



**Financial Performance and Supplementary
Regulatory Disclosures**

Q2 2023

Caution regarding forward-looking statements

This document contains certain forward-looking statements with respect to Manulife Bank of Canada's ("MBC" or the "Bank") financial condition, results of operations and business. Forward-looking statements can generally be identified by words such as "will," "expects," "believes," "seeks," "estimates," "potential," "possible," "targeting," and variations of these words and similar expressions.

Forward-looking statements involve inherent risks and uncertainties and, therefore, undue reliance should not be placed on them. Readers are cautioned that a number of factors could cause actual results to differ, in some instances materially, from those anticipated or implied in any forward-looking statement. These factors include changes in general economic conditions in the market in which MBC operates, changes to government policy and regulation, and factors specific to MBC.

The forward-looking statements in this document are, unless otherwise indicated, as of the date they are made. MBC makes no commitment to revise or update any forward-looking statements.

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Overview

About Manulife Bank of Canada

Manulife Bank of Canada (“MBC” or the “Bank”) is a Schedule I federally chartered bank regulated by the Office of the Superintendent of Financial Institutions (“OSFI”). The Bank is categorized as a Category I Bank under OSFI’s Small and Medium-Sized Deposit-Taking Institutions (“SMSB”) Capital and Liquidity Requirements Guideline.

Manulife Bank is a wholly owned subsidiary of The Manufacturers Life Insurance Company (“MLI”), a wholly owned subsidiary of Manulife Financial Corporation (“MFC”). MFC is a publicly traded financial services group. Manulife Bank and its wholly owned subsidiary, Manulife Trust Company (“MTC”), provides a wide range of financial products and services including mortgage and investment loans, and deposit products. MTC is a federally incorporated trust company licensed to operate in Canada with full trust and loan company powers under the Trust and Loan Companies Act (Canada) and is also regulated by OSFI. Platinum Canadian Mortgage Trust II (“PCMT II”) was established to provide financing for MBC mortgage products through securitization.

Financial Performance and Regulatory Disclosures

This document provides information on the Bank’s consolidated financial performance and includes pertinent disclosures based on the Basel Committee on Banking Supervision’s Basel III framework and OSFI’s Pillar 3 Disclosure Guideline for SMSBs, B-6 and B-20 guidelines. Effective Q2 2023, the Bank implemented the Basel III reforms according to the final Capital Adequacy Requirements Guideline, Leverage Requirements Guideline, SMSB Capital and Liquidity Requirements, and Pillar 3 Disclosures for SMSBs issued by OSFI. These disclosures are intended to provide market participants with information regarding the risk profile of Manulife Bank and the application of the Basel regulatory requirements, as well as information related to Manulife Bank’s residential mortgage loans portfolios to enable market participants to evaluate the Bank’s residential mortgage underwriting standards.

The financial data presented in this document represents the consolidated financial results for the Bank, its subsidiary, MTC, and structured entity PCMT II. This report is unaudited and all amounts are reported in millions of Canadian dollars, unless otherwise indicated. Full qualitative disclosures are provided annually, in the Q4 report.

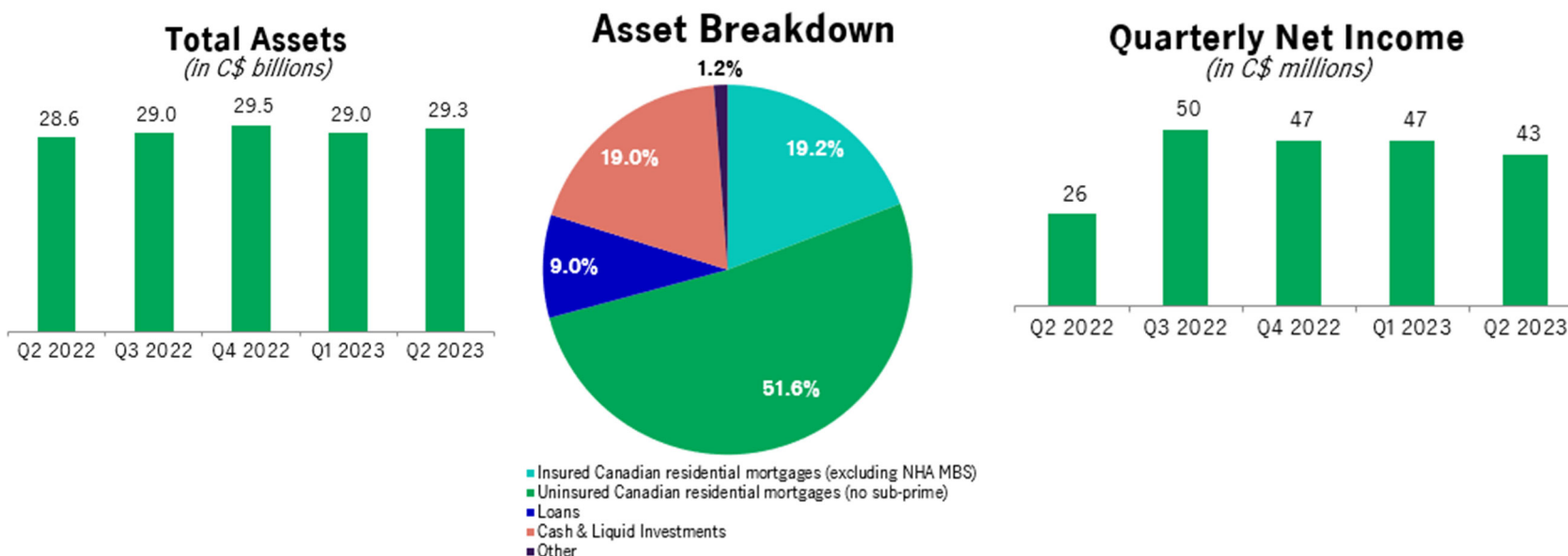
Additional financial information is also available on the OSFI Financial Data website at [Financial Data for Banks \(osfi-bsif.gc.ca\)](https://osfi-bsif.gc.ca/financial-data-for-banks).

Financial Performance

Financial performance information is provided to enable a reader to assess the Bank's unaudited results of operations and financial condition for the three-month period ended June 30, 2023.

Manulife Bank of Canada ended the quarter with assets of \$29.3 billion, an increase of \$0.3 billion, or 1.0%, as compared to March 31, 2023, primarily driven by higher mortgages and cash assets, partially offset by lower other loans. Assets increased by \$0.7 billion, or 2.4%, as compared to June 30, 2022, primarily driven by higher mortgages and cash assets, partially offset by lower other loans.

Net income of \$43 million for the three months ended June 30, 2023, decreased \$4 million, or 9%, as compared to the prior quarter, driven by lower net gains on securities, and higher non-interest expenses. Net income increased by \$17 million, or 65%, as compared to the prior year, primarily driven by lower losses on securities, higher net interest income due to favorable net interest margin and growth in net lending assets, partially offset by higher non-interest expenses.



Financial Performance

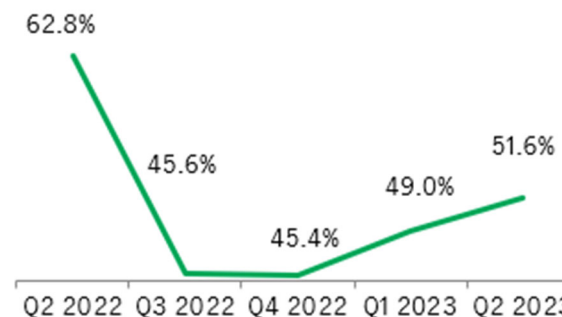
As at balances	Q2 2023		Q1 2023		Q4 2022		Q3 2022		Q2 2022	
ASSETS										
Cash, cash equivalents and restricted cash	\$	3,611	\$	3,554	\$	4,115	\$	3,722	\$	3,540
Debt securities		252		250		225		211		206
Equity securities		153		150		141		123		132
	\$	4,016	\$	3,954	\$	4,481	\$	4,056	\$	3,878
Mortgage loans	\$	22,363	\$	22,034	\$	21,988	\$	21,829	\$	21,710
Other loans		2,640		2,713		2,790		2,807		2,790
	\$	25,003	\$	24,747	\$	24,778	\$	24,636	\$	24,500
Other assets	\$	258	\$	258	\$	271	\$	273	\$	258
Total assets	\$	29,277	\$	28,959	\$	29,530	\$	28,965	\$	28,636
LIABILITIES and EQUITY										
Liabilities										
Demand deposits	\$	13,507	\$	13,288	\$	13,202	\$	12,849	\$	12,949
Term deposits		8,367		8,468		9,340		8,883		8,714
	\$	21,874	\$	21,756	\$	22,542	\$	21,732	\$	21,663
Notes payable		5,386		5,214		5,023		5,322		5,138
Other liabilities		182		179		183		170		132
Total liabilities	\$	27,442	\$	27,149	\$	27,748	\$	27,224	\$	26,933
Equity										
Issued share capital										
Preferred shares	\$	229	\$	229	\$	229	\$	229	\$	229
Common shares		267		267		267		267		267
Contributed surplus		442		442		442		428		428
Retained earnings		897		874		847		821		782
Accumulated other comprehensive income		-		(2)		(3)		(4)		(3)
Total equity	\$	1,835	\$	1,810	\$	1,782	\$	1,741	\$	1,703
Total liabilities and equity	\$	29,277	\$	28,959	\$	29,530	\$	28,965	\$	28,636

	2023		2022				Fiscal YTD		Fiscal							
	Q2	Q1	Q4	Q3	Q2	2023	2022	2022								
Revenue																
Interest income	\$	354	\$	344	\$	324	\$	266	\$	200	\$	698	\$	362	\$	952
Interest expense		236		225		197		144		92		461		156		497
Net interest income	\$	118	\$	119	\$	127	\$	122	\$	108	\$	237	\$	206	\$	455
Fee income	\$	6	\$	5	\$	6	\$	6	\$	6	\$	11	\$	12	\$	24
Net gains (losses) on securities		2		7		7		(2)		(16)		9		(12)		(7)
Net gains (losses) on derivatives		-		-		-		1		(3)		-		(3)		(2)
Non-interest income	\$	8	\$	12	\$	13	\$	5	\$	(13)	\$	20	\$	(3)	\$	15
Total revenue	\$	126	\$	131	\$	140	\$	127	\$	95	\$	257	\$	203	\$	470
Provision for (recovery of) credit losses on lending assets		2		2		-		-		1		4		3		3
Non-interest expense		65		64		63		58		60		129		120		241
Net income before income tax	\$	59	\$	65	\$	77	\$	69	\$	34	\$	124	\$	80	\$	226
Income tax expense		16		18		30		19		8		34		20		69
Net income	\$	43	\$	47	\$	47	\$	50	\$	26	\$	90	\$	60	\$	157

The tables above are a summary of MBC's unaudited consolidated financial statements and are consistent with the unaudited consolidated financial statements filed with OSFI with classification differences due to summarization of results.

