

Manulife Financial Corporation Management's Discussion and Analysis

For the three months ended March 31, 2018

MANAGEMENT'S DISCUSSION AND ANALYSIS

This Management's Discussion and Analysis ("MD&A") is current as of May 2, 2018, unless otherwise noted. This MD&A should be read in conjunction with our unaudited Interim Consolidated Financial Statements for the three months ended March 31, 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 A5 "Changes to reporting segments and other items" and section F3 "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 Earnings

In the first quarter of 2018 (“1Q18”), Manulife’s net income attributed to shareholders was \$1,372 million, fully diluted earnings per common share was \$0.67 and return on common shareholders’ equity (“ROE”) was 14.1%, compared with \$1,350 million, \$0.66, and 13.7%, respectively, for the first quarter of 2017 (“1Q17”).

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 \$1,303 million in 1Q18 compared with \$1,101 million in 1Q17, and items excluded from core earnings, which amounted to a net gain of \$69 million in 1Q18 compared with a net gain of \$249 million in 1Q17.

The \$202 million increase in core earnings was due to higher investment-related experience gains in core earnings (\$96 million in 1Q18 compared with \$46 million in 1Q17), strong growth in Asia and Global Wealth and Asset Management (“Global WAM”), lower U.S. tax rates and improved policyholder experience in Canada. Core earnings in 1Q18 included policyholder experience charges of \$3 million post-tax (\$2 million pre-tax) compared with charges of \$27 million post-tax (\$30 million pre-tax) in 1Q17.²

The \$96 million of investment-related experience gains reported in 1Q18 reflected the favourable impact of fixed income reinvestment activities on the measurement of our policy liabilities and strong credit experience, partially offset by lower than expected returns (including fair value changes) on alternative long-duration assets (“ALDA”).

Items excluded from core earnings in 1Q18 and 1Q17 primarily related to the direct impact of markets (1Q18 - \$50 million and 1Q17 - \$267 million). The 1Q18 gains were primarily due to increasing corporate spreads and a rising and flattening of the yield curve in the U.S., partially offset by charges from unfavourable equity markets and the sale of available-for-sale bonds.

A2 Sales

Annualized premium equivalent (“APE”) sales¹, were \$1.4 billion in 1Q18, a decrease of 10%³ compared with 1Q17. In Asia, APE sales decreased 3% from a particularly strong 1Q17 (1Q17 increased 31% compared with 1Q16) due to lower APE sales in Japan. APE sales increased 10% in Hong Kong and 16% in Asia Other⁴. In Canada, APE sales declined 23% from 1Q17 reflecting elevated sales volumes in the prior year primarily due to regulatory changes on individual insurance and a large-case group benefit sale. In the U.S., APE sales decreased by 20% from 1Q17 due to lower international and variable universal life sales and the impact of our decision to exit sales of corporate and business owned life insurance.

New business value (“NBV”)¹ was \$384 million in 1Q18, in line³ with 1Q17. In Asia, NBV reached \$325 million in 1Q18, a 1% increase compared with 1Q17, as improvements in business mix offset the lower sales volumes.

Wealth and asset management (“WAM”) gross flows¹ were \$36.5 billion in 1Q18, an increase of 16%³ compared with \$32.4 billion in 1Q17. Gross flows increased across all regions. In Asia, the increase was primarily driven by broad-based growth in our institutional asset management business from a variety of clients across multiple countries. In Canada, we experienced significant growth in our retail business and received funding for a large institutional mandate. Institutional asset management was also the driver of growth in the U.S., with additional funding from an existing large client.

Wealth and asset management net flows¹ were \$10.0 billion in 1Q18 compared with \$4.6 billion in 1Q17. Net flows increased across all regions driven by higher gross flows as mentioned above and lower redemptions in the U.S. and Canada, partially offset by higher redemptions in mainland China, primarily in money market funds.

A3 Capital related items

The Office of the Superintendent of Financial Institutions’ new 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.

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

² Effective 1Q18, policyholder experience is being reported excluding minority interest. Comparative prior periods have been updated.

³ Percentage growth / declines in APE sales, NBV and gross flows are stated on a constant exchange rate basis. Constant exchange rate basis is a non-GAAP measure. See “Performance and Non-GAAP Measures” below.

⁴ Asia Other excludes Japan and Hong Kong.

As at March 31, 2018, the LICAT ratio for The Manufacturers Life Insurance Company (“MLI”) was 129%, compared to a supervisory target level of 100%. As this is the first quarter we are reporting under LICAT, there are no prior period comparatives.

MFC’s LICAT ratio was 117% as at March 31, 2018, compared to a supervisory target level of 90%. The difference between the MLI and MFC ratios as at March 31, 2018 was largely due to the \$4.9 billion of MFC senior debt outstanding that does not qualify as available capital at the MFC level.

In the MD&A in our 2017 Annual Report, we noted that the impact of the U.S. Tax Cuts and Jobs Act (“U.S. Tax Reform”) and the investment strategy change related to assets supporting North American legacy businesses have reduced our capital position in the short and medium term. We expect the capital impact of these items to be favourable in 2018, further strengthening the healthy capital positions of MFC and MLI.¹

MFC’s financial leverage ratio as at March 31, 2018 was 29.7%, a decrease of 0.6 percentage points from the December 31, 2017 ratio of 30.3%, primarily due to an increase in equity from changes in foreign currency exchange rates and growth in retained earnings.

A4 Alternative long-duration asset (“ALDA”) update

In 4Q17, we recorded a \$1 billion post-tax charge related to our decision to reduce the allocation to ALDA in our portfolio asset mix supporting our North American legacy businesses and stated that this 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 In 1Q18, ALDA dispositions contributed approximately \$0.3 billion to regulatory capital.

A5 Changes to reporting segments and other items

Effective January 1, 2018, as a result of the 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, the Company’s wealth and asset management businesses are now a primary reporting segment, Global Wealth and Asset Management.

The new financial reporting segments are as follows:

- **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.
- **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.
- **Corporate and Other** – comprised of investment performance on assets backing capital, net of amounts allocated to the operating segments; costs incurred by the corporate office related to shareholder activities (not allocated to the 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 F3 “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.

