accumulation products in the U.S.
- **Global Wealth and Asset Management** – providing fee-based wealth solutions with little or no guarantees to our retail, retirement and institutional customers around the world.
- **Corporate and Other** – comprised of investment performance on assets backing capital, net of amounts allocated to operating segments; costs incurred by the corporate office related to shareholder activities (not allocated to operating segments); financing costs; our Property and Casualty Reinsurance business; and run-off reinsurance business lines.

In addition to changing the segments, we changed the segment reporting for changes to actuarial methods and assumptions. These changes were previously reported in the Corporate and Other segment and are now reported in the respective operating segment. Other minor adjustments to our reporting are outlined under section F2 "Performance and Non-GAAP Measures" below. Comparative periods are shown based on the Company's new reporting segments and reflect changes to the non-GAAP measures.

The table below reconciles core earnings to net income (loss) attributed to shareholders:

(\$ millions, unaudited)	Quarterly Results			YTD Results	
	3Q18	2Q18	3Q17	2018	2017
Core earnings⁽¹⁾					
Asia	\$ 457	\$ 406	\$ 374	\$ 1,290	\$ 1,081
Canada	351	403	403	1,044	936
U.S.	477	456	346	1,365	1,146
Global Wealth and Asset Management	289	239	216	755	618
Corporate and Other (excluding core investment gains)	(135)	(177)	(354)	(481)	(721)
Core investment gains	100	104	100	300	300
Total core earnings	\$ 1,539	1,431	1,085	4,273	3,360
Items excluded from core earnings:					
Investment-related experience outside of core earnings	312	18	11	330	149
Direct impact of equity markets and interest rates and variable annuity guarantee liabilities ^{(2),(3)} (see table below)	(277)	45	47	(182)	277
Change in actuarial methods and assumptions	(51)	-	(2)	(51)	(2)
Impact related to U.S. Tax Reform	124	-	-	124	-
Restructuring charge	-	(200)	-	(200)	-
Reinsurance transactions and other	(74)	(32)	(36)	(87)	(74)
Net income (loss) attributed to shareholders	\$ 1,573	\$ 1,262	\$ 1,105	\$ 4,207	\$ 3,710

⁽¹⁾ This item is a non-GAAP measure. See "Performance and Non-GAAP Measures" below. In addition, all values, including comparative periods, are shown based on the Company's new reporting segments noted in this section.

⁽²⁾ As outlined under "Critical Accounting and Actuarial Policies" below, net insurance contract liabilities under International Financial Reporting Standards ("IFRS") for Canadian insurers are determined using the Canadian Asset Liability Method ("CALM"). Under CALM, the measurement of policy liabilities includes estimates regarding future expected investment income on assets supporting the policies. 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. These gains and losses can relate to both the investment returns earned in the period, as well as to the change in our policy liabilities driven by the impact of current period investing activities on future expected investment income assumptions. The direct impact of equity markets and interest rates is separately reported. Our definition of core earnings (see "Performance and Non-GAAP Measures" below) includes up to \$400 million of favourable investment-related experience reported in a single year.

⁽³⁾ The direct impact of equity markets and interest rates is relative to our policy liability valuation assumptions and includes changes to interest rate assumptions, including experience gains and losses on derivatives associated with our macro equity hedges. We also include gains and losses on derivative positions and the sale of available-for-sale ("AFS") bonds in the Corporate and Other segment. See table below for components of this item.

Components of the direct impact of equity markets and interest rates and variable annuity guarantee liabilities in the table above:

(\$ millions, unaudited)	Quarterly Results			YTD Results	
	3Q18	2Q18	3Q17	2018	2017
Direct impact of equity markets and variable annuity guarantee liabilities	\$ 8	\$ (26)	\$ 126	\$ (205)	\$ 403
Fixed income reinvestment rates assumed in the valuation of policy liabilities	(246)	175	(22)	242	(45)
Sale of AFS bonds and derivative positions in the Corporate and Other segment	(39)	(104)	(57)	(219)	(81)
Direct impact of equity markets and interest rates and variable annuity guarantee liabilities	\$ (277)	\$ 45	\$ 47	\$ (182)	\$ 277

B2 Revenue

(\$ millions, unaudited)	Quarterly Results			YTD Results	
	3Q18	2Q18	3Q17	2018	2017
Gross premiums	\$ 9,863	\$ 9,831	\$ 9,211	\$ 29,160	\$ 27,326
Premiums ceded to reinsurers	(4,762)	(1,077)	(1,968)	(6,980)	(6,059)
Net premium income	5,101	8,754	7,243	22,180	21,267
Investment income	3,481	3,566	3,309	10,282	10,070
Other revenue	2,671	2,964	2,544	8,137	8,009
Revenue before realized and unrealized investment income gains and losses	11,253	15,284	13,096	40,599	39,346
Realized and unrealized gains and losses on assets supporting insurance and investment contract liabilities and on the macro hedge program	(3,210)	(1,615)	(1,163)	(10,141)	2,730
Total revenue	\$ 8,043	\$ 13,669	\$ 11,933	\$ 30,458	\$ 42,076

Total revenue in 3Q18 was \$8.0 billion compared with \$11.9 billion in 3Q17. 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 gains or losses on assets supporting insurance and investment contract liabilities and on the macro hedge program, a component of revenue (see section B5 “Impact of fair value accounting” below). Accordingly, we discuss specific drivers of revenue in each segment before realized and unrealized investment income gains and losses in section C “Performance by Segment” below.

3Q18 revenue before realized and unrealized investment income gains and losses of \$11.3 billion decreased \$1.8 billion compared with 3Q17, primarily due to higher ceded premiums from the reinsurance of a block of our legacy U.S. individual pay-out annuities business partially offset by reduced ongoing ceded premium in Canada due to a change made to a reinsurance agreement in 1Q18 and business growth in Asia.

Net realized and unrealized gains and losses on assets supporting insurance and investment contract liabilities and on the macro hedge program was a charge of \$3.2 billion in 3Q18 compared with a charge of \$1.2 billion in 3Q17. The 3Q18 charge was primarily due to an overall increase in interest rates in North America and Asia, partially offset by gains on real estate and ALDA. The 3Q17 charge was due to the increase in Canadian interest rates.

On a year-to-date basis, revenue before net realized and unrealized investment income gains and losses was \$1.3 billion higher in 2018 compared with the same period of 2017. The favourable variance was driven by an increase in large premium deposits in group insurance in 2Q18 in Canada. Net realized and unrealized gains on assets supporting insurance and investment contract liabilities and on the macro hedge program was a loss of \$10.1 billion for year-to-date 2018 compared with a gain of \$2.7 billion for year-to-date 2017. The key drivers of the fair value impact on a year-to-date basis in 2018 were similar to the factors noted above for 3Q18. Key drivers for the fair value impact on a year-to-date basis in 2017 were the decline in U.S. and Hong Kong interest rates partially offset by higher interest rates in Canada.

B3 Assets under management and administration (“AUMA”)¹

AUMA as at September 30, 2018 were \$1.1 trillion, an increase of 2% compared with December 31, 2017. The primary driver of the increase was continued customer net inflows.

B4 Capital¹

MFC’s total capital as at September 30, 2018 was \$54.4 billion, an increase of \$2.6 billion compared with September 30, 2017 capital of \$51.8 billion and an increase of \$3.7 billion from December 31, 2017 capital of \$50.7 billion. The increase from December 31, 2017 was primarily driven by net income attributed to shareholders over the last 9 months, the impact of changes in foreign currency exchange rates and the net issuance of capital instruments and preferred shares over the last 9 months of \$642 million, partially offset by dividend payments and a decrease in the market value of available-for-sale securities. As noted in section A4 “Capital related items” above, MLI’s LICAT ratio was 134% as at September 30, 2018.

B5 Impact of fair value accounting

Fair value accounting policies affect the measurement of both our assets and our liabilities. The impact on the measurement of both assets and liabilities of investment activities and market movements are reported as experience gains and losses on investments and the direct impact of equity markets and interest rates and variable annuity guarantees, each of which

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

impacts net income attributed to shareholders (see section A1 “Earnings” above for discussion of 3Q18 experience).

Net realized and unrealized losses on assets supporting insurance and investment contract liabilities and on the macro hedge program were \$3.2 billion for 3Q18 (3Q17 – losses of \$1.2 billion) and on a year-to-date basis, the losses were \$10.1 billion for 2018 (year-to-date 2017 – gains of \$2.7 billion). See section B2 “Revenue” above for discussion of results.

As outlined in the “Critical Accounting and Actuarial Policies” in the MD&A in our 2017 Annual Report, net insurance contract liabilities under IFRS are determined using 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 policies will result in an investment-related experience gain (loss).