The Banks' efficiency ratio at June 30, 2023 of 51.6% was higher, as compared with 49.0% reported at March 31, 2023 and lower as compared with 62.8% reported at June 30, 2022. The decrease over the prior year is primarily due to higher net interest income and higher net gains on securities, partially offset by higher non-interest expenses.

Efficiency Ratio

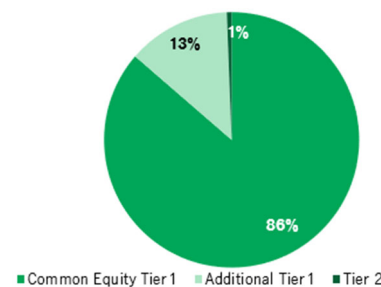


Capital

Basel III Common Equity Tier 1 (“CET1”) ratio, Tier 1 capital ratio and Total capital ratio were 14.7%, 16.9% and 17.0%, respectively, as at June 30, 2023, well in excess of minimum regulatory capital requirements.

Risk weighted assets as at June 30, 2023 were approximately \$10.1 billion, an increase of ~\$0.1 billion, or 1%, as compared to the prior quarter. The increase was primarily driven by the new OSFI Capital Adequacy Requirements effective Q2 2023. Risk weighted assets as at June 30, 2023, increased ~\$0.3 billion, or ~3%, as compared to the prior year, primarily driven by higher residential mortgages and other loans, and the impact of the new OSFI Capital Adequacy Requirements effective Q2 2023.

Refer to the Regulatory Capital section for further discussion on regulatory capital, capital ratios and risk weighted assets.



Total risk-weighted assets

\$ 10.1 Billion

Total capital

\$ 1.7 Billion

CET1 Capital Ratio

14.7%

Tier 1 Capital Ratio

16.9%

Total Capital Ratio

17.0%

Credit ratings

On June 28, 2023, Standard & Poor’s reaffirmed Manulife Bank’s long-term deposit rating of A+ and its short-term deposit rating of A-1 with a stable outlook. On July 19, 2023, DBRS confirmed Manulife Bank’s long-term issuer rating at AA (low) and reaffirmed its short-term issuer rating of R-1 (middle). The trends on all ratings are stable.

As of June 30, 2023

Standard & Poor's

Short-term rating	A-1
Long-term rating	A+

DBRS

Short-term rating	R-1 (middle)
Long-term rating	AA (low)

OVA: Bank risk management approach

The Bank is exposed to credit, market, operational, and liquidity risks, as well as strategic and regulatory risks. The Bank manages these risks using an Enterprise Risk Management (“ERM”) framework. The Bank’s objective is to balance risk levels with business objectives for growth and profitability.

Risk management framework

The Bank’s ERM framework sets out policies and standards of practice related to governance, identification, measurement, monitoring, control and mitigation of risk. The Chief Risk Officer is accountable for developing, establishing, implementing, maintaining and enhancing the ERM framework.

In addition, risk management programs are in place for each of the Bank’s broad risk categories: strategic, market, credit, liquidity, and operational. These programs incorporate policies and standards of practice that are aligned with the ERM framework covering:

- Assignment of risk management accountabilities;
- Philosophy and appetite related to assuming risks;
- Establishment of specific risk targets or limits;
- Delegation of authorities related to risk-taking activities;
- Identification, measurement, assessment, monitoring and reporting of risks; and
- Activities related to risk control and mitigation.

Risk culture involves a shared understanding of what risk means for our organization and shapes our behaviours. It is part of overall company culture and reflects our Company Values. A strong risk culture is supported by three pillars of key behaviours which we consistently and effectively demonstrate: Communication, Accountability and Incentives.

At Manulife, we value our good name and strive to maintain high standards of integrity in everything we do. The Manulife Code of Business Conduct and Ethics (the “Code”) affirms the Company’s commitment to ethical conduct and its practice of complying with all applicable laws. It is the obligation of all employees to comply with the Code. In addition, it is each employee’s responsibility to identify, disclose and avoid potential or actual conflicts of interest.

The Bank’s framework is centred on three lines of defence.

As the first line of defence, senior management of the various business areas are accountable for the management of risk within those areas and for the implementation of related controls. Management is responsible for ensuring that the Bank’s business strategies align with its risk-taking philosophy, risk appetite and culture. Furthermore, management evaluates and manages risk exposures consistent with ERM policies and standards of practice. Management is also responsible for delivering returns commensurate with the level of risk assumed.

The second line of defence comprises the Chief Risk Officer and the risk management group. The risk management group provides independent oversight (including validation and verification) and challenges assumptions regarding risk-taking and risk mitigation activities. Furthermore, the Bank Executive Risk Committee provides support to the executive leadership team for overseeing general risk-taking and risk mitigation activities.

As the third line of defence, Audit Services provides independent analyses of the effectiveness of controls and assesses whether controls are appropriate relative to the risk inherent in the business. Audit Services also reviews risk mitigation programs and risk oversight functions.

Risk governance and management structure

Risk governance in the Bank is managed by the Bank’s Board of Directors and several executive management committees.

Board of Directors

The Board of Directors oversees management’s implementation of appropriate systems to identify and manage the principal risks of the business. The Board of Directors reviews and approves the enterprise risk management policy, risk-taking philosophy and overall risk appetite with the assistance of the Board committees. The Chief Executive Officer is directly accountable to the Board of Directors for all risk-taking activities and risk management practices, and is supported by the Chief Risk Officer and the Executive Management Committees. The executive management committees establish risk policies, guide risk-taking activities, monitor significant risk exposures and sponsor strategic risk management priorities for the Bank.

The Audit Committee of the Board is responsible for assisting the Board of Directors with its oversight of the quality and integrity of financial information, the effectiveness of internal controls over financial reporting, the effectiveness of compliance with legal and regulatory requirements and the effectiveness of risk management and compliance practices.

The Conduct Review and Governance Committee of the Board oversees compliance with policies and procedures related to conflicts of interest, confidentiality of information, customer complaints and related party transactions.

The Risk Committee of the Board is responsible for assisting the Board of Directors with its oversight of the management of principal risks, including the effectiveness of internal controls over principal risks and the effectiveness of compliance with risk management policies.

Executive management committees

The Bank has established several roles and committees as part of its governance and management structure. The committees are forums to raise and share risk issues between business lines and risk functions.

The Bank Executive Risk Committee provides advisory support to senior management regarding governance and risk oversight. The Bank Executive Risk Committee also provides an executive forum for discussing and reviewing the Bank's risk philosophy and appetite, risk limits, risk exposures and opportunities for optimizing risk taking within the context of the Bank's business model and short-term and long-term strategic objectives. The Bank Executive Risk Committee is responsible for providing oversight related to the management of all risk exposures against approved policies and limits, risk management strategies, and the oversight of the ERM framework which covers risk appetite, risk management responsibilities, risk identification, measurement and assessment, risk monitoring, reporting, control and mitigation activities.

The Manulife Bank Credit Committee ("MBCC") monitors the Bank's overall credit risk profile and compliance with credit risk policies, establishes overall Credit Quality Standards, and approves large individual credits and investments.

The Asset Liability Committee ("ALCO") reviews, provides oversight for, and approves policy frameworks and reports related to liquidity, funding and structural interest rate risk management.

The Operational Risk Committee ("ORC") establishes, reviews, and approves operational risk policies. The ORC also oversees operational risk management and monitors operational risk exposures and trends.

The Capital Management Committee ("CMC") provides strategic and integrated oversight and direction on capital management.

The IFRS 9 Governance Committee provides oversight and direction for all significant matters relating to the IFRS 9 Impairment of Financial Assets requirements.

Risk reporting

Risk exposures of the Bank are monitored and reported to senior management, the executive management committees and Board of Directors on a regular basis.

Credit Risk

Credit risk exposures are monitored and reported to the Board of Directors, the Bank Executive Risk Committee and MFC's Credit Risk Management Department on a quarterly basis. The Chief Risk Officer and the Bank's Credit Risk Committee set out objectives related to the overall quality and diversification of lending portfolios and establish criteria for the selection of counterparties and intermediaries. The Chief Risk Officer monitors compliance with all credit policies and limits. The Board of Directors is responsible for reviewing and approving key credit risk management policies and material changes to management-level credit risk policies.