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

B FINANCIAL HIGHLIGHTS

(\$ millions, unless otherwise stated, unaudited)	Quarterly Results		
	1Q18	4Q17	1Q17
Net income attributed to shareholders	\$ 1,372	\$ (1,606)	\$ 1,350
Preferred share dividends	(39)	(40)	(41)
Common shareholders' net income	\$ 1,333	\$ (1,646)	\$ 1,309
Core earnings⁽¹⁾	\$ 1,303	\$ 1,205	\$ 1,101
Basic earnings per common share (\$)	\$ 0.67	\$ (0.83)	\$ 0.66
Diluted earnings per common share (\$)	\$ 0.67	\$ (0.83)	\$ 0.66
Diluted core earnings per common share (\$) ⁽¹⁾	\$ 0.64	\$ 0.59	\$ 0.53
Return on common shareholders' equity ("ROE")	14.1%	(17.1)%	13.7%
Core ROE ⁽¹⁾	13.4%	12.1%	11.1%
Sales ⁽¹⁾			
Annualized premium equivalent sales	\$ 1,387	\$ 1,259	\$ 1,545
Wealth and Asset Management gross flows	\$ 36,466	\$ 32,243	\$ 32,359
Wealth and Asset Management net flows	\$ 9,977	\$ 3,646	\$ 4,603
New Business Value ⁽¹⁾	\$ 384	\$ 383	\$ 386
Premiums and deposits ⁽¹⁾			
Insurance	\$ 11,603	\$ 11,003	\$ 10,705
Wealth and Asset Management	\$ 36,466	\$ 32,243	\$ 32,359
Corporate and Other	\$ 23	\$ 20	\$ 21
Assets under management and administration (\$ billions) ⁽¹⁾	\$ 1,098	\$ 1,071	\$ 1,034
Capital (\$ billions) ⁽¹⁾	\$ 52.5	\$ 50.7	\$ 52.3
MLI's LICAT ratio	129%	-	-
MLI's MCCSR ratio	-	224%	233%

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

B1 First quarter earnings analysis

The table below reconciles core earnings to net income attributed to shareholders

(\$ millions, unaudited)	Quarterly Results		
	1Q18	4Q17	1Q17
Core earnings⁽¹⁾			
Asia	\$ 427	\$ 372	\$ 357
Canada	290	273	255
U.S.	432	463	441
Global Wealth and Asset Management	227	198	188
Corporate and Other (excluding core investment gains)	(169)	(201)	(186)
Core investment gains ⁽²⁾	96	100	46
Total core earnings	\$ 1,303	\$ 1,205	\$ 1,101
Items excluded from core earnings			
Investment-related experience outside of core earnings ⁽²⁾	-	18	-
Direct impact of equity markets and interest rates and variable annuity guarantee liabilities (see table below) ^{(2),(3),(4)}	50	(68)	267
Changes in actuarial methods and assumptions	-	(33)	-
Charge related to decision to change portfolio asset mix supporting our legacy businesses	-	(1,032)	-
Charge related to U.S. Tax Reform	-	(1,777)	-
Other	19	81	(18)
Net income (loss) attributed to shareholders	\$ 1,372	\$ (1,606)	\$ 1,350

- (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. Please see Section A5 "Changes to reporting segments and other items".
- (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) Actual market performance differed from our valuation assumptions in 1Q18, which resulted in a macro hedge experience loss of \$1 million. This loss is included in the direct impact of equity markets and interest rates and variable annuity guarantee liabilities below.
- (4) 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		
	1Q18	4Q17	1Q17
Direct impact of equity markets and variable annuity guarantee liabilities	\$ (187)	\$ 130	\$ 222
Fixed income reinvestment rates assumed in the valuation of policy liabilities	313	(155)	50
Sale of AFS bonds and derivative positions in the Corporate and Other segment	(76)	40	(5)
Risk reduction related items ⁽¹⁾	-	(83)	-
Direct impact of equity markets and interest rates and variable annuity guarantee liabilities	\$ 50	\$ (68)	\$ 267

(1) Impact from the expansion of our dynamic hedging program in Japan.

B2 Revenue

(\$ millions, unaudited)	Quarterly Results		
	1Q18	4Q17	1Q17
Gross premiums	\$ 9,466	\$ 9,035	\$ 9,085
Premiums ceded to reinsurers	(1,141)	(2,092)	(2,035)
Net premium income	8,325	6,943	7,050
Investment income	3,235	3,579	3,317
Other revenue	2,502	2,737	2,593
Revenue before realized and unrealized investment income gains and losses	14,062	13,259	12,960
Realized and unrealized gains and losses on assets supporting insurance and investment contract liabilities and on the macro hedge program	(5,316)	2,988	590
Total revenue	\$ 8,746	\$ 16,247	\$ 13,550

Total revenue in 1Q18 was \$8.7 billion compared with \$13.6 billion in 1Q17. 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 hedging program, a component of revenue (see section B6 "Impact of fair value accounting" below). Accordingly, we discuss specific drivers of revenue in each segment before realized and unrealized gains and losses in section C "Performance by Segment" below. 1Q18 revenue before realized and unrealized investment income gains and losses increased \$1.1 billion compared with 1Q17, primarily due to the impact of a structural change in a reinsurance agreement on ceded premiums in Canada and business growth in Asia, partially offset by the impact of changes in foreign currency exchange rates.

Net realized and unrealized gains and losses on assets supporting insurance and investment contract liabilities and on the macro hedging program was a loss of \$5.3 billion in 1Q18 compared with a gain of \$0.6 billion in 1Q17. The 1Q18 loss was primarily due to an overall increase in interest rates and the impact of foreign currency exchange rates. Key drivers of the gain in 1Q17 was a decline in interest rates in North American and higher equity markets in North America and Hong Kong significantly offset by higher swap rates in North America.

B3 Premiums and deposits¹

Premiums and deposits is an additional measure of our top line growth. It includes all new policyholder cash flows and, unlike total revenue, is not impacted by the volatility created by fair value accounting.

Premiums and deposits for insurance products were \$11.6 billion in 1Q18, an increase of \$0.9 billion or 10%² compared with 1Q17 primarily due to growth in Asia. Asia reported a 22% increase driven by the stable growth in recurring premiums from the in-force business and higher single premium deposits.

Premiums and deposits for WAM products were \$36.5 billion in 1Q18, an increase of \$4.1 billion, or 16%², compared with 1Q17. Please refer to WAM gross flows in section A2 “Sales” above.

B4 Assets under management and administration¹

Assets under management and administration (“AUMA”) as at March 31, 2018 were \$1.1 trillion, in line² with AUMA reported as at December 31, 2017.