B6 Impact of foreign currency exchange rates

Changes in foreign currency exchange rates increased core earnings by \$40 million in 3Q18 compared with 3Q17 primarily due to a weaker Canadian dollar compared with the U.S. dollar. Changes in foreign currency exchange rates reduced year-to-date core earnings by \$39 million in 2018 compared with the same period of 2017. The impact of foreign currency exchange rates on items excluded from core earnings does not provide relevant information given the nature of these items.

C PERFORMANCE BY SEGMENT

C1 Asia

(\$ millions, unless otherwise stated)	Quarterly Results ⁽¹⁾			YTD Results ⁽¹⁾	
	3Q18	2Q18	3Q17	2018	2017
<i>Canadian dollars</i>					
Net income attributed to shareholders	\$ 562	\$ 363	\$ 521	\$ 1,373	\$ 1,574
Core earnings ⁽²⁾	457	406	374	1,290	1,081
Annualized premium equivalent sales	1,070	918	920	2,972	2,863
Revenue	5,149	4,937	5,016	14,391	15,583
Revenue before realized and unrealized investment income gains and losses ⁽³⁾	5,655	5,354	4,681	16,273	14,008
Assets under management (\$ billions)	98.3	98.6	87.1	98.3	87.1
<i>U.S. dollars</i>					
Net income attributed to shareholders	US\$ 431	US\$ 280	US\$ 416	US\$ 1,066	US\$ 1,205
Core earnings ⁽²⁾	349	315	298	1,002	828
Annualized premium equivalent sales	818	711	734	2,307	2,191
Revenue	3,941	3,823	4,004	11,168	11,923
Revenue before realized and unrealized investment income gains and losses ⁽³⁾	4,329	4,146	3,736	12,638	10,728
Assets under management (\$ billions)	75.9	74.9	69.8	75.9	69.8

⁽¹⁾ The Company made a number of reporting changes in 1Q18. Please refer to section B1 “Third quarter earnings analysis” and section F2 “Performance and Non-GAAP Measures” for details.

⁽²⁾ See “Performance and Non-GAAP Measures” for a reconciliation between IFRS net income attributed to shareholders and core earnings.

⁽³⁾ See section B5 “Impact of fair value accounting”.

Asia’s net income attributed to shareholders was \$562 million in 3Q18 compared with \$521 million in 3Q17. Net income attributed to shareholders is comprised of core earnings, which was \$457 million in 3Q18 compared with \$374 million in 3Q17, and items excluded from core earnings, which amounted to a net gain of \$105 million in 3Q18 compared with a net gain of \$147 million in 3Q17. The changes in net income attributed to shareholders and core earnings expressed in Canadian dollars are due to the factors described below and, in addition, core earnings reflected a net \$17 million favourable 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\$431 million in 3Q18 compared with US\$416 million in 3Q17 and core earnings were US\$349 million in 3Q18 compared with US\$298 million in 3Q17. Items excluded from core earnings were a net gain of US\$82 million in 3Q18 compared with a net gain of US\$118 million in 3Q17 (these items are outlined in section F2 “Performance and Non-GAAP Measures”).

Core earnings in 3Q18 increased 19% compared with 3Q17. The increase in core earnings was driven by all key operating business lines, reflecting the favourable impact of new business from higher sales volume and improved product mix, and in-force business growth.

Year-to-date net income attributed to shareholders was US\$1,066 million in 2018 compared with US\$1,205 million in the same period of 2017. Year-to-date core earnings of US\$1,002 million increased 20% compared with the same period of 2017. This increase reflects similar factors as noted above for 3Q18, partially offset by more unfavourable policyholder experience. Items excluded from year-to-date core earnings were a net gain of US\$64 million in 2018 and a net gain of US\$377 million for the same period of 2017. Expressed in Canadian dollars, core earnings reflected a \$13 million unfavourable impact of changes in foreign currency exchange rates versus the Canadian dollar.

APE sales in 3Q18 were US\$818 million, an increase of 13% compared with 3Q17 driven by growth in Japan, Hong Kong and Asia Other. NBV in 3Q18 reached US\$293 million, a 29% increase compared with 3Q17, reflecting strong growth across most of our markets. Year-to-date APE sales were US\$2.3 billion in 2018, an increase of 4% compared with the same period of 2017. Growth in Hong Kong and Asia Other was offset by lower sales volumes in the first half of the year in Japan. Year-to-date NBV in 2018 was US\$808 million, an 18% increase compared with the same period of 2017, reflecting growth in Hong Kong and Asia Other. New business value margin (“NBV margin”)¹ was 37.4% in 3Q18 compared with 33.2% in 3Q17.

- Japan APE sales in 3Q18 were US\$303 million, an increase of 19% compared with 3Q17 driven by the successful launch of a new corporate-owned life insurance term product. Japan NBV in 3Q18 of US\$84 million increased 42% compared with 3Q17 due to higher volumes and higher margins from improved product mix, scale benefits and management actions. Japan NBV margin was 27.7%, an increase of 4.6 percentage points compared with 3Q17.
- Hong Kong APE sales in 3Q18 were US\$170 million, a 12% increase compared with 3Q17 driven by a successful product launch, continued success of our critical illness product and strong growth in our agency force. Hong Kong NBV in 3Q18 of US\$110 million increased 17% compared with 3Q17, due to higher sales and favourable product mix. Hong Kong NBV margin was 64.6%, an increase of 2.6 percentage points compared with 3Q17.
- Asia Other APE sales in 3Q18 were US\$345 million, a 9% increase compared with 3Q17 driven by growth in both bancassurance and agency channels. Asia Other NBV in 3Q18 of US\$99 million increased 34% compared with 3Q17 due to higher sales, scale benefits, favourable product mix and product actions to improve margins. Asia Other NBV margin was 32.0%, an increase of 5.3 percentage points compared with 3Q17.

Revenue of US\$3.9 billion in 3Q18 decreased 1% compared with 3Q17. Revenue before realized and unrealized investment income gains and losses, was US\$4.3 billion in 3Q18, an increase of 16% compared with 3Q17, driven by recurring premium growth from in-force business and higher new business premiums. Year-to-date revenue was US\$11.2 billion in 2018 compared with US\$11.9 billion in the same period of 2017. Year-to-date revenue before realized and unrealized investment income gains and losses, was US\$12.6 billion in 2018, an increase of 18% compared with the same period of 2017.

Assets under management¹ were US\$75.9 billion as at September 30, 2018, an increase of 6% compared with December 31, 2017, driven by positive customer net flows of US\$7.9 billion partially offset by the negative impact on asset values from higher interest rates over the past nine months.

Business highlights - In 3Q18, we launched a new corporate-owned life insurance term product in Japan which drove a 19% increase in Japan APE sales compared with 3Q17. Also, in 3Q18 we introduced e-claims in Vietnam, advancing our digital strategy by expanding and leveraging the successful launch of e-claims in Hong Kong earlier this year. And to improve the health and well-being of our customers and the wider community, we sponsored multiple health and wellness events, including the IRIS yoga festival in Hong Kong and initiatives across Asia in support of World Heart Day.

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

C2 Canada

(\$ millions, unless otherwise stated)	Quarterly Results ⁽¹⁾			YTD Results ⁽¹⁾	
	3Q18	2Q18	3Q17	2018	2017
Net income (loss) attributed to shareholders	\$ 109	\$ 510	\$ 432	\$ 1,078	\$ 583
Core earnings ⁽²⁾	351	403	403	1,044	936
Annualized premium equivalent sales	210	198	245	698	1,144
Manulife Bank average net lending assets (\$ billions)	21.3	21.0	20.0	20.9	19.8
Revenue	2,106	4,497	775	9,797	6,921
Revenue before realized and unrealized investment income gains and losses ⁽³⁾	3,652	4,241	2,534	11,475	7,868
Assets under management (\$ billions)	145.3	146.0	142.6	145.3	142.6

⁽¹⁾ The Company made a number of reporting changes in 1Q18. Please refer to section B1 "Third quarter earnings analysis" and section F2 "Performance and Non-GAAP Measures" for details.

⁽²⁾ See "Performance and Non-GAAP Measures" below for a reconciliation between IFRS net income attributed to shareholders and core earnings.

⁽³⁾ See section B5 "Impact of fair value accounting".

Canada's 3Q18 net income attributed to shareholders was \$109 million compared with \$432 million in 3Q17. Net income attributed to shareholders is comprised of core earnings, which were \$351 million in 3Q18 compared with \$403 million in 3Q17, and items excluded from core earnings, which were a net charge of \$242 million in 3Q18 compared with a net gain of \$29 million in 3Q17 (these items are outlined in section F2 "Performance and Non-GAAP Measures").

The \$52 million decrease in core earnings reflected the release of provisions for uncertain tax positions of \$83 million in 3Q17 which did not recur. Other items resulted in a \$31 million increase in core earnings and included more favourable policyholder experience in our group insurance business and the favourable impact of new business from sales of the recently-launched Manulife Par product in 3Q18 and pricing actions taken in late 2017.