Market Risk

The Board has ultimately delegated the responsibility for the strategic management of market, interest rate and liquidity risks to ALCO. The ALCO risk management strategy addresses interest rate risk arising between asset returns and supporting liabilities and is designed to keep potential losses stemming from these risks within acceptable limits. Actual investment positions and risk exposures are monitored to ensure adherence to policy guidelines and limits. Positions are reported to ALCO on a monthly basis and to MFC's Global ALCO on a quarterly basis.

Liquidity Risk

The Board of Directors has ultimate oversight responsibility for liquidity risk management of the Bank with liquidity management responsibilities delegated to the CFO and Treasurer. The Chief Risk Officer is responsible for the independent oversight of liquidity risk taking and mitigation activities. ALCO is responsible for the management and monitoring of liquidity risk.

At least annually, the Board of Directors reviews and approves the Market and Liquidity Management Policy and reviews the Liquidity Contingency Plan, which ensures the Bank has the infrastructure and control functions in place to meet expected and unexpected liquidity obligations. Risk tolerances and limits are approved by the Board of Directors and define the maximum level of liquidity risk the Bank is willing to take. The Liquidity Contingency Plan outlines various liquidity statuses and includes procedures, action plans, communication requirements and roles and responsibilities under each liquidity status. There are four Liquidity Status Levels designed to identify and address various liquidity positions. The Bank's appropriate liquidity status is reviewed and affirmed or changed at each ALCO meeting, or more frequently as required.

Stress Testing

Stress testing is a risk management technique used by the Bank to evaluate the potential effects of a set of specified changes in risk factors on its financial condition. These changes in risk factors correspond to exceptional but plausible events. Stress testing includes both scenario analysis and sensitivity testing. Stress testing is an integral part of the Bank's Risk Management framework, as it facilitates risk identification and assessment and is used to support strategic decision-making. As a key component of the Enterprise Risk Management program, stress tests facilitate risk identification and may also contribute to the development of risk controls and mitigation strategies.

The Bank performs stress tests on its material risk exposures, including but not limited to credit, market, liquidity and operational risks. Each of these material risks are currently stressed separately and added together to provide a view of total capital required in the stressed-case scenario. Whenever appropriate, the Bank also uses expert judgement to calculate and assess additional capital requirements given specific risks identified.

Risk Strategies

For details on the Bank's strategies and processes to manage, hedge and mitigate risks please refer to the following sections contained in this report:

- Credit risk management strategy and credit risk mitigation techniques on page 12 and 16
- Operational risk management strategy on page 23
- Interest rate risk management strategy on page 25
- Liquidity risk management strategy on page 26

Regulatory Capital

Our consolidated regulatory capital requirements are determined by OSFI's SMSBs Capital and Liquidity Requirements, Capital Adequacy Requirements Guideline and Leverage Requirements Guideline. These guidelines reflect the domestic implementation of the final Basel III banking reforms in Canada.

The adequacy of capital is assessed by considering capital requirements necessary to offset unexpected losses arising from credit risk, market risk and operational risk. The minimum regulatory capital that the Bank is required to hold is determined by OSFI. MBC's approach to capital management is aligned to support its business model and strategic direction.

Regulatory approaches used to determine capital requirements

Credit risk

Banks are permitted a choice of two methodologies in determining the capital requirements for credit risk: the Internal Ratings Based ("IRB") or Standardized Approach. Under the IRB Approach, banks are permitted to determine risk weightings for on and off-balance sheet exposures using internal risk formulas. The Standardized Approach requires banks to assign risk weightings to on and off-balance sheet exposures as prescribed by OSFI under the CAR Guideline. MBC and MTC apply the Standardized Approach when determining capital requirements for credit risk.

Market risk

Market risk capital is calculated using one of two methodologies: the Standardized Approach or Internal Models. These requirements apply to banks designated by OSFI as domestic systemically important banks (D-SIBs) and other internationally active institutions. The capital requirements for Market risk are not applicable to MBC and MTC.

Operational risk

There are two methodologies for calculating operational risk capital: the Standardized Approach and the Simplified Standardized Approach ("SSA"). MBC and MTC currently apply the SSA. Under the SSA, institutions must hold operational risk capital equal to 15% of average annual Adjusted Gross income over the previous 12 fiscal quarters. Risk-weighted assets ("RWA") for operational risk are equal to 12.5 times operational risk capital.

KM1: Key Metrics ⁽¹⁾

	Q2 2023	Q1 2023	Q4 2022	Q3 2022	Q2 2022
Available capital (amounts)					
1 Common Equity Tier 1 (CET1)	\$ 1,478	\$ 1,450	\$ 1,414	\$ 1,371	\$ 1,322
1a Common Equity Tier 1 with transitional arrangements for ECL provisioning not applied	n.a.	n.a.	\$ 1,414	\$ 1,370	\$ 1,321
2 Tier 1	\$ 1,707	\$ 1,679	\$ 1,643	\$ 1,600	\$ 1,551
2a Tier 1 with transitional arrangements for ECL provisioning not applied	n.a.	n.a.	\$ 1,643	\$ 1,599	\$ 1,550
3 Total capital	\$ 1,717	\$ 1,690	\$ 1,653	\$ 1,611	\$ 1,562
3a Total capital with transitional arrangements for ECL provisioning not applied	n.a.	n.a.	\$ 1,653	\$ 1,610	\$ 1,561
Risk-weighted assets (amounts)					
4 Total risk-weighted assets (RWA)	\$ 10,080	\$ 10,025	\$ 10,182	\$ 9,983	\$ 9,802
Risk-based capital ratios as a percentage of RWA					
5 CET1 ratio (%)	14.7%	14.5%	13.9%	13.7%	13.5%
5a Common Equity Tier 1 ratio with transitional arrangements for ECL provisioning not applied (%)	n.a.	n.a.	13.9%	13.7%	13.5%
6 Tier 1 ratio (%)	16.9%	16.8%	16.1%	16.0%	15.8%
6a Tier 1 ratio with transitional arrangements for ECL provisioning not applied (%)	n.a.	n.a.	16.1%	16.0%	15.8%
7 Total capital ratio (%)	17.0%	16.9%	16.2%	16.1%	15.9%
7a Total capital ratio with transitional arrangements for ECL provisioning not applied (%)	n.a.	n.a.	16.2%	16.1%	15.9%
Additional CET1 buffer requirements as a percentage of RWA					
8 Capital conservation buffer requirement (%)	2.5%	2.5%	2.5%	2.5%	2.5%
11 Total of bank CET1 specific buffer requirements (%)	2.5%	2.5%	2.5%	2.5%	2.5%
12 CET1 available after meeting the bank's minimum capital requirements (%)	7.7%	7.5%	6.9%	6.7%	6.5%
Basel III Leverage ratio					
13 Total Basel III leverage ratio exposure measure	\$ 31,006	\$ 30,369	\$ 30,842	\$ 30,311	\$ 29,982
14 Basel III leverage ratio % (row 2 / row 13)	5.5%	5.5%	5.3%	5.3%	5.2%
14a Basel III leverage ratio % (row 2a / row 13) with transitional arrangements for ECL provisioning not applied	n.a.	n.a.	5.3%	5.3%	5.2%

⁽¹⁾ As a result of COVID-19, OSFI introduced transitional arrangements for the capital treatment of expected credit loss provisioning, which allowed a portion of eligible allowances to be included in CET1 capital instead of Tier 2. Effective Q1 2023, the adjustment for ECL provisioning is no longer applicable.

Modified CC1: Composition of capital for SMSBs

	Q2 2023	Q1 2023	Q4 2022	Q3 2022	Q2 2022
Common Equity Tier 1 capital: instruments and reserves					
1 Directly issued qualifying common share capital (and equivalent for non-joint stock companies) plus related stock surplus	\$ 709	\$ 709	\$ 709	\$ 695	\$ 695
2 Retained earnings	897	874	847	821	782
3 Accumulated other comprehensive income (and other reserves)	-	(2)	(3)	(4)	(3)
6 Common Equity Tier 1 capital before regulatory adjustments	\$ 1,606	\$ 1,581	\$ 1,553	\$ 1,512	\$ 1,474
Common Equity Tier 1 capital: regulatory adjustments					
28 Total regulatory adjustments to Common Equity Tier 1	\$ (128)	\$ (131)	\$ (139)	\$ (141)	\$ (152)
29 Common Equity Tier 1 capital (CET1)	\$ 1,478	\$ 1,450	\$ 1,414	\$ 1,371	\$ 1,322
Additional Tier 1 capital: instruments					
30 Directly issued qualifying Additional Tier 1 instruments plus related stock surplus	\$ 229	\$ 229	\$ 229	\$ 229	\$ 229
44 Additional Tier 1 capital (AT1)	229	229	229	229	229
45 Tier 1 capital (T1 = CET1 + AT1)	\$ 1,707	\$ 1,679	\$ 1,643	\$ 1,600	\$ 1,551
Tier 2 capital: instruments and provisions					
50 Collective allowances	\$ 10	\$ 11	\$ 10	\$ 11	\$ 11
58 Tier 2 capital (T2)	\$ 10	\$ 11	\$ 10	\$ 11	\$ 11
59 Total capital (TC = T1 + T2)	\$ 1,717	\$ 1,690	\$ 1,653	\$ 1,611	\$ 1,562
60 Total risk-weighted assets	\$ 10,080	\$ 10,025	\$ 10,182	\$ 9,983	\$ 9,802
Capital ratios (%)					
61 Common Equity Tier 1 (as percentage of risk-weighted assets)	14.7%	14.5%	13.9%	13.7%	13.5%
62 Tier 1 (as percentage of risk-weighted assets)	16.9%	16.8%	16.1%	16.0%	15.8%
63 Total Capital (as percentage of risk-weighted assets)	17.0%	16.9%	16.2%	16.1%	15.9%
OSFI target					
69 Common Equity Tier 1 target ratio	7.0%	7.0%	7.0%	7.0%	7.0%
70 Tier 1 capital target ratio	8.5%	8.5%	8.5%	8.5%	8.5%
71 Total capital target ratio	10.5%	10.5%	10.5%	10.5%	10.5%