B5 Capital¹

MFC’s total capital as at March 31, 2018 was \$52.5 billion, in line with March 31, 2017 capital of \$52.3 billion and an increase of \$1.8 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 3 months and the impact of changes in foreign currency exchange rates, partially offset by dividend payments and a decrease in the market value of available-for-sale securities. As noted in section A3 “Capital related items” above, MLI’s LICAT ratio was 129% as at March 31, 2018.

B6 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 impacts net income attributed to shareholders (see section A1 “Earnings” above for discussion of 1Q18 experience).

Net realized and unrealized investment income losses reported in net investment income were \$5.3 billion for 1Q18 (1Q17 – gains of \$0.6 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).

B7 Impact of foreign currency exchange rates

Changes in foreign currency exchange rates reduced core earnings by \$39 million in 1Q18 compared with 1Q17 primarily due to a stronger Canadian dollar compared with the U.S. dollar. The impact of foreign currency exchange rates on items excluded from core earnings does not provide relevant information given the nature of these items.

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

² Percentage growth / declines in premiums and deposits and assets under management and administration are stated on a constant exchange rate basis. Constant exchange rate basis is a non-GAAP measure. See “Performance and Non-GAAP Measures” below.

C PERFORMANCE BY SEGMENT

C1 Asia

(\$ millions, unless otherwise stated)

	Quarterly Results ⁽¹⁾		
	1Q18	4Q17	1Q17
<i>Canadian dollars</i>			
Net income attributed to shareholders	\$ 448	\$ 260	\$ 545
Core earnings ⁽²⁾	427	372	357
Annualized premium equivalent sales	984	884	1,020
Revenue	4,305	5,107	5,135
Revenue before realized and unrealized investment income gains and losses ⁽³⁾	5,264	4,640	4,662
Premiums and deposits	5,640	4,885	4,679
Assets under management (\$ billions)	96.1	91.7	85.8
<i>U.S. dollars</i>			
Net income attributed to shareholders	US\$ 355	US\$ 205	US\$ 412
Core earnings ⁽²⁾	338	293	270
Annualized premium equivalent sales	778	696	771
Revenue	3,404	4,018	3,880
Revenue before realized and unrealized investment income gains and losses ⁽³⁾	4,163	3,650	3,522
Premiums and deposits	4,460	3,844	3,533
Assets under management (\$ billions)	74.5	73.1	64.4

⁽¹⁾ The Company made a number of reporting changes in 1Q18. Please refer to section A5 "Changes to reporting segments and other items" and section F3 "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 B6 "Impact of fair value accounting".

Asia's net income attributed to shareholders was \$448 million in 1Q18 compared with \$545 million in 1Q17. Net income attributed to shareholders is comprised of core earnings, which was \$427 million in 1Q18 compared with \$357 million in 1Q17, and items excluded from core earnings, which amounted to a net gain of \$21 million in 1Q18 compared with a net gain of \$188 million in 1Q17. 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 \$14 million unfavourable impact due to changes in foreign currency exchange rates versus the Canadian dollar.

Expressed in U.S. dollars, the presentation currency of the segment, net income attributed to shareholders was US\$355 million in 1Q18 compared with US\$412 million in 1Q17 and core earnings were US\$338 million in 1Q18 compared with US\$270 million in 1Q17. Items excluded from core earnings were a net gain of US\$17 million in 1Q18 compared with a net gain of US\$142 million in 1Q17.

Core earnings in 1Q18 increased 21%¹ compared with 1Q17 on a constant exchange rate basis. The increase in core earnings was driven by a combination of growth in new business volumes, favorable product mix, solid in-force business growth and scale benefits in Hong Kong and Asia Other, partially offset by lower core earnings in Japan due to lower new business volumes.

The US\$125 million unfavourable change in items excluded from core earnings was primarily due to a net charge related to the direct impact of markets in 1Q18 compared with a net gain in 1Q17 and lower investment-related experience gains in 1Q18 compared with 1Q17.

APE sales in 1Q18 were US\$778 million, a decrease of 3% compared with 1Q17 as strong growth in Hong Kong and Asia Other was more than offset by lower sales volumes in Japan. Japan APE sales were US\$257 million, a decrease of 26% compared with 1Q17 due to increased competition in the corporate market segment and the impact of product repricing. Hong Kong APE sales in 1Q18 were US\$149 million, a 10% increase compared with 1Q17 driven by new customer solutions launched in 2017 and growth as well as increased productivity of our agency channel. Asia Other APE sales in 1Q18 were US\$372 million, a 16% increase compared with 1Q17 driven by strong growth in the bancassurance channel.

¹ Percentage growth / declines in core earnings is stated on a constant exchange rate basis. Constant exchange rate basis is a non-GAAP measure. See "Performance and Non-GAAP Measures" below.

Revenue of US\$3.4 billion in 1Q18 decreased 12% compared with 1Q17. Excluding realized and unrealized investment income gains and losses, revenue was US\$4.2 billion in 1Q18, an increase of 18% compared with 1Q17, driven by stable recurring premium growth from in-force business and single premium sales.

Premiums and deposits of US\$4.5 billion in 1Q18 increased 22% compared with 1Q17, driven by the stable growth in recurring premiums from the in-force business and higher single premium deposits.

Assets under management were US\$74.5 billion as at March 31, 2018, in line¹ with December 31, 2017, driven by positive customer net flows of US\$2.6 billion offset by the impact on asset values of changes in equity markets and interest rates.

C2 Canada

(\$ millions, unless otherwise stated)	Quarterly Results ⁽¹⁾		
	1Q18	4Q17	1Q17
Net income (loss) attributed to shareholders	\$ 459	\$ (29)	\$ 128
Core earnings ⁽²⁾	290	273	255
Annualized premium equivalent sales	290	222	375
Revenue	3,194	4,266	2,941
Revenue before realized and unrealized investment income gains and losses ⁽³⁾	3,582	2,717	2,607
Premiums and deposits	3,803	3,698	3,734
Assets under management (\$ billions)	144.4	144.6	145.1

⁽¹⁾ The Company made a number of reporting changes in 1Q18. Please refer to section A5 "Changes to reporting segments and other items" and section F3 "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 B6 "Impact of fair value accounting".

Canada's 1Q18 net income attributed to shareholders was \$459 million compared with \$128 million in 1Q17. Net income attributed to shareholders is comprised of core earnings, which were \$290 million in 1Q18 compared with \$255 million in 1Q17, and items excluded from core earnings, which were a net gain of \$169 million in 1Q18 compared with a net charge of \$127 million in 1Q17.