Year-to-date net income attributed to shareholders was \$1,078 million in 2018 compared with \$583 million in the same period of 2017 and year-to-date core earnings were \$1,044 million in 2018 compared with \$936 million in the same period of 2017. The increase in year-to-date core earnings of \$108 million was driven by favourable policyholder experience in our group insurance business and higher new business margins in individual insurance due to pricing actions taken in late 2017, partially offset by lower gains of \$35 million related to the release of provisions for uncertain tax positions of prior years. Items excluded from year-to-date core earnings were a net gain of \$34 million in 2018 and a net charge of \$353 million for the same period of 2017.

APE sales of \$210 million in 3Q18 decreased by \$35 million compared with 3Q17 driven by variability in the large-case group insurance market. Year-to-date APE sales in 2018 were \$698 million, \$446 million lower than in the same period of 2017, driven by a prior year large-case group insurance sale.

- Individual insurance APE sales in 3Q18 of \$78 million increased \$12 million or 18% compared with 3Q17, driven by the introduction of Manulife Par.
- Group insurance APE sales in 3Q18 of \$78 million decreased \$42 million or 35% compared with 3Q17, due to variability in the large-case group insurance market.
- Annuities APE sales in 3Q18 of \$54 million decreased \$5 million or 8% compared with 3Q17 due to actions to de-emphasize higher risk segregated fund¹ sales. We are focused on growth in lower risk segregated fund products, which in 3Q18 grew by 13% and accounted for 78% of annuity APE sales.

Manulife Bank quarterly average net lending assets were \$21.3 billion as at September 30, 2018, up \$1.0 billion or 5% from December 31, 2017.

Revenue in 3Q18 was \$2.1 billion compared with \$0.8 billion in 3Q17 and was \$9.8 billion for year-to-date 2018 compared with \$6.9 billion in the same period of 2017. Revenue before realized and unrealized investment income gains and losses was \$3.7 billion in 3Q18, an increase of \$1.1 billion compared with 3Q17, and was \$11.5 billion for year-to-date 2018, an increase of \$3.6 billion compared with the same period of 2017. The increases in quarterly and year-to-date revenue before realized and unrealized investment income gains and losses were driven by a change made to a reinsurance agreement in 1Q18, which reduced ongoing ceded premiums.

¹ Segregated fund products include guarantees. These products are also referred to as variable annuities.

Assets under management were \$145.3 billion as at September 30, 2018, an increase of \$0.7 billion from December 31, 2017, primarily driven by growth in Manulife Bank net lending assets, partially offset by net outflows in the segregated fund business.

Business highlights - In 3Q18, we entered into a reinsurance transaction on our legacy business to reduce risk and release \$85 million of capital. We delivered a strong first quarter of sales in Manulife Par, gaining momentum in the individual insurance market. We continued to execute our digital customer-centric strategy, partnering with Canada's largest pharmacy chain, Shoppers Drug Mart, to launch the first medical marijuana program in Canada to help customers receive the right strain and formulation for their condition. We also surpassed one million robotics-processed transactions, which improves efficiency and makes it easier for our customers to do business with us through faster processing times and improved transaction quality.

C3 U.S.

(\$ millions, unless otherwise stated) <i>Canadian dollars</i>	Quarterly Results ⁽¹⁾			YTD Results ⁽¹⁾	
	3Q18	2Q18	3Q17	2018	2017
Net income attributed to shareholders	\$ 640	\$ 630	\$ 322	\$ 1,808	\$ 1,697
Core earnings ⁽²⁾	477	456	346	1,365	1,146
Annualized premium equivalent sales	159	129	135	401	450
Revenue	(583)	2,982	4,884	2,418	15,809
Revenue before realized and unrealized investment income gains and losses ⁽³⁾	571	4,461	4,586	9,013	13,555
Assets under management (\$ billions)	227.3	233.5	224.4	227.3	224.4
<i>U.S. dollars</i>					
Net income attributed to shareholders	US\$ 490	US\$ 488	US\$ 257	US\$ 1,403	US\$ 1,288
Core earnings ⁽²⁾	365	353	276	1,059	876
Annualized premium equivalent sales	122	99	107	311	343
Revenue	(446)	2,308	3,898	1,878	12,072
Revenue before realized and unrealized investment income gains and losses ⁽³⁾	436	3,454	3,659	7,038	10,383
Assets under management (\$ billions)	175.6	177.4	179.8	175.6	179.8

⁽¹⁾ The Company made a number of reporting changes in 1Q18. Please refer to section B1 "Third quarter earnings analysis" and section F2 "Performance and Non-GAAP Measures" for details.

⁽²⁾ See "Performance and Non-GAAP Measures" below for a reconciliation between IFRS net income attributed to shareholders and core earnings.

⁽³⁾ See section B5 "Impact of fair value accounting".

U.S. 3Q18 net income attributed to shareholders was \$640 million compared with \$322 million in 3Q17. Net income attributed to shareholders is comprised of core earnings, which amounted to \$477 million in 3Q18 compared with \$346 million in 3Q17, and items excluded from core earnings, which amounted to a net gain of \$163 million in 3Q18 compared with a net charge of \$24 million in 3Q17. The changes in net income attributed to shareholders and core earnings expressed in Canadian dollars are due to the factors described below and, in addition, the change in core earnings reflected a net \$20 million favourable currency impact from the strengthening of the U.S. dollar compared with the Canadian dollar.

Expressed in U.S. dollars, the functional currency of the segment, 3Q18 net income attributed to shareholders was US\$490 million compared with US\$257 million in 3Q17, core earnings were US\$365 million in 3Q18 compared with US\$276 million in 3Q17, and items excluded from core earnings were a net gain of US\$125 million in 3Q18 compared with a net charge of US\$19 million in 3Q17 (these items are outlined in section F2 "Performance and Non-GAAP Measures").

The US\$89 million increase in core earnings included US\$53 million related to lower U.S. tax rates, favourable policyholder experience in 3Q18 compared with unfavourable experience in 3Q17, and the impact of higher sales volume and product mix changes, partially offset by other experience related items. Favourable policyholder experience in 3Q18 was driven by favourable mortality in the life insurance and annuities businesses, partially offset by unfavourable experience in the long-term care ("LTC") business. LTC experience in the quarter was consistent with the prior year period, and remains approximately neutral on average since our last triennial review in the third quarter of 2016.

Year-to-date net income attributed to shareholders was US\$1,403 million in 2018 compared with US\$1,288 million in the same period of 2017 and year-to-date core earnings were US\$1,059 million in 2018 compared with US\$876 million in the same period of 2017. The increase in year-to-date core earnings of US\$183 million was driven by the favourable impact of lower U.S. tax rates, favourable policyholder experience, a gain related to the settlement of an annuity reinsurance item, and

lower amortization of deferred acquisition costs on the legacy variable annuity business, partially offset by the impact of lower sales volume and product mix changes. Year-to-date policyholder experience was a small gain in 2018 compared to losses in 2017. Items excluded from year-to-date core earnings were a net gain of US\$344 million in 2018 and a net gain of US\$412 million for the same period of 2017. Expressed in Canadian dollars, core earnings reflected a \$19 million unfavourable impact of changes in foreign currency exchange rates versus the Canadian dollar.

APE sales in 3Q18 of US\$122 million increased 14% compared with 3Q17, primarily due to enhanced features on the indexed universal life product offerings and continued ramp-up of product sales with the John Hancock Vitality PLUS feature which benefited multiple products in 3Q18. Term and international sales continue to be impacted by competitive pressures although 3Q18 international sales benefited from the sale of a large multi-pay policy. Year-to-date sales in 2018 of US\$311 million decreased 9% compared with the same period of 2017 primarily due to lower international and variable universal life sales.

Revenue in 3Q18 was a charge of US\$0.4 billion compared with a gain of US\$3.9 billion in 3Q17. Revenue before net realized and unrealized investment income gains and losses was US\$0.4 billion in 3Q18, a decrease compared with US\$3.7 billion in 3Q17. The US\$3.3 billion decrease was primarily due to US\$2.8 billion of ceded premiums from the reinsurance of a block of our legacy individual pay-out annuities business during the quarter. Year-to-date revenue was US\$1.9 billion in 2018, a decrease compared with US\$12.1 billion in the same period of 2017. Year-to-date revenue before realized and unrealized investment income gains and losses was US\$7.0 billion in 2018, a decrease of US\$3.3 billion compared with the same period of 2017.

Assets under management as at September 30, 2018 were US\$175.6 billion, a decrease of 4% from December 31, 2017. The decrease was driven by the continued run-off of our annuities business, unfavourable mark-to-market movement on assets supporting our insurance business primarily from interest rate movement, as well as the impact of the reinsurance of our legacy individual pay-out annuities block.

