Manulife Bank

Financial Performance and Regulatory Disclosures
Q2 2020

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.

Overview

About Manulife Bank of Canada

MBC is a Schedule I federally chartered bank and 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. MBC 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. Platinum Canadian Mortgage Trust ("PCMT") and Platinum Canadian Mortgage Trust II ("PCMT II") were established to provide financing for MBC mortgage products through securitization.

Vision

MBC's vision is to improve the wealth of Canadians by providing efficient and flexible banking solutions and integrating banking into every client's financial plan.

Mission and Values

MFC's mission is to make decisions easier and customers' lives better. MFC's values are the guideposts that help achieve the mission, define who we are and how we work together. These values are:

Obsess about customers
Do the right thing
Think big
Get it done together
Own it
Share your humanity

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 ("BCBS") Basel II and III frameworks and the Office of the Superintendent of Financial Institutions ("OSFI") B-6 and B-20 guidelines. These disclosures are intended to provide market participants with information regarding the risk profile of MBC and the application of the Basel regulatory requirements, as well as information related to MBC'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 entities PCMT and PCMT II.

Contents

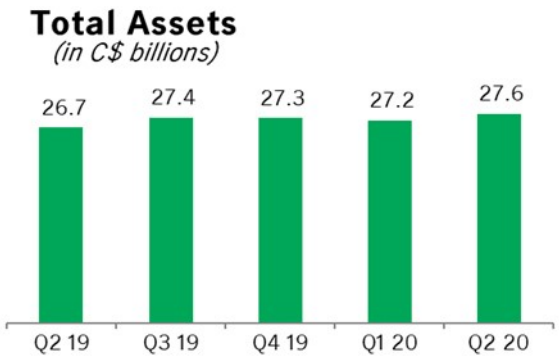
Financial Performance[1]

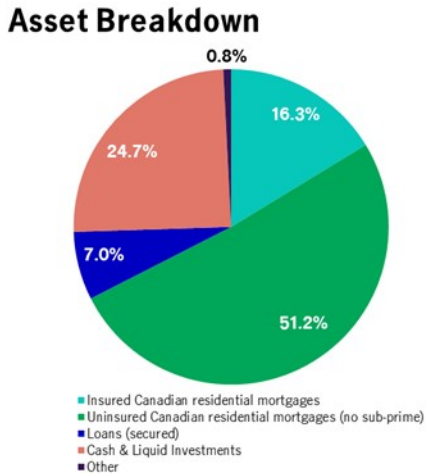
MBC ended the quarter with assets of $27.6 billion, an increase of $0.4 billion, or 1.5%, as compared to March 31, 2020, and increased by $0.9 billion, or 3%, as compared to June 30, 2019. The increase over prior quarter was primarily driven by an increase in net lending assets, driven by sales growth, and higher cash assets, driven by an expansion of securitization programs and deposit growth. The increase over prior year reflects an increase in net lending assets, driven by sales growth and an increase in other assets.

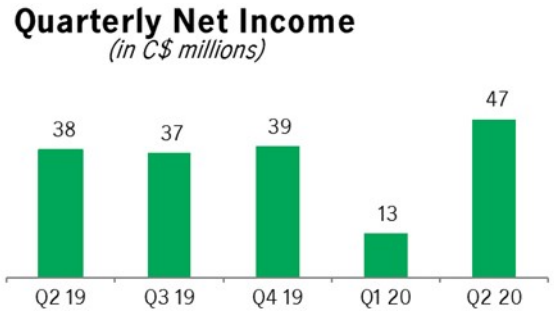
The COVID-19 pandemic and actions taken to limit the spread have had a significant impact on the Canadian economy, resulting in lower interest rates, higher unemployment, volatile equity markets, and higher expected credit risk for financial institutions. In response to the pandemic, the Government of Canada and OSFI acted by introducing a range of regulatory changes, relief measures and liquidity programs to support both Canadians directly and through the Canadian financial sector. Manulife Bank responded quickly to support our customers and offer client relief programs for those experiencing financial difficulty. We also took action to protect our employees, enabling nearly all employees to work from home while they continue to provide the highest quality of service to our customers.