Core earnings increased \$35 million or 14% compared with 1Q17 due to improved claims experience in our group insurance long-term disability business.

The 1Q18 gains in items excluded from core earnings included \$145 million of favourable investment-related experience gains and \$86 million of in-force reinsurance actions. In 1Q17, the charges were primarily related to the direct impact of markets.

APE sales were \$290 million in 1Q18, a decrease of \$85 million or 23% compared with 1Q17. The decline was primarily attributed to the 1Q17 large-case sale in group benefits and elevated 1Q17 individual insurance sales due to tax-exempt changes.

Revenue in 1Q18 was \$3.2 billion compared with \$2.9 billion in 1Q17. Total revenue before realized and unrealized investment income gains and losses was \$3.6 billion in 1Q18, an increase of \$1.0 billion compared with 1Q17 driven by a structural change in a reinsurance agreement, which reduced ceded premiums.

Premiums and deposits in 1Q18 were \$3.8 billion, an increase of \$0.1 billion or 2% compared with 1Q17. The structural change noted above does not impact this metric.

Assets under management were \$144.4 billion as at March 31, 2018, a decrease of \$0.2 billion from December 31, 2017, primarily driven by net outflows in the segregated fund business, partially offset by growth in Manulife Bank net lending assets.

¹ Percentage growth/declines in assets under management are stated on a constant exchange rate basis. Constant exchange rate basis is a non-GAAP measure rate basis. See "Performance and Non-GAAP Measures" below.

C3 U.S.

(\$ millions, unless otherwise stated)	Quarterly Results ⁽¹⁾				
	Canadian dollars		1Q18	4Q17	1Q17
Net income attributed to shareholders	\$	538	\$ (2,898)	\$	693
Core earnings ⁽²⁾		432	463		441
Annualized premium equivalent sales		113	153		150
Revenue		19	5,509		4,254
Revenue before realized and unrealized investment income gains and losses ⁽³⁾		3,981	4,483		4,434
Premiums and deposits		2,160	2,422		2,294
Assets under management (\$ billions)		229.8	228.8		232.1
<i>U.S. dollars</i>					
Net income attributed to shareholders	US\$	425	US\$(2,280)	US\$	524
Core earnings ⁽²⁾		341	365		333
Annualized premium equivalent sales		90	121		113
Revenue		16	4,334		3,214
Revenue before realized and unrealized investment income gains and losses ⁽³⁾		3,148	3,528		3,349
Premiums and deposits		1,709	1,904		1,733
Assets under management (\$ billions)		178.2	182.4		174.2

⁽¹⁾ The Company made a number of reporting changes in 1Q18. Please refer to section A5 "Changes to reporting segments and other items" and section F3 "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 B6 "Impact of fair value accounting".

U.S. 1Q18 net income attributed to shareholders was \$538 million compared with \$693 million in 1Q17. Net income attributed to shareholders is comprised of core earnings, which amounted to \$432 million in 1Q18 compared with \$441 million in 1Q17, and items excluded from core earnings, which amounted to a net gain of \$106 million in 1Q18 compared with a net gain of \$252 million in 1Q17. 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 unfavourable currency impact from the weakening of the U.S. dollar compared with the Canadian dollar.

Expressed in U.S. dollars, the functional currency of the segment, 1Q18 net income attributed to shareholders was US\$425 million compared with US\$524 million in 1Q17, core earnings were US\$341 million in 1Q18 compared with US\$333 million in 1Q17, and items excluded from core earnings were a net gain of US\$84 million in 1Q18 compared with a net gain of US\$191 million in 1Q17.

The US\$8 million increase in core earnings was driven by the favourable impact of lower U.S. tax rates and a gain related to a historical annuity reinsurance item, partially offset by the impact of lower sales volume, product mix changes and less favourable policyholder experience (policyholder experience was favourable in both periods).

The net gains in items excluded from core earnings were US\$107 million less favourable in 1Q18 compared with 1Q17 primarily due to unfavourable investment-related experience on private equity investments in 1Q18.

APE sales in 1Q18 of US\$90 million decreased 20% compared with 1Q17, primarily due to lower international and variable universal life sales and the impact of our decision to exit sales of corporate and bank-owned life insurance products. The lower international sales were impacted by increased competitive pressures from domestic carriers. Partially offsetting these headwinds, term sales increased and sales of the John Hancock Vitality feature benefited multiple product categories in 1Q18.

Revenue in 1Q18 was US\$16 million, a decrease compared with US\$3.2 billion in 1Q17. The decrease is primarily attributable to mark-to-market losses on fixed income holdings due to the increase in interest rates in 1Q18. Revenue before net realized and unrealized investment income gains and losses was US\$3.1 billion in 1Q18, a decrease of 6% compared with 1Q17. This US\$0.2 billion decrease was consistent with the run-off nature of the business.

Premiums and deposits for 1Q18 were US\$1.7 billion, a decrease of 1% compared with 1Q17 primarily driven by lower first year premiums in insurance from lower sales.

Assets under management as at March 31, 2018 were US\$178.2 billion, down 2% from December 31, 2017. The decrease was driven by unfavourable mark-to-market movement in our insurance business, as well as the continued runoff of our annuities business.

C4 Global Wealth and Asset Management

(\$ millions, unless otherwise stated)	Quarterly Results ⁽¹⁾		
	1Q18	4Q17	1Q17
<i>Canadian dollars</i>			
Net income attributed to shareholders	\$ 223	\$ 496	\$ 175
Core earnings ⁽²⁾	227	198	188
Core EBITDA ⁽³⁾	360	355	342
Sales			
Wealth and asset management gross flows	36,466	32,243	32,359
Wealth and asset management net flows	9,977	3,646	4,603
Revenue	1,347	1,341	1,269
Premiums and deposits	36,466	32,243	32,359
Assets under management and administration (\$ billions)	626.9	609.0	575.2

⁽¹⁾ The Company made a number of reporting changes in 1Q18. Please refer to section A5 "Changes to reporting segments and other items" and section F3 "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 F3 "Performance and Non-GAAP measures" below.

Global Wealth and Asset Management's net income attributed to shareholders was \$223 million compared with \$175 million in 1Q17. Net income attributed to shareholders is comprised of core earnings, which were \$227 million in 1Q18 compared with \$188 million in 1Q17, and items excluded from core earnings, which were a net charge of \$4 million in 1Q18 compared with a net charge of \$13 million in 1Q17.