LR2: Leverage Ratio Common Disclosure

	Q2 2023	Q1 2023	Q4 2022	Q3 2022	Q2 2022
On-balance sheet exposures					
1 On-balance sheet items (excluding derivatives, SFTs and grandfathered securitization exposures but including collateral)	\$ 29,277	\$ 28,959	\$ 29,530	\$ 28,965	\$ 28,636
4 (Asset amounts deducted in determining Tier 1 capital)	(128)	(130)	(139)	(143)	(153)
5 Total on-balance sheet exposures (excluding derivatives and SFTs) (sum of lines 1 to 4)	\$ 29,149	\$ 28,829	\$ 29,391	\$ 28,822	\$ 28,483
Derivative exposures					
7 Add-on amounts for potential future exposure associated with all derivative transactions	\$ -	\$ -	\$ -	\$ -	\$ 1
11 Total derivative exposures (sum of lines 6 to 10)	\$ -	\$ -	\$ -	\$ -	\$ 1
Other off-balance sheet exposures					
17 Off-balance sheet exposure at gross notional amount	\$ 15,343	\$ 14,624	\$ 14,040	\$ 14,078	\$ 13,999
18 (Adjustments for conversion to credit equivalent amounts)	(13,486)	(13,084)	(12,589)	(12,589)	(12,501)
19 Off-balance sheet items (sum of lines 17 and 18)	\$ 1,857	\$ 1,540	\$ 1,451	\$ 1,489	\$ 1,498
Capital and Total Exposures					
20 Tier 1 capital	\$ 1,707	\$ 1,679	\$ 1,643	\$ 1,600	\$ 1,551
21 Total Exposures (sum of lines 5, 11, 16 and 19)	\$ 31,006	\$ 30,369	\$ 30,842	\$ 30,311	\$ 29,982
Leverage Ratio					
22 Basel III leverage ratio	5.5%	5.5%	5.3%	5.3%	5.2%

Credit Risk

CRA: General qualitative information about credit risk

Credit risk is the risk of loss due to the inability or unwillingness of a borrower or counterparty to fulfil its payment obligations. Credit risk is one of the most significant risks to the Bank's business, and exists in its lending activities, investment activities and derivative transactions.

Risk management strategy

The Bank's credit risk management practices are strong. Risk identification, monitoring, limit-setting and enforcement processes are well developed and comparable to industry leading practices. Relevant underwriting metrics remain consistent across all distribution channels given policy alignment, embedded quality control, and structured communication. Current originations continue to be appropriate, within limits, and aligned to Bank risk appetite.

The Bank has established policies that set exposure limits by borrower, quality rating, industry and geographic region. The Chief Risk Officer, together with the Bank Executive Risk Committee, sets out objectives related to the overall quality and diversification of lending portfolios and establishes criteria for the selection of counterparties and intermediaries. The Chief Risk Officer monitors compliance with all credit policies and limits and reports the results to senior management and Board of Directors.

The Bank establishes policies and procedures to provide an independent assessment of the existence, quality and value of the credit portfolios, the integrity of the credit process, and to promote the detection of related problems. Internal audit performs periodic assessments of compliance with credit policies and procedures of credit granting and investment originating units.

The Board of Directors of both MBC and MTC ("Board of Directors") are responsible for reviewing and approving all key credit risk management policies. A review system sensitized to prescribed total credit exposure and risk rating thresholds is in place and is maintained with the intent that:

- The borrower's current financial condition is known;
- Collateral security is adequate and enforceable relative to the borrower's current circumstances;
- Credits are in compliance with covenants and margins;
- Early identification and classification of at-risk credit is possible;
- Current information regarding the quality of the loan portfolio is available; and
- Higher risk credits are reviewed in order to assess the risk of default.

The Bank's risk rating systems are designed to assess and monitor credit risk. The risk assessment and monitoring processes for the lending portfolio and derivatives contracts are described below.

Lending Portfolio

Our lending business is focused on residential properties. We have no exposure to oil and gas or other carbon heavy industries. Insured mortgages are insured against loss caused by borrower default under a loan secured by real property. Insurance is provided by the Canada Mortgage and Housing Corporation (“CMHC”) or other authorized insurers.

MBC’s flagship product, Manulife One, is an all-in-one banking solution that combines a client’s savings and borrowings into one Home Equity Line of Credit (“HELOC”) product. This can include a client’s traditional mortgage loan, personal loan, lines of credit, and chequing and savings accounts. The Proactive Account Monitoring program is a client engagement program that uses predictive indicators of potential default to select accounts for proactive remediation. High risk clients are contacted before they enter arrears and are encouraged to undertake actions to reduce their borrowing and maintain their good standing.

Derivatives

The Bank has established policies and limits for managing credit risk exposures that may arise with counterparties when entering into derivative transactions. The Bank enters into master netting arrangements that permit the offsetting of contracts in a loss position in the case of a counterparty default. The Bank measures derivative counterparty exposure as net potential credit exposure, which takes into consideration mark-to-market values of all transactions with each counterparty, net of any collateral held, and an allowance to reflect future potential exposure.

CR1: Credit Quality of Assets

	a	b	c	d	e	g
	Gross carrying values of		Allowances/ Impairments	Of which ECL accounting provisions for credit losses on SA exposures		Net values (a+b-c)
	Defaulted exposures ¹	Non- defaulted exposures		Allocated in regulatory category of Specific	Allocated in regulatory category of General	
Q2 2023						
1 Loans	\$ 48	\$ 24,969	\$ 14	\$ 4	\$ 10	\$ 25,003
2 Debt Securities	-	262	-	-	-	262
3 Off-balance sheet exposures	-	15,343	7	2	5	15,336
4 Total	\$ 48	\$ 40,574	\$ 21	\$ 6	\$ 15	\$ 40,601
Q1 2023						
1 Loans	\$ 47	\$ 24,714	\$ 14	\$ 3	\$ 11	\$ 24,747
2 Debt Securities	-	250	-	-	-	250
3 Off-balance sheet exposures	-	14,625	6	1	5	14,619
4 Total	\$ 47	\$ 39,589	\$ 20	\$ 4	\$ 16	\$ 39,616
Q4 2022						
1 Loans	\$ 55	\$ 24,736	\$ 13	\$ 2	\$ 11	\$ 24,778
2 Debt Securities	-	225	-	-	-	225
3 Off-balance sheet exposures	-	14,040	6	1	5	14,034
4 Total	\$ 55	\$ 39,001	\$ 19	\$ 3	\$ 16	\$ 39,037
Q3 2022						
1 Loans	\$ 47	\$ 24,602	\$ 13	\$ 1	\$ 12	\$ 24,636
2 Debt Securities	-	231	-	-	-	231
3 Off-balance sheet exposures	-	14,077	7	1	6	14,070
4 Total	\$ 47	\$ 38,910	\$ 20	\$ 2	\$ 18	\$ 38,937
Q2 2022						
1 Loans	\$ 29	\$ 24,484	\$ 13	\$ 1	\$ 12	\$ 24,500
2 Debt Securities	-	221	-	-	-	221
3 Off-balance sheet exposures	-	13,999	7	1	6	13,992
4 Total	\$ 29	\$ 38,704	\$ 20	\$ 2	\$ 18	\$ 38,713

¹A defaulted exposure is defined as one that is past due for more than 90 days or is an exposure to a defaulted borrower under CAR 2023, Chapter 4, Section 4.1.21.

CR3: Credit Risk Mitigation Techniques – Overview

	Q2 2023					Q1 2023				
	Exposures unsecured: carrying amount	Exposures to be secured	Exposures secured by			Exposures unsecured: carrying amount	Exposures to be secured	Exposures secured by		
			Collateral	Financial guarantees	Credit derivatives			Collateral	Financial guarantees	Credit derivatives
1 Loans	\$ 17,898	\$ 7,105	\$ -	\$ 7,105	\$ -	\$ 17,695	\$ 7,052	\$ -	\$ 7,052	\$ -
2 Debt securities	262	-	-	-	-	250	-	-	-	-
3 Total	\$ 18,160	\$ 7,105	\$ -	\$ 7,105	\$ -	\$ 17,945	\$ 7,052	\$ -	\$ 7,052	\$ -
4 Of which defaulted	\$ 30	\$ 14	\$ -	\$ 14	\$ -	\$ 33	\$ 11	\$ -	\$ 11	\$ -

	Q4 2022					Q3 2022				
	Exposures unsecured: carrying amount	Exposures to be secured	Exposures secured by			Exposures unsecured: carrying amount	Exposures to be secured	Exposures secured by		
			Collateral	Financial guarantees	Credit derivatives			Collateral	Financial guarantees	Credit derivatives
1 Loans	\$ 17,805	\$ 6,973	\$ -	\$ 6,973	\$ -	\$ 17,481	\$ 7,155	\$ -	\$ 7,155	\$ -
2 Debt securities	225	-	-	-	-	231	-	-	-	-
3 Total	\$ 18,030	\$ 6,973	\$ -	\$ 6,973	\$ -	\$ 17,712	\$ 7,155	\$ -	\$ 7,155	\$ -
4 Of which defaulted	\$ 42	\$ 11	\$ -	\$ 11	\$ -	\$ 39	\$ 7	\$ -	\$ 7	\$ -

	Q2 2022				
	Exposures unsecured: carrying amount	Exposures to be secured	Exposures secured by		
			Collateral	Financial guarantees	Credit derivatives
1 Loans	\$ 17,179	\$ 7,321	\$ -	\$ 7,321	\$ -
2 Debt securities	221	-	-	-	-
3 Total	\$ 17,400	\$ 7,321	\$ -	\$ 7,321	\$ -
4 Of which defaulted	\$ 21	\$ 7	\$ -	\$ 7	\$ -

CRC: Qualitative disclosure related to credit risk mitigation techniques

Risk control and mitigation

Diversification

MBC's credit risk governance policies require an acceptable level of diversification. Limits are in place for several portfolio dimensions including industry, geography, single-name concentrations, and transaction-specific limits. Although the Bank's credit portfolio is heavily weighted to Canadian residential mortgage and other loans, the portfolio is well-diversified geographically within Canada. Credit risk exposures are monitored for concentration risk and such findings are reported to the Board of Directors, the Risk Committee and MFC's credit risk management department on a quarterly basis.