Business highlights - In the U.S., we became the first U.S. life insurance company to fully embrace behavioral-based life insurance with the October 1st launch of Vitality Go on all life insurance policies at no additional cost. This basic, “be healthy” version of the program provides access to expert fitness and nutritional resources, and personalized health goals that when achieved unlock rewards and discounts at major brand outlets. Our full feature Vitality rider (now known as Vitality PLUS) garnered US\$31 million in sales in 3Q18. We also made progress in managing our legacy business with the reinsurance of our individual pay-out annuities business in 3Q18 and our group pay-out annuities business in 4Q18.

C4 Global Wealth and Asset Management

(\$ millions, unless otherwise stated)	Quarterly Results ⁽¹⁾			YTD Results ⁽¹⁾	
	3Q18	2Q18	3Q17	2018	2017
Net income attributed to shareholders	\$ 281	\$ 233	\$ 206	\$ 737	\$ 582
Core earnings ⁽²⁾	289	239	216	755	618
Core EBITDA ⁽³⁾	406	370	352	1,136	1,071
Sales					
Wealth and asset management gross flows	27,128	29,102	27,024	92,696	89,726
Wealth and asset management net flows	448	92	4,177	10,517	14,634
Revenue	1,387	1,359	1,275	4,093	3,859
Assets under management and administration (\$ billions)	644.0	639.9	584.4	644.0	584.4

⁽¹⁾ The Company made a number of reporting changes in 1Q18. Please refer to section B1 “Third quarter earnings analysis” and section F2 “Performance and Non-GAAP Measures” for details.

⁽²⁾ See “Performance and Non-GAAP Measures” below for a reconciliation between IFRS net income attributed to shareholders and core earnings.

⁽³⁾ Core EBITDA is a non-GAAP measure and is equal to core earnings before interest, taxes, depreciation and amortization. See F2 “Performance and Non-GAAP Measures” below.

Global Wealth and Asset Management’s net income attributed to shareholders was \$281 million in 3Q18 compared with \$206 million in 3Q17. Net income attributed to shareholders is comprised of core earnings, which were \$289 million in 3Q18 compared with \$216 million in 3Q17, and items excluded from core earnings, which were a net charge of \$8 million in 3Q18 compared with a net charge of \$10 million in 3Q17. Items excluded from core earnings are related to integration costs in our Hong Kong and Canadian retirement businesses (these items are outlined in section F2 “Performance and Non-GAAP Measures”).

Core earnings in 3Q18 increased 30% compared with 3Q17 driven by higher earnings on higher average asset levels and \$13 million from the impact of lower U.S. tax rates.

Core EBITDA was \$406 million in 3Q18, an increase of 12% compared with 3Q17, driven by higher fee income.

Year-to-date net income attributed to shareholders was \$737 million in 2018 compared with \$582 million in the same period of 2017. Year-to-date core earnings of \$755 million increased \$137 million compared with the same period of 2017. The increase reflects higher earnings on higher average asset levels and the impact of lower U.S. tax rates. Items excluded from year-to-date core earnings were a net charge of \$18 million in 2018 and a net charge of \$36 million for the same period of 2017.

Year-to-date Core EBITDA was \$1,136 million in 2018, an increase of 7% compared with the same period of 2017. The increase was driven by higher earnings on higher average asset levels.

Gross Flows and Net Flows - As noted above, gross flows were \$27.1 billion in 3Q18, a decrease of 3% compared with 3Q17, and net flows were \$0.4 billion in 3Q18, a decrease of \$3.7 billion compared with 3Q17. Year-to-date gross flows in 2018 of \$92.7 billion were 4% higher than the same period of 2017, and year-to-date net flows of \$10.5 billion in 2018 were \$4.1 billion lower than the same period of 2017. By geography the results were:

WAM Asia:

- Gross flows in Asia in 3Q18 were \$5.2 billion, a decrease of 27% compared with 3Q17, driven by lower gross flows in mainland China from retail money market funds and institutional asset management. Retirement gross flows were in line with the prior year. Year-to-date gross flows of \$18.4 billion were 4% lower than the same period of 2017.
- Net flows in 3Q18 were \$1.0 billion compared with net flows of \$1.8 billion in 3Q17, driven by lower gross flows in retail money market funds in mainland China as mentioned above. Year-to-date net flows of \$4.6 billion in 2018 were \$0.3 billion higher than the same period of 2017.

WAM Canada:

- Gross flows in Canada in 3Q18 were \$4.7 billion, an increase of 7% compared with 3Q17, driven by new plan deposits and recurring contributions in retirement, higher sales of several balanced and equity funds in retail, and higher private market sales in institutional asset management. Year-to-date gross flows in 2018 of \$18.2 billion were 19% higher than the same period of 2017.
- Net flows in 3Q18 were negative \$1.5 billion in 3Q18 compared with positive net flows of \$0.9 billion in 3Q17, driven by higher retail redemptions, the departure of a large retail advisor branch, and two large fixed income redemptions totaling \$1.0 billion in institutional asset management. These items were partially offset by higher gross flows as mentioned above. Year-to-date net flows of \$2.7 billion in 2018 were \$0.3 billion lower than the same period of 2017.

WAM U.S.:

- Gross flows in the U.S. in 3Q18 were \$17.3 billion, an increase of 5% compared with 3Q17, driven by the launch of a \$1.2 billion real estate separately managed account in institutional asset management as well as higher plan deposits in the mid-case market segment in retirement. These items were partially offset by lower sales of fixed income funds and the closure of a top selling international equity fund in retail. Year-to-date gross flows in 2018 of \$56.1 billion were 3% higher than the same period of 2017.
- Net flows in 3Q18 were \$0.9 billion compared with net flows of \$1.4 billion in 3Q17, driven by higher retail redemptions, partially offset by higher gross flows as mentioned above and growth in exchange traded funds. Year-to-date net flows in 2018 of \$3.2 billion were \$4.1 billion lower than the same period of 2017.

Revenue in 3Q18 was \$1.4 billion, an increase compared with \$1.3 billion in 3Q17. This increase was driven by higher fee income on higher average asset levels. Year-to-date revenue in 2018 was \$4.1 billion, an increase compared with \$3.9 billion in the same period of 2017.

Assets under management and administration of \$644 billion as at September 30, 2018 increased 4% compared with December 31, 2017 driven by positive year-to-date net flows of \$10.5 billion, and increased 7% compared with September 30, 2017 due to favourable investment performance and positive net flows. Global WAM also manages \$182 billion in assets for the Company's non-WAM reporting segments, and including those managed assets, AUMA managed by Global WAM was \$826 billion as at September 30, 2018.

Business highlights - Global WAM launched an innovative Goals-Based Investing program powered by advanced data analytics and dynamic liability-driven investment, marking the first time this type of investment strategy has been offered to retail customers in Canada. In 3Q18, we regained the leading sales market share position in the Hong Kong Mandatory

Provident Fund (“MPF”) market, attracting over one-third of net cash flows.¹ In addition, in the U.S., we continue to enhance the digital customer experience with the launch of My Money Connector, an aggregation tool that helps participants manage their finances.

C5 Corporate and Other

(\$ millions, unless otherwise stated)	Quarterly Results ⁽¹⁾			YTD Results ⁽¹⁾	
	3Q18	2Q18	3Q17	2018	2017
Net income (loss) attributed to shareholders	\$ (19)	\$ (474)	\$ (376)	\$ (789)	\$ (726)
Core loss excluding core investment gains ⁽²⁾	\$ (135)	\$ (177)	\$ (354)	\$ (481)	\$ (721)
Core investment gains	100	104	100	300	300
Total core gain (loss)	\$ (35)	\$ (73)	\$ (254)	\$ (181)	\$ (421)
Revenue	\$ (16)	\$ (106)	\$ (17)	\$ (241)	\$ (96)
Assets under management (\$ billions)	2.6	0.3	(2.7)	2.6	(2.7)

⁽¹⁾ The Company made a number of reporting changes in 1Q18. Please refer to section B1 “Third quarter earnings analysis” and section F2 “Performance and Non-GAAP Measures” for details.

⁽²⁾ See “Performance and Non-GAAP Measures” for a reconciliation between IFRS net income 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); 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 this segment’s 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 other segments, we report all investment-related experience in items excluded from core earnings.

Corporate and Other reported a net loss attributed to shareholders of \$19 million in 3Q18 compared with a net loss attributed to shareholders of \$376 million in 3Q17. The core loss was \$35 million in 3Q18 compared with a core loss of \$254 million in 3Q17 and the items excluded from core loss amounted to a net gain of \$16 million in 3Q18 compared with a net charge of \$122 million in 3Q17 (these items are outlined in section F2 “Performance and Non-GAAP Measures”).

The \$219 million improvement in core loss was largely due to a \$240 million charge in the prior year in our Property and Casualty Reinsurance business for estimated losses relating to hurricanes in the U.S and the Caribbean. We also reported higher withholding taxes on future U.S. remittances and the unfavourable impact of lower U.S. tax rates partially offset by higher net investment-related income and lower expected macro hedging costs.