Core earnings in 1Q18 increased 24% compared with 1Q17 on a constant exchange rate basis. The increase in core earnings was driven by higher fee income on higher average asset levels, and lower U.S. tax rates.

Core EBITDA was \$360 million in 1Q18, an increase of 8%¹ compared with 1Q17 on a constant exchange rate basis. The increase was driven by higher fee income as noted above.

The \$9 million favourable change in the items excluded from core earnings in 1Q18 was primarily due to higher integration costs in our retirement businesses in Hong Kong and Canada in 1Q17.

WAM gross flows were \$36.5 billion in 1Q18, an increase of 16% compared with \$32.4 billion in 1Q17. Gross flows increased across all regions. In Asia, the increase was primarily driven by broad-based growth in our institutional asset management business from a variety of clients across multiple countries. In Canada, we experienced significant growth in our retail business and received funding for a large institutional mandate. Institutional asset management was also the driver of growth in the U.S., with additional funding from an existing large client.

WAM net flows were \$10.0 billion in 1Q18 compared with \$4.6 billion in 1Q17. Net flows increased across all regions driven by higher gross flows as mentioned above and lower redemptions in the U.S. and Canada, partially offset by higher redemptions in mainland China, primarily in money market funds.

Revenue in 1Q18 was \$1,347 million, an increase compared with \$1,269 million in 1Q17. This increase was driven by higher fee income on higher average asset levels.

Premiums and deposits for 1Q18 were \$36.5 billion, an increase of 16% compared with 1Q17 for the reasons noted above for WAM gross flows.

¹ Percentage growth / declines in core EBITDA is stated on a constant exchange rate basis. Constant exchange rate basis is a non-GAAP measure. See "Performance and Non-GAAP Measures" below.

WAM assets under management and administration as at March 31, 2018 were \$626.9 billion, an increase of less than 1% compared with December 31, 2017. The increase was driven by positive net flows in 1Q18 which more than offset the negative impact of market performance on our investment returns. WAM also managed \$185 billion for the Company's non-WAM reporting segments, and including those managed assets, WAM AUMA was \$812 billion as at March 31, 2018.

C5 Corporate and Other

(\$ millions, unless otherwise stated)	Quarterly Results ⁽¹⁾		
	1Q18	4Q17	1Q17
Net income (loss) attributed to shareholders	\$ (296)	\$ 565	\$ (191)
Core loss excluding core investment gains ⁽²⁾	\$ (169)	\$ (201)	\$ (186)
Core investment gains	96	100	46
Total core gain (loss)	\$ (73)	\$ (101)	\$ (140)
Revenue	\$ (119)	\$ 24	\$ (49)
Premiums and deposits	23	20	21
Assets under management (\$ billions)	0.9	(2.9)	(4.1)

⁽¹⁾ The Company made a number of reporting changes in 1Q18. Please refer to section A5 "Changes to reporting segments and other items" and section F3 "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 favorable 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 \$296 million in 1Q18 compared with a net loss attributed to shareholders of \$191 million in 1Q17. The net loss attributed to shareholders was comprised of core loss and items excluded from core loss. The core loss was \$73 million in 1Q18 compared with a core loss of \$140 million in 1Q17 and the items excluded from core loss amounted to a net charge of \$223 million in 1Q18 compared with a net charge of \$51 million in 1Q17.

The \$67 million decrease in core loss was primarily due to \$50 million of higher core investment gains, lower expected macro hedging costs and higher realized gains on AFS equities partially offset by higher allocated investment income from capital allocated to operating segments due to lower U.S. tax rates.

The items excluded from core loss amounted to a net charge of \$223 million in 1Q18, which includes a \$96 million reclassification to core investment gains and \$76 million related to net realized losses on AFS bonds.

Revenue in 1Q18 was a loss of \$119 million compared with a loss of \$49 million in 1Q17. The variance was primarily driven by higher realized losses on the sale of AFS bonds.

Premiums for the P&C Reinsurance business in 1Q18 were \$23 million, in line with 1Q17 premiums.

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.

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)	March 31, 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 ⁽¹⁾	\$ 5,255	\$ 4,148	\$ 1,155	\$ 5,201	\$ 4,195	\$ 1,074
Guaranteed minimum withdrawal benefit	62,155	55,391	7,184	61,767	56,512	5,943
Guaranteed minimum accumulation benefit	18,279	18,715	37	18,162	18,705	11
Gross living benefits ⁽²⁾	85,689	78,254	8,376	85,130	79,412	7,028
Gross death benefits ⁽³⁾	10,874	16,507	1,083	10,743	16,973	1,001
Total gross of reinsurance	96,563	94,761	9,459	95,873	96,385	8,029
Living benefits reinsured	4,516	3,591	964	4,522	3,667	911
Death benefits reinsured	3,065	3,020	449	3,014	3,040	435
Total reinsured	7,581	6,611	1,413	7,536	6,707	1,346
Total, net of reinsurance	\$ 88,982	\$ 88,150	\$ 8,046	\$ 88,337	\$ 89,678	\$ 6,683

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

(2) 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.

(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 March 31, 2018 was \$8,046 million (December 31, 2017 – \$6,683 million) of which: US\$4,544 million (December 31, 2017 – US\$3,982 million) was on our U.S. business, \$1,707 million (December 31, 2017 – \$1,342 million) was on our Canadian business, US\$183 million (December 31, 2017 – US\$95 million) was on our Japan business and US\$189 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 E2 “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 March 31, 2018 (\$ millions)	-30%	-20%	-10%	10%	20%	30%
Underlying sensitivity to net income attributed to shareholders⁽⁴⁾						
Variable annuity guarantees	\$ (4,060)	\$ (2,440)	\$ (1,080)	\$ 790	\$ 1,360	\$ 1,770
Asset based fees	(500)	(330)	(170)	170	330	500
General fund equity investments ⁽⁵⁾	(970)	(630)	(280)	270	550	820
Total underlying sensitivity before hedging	(5,530)	(3,400)	(1,530)	1,230	2,240	3,090
Impact of macro and dynamic hedge assets ⁽⁶⁾	3,300	1,980	850	(760)	(1,330)	(1,740)
Net potential impact on net income after impact of hedging	\$ (2,230)	\$ (1,420)	\$ (680)	\$ 470	\$ 910	\$ 1,350
As at December 31, 2017 (\$ millions)						
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 E2 “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%
March 31, 2018	(6)	(4)	(2)	2	4	6

- ⁽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 March 31, 2018, we estimated the sensitivity of our net income attributed to shareholders to a 50 basis point parallel decline in interest rates to be nil, and to a 50 basis point increase in interest rates to be a charge 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	March 31, 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)	\$ (200)	\$ 100
From fair value changes in AFS fixed income assets held in surplus, if realized	1,000	(900)	1,100	(1,000)
MLI's LICAT ratio (Percentage points)				
LICAT ratio change in percentage points ⁽⁵⁾	3	(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) Impact includes realized and unrealized fair value change in AFS fixed income assets.