The impact of COVID-19 on the Bank's operations will depend on the breadth and depth of these events and the effectiveness of relief programs at mitigating the economic effects to our customers. Despite these challenging times, our focus as a digital bank positions us well, and we remain well positioned to continue to serve Canadians with efficient and flexible banking solutions. Our asset quality remains high, and our capital and liquidity positions remain strong.

Net income of $47 million for the three months ended June 30, 2020, increased by $34 million, or 262%, as compared to the three months ended March 31, 2020, driven by higher net gains on securities, lower provision for credit losses, and lower non-interest expenses. This was partially offset by a decline in net interest income, reflecting the impact of the Bank of Canada rate reductions. Net income increased $9 million, or 24%, as compared to the three months ended June 30, 2019, primarily driven by higher net gains/(losses) on securities, and lower non interest expenses, partially offset by lower net interest income, primarily driven by the impact of lower interest rates.







[1] 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, 2020.

The Banks' efficiency ratio at June 30, 2020 of 48.1% was lower, as compared with 69.1% reported at March 31, 2020, and lower as compared with 55.5% reported at June 30, 2019. The decrease over prior quarter and prior year is primarily driven by higher net gains/(losses) on securities and lower non-interest expenses, partially offset by lower net interest income.

MBC has no exposure to European sovereign debt or to the sub-prime mortgage market.

Capital

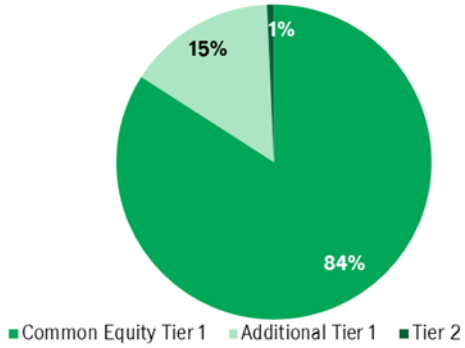
Basel III Common Equity Tier 1 ("CET1") ratio, Tier 1 capital ratio and Total capital ratio were 14.9 per cent, 17.5 per cent and 17.6 per cent, respectively, as at June 30, 2020, well in excess of minimum regulatory capital requirements.

Risk weighted assets as at June 30, 2020 were approximately $8.6 billion, consistent with March 31, 2020. Risk weighted assets as at June 30, 2020, increased ~$0.4 billion, or ~5%, as compared to June 30, 2019, primarily driven by growth in other loans, corporate and residential mortgage exposures.

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

Efficiency Ratio

Regulatory Capital Breakdown



Total risk-weighted assets	**$ 8.6 Billion**
Total capital	**$ 1.5 Billion**
CET1 Capital Ratio	**14.9%**
Tier 1 Capital Ratio	**17.5%**
Total Capital Ratio	**17.6%**

Credit ratings

As at March 24, 2020, Standard & Poor's reaffirmed Manulife Bank's long-term deposit rating of A+ and its short-term deposit rating of A-1[2]. As at September 24, 2020, DBRS upgraded the long-term issuer ratings of the Bank to AA (low) from A (high) and reaffirmed the Bank's short-term deposit rating of R-1 (middle)[3].

Standard & Poor's	
Short-term rating	A-1
Long-term rating	A+
DBRS	
Short-term rating	R-1 (middle)
Long-term rating	AA (low)

Key strategic priorities

MBC continues to focus on strengthening and growing its core business and customer service, while expanding into complementary products and services to meet a broader range of customer needs. The Bank's priorities include:

- Deepen Manulife customer relationships by providing unique bank offers and integrated solutions that align to the best interests of our customers;
- Expand our distribution through direct, advisor and mortgage broker channels;
- Increase our market share among younger, digitally-inclined customers;
- Continue to put customers first by reorienting our projects delivery organization to focus on a customer journey model;
- Deliver simple and reliable digital experiences for customers to improve customer satisfaction and make us easier to do business with; and
- Build high performing, motivated teams to deliver on growth strategies.

[2] Long-term debt rated A has "strong capacity to meet financial commitments, but somewhat susceptible to adverse economic conditions and changes in circumstances." A is the third highest rating out of 10. A short-term issuer credit rating of A-1 denotes "a strong capacity to meet its financial commitments." A-1 is Standard & Poor's highest short term rating category.