Lending portfolio

In the normal course of business, various indirect commitments are outstanding that are not reflected on the Consolidated Statements of Financial Position, including commitments to extend credit in the form of loans or other financing for specific amounts and maturities. These financial commitments are subject to normal credit standards, financial controls and monitoring procedures.

Collateral management

Collateral is an integral part of the Bank's credit risk mitigation in its lending portfolio. The purpose of collateral for credit risk mitigation is to minimize losses that would otherwise be incurred, and the Bank generally requires borrowers to pledge collateral when advancing credit. Residential real estate and liquid investments are examples of acceptable collateral.

Credit Counterparty Risk

CCRA: Qualitative disclosure related to CCR

Derivative strategies are only approved at Manulife Bank for hedging purposes and are governed by the Bank's Investment Standard that is approved by ALCO. Manulife Bank has an active hedging program to limit Canada Mortgage Bond (CMB) funding cost risk by entering into the sale of bond forwards with approved counterparties. Over-the-Counter (OTC) transactions expose Manulife Bank to Counterparty Credit risk and the bank actively takes steps to mitigate and minimize these exposures, including:

- Manulife Bank only enters into transactions with approved, highly rated counterparties;
- All derivative contracts are governed by an ISDA agreement and Credit Support Annex (CSA) that mitigate Counterparty Credit risk through netting and bilateral collateral posting as per the initial and variation margin requirements; and
- Forward contracts are short dated, with a typical maximum term of only 3 months, limiting wrong way risk (WWR).

A ratings downgrade would have no material impact on the collateral that is posted by Manulife Bank to a counterparty as the haircut applied to collateral posted is based on the rating of the underlying collateral.

CCR1: Analysis of CCR Exposures by Approach

(\$ thousands)		Replacement cost	Potential future exposure	Effective EPE	Alpha used for computing regulatory EAD	EAD post-CRM	RWA
Q2 2023							
1	SA-CCR (for derivatives)	\$ -	\$ 200		1.4	\$ 280	\$ 280
6	Total						\$ 280
Q1 2023¹							
1	SA-CCR (for derivatives)	\$ -	\$ -		1.4	\$ -	\$ -
6	Total						\$ -
Q4 2022¹							
1	SA-CCR (for derivatives)	\$ -	\$ -		1.4	\$ -	\$ -
6	Total						\$ -
Q3 2022¹							
1	SA-CCR (for derivatives)	\$ -	\$ -		1.4	\$ -	\$ -
6	Total						\$ -
Q2 2022							
1	SA-CCR (for derivatives)	\$ -	\$ 875		1.4	\$ 1,225	\$ 1,225
6	Total						\$ 1,225

¹ As at March 31, 2023, December 31, 2022, and September 30, 2022, Manulife Bank held no derivative positions.

CCR3: Standardised Approach of CCR Exposures by Regulatory Portfolio and Risk Weights

Regulatory portfolio (\$ thousands)	Risk Weight	
	100%	Total credit exposure
Q2 2023		
Banks	\$ 280	\$ 280
Total	\$ 280	\$ 280
Q1 2023 ¹		
Banks	\$ -	\$ -
Total	\$ -	\$ -
Q4 2022 ¹		
Banks	\$ -	\$ -
Total	\$ -	\$ -
Q3 2022 ¹		
Banks	\$ -	\$ -
Total	\$ -	\$ -
Q2 2022		
Banks	\$ 1,225	\$ 1,225
Total	\$ 1,225	\$ 1,225

¹ As at March 31, 2023, December 31, 2022, and September 30, 2022, Manulife Bank held no derivative positions.

CCR5: Composition of Collateral for CCR Exposure

(\$ thousands)	Collateral used in derivative transactions				Collateral used in SFTs	
	Fair value of collateral received		Fair value of posted collateral		Fair value of collateral received	Fair value of posted collateral
	Segregated	Unsegregated	Segregated	Unsegregated		
Q2 2023						
Domestic sovereign debt	\$ -	\$ -	\$ 608	\$ -	\$ -	\$ -
Corporate bonds	1,633	-	-	-	-	-
Total	\$ 1,633	\$ -	\$ 608	\$ -	\$ -	\$ -
Q1 2023 ¹						
Domestic sovereign debt	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Corporate bonds	-	-	-	-	-	-
Total	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Q4 2022 ¹						
Domestic sovereign debt	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Corporate bonds	-	-	-	-	-	-
Total	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Q3 2022 ¹						
Domestic sovereign debt	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Corporate bonds	-	-	-	-	-	-
Total	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Q2 2022						
Domestic sovereign debt	\$ 1,892	\$ -	\$ 753	\$ -	\$ -	\$ -
Corporate bonds	-	-	-	-	-	-
Total	\$ 1,892	\$ -	\$ 753	\$ -	\$ -	\$ -

¹ As at March 31, 2023, December 31, 2022, and September 30, 2022, Manulife Bank held no derivative positions.

Market Risk

Market risk is the risk of loss resulting from market price volatility, interest rate changes and adverse foreign currency rate movements. Market price volatility relates to changes in the prices of publicly traded equities and to impacts of interest rate movements on the lending portfolio.

Governance structure

The Board of Directors annually review and approve the capital policy and the market and liquidity policy. The Board of Directors have ultimately delegated the responsibility for the strategic management of market, interest rate and liquidity risks to the Asset Liability Committee (“ALCO”). The ALCO risk management strategy addresses the interest rate risk arising between asset returns and supporting liabilities and is designed to keep potential losses stemming from these risks within acceptable limits. Actual investment positions and risk exposures are monitored to ensure guidelines and limits are adhered to. Positions are reported to ALCO monthly and to MFC’s Global ALCO quarterly. The Bank invests in common equities based on limits set within the Investment Standard.

Securities

Debt securities are classified and measured as fair value through other comprehensive income (“FVOCI”) financial instruments as the contractual terms of the financial asset give rise, on specified dates, to cash flows that are solely payments of principal and interest (“SPPI”) and the financial assets are held within a business model whose objective is achieved by both collecting contractual cash flows and selling financial assets. Debt securities are recognized initially at fair value plus directly attributable transaction costs and are subsequently presented in the Consolidated Statements of Financial Position at fair value. Unrealized gains and losses on FVOCI debt securities are recorded in other comprehensive income (“OCI”) except for unrealized gains or losses attributable to foreign currency translation, which are included in income. When FVOCI debt securities are sold, the unrealized gains or losses are transferred from accumulated other comprehensive income (“AOCI”) to the Consolidated Statements of Income. As at June 30, 2023, the total pre-tax unrealized losses recorded in AOCI related to FVOCI debt securities was \$3 million (December 31, 2022 – \$5 million). The cumulative realized losses arising from the sale of FVOCI debt securities for the three months ended June 30, 2023, was nil and for the six months ended June 30, 2023, was nil (three months ended June 30, 2022 – nil and six months ended June 30, 2022 – \$1 million).

Debt securities measured as FVOCI are subject to the impairment of financial assets requirements of IFRS 9. The expected credit losses (“ECL”) allowance is based on credit losses expected to arise over the life of the asset. The Bank recognizes a loss allowance at an amount equal to 12-month ECL for those financial instruments that have not yet seen a significant increase in credit risk since origination, and lifetime ECL once there has been a significant increase in credit risk. The Bank assesses, at each reporting date, whether credit risk has increased significantly by comparing the risk of default as at the reporting date, with the risk of default as at the date of initial recognition. The ECLs for debt instruments measured at FVOCI do not reduce the carrying amount of these financial assets in the Consolidated Statements of Financial Position, which remains at fair value. Instead, an amount equal to the allowance is recognized in OCI as an accumulated impairment amount, with a corresponding charge to profit or loss. The accumulated loss recognized in OCI is recycled to the profit and loss upon derecognition of the assets. ECL recognized as at June 30, 2023 was nil (December 31, 2021 – nil).

For debt issues, External Credit Assessment Institutions (“ECAI”) ratings are used for managing market risk and, if not available, MLI’s internal risk ratings are used. When ratings from more than one approved agency are available for a single issue, the priority sequence of rating agencies is Standard & Poor’s (“S&P”), Moody’s Investor Service, DBRS, Fitch Rating Services, and the parent company’s internal risk rating.