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)	March 31, 2018	December 31, 2017
Corporate spreads^{(4),(5)}		
Increase 50 basis points	\$ 900	\$ 1,000
Decrease 50 basis points	(900)	(1,000)
Swap spreads		
Increase 20 basis points	\$ (300)	\$ (400)
Decrease 20 basis points	300	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)	March 31, 2018		December 31, 2017	
	-10%	10%	-10%	10%
Real estate, agriculture and timber assets	\$ (1,400)	\$ 1,300	\$ (1,300)	\$ 1,300
Private equities and other ALDA	(1,600)	1,600	(1,500)	1,400
Alternative long-duration assets	\$ (3,000)	\$ 2,900	\$ (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 E2 “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 March 31, 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..

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 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			
	March 31, 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⁾	3,600	(4,100)	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 8.1% 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 12%, with an average of 9.5% based on the current asset mix backing our guaranteed insurance and annuity business as of March 31, 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 March 31, 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 A4 "Alternative long-duration asset ("ALDA") update.

⁽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%.

E3 Accounting and reporting changes

Refer to note 2 of our unaudited Interim Consolidated Financial Statements for the three months ended March 31, 2018 for accounting and reporting changes during the quarter.

E4 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	Mar 31,	Dec 31,	Sept 30,	Jun 30,	Mar 31,	Dec 31,	Sept 30,	Jun 30,
(\$ millions, except per share amounts or otherwise stated, unaudited)	2018	2017	2017	2017	2017	2016	2016	2016
Revenue								
Premium income								
Life and health insurance	\$ 7,300	\$ 6,000	\$ 6,321	\$ 6,040	\$ 5,994	\$ 6,093	\$ 5,950	\$ 5,497
Annuities and pensions	1,025	943	922	934	1,056	908	1,247	1,209
Net premium income	8,325	6,943	7,243	6,974	7,050	7,001	7,197	6,706
Investment income	3,235	3,579	3,309	3,444	3,317	3,309	3,568	3,213
Realized and unrealized gains (losses) on assets supporting insurance and investment contract liabilities ⁽¹⁾	(5,316)	2,988	(1,163)	3,303	590	(16,421)	771	7,922
Other revenue	2,502	2,737	2,544	2,872	2,593	2,637	2,921	2,794
Total revenue	\$ 8,746	\$ 16,247	\$ 11,933	\$ 16,593	\$ 13,550	\$ (3,474)	\$ 14,457	\$ 20,635
Income (loss) before income taxes	\$ 1,714	\$ (2,123)	\$ 1,269	\$ 1,618	\$ 1,737	\$ (285)	\$ 1,314	\$ 947
Income tax (expense) recovery	(337)	424	(13)	(304)	(346)	450	(117)	(231)
Net income (loss)	\$ 1,377	\$ (1,699)	\$ 1,256	\$ 1,314	\$ 1,391	\$ 165	\$ 1,197	\$ 716
Net income (loss) attributed to shareholders	\$ 1,372	\$ (1,606)	\$ 1,105	\$ 1,255	\$ 1,350	\$ 63	\$ 1,117	\$ 704
Reconciliation of core earnings to net income attributed to shareholders								
Total core earnings ⁽²⁾	\$ 1,303	\$ 1,205	\$ 1,085	\$ 1,174	\$ 1,101	\$ 1,287	\$ 996	\$ 833
Other items to reconcile net income attributed to shareholders to core earnings ⁽³⁾								
Investment-related experience in excess of amounts included in core earnings	-	18	11	138	-	-	280	60
Direct impact of equity markets, interest rates and variable annuity guarantee liabilities	50	(68)	47	(37)	267	(1,202)	414	(170)
Change in actuarial methods and assumptions	-	(33)	(2)	-	-	(10)	(455)	-
Charge related to decision to change asset mix in legacy businesses	-	(1,032)	-	-	-	-	-	-
Charge related to U.S. Tax Reform	-	(1,777)	-	-	-	-	-	-
Other	19	81	(36)	(20)	(18)	(12)	(118)	(19)
Net income (loss) attributed to shareholders	\$ 1,372	\$ (1,606)	\$ 1,105	\$ 1,255	\$ 1,350	\$ 63	\$ 1,117	\$ 704
Basic earnings (loss) per common share	\$ 0.67	\$ (0.83)	\$ 0.54	\$ 0.62	\$ 0.66	\$ 0.01	\$ 0.55	\$ 0.34
Diluted earnings (loss) per common share	\$ 0.67	\$ (0.83)	\$ 0.54	\$ 0.61	\$ 0.66	\$ 0.01	\$ 0.55	\$ 0.34
Segregated funds deposits	\$ 9,728	\$ 8,421	\$ 8,179	\$ 8,544	\$ 9,632	\$ 8,247	\$ 8,291	\$ 7,899
Total assets (in billions)	\$ 740	\$ 730	\$ 713	\$ 726	\$ 728	\$ 721	\$ 742	\$ 725
Weighted average common shares (in millions)	1,983	1,980	1,978	1,977	1,976	1,974	1,973	1,972
Diluted weighted average common shares (in millions)	1,989	1,988	1,986	1,984	1,984	1,980	1,976	1,976
Dividends per common share	\$ 0.220	\$ 0.205	\$ 0.205	\$ 0.205	\$ 0.205	\$ 0.185	\$ 0.185	\$ 0.185
CDN\$ to US\$1 - Statement of Financial Position	1.2894	1.2545	1.2480	1.2977	1.3323	1.3426	1.3116	1.3009
CDN\$ to US\$1 - Statement of Income	1.2647	1.2712	1.2528	1.3450	1.3238	1.3343	1.3050	1.2889

⁽¹⁾ For fixed income assets supporting insurance and investment contract liabilities and for equities supporting pass-through products and derivatives related to variable hedging programs, the impact of realized and unrealized gains (losses) on the assets is largely offset in the change in insurance and investment contract liabilities.