On a year-to-date basis, the net loss attributed to shareholders was \$789 million in 2018 compared with a net loss attributed to shareholders of \$726 million in the same period of 2017. The year-to-date core loss was \$181 million in 2018 compared with \$421 million in the same period of 2017. The favourable variance in the year-to-date core loss of \$240 million was attributable to the prior year hurricane-related provisions, higher net investment-related income, and lower expected macro hedging costs, partially offset by the impact of lower U.S. tax rates. Items excluded from the year-to-date core loss were a net charge of \$608 million in 2018 compared with a net charge of \$305 million in the same period of 2017.

Revenue in 3Q18 was a loss of \$16 million compared with a loss of \$17 million in 3Q17. The variance was driven by lower realized losses on the sale of AFS bonds mostly offset by lower premiums in the P&C Reinsurance business primarily due to reinstatement premiums in 2017. Year-to-date revenue was a loss of \$241 million in 2018 compared with a loss of \$96 million in the same period of 2017.

D 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 2017 Annual Report. The shaded 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”. Accordingly, the following shaded text and tables represent an integral part of our unaudited Interim Consolidated Financial Statements.

¹ Market share of net cash flows by scheme sponsor as reported in the Mercer MPF Market Share Report for September 30, 2018.

D1 Variable annuity and segregated fund guarantees

As described in the MD&A in our 2017 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 on 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 2018 to 2038.

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 D3 “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)	September 30, 2018			December 31, 2017		
	Guarantee value	Fund value	Amount at risk ^{(4),(5)}	Guarantee value	Fund value	Amount at risk ^{(4),(5)}
Guaranteed minimum income benefit	\$ 5,094	\$ 4,097	\$ 1,060	\$ 5,201	\$ 4,195	\$ 1,074
Guaranteed minimum withdrawal benefit	59,866	53,679	6,659	61,767	56,512	5,943
Guaranteed minimum accumulation benefit	17,983	18,346	22	18,162	18,705	11
Gross living benefits ⁽¹⁾	82,943	76,122	7,741	85,130	79,412	7,028
Gross death benefits ^{(2),(3)}	10,476	16,743	977	10,743	16,973	1,001
Total gross of reinsurance	93,419	92,865	8,718	95,873	96,385	8,029
Living benefits reinsured	4,368	3,537	880	4,522	3,667	911
Death benefits reinsured	2,290	2,262	376	3,014	3,040	435
Total reinsured	6,658	5,799	1,256	7,536	6,707	1,346
Total, net of reinsurance	\$ 86,761	\$ 87,066	\$ 7,462	\$ 88,337	\$ 89,678	\$ 6,683

(1) 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 3.

(2) Contracts with guaranteed long-term care benefits are included in this category.

(3) Death benefits include stand-alone guarantees and guarantees in excess of living benefit guarantees where both death and living benefits are provided on a policy.

(4) 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. This amount is not currently payable. 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. For guaranteed minimum income benefit, the amount at risk is defined as the excess of the current annuitization income base over the current account value. For all guarantees, the amount at risk is floored at zero at the single contract level.

(5) The amount at risk net of reinsurance at September 30, 2018 was \$7,462 million (December 31, 2017 – \$6,683 million) of which: US\$4,343 million (December 31, 2017 – US\$3,982 million) was on our U.S. business, \$1,449 million (December 31, 2017 – \$1,342 million) was on our Canadian business, US\$130 million (December 31, 2017 – US\$95 million) was on our Japan business and US\$172 million (December 31, 2017 – US\$181 million) was related to Asia (other than Japan) and our run-off reinsurance business.

D2 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 will be as indicated or on MLI’s LICAT ratio will be as indicated.

D3 Publicly traded equity performance risk

As outlined in our 2017 Annual Report, our macro hedging strategy is designed to mitigate public equity risk arising from variable annuity guarantees not dynamically hedged and from other products and fees. In addition, 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 (see pages 52 and 53 of our 2017 Annual Report).

The tables below 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. 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 E3 "Sensitivity of policy liabilities 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 hedging program 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 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 September 30, 2018 (\$ millions)	-30%	-20%	-10%	10%	20%	30%
Underlying sensitivity to net income attributed to shareholders⁽⁴⁾						
Variable annuity guarantees	\$ (3,560)	\$ (2,100)	\$ (880)	\$ 700	\$ 1,240	\$ 1,690
Asset based fees	(520)	(350)	(170)	170	350	520
General fund equity investments ⁽⁵⁾	(1,080)	(690)	(310)	300	590	890
Total underlying sensitivity before hedging	(5,160)	(3,140)	(1,360)	1,170	2,180	3,100
Impact of macro and dynamic hedge assets ⁽⁶⁾	2,900	1,710	750	(600)	(1,040)	(1,390)
Net potential impact on net income after impact of hedging	\$ (2,260)	\$ (1,430)	\$ (610)	\$ 570	\$ 1,140	\$ 1,710
As at December 31, 2017						
(\$ millions)	-30%	-20%	-10%	10%	20%	30%
Underlying sensitivity to net income attributed to shareholders⁽⁴⁾						
Variable annuity guarantees	\$ (3,940)	\$ (2,260)	\$ (960)	\$ 670	\$ 1,110	\$ 1,410
Asset based fees	(510)	(340)	(170)	170	340	510
General fund equity investments ⁽⁵⁾	(930)	(590)	(270)	270	540	810
Total underlying sensitivity before hedging	(5,380)	(3,190)	(1,400)	1,110	1,990	2,730
Impact of macro and dynamic hedge assets ⁽⁶⁾	3,220	1,850	790	(640)	(1,100)	(1,410)
Net potential impact on net income after impact of hedging	\$ (2,160)	\$ (1,340)	\$ (610)	\$ 470	\$ 890	\$ 1,320

(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.

(3) Please refer to section E3 "Sensitivity of policy liabilities 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 equities is calculated as at a point-in-time and 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 ratio. The following table shows the potential impact to MLI's LICAT ratio resulting from changes in public equity market values, assuming that the change in the value of the hedge assets does not completely offset the change of the related variable annuity guarantee liabilities.

Potential immediate impact on MLI's LICAT ratio arising from public equity returns different than the expected return for policy liability valuation^{(1),(2),(3)}

Percentage points	Impact on MLI's LICAT ratio					
	-30%	-20%	-10%	10%	20%	30%
September 30, 2018	(6)	(4)	(2)	3	6	8
June 30, 2018	(6)	(4)	(2)	2	5	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 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.

D4 Interest rate and spread risk

As at September 30, 2018, 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 increase in interest rates to be a benefit of \$100 million.

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 Actuarial Standards Board, while our interest rate hedges are valued using current market interest rates. 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, if sustained, may have a positive long-term economic impact.

The potential impact on net income attributed to shareholders does not take into account any future potential changes to our ultimate reinvestment rate assumptions or calibration criteria for stochastic risk-free rates or 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 surplus 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 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 crystallize 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 assets (see “Critical Accounting and Actuarial Policies – Fair Value of Invested Assets”, on page 75 of our 2017 Annual Report). More information on ALDA can be found in section D5 “Alternative long-duration asset (“ALDA”) performance risk”.

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 surplus segment, which could be realized through the sale of these assets.

Potential impact on net income attributed to shareholders and MLI’s LICAT 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	September 30, 2018		December 31, 2017	
	-50bp	+50bp	-50bp	+50bp
Net income attributed to shareholders (\$ millions)				
Excluding change in market value of AFS fixed income assets held in the surplus segment	\$ (100)	\$ 100	\$ (200)	\$ 100
From fair value changes in AFS fixed income assets held in surplus, if realized	1,400	(1,300)	1,100	(1,000)
MLI’s LICAT ratio (Percentage points)				
LICAT ratio change in percentage points ⁽⁵⁾	2	-		

(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 surplus 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) Includes all LICAT impacts, including realized and unrealized fair value change in AFS fixed income assets. The LICAT ratio is not applicable before January 1, 2018.

The following table shows 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 arising from changes to corporate spreads and swap spreads^{(1),(2),(3)}

As at (\$ millions)	September 30, 2018		December 31, 2017	
Corporate spreads^{(4),(5)}				
Increase 50 basis points	\$	600	\$	1,000
Decrease 50 basis points		(600)		(1,000)
Swap spreads				
Increase 20 basis points	\$	(200)	\$	(400)
Decrease 20 basis points		200		400

(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 surplus 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.

D5 Alternative long-duration asset (“ALDA”) performance risk

The following table shows the potential impact on net income attributed to shareholders resulting from changes in market values of ALDA that differ from the expected levels assumed in the valuation of policy liabilities.