Equity securities are classified and measured at fair value through profit or loss (“FVTPL”) as these instruments contain contractual cash flows that do not meet the SPPI test (dividend is discretionary and capital gain is not contractual). As at June 30, 2023, the Bank held \$153 million of publicly traded FVTPL equity securities (December 31, 2022 – \$141 million). Equity securities are measured initially at their fair value plus directly attributable transaction costs and are subsequently presented in the Consolidated Statements of Financial Position at their fair values using published bid prices. Changes in fair value and realized gains and losses are recognized in non-interest income in the Consolidated Statement of Income under net gains (losses) on securities. Dividend income is recorded in interest income. Net realized losses arising from the sale of FVTPL equity securities for the three months ended June 30, 2023, were \$1 million (June 30, 2022 – net realized gains of \$8 million) and for the six months ended June 30, 2023, were \$3 million (six months ended June 30, 2022 – net realized gains of \$18 million). Net unrealized gains recognized in profit or loss for the three months ended June 30, 2023, were \$3 million (net unrealized losses of \$24 million for the three months ended June 30, 2022) and net unrealized gains for the six months ended June 30, 2023, were \$12 million (net unrealized losses of \$30 million for the six months ended June 30, 2022).

Operational Risk

ORA: General qualitative information on a bank's operational risk framework

Operational risk is the risk of loss resulting from inadequate or failed internal processes, systems failures, human performance failures or from external events.

Key risk factors

Operational risk is inherent in all of MBC's business activities and encompasses a broad range of risks including regulatory compliance failures, legal disputes, technology failures, business interruption, information security and privacy failures, ineffective human resource management, processing errors, modeling errors, ineffective business integration, theft and fraud and damage to physical assets. Exposures can take the form of financial losses, regulatory sanctions, loss of competitive positioning and damage to reputation. Operational risk is embedded in all of the practices used to manage other risks such as credit risk, market risk and liquidity risk. If not managed effectively, operational risk can impact the ability to manage these key risks.

Risk management strategy

The Bank's risk control processes are established and communicated through approved policies, and associated management approved standards, procedures, control limits, and delegated authorities which reflect the Bank's risk appetite and risk tolerances.

MBC's Operational Risk Management Policy and Framework outline the governance structure, risk appetite, the level of risk tolerance, and set the foundation for mitigating operational risks. This base is strengthened by the establishment of appropriate internal controls and systems and by seeking to retain trained and competent people throughout the organization. Risk management programs have been established across functional business areas for specific operational risks that could materially impact the ability to do business or negatively impact the reputations of MBC, MTC and PCMT II.

To ensure effective oversight of risks in the organization, the Bank has established a risk governance structure that includes Bank Senior Management and Risk Committees that ultimately report to the Board. The Board and the Board Risk Committee are responsible for overseeing the Bank's management of its principal risks. The Board Risk Committee and the Bank's Chief Executive Officer delegate the oversight of risk-taking activities and risk management practices to the Chief Risk Officer.

The Bank Executive Risk Committee supports the Chief Risk Officer in the oversight of risk taking and risk management activities. The Bank Executive Risk Committee is responsible for providing oversight related to the management of all risk exposures against approved policies and limits and risk management strategies, and the overall oversight of the Risk Management framework covering risk appetite, risk management responsibilities, risk identification, measurement and assessment, risk monitoring, reporting, control and mitigation activities.

Business area managers are accountable for the day-to-day management of the operational risks inherent in their operations. Business and functional areas perform risk control self-assessments to identify, document and assess inherent operational risks and the effectiveness of internal controls. The Bank's Chief Risk Officer and Risk Management team provide independent oversight of risk taking and risk mitigation activities across the enterprise. Key risk indicators are monitored and provide early warnings of emerging control issues. Business area managers proactively modify procedures where emerging control issues are identified.

The Bank monitors and reports on enterprise risk on a regular basis. The Bank Executive Risk Committee and Risk Committee of the Board receive quarterly Risk Management reports that reflect any breaches of the Bank's risk tolerance/appetite, recent significant risk events and losses, and any evolving risks and relevant external events that have the potential to impact the Bank's risk policy adherence and its risk capital.

There is an established process in place for the identification and assessment of top and evolving risks. The Bank maintains a Register of operational risks and controls, which are assessed for risk exposure and control effectiveness on a periodic basis. The process allows the Bank to track management action plans taken to mitigate risks or close control gaps. In addition, the Bank has clear procedures governing when and how risk events and issues are brought to the attention of Bank Senior Management and the Bank Executive Risk Committee.

The Bank's approach to risk control also includes risk and capital assessments to appropriately capture key risks in the Bank's measurement and management of capital adequacy. OSFI requires the Bank to hold regulatory operational risk capital. The required operational risk capital calculation is included in the Bank's Internal Capital Adequacy Assessment Process, which considers both Pillar 1 regulatory capital and Pillar 2 capital in relation to the entity's risk profile, strategy, business plans, business complexity, and range of business activities.

There are two methodologies for calculating capital requirements for operational risk capital: the Standardized Approach and the SSA. MBC and MTC currently apply the SSA. Under the SSA, institutions must hold operational risk capital equal to 15% of average annual Adjusted Gross income over the previous 12 fiscal quarters. RWA for operational risk are equal to 12.5 times operational risk capital.

IRRBB – Risk management objectives, policies and quantitative information

Interest rate risk

Interest rate risk is identified as the potential impact of adverse market movements on the Bank’s net interest income and economic value of its capital. The Bank measures this by projecting asset and liability cash flows under a range of interest rate scenarios. The Bank takes into consideration loan prepayments, loan commitments and the behaviour of non-maturity deposits in its calculation of the risk metrics. The Bank applies prescribed and internal interest rate shocks to assess interest rate risk and reports these to ALCO monthly. This ensures risk is managed within the set risk appetite. Key assumptions of the interest rate model are reviewed and approved annually by ALCO to ensure that they remain reasonable and appropriate.

Derivative contracts are employed, when appropriate, for asset-liability management purposes to better match the cash flows resulting from different re-pricing or maturity dates of assets and liabilities and manage interest rate risk. Derivatives are permitted for hedging purposes only. To mitigate the unique risks associated with the use of derivatives, the Bank has specific risk management policies and processes, authorized types of derivatives, and robust controls surrounding the usage of these derivatives.

The following table shows the sensitivity to a sudden and sustained 100 basis points parallel shock in interest rates to MBC’s net interest income (“NII”) measured over a 12-month horizon and its economic value of equity (“EVE”). The actual sensitivity outcome may vary depending on multiple factors, including changes to the current positions and management actions.

Interest Rate Risk

	Q2 2023 ⁽¹⁾		Q1 2023 ⁽¹⁾		Q4 2022 ⁽¹⁾	
	NII risk	EVE	NII risk	EVE	NII risk	EVE
100 basis points rate increase	\$ (4)	\$ (22)	\$ 3	\$ 1	\$ 5	\$ 9
100 basis points rate decrease	3	21	(3)	(3)	(6)	(12)

	Q3 2022 ⁽¹⁾		Q2 2022 ⁽¹⁾⁽²⁾	
	NII risk	EVE	NII risk	EVE
100 basis points rate increase	\$ 4	\$ 6	\$ 5	\$ 3
100 basis points rate decrease	(5)	(8)	(1)	(1)

⁽¹⁾ The interest sensitivity assumes that the Bank moves all Bank-administered rates for lending and deposits directly with market rates. The Bank has the ability to mitigate margin impact through its administered rates.

⁽²⁾ The downward shocks for both NII Risk and EVE presented for the comparative period Q2 2022 was limited to 25 basis points due to the low interest rate environment.

B6 Disclosures – Liquidity risk

Liquidity risk is the risk of not having access to sufficient funds or liquid assets to meet both expected and unexpected cash and collateral demands.

At least annually, the Board of Directors reviews and approves the Liquidity and Market Risk Management Policy and reviews the Liquidity Contingency Plan, which ensures the Bank has the infrastructure and control functions in place to meet expected and unexpected liquidity obligations. Risk limits are approved by the Board of Directors and define the maximum level of risk the Bank is willing to take regarding liquidity risks. The Liquidity Contingency Plan outlines various liquidity statuses and includes procedures, action plans, communication requirements and roles and responsibilities under each liquidity status.

Liquidity stress testing is completed monthly to monitor and identify sources of potential liquidity strain, and to ensure current exposures remain in accordance with the Bank's established liquidity risk tolerance and limits. In addition to the Bank's internal metrics, the Bank must also comply with OSFI's Liquidity Adequacy Requirements ("LAR") Guideline, which includes the Net Cumulative Cash Flow ("NCCF") and the Liquidity Coverage Ratio ("LCR"). Key assumptions of the internal stress tests are reviewed and approved annually by ALCO to ensure that they remain reasonable and appropriate.

Liquid assets include unencumbered assets that are marketable, can be pledged as security for borrowings, and can be converted to cash in a timeframe that meets liquidity requirements. The Bank's liquid assets as at June 30, 2023, were \$5.6 billion (19% of total assets) compared to \$6.2 billion as at December 31, 2022 (21% of total assets).

Both the NCCF and LCR regulatory minimums were met by the Bank during the three months ended June 30, 2023.

As a federally regulated bank and member of Payments Canada, Manulife Bank also has access to the Bank of Canada's Standing Term Liquidity Facility.

Governance structure

The Board of Directors have the ultimate oversight responsibility for liquidity risk management of the Bank. The liquidity management responsibilities are ultimately delegated to the Bank's CFO and Treasurer and oversight of the Bank's liquidity risk management framework delegated to the Chief Risk Officer. ALCO is responsible for the management and monitoring of liquidity risk.

Funding

The Bank maintains a diversified funding base that consists of robust retail funding channels complemented by unsecured and secured wholesale funding channels. The Bank's ability to securitize high quality residential mortgage loans has provided a key source of diversified funding and contingent liquidity.