⁽²⁾ Core earnings is a non-GAAP measure. See "Performance and Non-GAAP Measures" below.

⁽³⁾ For explanations of other items, see "Q1 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 F3 "Performance and Non-GAAP Measures" which reconcile net income attributed to shareholders to core earnings.

E5 Other

No changes were made in our internal control over financial reporting during the three months ended March 31, 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 Quarterly dividend

The Company also announced today that the Board of Directors approved a quarterly dividend in the amount of \$0.22 per Manulife common share, payable on and after June 19, 2018 to shareholders of record at the close of business on May 15, 2018. Participants in the Company's dividend reinvestment and share purchase plans in Canada and the U.S. will receive

common shares purchased on the open market at a price based on the average actual cost to purchase the shares with no discount.

The Board also declared dividends on the following non-cumulative preferred shares, payable on or after June 19, 2018 to shareholders of record at the close of business on May 15, 2018.

Class A Shares Series 2 – \$0.29063 per share	Class 1 Shares Series 13 – \$0.2375 per share
Class A Shares Series 3 – \$0.28125 per share	Class 1 Shares Series 15 – \$0.24375 per share
Class 1 Shares Series 3 – \$0.136125 per share	Class 1 Shares Series 17 – \$0.24375 per share
Class 1 Shares Series 4 – \$0.164908 per share	Class 1 Shares Series 19 – \$0.2375 per share
Class 1 Shares Series 5 – \$0.243188 per share	Class 1 Shares Series 21 – \$0.35 per share
Class 1 Shares Series 7 – \$0.2695 per share	Class 1 Shares Series 23 – \$0.303125 per share
Class 1 Shares Series 9 – \$0.271938 per share	Class 1 Shares Series 25 – \$0.383082 per share
Class 1 Shares Series 11– \$0.295688 per share	

F2 Outstanding shares – selected information

Common Shares

As at April 26, 2018 MFC had 1,983,188,651 common shares outstanding.

F3 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/declines 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; 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 A5 "Changes to reporting segments and other items". In addition, we made the following adjustments to our reporting:

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

While core earnings is relevant to how we manage our business and offers a consistent methodology, it is not insulated from macro-economic factors which can have a significant impact. See “Quarterly Financial Information” below for reconciliation of core earnings to net income 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 assists 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 A5 "Changes to reporting segments and other items" for details.

Total Company

(\$ millions, unaudited)	Quarterly Results							
	1Q18	4Q17	3Q17	2Q17	1Q17	4Q16	3Q16	2Q16
Core earnings (loss)								
Asia	\$ 427	\$ 372	\$ 374	\$ 350	\$ 357	\$ 341	\$ 342	\$ 305
Canada	290	273	403	278	255	308	312	279
U.S.	432	463	346	359	441	387	312	293
Global Wealth and Asset Management	227	198	216	214	188	186	168	160
Corporate and Other (excluding core investment gains)	(169)	(201)	(354)	(181)	(186)	(115)	(155)	(204)
Core investment gains	96	100	100	154	46	180	17	-
Total core earnings	1,303	1,205	1,085	1,174	1,101	1,287	996	833
Items to reconcile core earnings to net income attributed to shareholders:								
Investment-related experience outside of core earnings	-	18	11	138	-	-	280	60
Direct impact of equity markets and interest rates and variable annuity guarantee liabilities	50	(68)	47	(37)	267	(1,202)	414	(170)
Change in actuarial methods and assumptions	-	(33)	(2)	-	-	(10)	(455)	-
Charge related to decision to change portfolio asset mix supporting our legacy businesses	-	(1,032)	-	-	-	-	-	-
Charge related to U.S. Tax Reform	-	(1,777)	-	-	-	-	-	-
Other	19	81	(36)	(20)	(18)	(12)	(118)	(19)
Net income (loss) attributed to shareholders	\$ 1,372	\$ (1,606)	\$ 1,105	\$ 1,255	\$ 1,350	\$ 63	\$ 1,117	\$ 704

Asia

(\$ millions, unaudited)	Quarterly Results							
	1Q18	4Q17	3Q17	2Q17	1Q17	4Q16	3Q16	2Q16
Asia core earnings	\$ 427	\$ 372	\$ 374	\$ 350	\$ 357	\$ 341	\$ 342	\$ 305
Items to reconcile core earnings to net income (loss) attributed to shareholders:								
Investment-related experience outside of core earnings	48	62	48	62	69	74	62	(25)
Direct impact of equity markets and interest rates and variable annuity guarantee liabilities	(27)	(140)	(62)	96	119	(15)	107	(287)
Change in actuarial methods and assumptions	-	5	161	-	-	(38)	(92)	-
Other	-	(39)	-	-	-	(10)	-	-
Net income (loss) attributed to shareholders	\$ 448	\$ 260	\$ 521	\$ 508	\$ 545	\$ 352	\$ 419	\$ (7)

Canada

(\$ millions, unaudited)	Quarterly Results							
	1Q18	4Q17	3Q17	2Q17	1Q17	4Q16	3Q16	2Q16
Canada core earnings	\$ 290	\$ 273	\$ 403	\$ 278	\$ 255	\$ 308	\$ 312	\$ 279
Items to reconcile core earnings to net income (loss) attributed to shareholders:								
Investment-related experience outside of core earnings	145	76	(125)	(12)	(38)	17	35	(88)
Direct impact of equity markets and interest rates and variable annuity guarantee liabilities	(60)	(21)	115	(238)	(83)	(266)	59	130
Change in actuarial methods and assumptions	-	(7)	43	-	-	68	(56)	-
Charge related to decision to change portfolio asset mix supporting our legacy businesses	-	(343)	-	-	-	-	-	-
Other	84	(7)	(4)	(5)	(6)	(11)	(8)	(9)
Net income (loss) attributed to shareholders	\$ 459	\$ (29)	\$ 432	\$ 23	\$ 128	\$ 116	\$ 342	\$ 312

U.S.