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

As at (\$ millions)	September 30, 2018		December 31, 2017	
	-10%	10%	-10%	10%
Real estate, agriculture and timber assets	\$ (1,300)	\$ 1,300	\$ (1,300)	\$ 1,300
Private equities and other ALDA	(1,600)	1,500	(1,500)	1,400
Alternative long-duration assets	\$ (2,900)	\$ 2,800	\$ (2,800)	\$ 2,700

⁽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 E3 "Sensitivity of policy liabilities 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 sensitivities as at September 30, 2018 reflect ALDA dispositions completed as of that date. Further ALDA dispositions as part of our decision to change the portfolio asset mix supporting our North American legacy business will be reflected in the sensitivity as they occur.

D6 Short selling activity

As noted above in A7 "Mosten Update", on October 4, 2018, a U.S. based investment firm announced it had taken a short position on Manulife's common shares and published a report on the Mosten litigation. Manulife believes the investment firm mischaracterized several aspects of the litigation. We disagree with the conclusions of the report and continue to believe that Mosten's position is legally unfounded. Following this public announcement, our common share price declined and has experienced heightened volatility despite the positive fundamentals of Manulife's business.

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

E ACCOUNTING MATTERS AND CONTROLS

E1 Critical accounting and actuarial policies

Our significant accounting policies are described in note 1 to our Consolidated Financial Statements for the year ended December 31, 2017. The critical accounting policies and the estimation processes relate to the determination of insurance and investment contract liabilities, assessment of relationships with other entities for consolidation, fair value of certain financial instruments, provisioning for asset impairment, accounting for derivative financial instruments, determination of pension and other post-employment benefit obligations and expenses, income taxes and uncertain tax positions and valuation and impairment of goodwill and intangible assets are described on pages 68 to 79 of our 2017 Annual Report.

E2 Actuarial methods and assumptions

A comprehensive review of actuarial methods and assumptions is 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. This is accomplished by monitoring experience and selecting assumptions which represent a current best estimate view of expected future experience, and margins for adverse deviations that are appropriate for the risks assumed. While the assumptions selected represent the Company's current best estimates and assessment of risk, the ongoing monitoring of experience and changes in the economic environment are likely to result in future changes to actuarial assumptions, which could materially impact insurance contract liabilities.

The completion of the 2018 annual review of actuarial methods and assumptions in 3Q18 resulted in a decrease in insurance contract liabilities of \$174 million, net of reinsurance, and a decrease in net income attributed to shareholders of \$51 million post-tax.

For the three and nine months ended September 30, 2018 (\$ millions)	Change in insurance contract liabilities, net of reinsurance			Change in net income attributed to shareholders (post-tax)
	Total	Attributed to participating policyholders' account	Attributed to shareholders' account	
Mortality and morbidity updates	\$ 319	\$ (192)	\$ 511	\$ (360)
Lapses and policyholder behaviour	287	-	287	(226)
Investment return assumptions	(96)	50	(146)	143
Other updates	(684)	(94)	(590)	392
Net impact	\$ (174)	\$ (236)	\$ 62	\$ (51)

Updates to mortality and morbidity assumptions

Mortality and morbidity updates resulted in a \$360 million post-tax charge to net income attributed to shareholders.

The primary driver of the charge is related to updates to mortality and morbidity assumptions for the Company's structured settlement and term renewal business in Canada. A review of mortality assumptions for the Company's U.S. group pension annuity business and certain blocks of its U.S. life insurance business resulted in a small charge to earnings, and other updates to mortality and morbidity assumptions led to a small net charge.

Updates to lapses and policyholder behaviour

Lapse and policyholder behaviour updates resulted in a \$226 million post-tax charge to net income attributed to shareholders.

The primary driver of the charge is related to updated lapse and premium persistency rates for certain U.S. life insurance product lines (\$252 million post-tax charge). This included updates to universal life no-lapse guarantee business lapse assumptions to better reflect emerging experience which showed a variation in lapses based on premium funding levels, partially offset by favourable lapse experience on several of the U.S. life insurance product lines.

Other updates to lapse and policyholder behaviour assumptions were made across several product lines to reflect recent experience.

Updates to investment return assumptions

Investment return assumption updates resulted in a \$143 million post-tax gain to net income attributed to shareholders.

We updated our bond default rates to reflect recent experience, leading to a \$401 million post-tax gain and updated our investment return assumptions for ALDA and public equities, specifically oil and gas, which led to a \$210 million post-tax charge. Other refinements to the projections of investment returns resulted in a \$48 million post-tax charge.

Other updates

Refinements to the projection of our tax and liability cashflows across multiple product lines led to a post-tax gain to net income attributed to shareholders of \$392 million. The refinements were primarily driven by the projection of tax cashflows as we reviewed the deductibility of certain reserves. In addition, we refined the projection of policyholder crediting rates for certain products.

Impact of changes in actuarial methods and assumptions by segment

The impact of changes in actuarial methods and assumptions in Canada was a post-tax charge to net income attributed to shareholders of \$370 million. This charge was driven by updates to oil & gas investment return assumptions and updates to mortality and morbidity assumptions for our structured settlement and term renewal businesses. In the U.S., we recorded a post-tax gain of \$286 million, driven by updates to our bond default rates and refinements to the projection of our tax and liability cashflows, partially offset by updates to policyholder behavior assumptions in JH Life. Updates to assumptions in Asia and Reinsurance resulted in a post-tax gain of \$33 million.

E3 Sensitivity of policy liabilities 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 updates to certain 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 income			
	September 30, 2018		December 31, 2017	
Asset related assumptions updated periodically in valuation basis changes	Increase	Decrease	Increase	Decrease
100 basis point change in future annual returns for public equities ⁽¹⁾	\$ 500	\$ (500)	\$ 400	\$ (400)
100 basis point change in future annual returns for ALDA ⁽²⁾	3,500	(3,900)	3,600	(4,100)
100 basis point change in equity volatility assumption for stochastic segregated fund modelling ⁽³⁾	(300)	300	(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. The growth rates inclusive of dividends in the major markets used in the stochastic valuation models for valuing segregated fund guarantees are 9.3% 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⁾ 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 9.5% based on the current asset mix backing our guaranteed insurance and annuity business as of September 30, 2018, adjusted to reflect our decision to reduce the allocation to ALDA in the portfolio asset mix of our North American legacy businesses. 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 6.3% based on the asset mix backing our guaranteed insurance and annuity business as of September 30, 2018, adjusted to reflect our decision to reduce the allocation to ALDA in the portfolio asset mix of our North American legacy businesses. See section A5 "Progress on improving the capital efficiency of our legacy businesses".

⁽³⁾ Volatility assumptions for public equities are based on long-term historical observed experience and compliance with actuarial standards. The resulting volatility assumptions are 16.95% per annum in Canada and 17.15% per annum in the U.S. for large-cap public equities, and 19.25% per annum in Japan. For European equity funds, the volatility varies between 16.5% and 18.4%.

E4 Accounting and reporting changes

Refer to note 2 of our unaudited Interim Consolidated Financial Statements for the three and nine months ended September 30, 2018 for accounting and reporting changes during the quarter.