Securitization

The Bank acts in the capacity of sponsor, originator, servicer and the provider of credit enhancements for its securitization programs. Mortgage loans purchased by the Bank from third-parties and securitized in the NHA MBS program continue to be serviced by the third-party mortgage servicer. In addition, the Bank also invests in short and long-term investment grade asset-backed securities. The sections below provide an overview of the Bank's securitization programs.

Manulife One securitization program

MBC has established the Platinum Canadian Mortgage Trust II (“PCMT II”) program to securitize high quality uninsured Manulife One accounts. The PCMT II securitization program diversifies MBC’s funding capabilities by providing an additional source of funding. The availability of multiple funding channels enhances MBC’s ability to obtain low cost funds and provides increased liquidity. Eligibility criteria are defined in the program documentation. These accounts are pooled by MBC and undivided co-ownership interests in the receivables of the pool are then sold to the program in exchange for cash. The program funds the purchase of the co-ownership interests by issuing term notes. The pool of Manulife One accounts supporting the notes is legally isolated from MBC’s assets and the cash flows generated from the pool are used to provide interest and principal payments on the term notes. MBC’s continuing involvement includes servicing the pool of Manulife One accounts and performing an administrative role for the programs. MBC also provides loans to the program to pay for upfront transaction costs. These loans are subordinate to all notes issued by PCMT II.

MBC provides credit enhancements to PCMT II in the form of an asset pool balance in excess of notes issued, credit enhancement of the ownership interest, and excess spread consisting of excess cash receipts that are only attributable to MBC after the periodic obligations of PCMT II have been met. As at June 30, 2023, cash reserve accounts have been funded for PCMT II in the amount of \$37 million (December 31, 2022 – \$44 million). The cash reserve account for PCMT II is funded according to criteria defined in the series agreements.

During the six-month period ended June 30, 2023, no secured term notes were issued under PCMT II (six-month period ended June 30, 2022 – \$250 million). As at June 30, 2023, term notes worth \$2,750 million (December 31, 2022 – \$2,750 million) are outstanding.

NHA MBS securitization program

MBC securitizes insured amortizing Canadian residential mortgage loans through the NHA MBS program and either holds the securities on the Consolidated Statements of Financial Position or sells them to third party investors. MBC expects to continue to issue NHA MBS in volumes consistent with the growth of insured mortgage assets, subject to CMHC allocations of guarantees for new market NHA MBS.

CMB securitization program

The CMB program represents the lowest cost funding alternative for the Bank’s insured amortizing mortgage products. CMB issuances are backed by NHA MBS pools and the payment structure consists of semi-annual coupon payments and a bullet payment at maturity. At issuance of a CMB, a secured borrowing liability is recorded and the related residential mortgages backing the CMB remain on the Bank’s Consolidated Statements of Financial Position.

Securitization accounting

The Bank’s internal Manulife One securitization program does not meet derecognition requirements. Securitized Manulife One accounts remain on MBC’s Consolidated Statements of Financial Position as the Bank retains the pre-payment and interest rate risk associated with these accounts, which represents substantially all of the risks and rewards associated with the transferred assets. These transactions are accounted for as secured financing transactions and MBC continues to recognize the accounts as assets and records a secured borrowing liability (i.e. notes payable, which is accounted for at amortized cost). Interest income on the assets and interest expense on the notes payable are recorded using the effective interest rate method. Transactions under the Bank’s internal securitization programs are consolidated with MBC.

Residential mortgage loans securitized through the NHA MBS program also remain on MBC's Consolidated Statements of Financial Position as the Bank retains the pre-payment and interest rate risks. MBC also retains the interest spread between the securities and the underlying mortgage assets. If MBC creates an NHA MBS security without selling it, a liability is not recognized. All securitization exposures are included in the banking book.

The Bank also purchases CMHC insured multi-unit residential mortgages from third party originators with negligible pre-payment and credit risk. These mortgages are pooled within the NHA MBS program and subsequently sold into the CMB program. The transaction structure meets specific criteria and qualifies for balance sheet derecognition with an upfront gain recorded on the sale of mortgages. The Bank retains a residual interest, which is recorded as securitization retained interest on the Bank's Consolidated Statements of Financial Position.

Capital treatment for securitization exposures

As discussed within the Capital Management section of this document, MBC utilizes the Standardized Approach to assign risk weightings to assets, including mortgages in the NHA MBS and PCMT II program that do not qualify for derecognition as detailed above, as well as securitization exposures resulting from short-term and long-term investments. The Bank assigns credit assessments from OSFI authorized ECAI.

Summary of Securitized Assets ⁽¹⁾					
Securitization program	Q2 2023	Q1 2023	Q4 2022	Q3 2022	Q2 2022
Manulife One securitization					
Securitized mortgages - PCMT II ⁽²⁾	\$ 2,750	\$ 2,750	\$ 2,750	\$ 2,750	\$ 2,750
Restricted cash ⁽³⁾	37	37	44	13	13
Total Manulife One securitization	\$ 2,787	\$ 2,787	\$ 2,794	\$ 2,763	\$ 2,763
NHA MBS securitization					
NHA MBS unsold ⁽⁴⁾	\$ 1,643	\$ 1,631	\$ 1,859	\$ 1,580	\$ 1,716
Restricted cash ⁽³⁾	63	63	80	80	80
Total NHA MBS securitization	\$ 1,706	\$ 1,694	\$ 1,939	\$ 1,660	\$ 1,796
Sold to CMB	2,710	2,543	2,318	2,649	2,383
Total	\$ 7,203	\$ 7,025	\$ 7,050	\$ 7,072	\$ 6,942

⁽¹⁾ These are securitized mortgages.

⁽²⁾ Under the terms of the series purchase agreements, additional collateral must also be provided to the noteholder as added credit protection.

⁽³⁾ The securitization programs require issuers to maintain additional cash reserves within the principal and interest custodial account to cover deposits of unscheduled principal payments.

⁽⁴⁾ When a security is created but remains unsold, no liability is recognized.

During the three months ended June 30, 2023, \$60 million multi-unit residential mortgages were sold into the CMB program and derecognized from the Consolidated Financial Statements (three months ended June 30, 2022 – \$40 million), and \$0.7 million gain on sale was recognized (three months ended June 30, 2022 – \$0.4 million). For the six months ended June 30, 2023, \$221 million (six months ended June 30, 2022 – \$40 million) of insured multi-unit residential mortgages were sold in the CMB program and derecognized from the Consolidated Financial Statements and a \$2.4 million gain on sale was recognized (six months ended June 30, 2022 – \$0.4 million). As at June 30, 2023, \$1,609 million (December 31, 2022 – \$1,411 million) of insured multi-unit residential mortgages were derecognized from the Consolidated Financial Statements, and securitization retained interests totaling \$71 million (December 31, 2022 – \$65 million) were recorded as Other Assets.

B20 Disclosures

Residential mortgage loans and Manulife One

MBC has a high-quality mortgage loans portfolio. As at June 30, 2023, MBC had \$4.3 billion residential mortgage loans, of which \$3.8 billion (88%) were insured² and \$0.5 billion (12%) were uninsured. In addition, the Bank had \$17.7 billion of Manulife One loans of which \$3.5 billion (20%) were insured and \$14.2 billion (80%) were uninsured. Overall, as at March 31, 2023, MBC had \$22.0 billion in residential mortgage and Manulife One mortgage loans of which \$7.3 billion (33%) were insured. All residential mortgage loans and Manulife One mortgage loans were originated in Canada.

The table outlining the residential mortgage loans and Manulife One portfolios by geographic region³ and type is included in the quantitative disclosures below.

² Insured mortgage loans and Manulife One accounts refer to mortgage loans and accounts whereby the exposure to default is mitigated by insurance through the CMHC or other private mortgage default insurers.

³ Region is based upon address of property mortgaged.