(\$ millions, unaudited)	Quarterly Results							
	1Q18	4Q17	3Q17	2Q17	1Q17	4Q16	3Q16	2Q16
U.S. core earnings	\$ 432	\$ 463	\$ 346	\$ 359	\$ 441	\$ 387	\$ 312	\$ 293
Items to reconcile core earnings to net income (loss) attributed to shareholders:								
Investment-related experience outside of core earnings	(101)	(33)	181	164	30	97	192	93
Direct impact of equity markets and interest rates and variable annuity guarantee liabilities	268	75	50	159	222	(623)	72	(46)
Change in actuarial methods and assumptions	-	(31)	(214)	-	-	(39)	(309)	-
Charge related to decision to change portfolio asset mix supporting our legacy businesses	-	(689)	-	-	-	-	-	-
Charge related to U.S. Tax Reform	-	(2,822)	-	-	-	-	-	-
Other	(61)	139	(41)	-	-	(18)	(97)	-
Net income (loss) attributed to shareholders	\$ 538	\$ (2,898)	\$ 322	\$ 682	\$ 693	\$ (196)	\$ 170	\$ 340

Global Wealth and Asset Management

(\$ millions, unaudited)	Quarterly Results							
	1Q18	4Q17	3Q17	2Q17	1Q17	4Q16	3Q16	2Q16
Global WAM core earnings	\$ 227	\$ 198	\$ 216	\$ 214	\$ 188	\$ 186	\$ 168	\$ 160
Items to reconcile core earnings to net income attributed to shareholders:								
Impact related to U.S. Tax Reform	-	308	-	-	-	-	-	-
Other	(4)	(10)	(10)	(13)	(13)	(14)	(12)	(9)
Net income attributed to shareholders	\$ 223	\$ 496	\$ 206	\$ 201	\$ 175	\$ 172	\$ 156	\$ 151

Corporate and Other

(\$ millions, unaudited)	Quarterly Results							
	1Q18	4Q17	3Q17	2Q17	1Q17	4Q16	3Q16	2Q16
Corporate and Other core loss (excluding expected cost of macro hedges and core investment gains)	\$ (169)	\$ (201)	\$ (354)	\$ (181)	\$ (186)	\$ (115)	\$ (155)	\$ (205)
Core investment gains	96	100	100	154	46	180	17	-
Total core earnings (loss)	(73)	(101)	(254)	(27)	(140)	65	(138)	(205)
Other items to reconcile core earnings (loss) to net income (loss) attributed to shareholders:								
Investment-related experience outside of core earnings	(92)	(87)	(92)	(79)	(61)	(187)	(10)	80
Direct impact of equity markets and interest rates and variable annuity guarantee liabilities	(131)	17	(56)	(53)	9	(298)	175	34
Changes in actuarial methods and assumptions	-	-	8	-	-	-	1	-
Impact related to U.S. Tax Reform	-	737	-	-	-	-	-	-
Other	-	(1)	18	-	1	39	-	-
Net income (loss) attributed to shareholders⁽¹⁾	\$ (296)	\$ 565	\$ (376)	\$ (159)	\$ (191)	\$ (381)	\$ 28	\$ (91)

⁽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 1Q18. 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		
	1Q18	4Q17	1Q 17
Gross premiums	\$ 9,466	\$ 9,035	\$ 9,085
Ceded premiums (excluding Canada Group Benefits reinsurance)	(1,012)	(997)	(997)
Segregated fund deposits	9,728	8,421	9,632
Mutual fund deposits	21,610	20,999	20,669
Institutional advisory account deposits	7,222	4,758	3,696
Other fund deposits	239	204	235
ASO premium equivalents	821	823	742
Investment contract deposits	18	23	23
Total premiums and deposits	48,092	43,266	43,085
Currency impact	-	122	(1,070)
Premiums and deposits at constant exchange rates	\$ 48,092	\$ 43,388	\$ 42,015

Assets under management and administration 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)	March 31, 2018	December 31, 2017	March 31, 2017
Total invested assets	\$ 342,389	\$ 334,222	\$ 328,237
Segregated funds net assets	326,011	324,307	323,118
Assets under management per financial statements	668,400	658,529	651,355
Mutual funds	197,854	191,507	175,635
Institutional advisory accounts (excluding segregated funds)	98,275	91,115	84,498
Other funds	7,247	6,937	6,477
Total assets under management	971,776	948,088	917,965
Other assets under administration	126,271	123,188	116,053
Currency impact	-	24,585	(19,863)
AUMA at constant exchange rates	\$ 1,098,047	\$ 1,095,861	\$ 1,014,155

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 preferred shares and capital instruments.

Capital

As at (\$ millions)	March 31, 2018	December 31, 2017	March 31, 2017
Total equity	\$ 44,089	\$ 42,163	\$ 43,931
Add AOCI loss on cash flow hedges	146	109	177
Add liabilities for capital instruments	8,275	8,387	8,179
Total capital	\$ 52,510	\$ 50,659	\$ 52,287

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 WAM businesses, 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 wealth and asset management 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 WAM businesses, as EBITDA margin is widely used among asset management peers, and core earnings is a primary profitability metric for the Company overall.

Wealth and Asset Management

(\$ millions, unaudited)	Quarterly Results							
	1Q18	4Q17	3Q17	2Q17	1Q17	4Q16	3Q16	2Q16
Core EBITDA	\$ 360	\$ 355	\$ 352	\$ 377	\$ 342	\$ 315	\$ 298	\$ 298
Amortization of deferred acquisition costs and other depreciation	73	87	84	88	85	85	89	77
Amortization of deferred sales commissions	29	25	23	23	28	24	24	26
Core earnings before income taxes	258	243	245	266	229	206	185	195
Core income tax (expense) recovery	(31)	(45)	(29)	(52)	(41)	(20)	(16)	(35)
Core earnings	\$ 227	\$ 198	\$ 216	\$ 214	\$ 188	\$ 186	\$ 169	\$ 160

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 Statement 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 NBV for the first quarter 2018 and will be used in subsequent quarters. The value of in-force business in Asia reflects local statutory earnings and capital requirements. The value of in-force excludes Manulife’s WAM, Bank and Property and Casualty Reinsurance businesses.

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 Manulife’s wealth and asset management businesses and Manulife Bank and the short-term Property and Casualty Reinsurance business. 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 wealth and asset management, 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 WAM businesses 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 WAM businesses 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.

F4 Caution regarding forward-looking statements

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

The forward-looking statements in this document include, but are not limited to, statements with respect to the expected impact of our decision to reduce the allocation to ALDA in our portfolio asset mix supporting our legacy business and of U.S. Tax Reform, 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; 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.