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	Sept 30,	Jun 30,	Mar 31,	Dec 31,	Sept 30,	Jun 30,	Mar 31,	Dec 31,
(\$ millions, except per share amounts or otherwise stated, unaudited)	2018	2018	2018	2017	2017	2017	2017	2016
Revenue								
Premium income								
Life and health insurance	\$ 7,700	\$ 7,628	\$ 7,300	\$ 6,000	\$ 6,321	\$ 6,040	\$ 5,994	\$ 6,093
Annuities and pensions ⁽¹⁾	(2,599)	1,126	1,025	943	922	934	1,056	908
Net premium income	5,101	8,754	8,325	6,943	7,243	6,974	7,050	7,001
Investment income	3,481	3,566	3,235	3,579	3,309	3,444	3,317	3,309
Realized and unrealized gains and losses on assets supporting insurance and investment contract liabilities ⁽²⁾	(3,210)	(1,615)	(5,316)	2,988	(1,163)	3,303	590	(16,421)
Other revenue	2,671	2,964	2,502	2,737	2,544	2,872	2,593	2,637
Total revenue	\$ 8,043	\$ 13,669	\$ 8,746	\$ 16,247	\$ 11,933	\$ 16,593	\$ 13,550	\$ (3,474)
Income (loss) before income taxes	\$ 1,911	\$ 1,535	\$ 1,714	\$ (2,123)	\$ 1,269	\$ 1,618	\$ 1,737	\$ (285)
Income tax (expense) recovery	(6)	(246)	(337)	424	(13)	(304)	(346)	450
Net income (loss)	\$ 1,905	\$ 1,289	\$ 1,377	\$ (1,699)	\$ 1,256	\$ 1,314	\$ 1,391	\$ 165
Net income (loss) attributed to shareholders	\$ 1,573	\$ 1,262	\$ 1,372	\$ (1,606)	\$ 1,105	\$ 1,255	\$ 1,350	\$ 63
Reconciliation of core earnings to net income attributed to shareholders								
Total core earnings ⁽³⁾	\$ 1,539	\$ 1,431	\$ 1,303	\$ 1,205	\$ 1,085	\$ 1,174	\$ 1,101	\$ 1,287
Other items to reconcile net income attributed to shareholders to core earnings ⁽⁴⁾ :								
Investment-related experience outside of core earnings	312	18	-	18	11	138	-	-
Direct impact of equity markets, interest rates and variable annuity guarantee liabilities	(277)	45	50	(68)	47	(37)	267	(1,202)
Change in actuarial methods and assumptions	(51)	-	-	(33)	(2)	-	-	(10)
Charge related to decision to change portfolio asset mix supporting our legacy businesses	-	-	-	(1,032)	-	-	-	-
Charge related to U.S. Tax Reform	124	-	-	(1,777)	-	-	-	-
Restructuring charges	-	(200)	-	-	-	-	-	-
Reinsurance transactions and other	(74)	(32)	19	81	(36)	(20)	(18)	(12)
Net income (loss) attributed to shareholders	\$ 1,573	\$ 1,262	\$ 1,372	\$ (1,606)	\$ 1,105	\$ 1,255	\$ 1,350	\$ 63
Basic earnings (loss) per common share	\$ 0.77	\$ 0.61	\$ 0.67	\$ (0.83)	\$ 0.54	\$ 0.62	\$ 0.66	\$ 0.01
Diluted earnings (loss) per common share	\$ 0.77	\$ 0.61	\$ 0.67	\$ (0.83)	\$ 0.54	\$ 0.61	\$ 0.66	\$ 0.01
Segregated funds deposits	\$ 9,424	\$ 9,872	\$ 9,728	\$ 8,421	\$ 8,179	\$ 8,544	\$ 9,632	\$ 8,247
Total assets (in billions)	\$ 748	\$ 752	\$ 740	\$ 730	\$ 713	\$ 726	\$ 728	\$ 721
Weighted average common shares (in millions)	1,984	1,984	1,983	1,980	1,978	1,977	1,976	1,974
Diluted weighted average common shares (in millions)	1,989	1,989	1,989	1,988	1,986	1,984	1,984	1,980
Dividends per common share	\$ 0.220	\$ 0.220	\$ 0.220	\$ 0.205	\$ 0.205	\$ 0.205	\$ 0.205	\$ 0.185
CDN\$ to US\$1 - Statement of Financial Position	1.2945	1.3168	1.2894	1.2545	1.2480	1.2977	1.3323	1.3426
CDN\$ to US\$1 - Statement of Income	1.3069	1.2912	1.2647	1.2712	1.2528	1.3450	1.3238	1.3343

⁽¹⁾ Includes US\$2.8 billion of ceded premiums related to the reinsurance of a block of our legacy U.S. individual pay-out annuities in 3Q18.

⁽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 and 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" below.

⁽⁴⁾ For explanations of other items, see "Q3 earnings analysis" table in section B "Financial Highlights" and for an operating segment split of these items see the 8 quarter trend tables in section F2 "Performance and Non-GAAP Measures" which reconcile net income attributed to shareholders to core earnings.

E6 Other

No changes were made in our internal control over financial reporting during the three and nine months ended September 30, 2018, 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.

F OTHER

F1 Outstanding shares – selected information

Common Shares

As at October 31, 2018 MFC had 1,984,717,426 common shares outstanding.

F2 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 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 ROE; diluted core earnings per common share; core earnings before income taxes, depreciation and amortization ("core EBITDA"); core EBITDA margin; core investment gains; constant exchange rate basis (measures that are reported on a constant exchange rate basis include percentage growth/decline in core earnings, sales, APE sales, gross flows, premiums and deposits, core EBITDA, new business value, new business value margin, assets under management and assets under management and administration); assets under administration; expense efficiency ratio; premiums and deposits; assets under management and administration; assets under management; capital; embedded value; new business value; new business value margin; sales; APE sales; gross flows; and net flows. 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.

Effective January 1, 2018, the Company's reporting segments have been reorganized as outlined under section B1 "Third quarter earnings analysis". In addition, we made the following adjustments to our reporting:

- The definition of the Global Wealth and Asset Management business now includes the Guaranteed Interest Account portion of the Canadian Pension defined contribution business.
- The NBV calculation has been refined for our Canadian segregated fund guarantee business.
- The calculation of net flows and AUMA now includes the sale of non-proprietary products in Canada.

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 are 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" above for reconciliation of core earnings to net income 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 through-the-business cycle. To the extent any investment-related experience losses cannot be fully offset in a quarter they will be carried forward to be offset against investment-related experience gains in subsequent quarters in the same year, for purposes of determining core investment gains. Investment-related experience relates to fixed income investing, ALDA returns, credit experience and asset mix changes other than those related to a strategic change. An example of a strategic asset mix change is outlined below.
 - This favourable and unfavourable investment-related experience is a combination of reported investment experience as well as the impact of investing activities on the measurement of our policy liabilities. We do not attribute specific components of investment-related experience to amounts included or excluded from 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 2017 was \$475 million (2012 to the end of 2016 was \$456 million).
 - The decision announced on December 22, 2017 to reduce the allocation to ALDA in the portfolio asset mix supporting our legacy businesses was the first strategic asset mix change since we introduced the core earnings metric in 2012. We have refined our description of investment-related experience 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.
7. Earnings on surplus other than mark-to-market items. Gains on available-for-sale (“AFS”) equities and seed money investments 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 Accounting and Actuarial Policies section above, 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. 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. All values are shown based on the Company's new reporting segments. Please refer to Section B1 "Third quarter earnings analysis" for details.

Total Company

(\$ millions, unaudited)	Quarterly Results							
	3Q18	2Q18	1Q18	4Q17	3Q17	2Q17	1Q17	4Q16
Core earnings (loss)								
Asia	\$ 457	\$ 406	\$ 427	\$ 372	\$ 374	\$ 350	\$ 357	\$ 341
Canada	351	403	290	273	403	278	255	308
U.S.	477	456	432	463	346	359	441	387
Global Wealth and Asset Management	289	239	227	198	216	214	188	186
Corporate and Other (excluding core investment gains)	(135)	(177)	(169)	(201)	(354)	(181)	(186)	(115)
Core investment gains	100	104	96	100	100	154	46	180
Total core earnings (loss)	1,539	1,431	1,303	1,205	1,085	1,174	1,101	1,287
Items to reconcile core earnings (loss) to net income (loss) attributed to shareholders:								
Investment-related experience outside of core earnings	312	18	-	18	11	138	-	-
Direct impact of equity markets and interest rates and variable annuity guarantee liabilities	(277)	45	50	(68)	47	(37)	267	(1,202)
Change in actuarial methods and assumptions	(51)	-	-	(33)	(2)	-	-	(10)
Charge related to decision to change portfolio asset mix supporting our legacy businesses	-	-	-	(1,032)	-	-	-	-
Charge related to U.S. Tax Reform	124	-	-	(1,777)	-	-	-	-
Restructuring charges	-	(200)	-	-	-	-	-	-
Reinsurance transactions and other	(74)	(32)	19	81	(36)	(20)	(18)	(12)
Net income (loss) attributed to shareholders	\$ 1,573	\$ 1,262	\$ 1,372	\$ (1,606)	\$ 1,105	\$ 1,255	\$ 1,350	\$ 63

Asia

(\$ millions, unaudited)	Quarterly Results							
	3Q18	2Q18	1Q18	4Q17	3Q17	2Q17	1Q17	4Q16
Asia core earnings (loss)	\$ 457	\$ 406	\$ 427	\$ 372	\$ 374	\$ 350	\$ 357	\$ 341
Items to reconcile core earnings (loss) to net income (loss) attributed to shareholders:								
Investment-related experience outside of core earnings	91	46	48	62	48	62	69	74
Direct impact of equity markets and interest rates and variable annuity guarantee liabilities	(18)	(86)	(27)	(140)	(62)	96	119	(15)
Change in actuarial methods and assumptions	27	-	-	5	161	-	-	(38)
Reinsurance transactions and other	5	(3)	-	(39)	-	-	-	(10)
Net income (loss) attributed to shareholders	\$ 562	\$ 363	\$ 448	\$ 260	\$ 521	\$ 508	\$ 545	\$ 352

Canada

(\$ millions, unaudited)	Quarterly Results							
	3Q18	2Q18	1Q18	4Q17	3Q17	2Q17	1Q17	4Q16
Canada core earnings (loss)	\$ 351	\$ 403	\$ 290	\$ 273	\$ 403	\$ 278	\$ 255	\$ 308
Items to reconcile core earnings (loss) to net income (loss) attributed to shareholders:								
Investment-related experience outside of core earnings	155	83	145	76	(125)	(12)	(38)	17
Direct impact of equity markets and interest rates and variable annuity guarantee liabilities	(26)	13	(60)	(21)	115	(238)	(83)	(266)
Change in actuarial methods and assumptions	(370)	-	-	(7)	43	-	-	68
Charge related to decision to change portfolio asset mix supporting our legacy businesses	-	-	-	(343)	-	-	-	-
Charge related to U.S. Tax Reform	(2)	-	-	-	-	-	-	-
Reinsurance transactions and other	1	11	84	(7)	(4)	(5)	(6)	(11)
Net income (loss) attributed to shareholders	\$ 109	\$ 510	\$ 459	\$ (29)	\$ 432	\$ 23	\$ 128	\$ 116

U.S.