B20 - Mortgages by Province

	Q2 2023				Q1 2023				Q4 2022			
	Insured ⁽²⁾	Uninsured ⁽²⁾	Total	Total %	Insured ⁽²⁾	Uninsured ⁽²⁾	Total	Total %	Insured ⁽²⁾	Uninsured ⁽²⁾	Total	Total %
Residential mortgages ⁽¹⁾												
Alberta	\$ 836	\$ 64	\$ 900	21%	\$ 794	\$ 52	\$ 846	21%	\$ 778	\$ 48	\$ 826	21%
Atlantic provinces	246	35	281	7%	227	33	260	7%	224	34	258	7%
British Columbia	262	51	313	7%	241	41	282	7%	237	41	277	7%
Manitoba	98	10	108	2%	91	7	98	2%	89	6	95	3%
Ontario	764	130	894	21%	706	124	830	21%	695	125	820	21%
Québec	1,328	215	1,543	36%	1,232	178	1,410	36%	1,210	170	1,379	36%
Saskatchewan	221	17	238	6%	196	15	211	6%	189	15	204	5%
Territories	-	1	1	0%	-	1	1	0%	-	1	1	0%
Total	\$ 3,755	\$ 523	\$ 4,278	100%	\$ 3,487	\$ 451	\$ 3,938	100%	\$ 3,421	\$ 439	\$ 3,860	100%
Manulife One												
Alberta	\$ 686	\$ 1,318	\$ 2,004	11%	\$ 708	\$ 1,324	\$ 2,032	11%	\$ 707	\$ 1,347	\$ 2,054	11%
Atlantic provinces	196	627	823	5%	200	608	808	5%	202	610	812	5%
British Columbia	510	2,263	2,773	16%	525	2,262	2,787	16%	532	2,273	2,805	16%
Manitoba	89	273	362	2%	92	271	363	2%	92	275	368	2%
Ontario	1,071	7,152	8,223	46%	1,106	7,096	8,202	46%	1,111	7,062	8,173	46%
Québec	782	2,258	3,040	17%	807	2,232	3,039	17%	779	2,247	3,026	17%
Saskatchewan	173	322	495	3%	176	325	501	3%	179	337	516	3%
Territories	-	3	3	0%	-	3	3	0%	-	3	3	0%
Total	\$ 3,507	\$ 14,216	\$ 17,723	100%	\$ 3,614	\$ 14,121	\$ 17,735	100%	\$ 3,602	\$ 14,155	\$ 17,757	100%
Q3 2022												
	Insured ⁽²⁾	Uninsured ⁽²⁾	Total	Total %	Insured ⁽²⁾	Uninsured ⁽²⁾	Total	Total %				
Residential mortgages ⁽¹⁾												
Alberta	\$ 779	\$ 50	\$ 829	22%	\$ 779	\$ 55	\$ 834	21%				
Atlantic provinces	222	34	256	7%	218	36	254	7%				
British Columbia	242	42	284	7%	242	46	288	7%				
Manitoba	88	6	94	2%	90	5	95	2%				
Ontario	699	124	823	21%	704	125	829	21%				
Québec	1,220	168	1,388	36%	1,254	185	1,439	37%				
Saskatchewan	186	16	202	5%	184	18	202	5%				
Territories	-	1	1	0%	-	1	1	0%				
Total	\$ 3,436	\$ 442	\$ 3,878	100%	\$ 3,471	\$ 472	\$ 3,943	100%				
Manulife One												
Alberta	\$ 731	\$ 1,323	\$ 2,054	12%	\$ 759	\$ 1,327	\$ 2,086	12%				
Atlantic provinces	217	585	802	4%	227	558	785	5%				
British Columbia	558	2,235	2,793	16%	579	2,211	2,790	16%				
Manitoba	97	270	367	2%	100	263	362	2%				
Ontario	1,169	6,880	8,048	46%	1,215	6,668	7,883	45%				
Québec	814	2,168	2,982	17%	840	2,118	2,958	17%				
Saskatchewan	186	337	523	3%	193	337	530	3%				
Territories	-	2	2	0%	-	1	1	0%				
Total	\$ 3,772	\$ 13,800	\$ 17,572	100%	\$ 3,912	\$ 13,483	\$ 17,395	100%				

⁽¹⁾ Residential mortgages exclude Manulife One accounts.

⁽²⁾ The amounts presented for residential mortgages and Manulife One are gross of allowance for expected credit losses.

Average loan-to-value (LTV) ratio

The LTV ratio factors in the amount of collateral value that supports the loan in comparison to the loan value. The LTV ratio on MBC's total uninsured residential mortgage portfolio, including HELOCs was 55% as at June 30, 2023 (December 31, 2022 – 51%). This calculation is weighted by mortgage balances and adjusted for property values based on the Teranet – National Bank National Composite House Price Index.

The Bank regularly monitors the credit quality of its portfolio and has implemented a proactive management program, where the Bank takes corrective actions prior to loans going into arrears. The Bank also performs stress tests in order to assess the expected losses on the portfolio in a scenario of a severe shock to the real estate market. The tests indicate that MBC is well positioned to absorb credit losses resulting from conditions assumed in the stress tests.

The following provides a summary of the weighted average LTV ratio by geographic region⁴ and type for newly originated and acquired uninsured mortgage loans and HELOCs (including refinances with increase in funds or limits) during the current period.

⁴ Region is based upon address of property mortgaged.

B20 - Average LTV Ratios for Uninsured Residential and Manulife One Mortgages Originated During the Quarter

Average LTV ratio %	Q2 2023				Q1 2023				Q4 2022			
	Residential mortgages ⁽¹⁾	Manulife One ⁽²⁾			Residential mortgages ⁽¹⁾	Manulife One ⁽²⁾			Residential mortgages ⁽¹⁾	Manulife One ⁽²⁾		
		Revolving ⁽³⁾	Fixed ⁽³⁾	Total		Revolving ⁽³⁾	Fixed ⁽³⁾	Total		Revolving ⁽³⁾	Fixed ⁽³⁾	Total
Alberta	66%	57%	11%	68%	67%	58%	13%	71%	75%	57%	12%	69%
Atlantic provinces	69%	55%	14%	69%	71%	54%	12%	66%	71%	56%	12%	68%
British Columbia	57%	51%	7%	58%	63%	50%	6%	56%	57%	53%	7%	60%
Manitoba	64%	61%	11%	72%	75%	61%	11%	72%	0%	61%	11%	72%
Ontario	58%	52%	7%	59%	60%	52%	7%	59%	58%	51%	8%	59%
Quebec	56%	57%	11%	68%	59%	58%	10%	68%	61%	58%	10%	68%
Saskatchewan	62%	57%	13%	70%	68%	63%	9%	72%	63%	61%	13%	74%
Average	59%	54%	9%	63%	62%	54%	8%	62%	63%	54%	9%	63%

Average LTV ratio %	Q3 2022				Q2 2022			
	Residential mortgages ⁽¹⁾	Manulife One ⁽²⁾			Residential mortgages ⁽¹⁾	Manulife One ⁽²⁾		
		Revolving ⁽³⁾	Fixed ⁽³⁾	Total		Revolving ⁽³⁾	Fixed ⁽³⁾	Total
Alberta	70%	56%	15%	71%	70%	54%	15%	69%
Atlantic provinces	66%	56%	12%	68%	70%	55%	11%	66%
British Columbia	72%	51%	6%	57%	68%	51%	6%	57%
Manitoba	78%	59%	13%	72%	63%	60%	10%	70%
Ontario	65%	52%	7%	59%	61%	51%	7%	58%
Quebec	67%	58%	10%	68%	54%	58%	12%	70%
Saskatchewan	69%	58%	14%	72%	0%	58%	11%	69%
Average	68%	53%	8%	61%	64%	53%	8%	61%

⁽¹⁾ LTV is calculated using the outstanding amount and weighted by the outstanding amount of each loan.

⁽²⁾ Manulife One comprising of both revolving and fixed components is secured by the same collateral (residential property).

⁽³⁾ LTV is calculated based on the authorized limit for revolving component and outstanding amount for the fixed component of Manulife One accounts and weighted by the total borrowing limit for each account. For the revolving component of Manulife One accounts, the average LTV ratio based on the outstanding amount and weighted by total outstanding amount for Manulife One accounts is 42% compared to 54% based on the authorized limits for the three month period ended June 30, 2023, and 43% compared to 54% based on the authorized limits for the three month period ended December 31, 2022.

Residential mortgage loans and Manulife One (fixed⁵) portfolios by amortization period

A summary of MBC's residential mortgage loans and Manulife One (fixed) by remaining amortization⁶ period based on the contractual terms of the mortgage agreement is presented in the quantitative section below.

B20 - Mortgages by Amortization Period

	Residential mortgages				
	Q2 2023	Q1 2023	Q4 2022	Q3 2022	Q2 2022
Less than 20 years	26%	26%	23%	22%	23%
20-25 years	70%	71%	75%	76%	73%
25-30 years	4%	3%	2%	2%	4%
30 years and greater	0%	0%	0%	0%	0%
Total	100%	100%	100%	100%	100%

Q2 2023	Manulife One (fixed)				
	Q1 2023	Q4 2022	Q3 2022	Q2 2022	
28%	27%	27%	26%	27%	
46%	48%	48%	50%	49%	
25%	24%	24%	23%	23%	
1%	1%	1%	1%	1%	
100%	100%	100%	100%	100%	

⁵ Fixed represents the amortizing portion of the Manulife One account.

⁶ Remaining amortization is the difference between the contractual amortization and the time elapsed since origination.

Glossary

Basel III framework

- Pillar 1 – CAR: Outlines methodologies to calculate capital and set minimum capital requirements;
- Pillar 2 – Supervisory Review: Requires banks to maintain a formal internal capital adequacy assessment process, subject to supervisory review; and
- Pillar 3 – Market Discipline: Complements other pillars by providing enhanced public disclosures to enable market participants to understand the risk profile of the bank and assess the application of Basel III capital requirements.

Risk weighted assets (“RWA”)

Under Basel III, OSFI requires banks to meet minimum risk-based capital requirements for exposures to credit risk, operational risk and market risk, where there are significant trading activities. Risk-weighted assets are calculated for each of these types of risks and added together to determine total risk weighted assets.

Common Equity Tier 1 (“CET1”) capital

Comprised mainly of common shares, retained earnings and AOCI, net of applicable regulatory adjustments.

Additional Tier 1 capital

Consists of Tier 1 instruments issued that do not meet the criteria of CET1, contributed surplus from the issuance of instruments not included in CET1, instruments issued by consolidated subsidiaries not included in CET1, net of applicable regulatory adjustments.

Tier 2 capital

Consists of eligible loan loss allowances and subordinated debt, net of applicable regulatory adjustments.

Capital ratios

Regulatory capital ratios are calculated by dividing CET1, Tier 1 and Total Capital by risk-weighted assets. In addition to the CET1, Tier 1 and Total Capital Ratios, Canadian Deposit-taking Institutions are required to ensure that a Leverage Ratio meets a minimum level prescribed by OSFI. All items that are deducted from capital are excluded from total assets.

Leverage ratio

The Leverage Ratio is calculated by dividing the Bank’s Tier 1 Capital by the Bank’s Total Exposure. The Bank’s Total Exposure is the sum of the following: (a) on-balance sheet exposures; (b) derivative exposures; (c) securities financing transaction exposures; and (d) off-balance sheet exposures.

Efficiency ratio

The ratio represents total money expended to earn a dollar of revenue i.e. a ratio of expense to revenue. A low ratio indicates that the Bank has been efficiently utilizing its resources.