(\$ millions, unaudited)	Quarterly Results							
	3Q18	2Q18	1Q18	4Q17	3Q17	2Q17	1Q17	4Q16
U.S. core earnings (loss)	\$ 477	\$ 456	\$ 432	\$ 463	\$ 346	\$ 359	\$ 441	\$ 387
Items to reconcile core earnings (loss) to net income (loss) attributed to shareholders:								
Investment-related experience outside of core earnings	162	(59)	(101)	(33)	181	164	30	97
Direct impact of equity markets and interest rates and variable annuity guarantee liabilities	(204)	267	268	75	50	159	222	(623)
Change in actuarial methods and assumptions	286	-	-	(31)	(214)	-	-	(39)
Charge related to decision to change portfolio asset mix supporting our legacy businesses	-	-	-	(689)	-	-	-	-
Charge related to U.S. Tax Reform	(7)	-	-	(2,822)	-	-	-	-
Reinsurance transactions and other	(74)	(34)	(61)	139	(41)	-	-	(18)
Net income (loss) attributed to shareholders	\$ 640	\$ 630	\$ 538	\$ (2,898)	\$ 322	\$ 682	\$ 693	\$ (196)

Global Wealth and Asset Management

(\$ millions, unaudited)	Quarterly Results							
	3Q18	2Q18	1Q18	4Q17	3Q17	2Q17	1Q17	4Q16
Global WAM core earnings (loss)	\$ 289	\$ 239	\$ 227	\$ 198	\$ 216	\$ 214	\$ 188	\$ 186
Items to reconcile core earnings (loss) to net income (loss) attributed to shareholders:								
Impact related to U.S. Tax Reform	(2)	-	-	308	-	-	-	-
Other	(6)	(6)	(4)	(10)	(10)	(13)	(13)	(14)
Net income (loss) attributed to shareholders	\$ 281	\$ 233	\$ 223	\$ 496	\$ 206	\$ 201	\$ 175	\$ 172

Corporate and Other

(\$ millions, unaudited)	Quarterly Results							
	3Q18	2Q18	1Q18	4Q17	3Q17	2Q17	1Q17	4Q16
Corporate and Other core income (loss) (excluding core investment gains)⁽¹⁾	\$ (135)	\$ (177)	\$ (169)	\$ (201)	\$ (354)	\$ (181)	\$ (186)	\$ (115)
Core investment gains (loss)	100	104	96	100	100	154	46	180
Total core earnings (loss)	(35)	(73)	(73)	(101)	(254)	(27)	(140)	65
Other items to reconcile core earnings (loss) to net income (loss) attributed to shareholders:								
Investment-related experience outside of core earnings	(96)	(52)	(92)	(87)	(92)	(79)	(61)	(187)
Direct impact of equity markets and interest rates	(29)	(149)	(131)	17	(56)	(53)	9	(298)
Changes in actuarial methods and assumptions	6	-	-	-	8	-	-	-
Impact related to U.S. Tax Reform	135	-	-	737	-	-	-	-
Restructuring charges	-	(200)	-	-	-	-	-	-
Other	-	-	-	(1)	18	-	1	39
Net income (loss) attributed to shareholders⁽¹⁾	\$ (19)	\$ (474)	\$ (296)	\$ 565	\$ (376)	\$ (159)	\$ (191)	\$ (381)

⁽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 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 3Q18. Measures that are reported on a constant exchange rate basis include growth in core earnings, sales, APE sales, gross flows, premiums and deposits, core EBITDA, new business value, new business value margin, assets under management and assets under management and administration.

Premiums and deposits is a non-GAAP measure of top line growth. The Company calculates premiums and deposits as the aggregate of (i) general fund premiums, net of reinsurance, reported as premiums on the Consolidated Statements of Income and investment contract deposits, (ii) segregated fund deposits, excluding seed money, ("deposits from policyholders"), (iii) mutual fund deposits, (iv) deposits into institutional advisory accounts, (v) premium equivalents for

“administration services only” group benefit contracts (“ASO premium equivalents”), (vi) premiums in the Canada Group Benefits reinsurance ceded agreement, and (vii) other deposits in other managed funds.

Premiums and deposits (\$ millions)	Quarterly Results		
	3Q18	2Q18	3Q17
Gross premiums	\$ 9,863	\$ 9,831	\$ 9,211
Ceded premiums (excluding Canada Group Benefits reinsurance)	(4,633)	(949)	(872)
Segregated fund deposits	9,424	9,872	8,174
Mutual fund deposits	16,063	16,450	18,164
Institutional advisory account deposits	3,528	4,592	2,494
Other fund deposits	190	191	168
ASO premium equivalents	790	848	812
Investment contract deposits	4	9	34
Total premiums and deposits	35,229	40,844	38,185
Currency impact	-	65	1,108
Premiums and deposits at constant exchange rates	\$ 35,229	\$ 40,909	\$ 39,293

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)	September 30, 2018	June 30, 2018	September 30, 2017
Total invested assets	\$ 344,568	\$ 348,974	\$ 325,106
Segregated funds net assets	332,256	331,995	316,977
Assets under management per financial statements	676,824	680,969	642,083
Mutual funds	203,340	201,839	182,123
Institutional advisory accounts (excluding segregated funds)	99,355	100,777	87,045
Other funds	7,850	7,711	6,528
Total assets under management	987,369	991,296	917,779
Other assets under administration	130,091	127,058	118,031
Currency impact	-	(15,655)	25,518
AUMA at constant exchange rates	\$ 1,117,460	\$ 1,102,699	\$ 1,061,328

Capital The definition we use for capital, a non-GAAP measure, 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. 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.

Capital

As at

(\$ millions)	September 30, 2018	June 30, 2018	September 30, 2017
Total equity	\$ 45,487	\$ 45,318	\$ 43,755
Add AOCI loss on cash flow hedges	114	139	122
Add liabilities for capital instruments	8,843	8,888	7,903
Total capital	\$ 54,444	\$ 54,345	\$ 51,780

Core EBITDA is a non-GAAP measure which Manulife uses to better understand the long-term earnings capacity and valuation of the 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 life time of the customer relationship under the CALM. Core EBITDA was

selected as a key performance indicator for the 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							
	3Q18	2Q18	1Q18	4Q17	3Q17	2Q17	1Q17	4Q16
Core EBITDA	\$ 406	\$ 370	\$ 360	\$ 355	\$ 352	\$ 377	\$ 342	\$ 315
Amortization of deferred acquisition costs and other depreciation	76	75	73	87	84	88	85	85
Amortization of deferred sales commissions	23	24	29	25	23	23	28	24
Core earnings before income taxes	307	271	258	243	245	266	229	206
Core income tax (expense) recovery	(18)	(32)	(31)	(45)	(29)	(52)	(41)	(20)
Core earnings	\$ 289	\$ 239	\$ 227	\$ 198	\$ 216	\$ 214	\$ 188	\$ 186

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 divided by the sum of pre-tax core earnings and pre-tax general expenses included in core earnings.

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 MCCSR framework. The MCCSR framework was replaced by the LICAT framework on January 1, 2018 and LICAT will be used to calculate EV as at December 31, 2018. It has been used to calculate quarterly NBV starting January 1, 2018. The value of in-force business in Asia reflects local statutory earnings and capital requirements. The value of in-force excludes our Global WAM, Manulife Bank and Property and Casualty Reinsurance businesses.

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 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. The 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 the 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.

F3 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 Company’s strategic priorities and 2022 targets for net promoter score, employee engagement, its highest potential businesses, expense efficiency and portfolio optimization; the expected impact of reinsurance transactions on its legacy businesses, including the expected releases of capital and the closing of the U.S. reinsurance transactions relating to New York business; and the expected impact of our decision to reduce the allocation to ALDA in our portfolio asset mix supporting our legacy businesses, 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: the final interpretation of U.S. Tax Reform by tax authorities, the amount of time required to reduce the allocation to ALDA in our asset mix supporting our legacy business and redeploy capital towards higher-return businesses, the specific type of ALDA we dispose of and the value realized from such dispositions; the amount and timing of strategic investment in our business; 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); 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 Accounting and Actuarial Policies", under "Risk Management", "Risk Factors" and "Critical Accounting and Actuarial 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.