[3] Long-term debt rated AA is "of superior credit quality and protection of interest and principal is considered high." AA is the second-highest rating out of ten. Each rating category (except AAA and D) is denoted by the subcategories "high" and "low". The absence of either a "high" or "low" designation indicates the rating is in the "middle" of the category. Short-term debt rated R-1 (middle) is of "superior credit quality and typically exemplifies above-average strength in key areas of consideration for the timely repayment of short-term liabilities." The rating R-1 (middle) is the second-highest rating out of 10.

Financial Performance

As at balances	Q2 2020	Q1 2020	Q4 2019	Q3 2019	Q2 2019
ASSETS					
Cash, cash equivalents and restricted cash	**$ 4,369**	$ 4,185	$ 4,586	$ 4,885	$ 4,317
Debt securities	**257**	259	232	222	230
Equity securities	**114**	108	133	127	128
	$ 4,740	$ 4,552	$ 4,951	$ 5,234	$ 4,675
Mortgage loans	**$ 20,706**	$ 20,640	$ 20,434	$ 20,275	$ 20,180
Other loans	**1,919**	1,793	1,743	1,741	1,777
	$ 22,625	$ 22,433	$ 22,177	$ 22,016	$ 21,957
Other assets	**$ 203**	$ 189	$ 182	$ 101	$ 101
Total assets	**$ 27,568**	$ 27,174	$ 27,310	$ 27,351	$ 26,733
LIABILITIES and EQUITY					
Liabilities					
Demand deposits	**$ 13,873**	$ 13,902	$ 14,015	$ 14,574	$ 13,668
Term deposits	**7,788**	7,572	7,687	7,381	7,707
	$ 21,661	$ 21,474	$ 21,702	$ 21,955	$ 21,375
Notes payable	**4,172**	4,011	3,881	3,775	3,774
Other liabilities	**136**	135	163	163	147
Total liabilities	**$ 25,969**	$ 25,620	$ 25,746	$ 25,893	$ 25,296
Equity					
Issued share capital					
Preferred shares	**$ 229**	$ 229	$ 229	$ 229	$ 229
Common shares	**267**	267	267	267	267
Contributed surplus	**308**	308	308	226	226
Retained earnings	**794**	755	759	736	715
Accumulated other comprehensive income	**1**	(5)	1	-	-
Total equity	**$ 1,599**	$ 1,554	$ 1,564	$ 1,458	$ 1,437
Total liabilities and equity	**$ 27,568**	$ 27,174	$ 27,310	$ 27,351	$ 26,733

	2020		2019			Fiscal YTD		Fiscal
	Q2	Q1	Q4	Q3	Q2	2020	2019	2019
Revenue								
Interest income	**$ 176**	$ 224	$ 235	$ 237	$ 229	$ 400	$ 454	$ 926
Interest expense	**73**	111	122	130	123	184	242	494
Net interest income	**$ 103**	$ 113	$ 113	$ 107	$ 106	$ 216	$ 212	$ 432
Fee income	**$ 9**	$ 9	$ 9	$ 10	$ 10	$ 18	$ 18	$ 37
Net gains (losses) on securities	**11**	(28)	2	-	3	(17)	18	20
Non-interest income	**$ 20**	$ (19)	$ 11	$ 10	$ 13	$ 1	$ 36	$ 57
Total revenue	**$ 123**	$ 94	$ 124	$ 117	$ 119	$ 217	$ 248	$ 489
Provision for credit losses on lending assets	**1**	11	2	-	2	12	(1)	1
Non-interest expense	**59**	65	70	66	66	124	129	265
Net income before income tax	**$ 63**	$ 18	$ 52	$ 51	$ 51	$ 81	$ 120	$ 223
Income tax expense	**16**	5	13	14	13	21	31	58
Net income	**$ 47**	$ 13	$ 39	$ 37	$ 38	$ 60	$ 89	$ 165

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.

Basel III Pillar 3 Disclosures[4]

MBC is a Schedule I bank regulated by OSFI. 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. Canadian Deposit-taking Institutions are subject to OSFI's Capital Adequacy Requirements ("CAR") guideline, which reflects the capital requirements that have been approved by the BCBS reform commonly referred to as Basel III. OSFI's capital requirements are applied at the consolidated MBC level. Refer to the Capital Management section for further details.

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 use assessments from qualifying rating agencies to determine risk weightings. 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

Banks are permitted to apply one of two approaches to calculate capital requirements for operational risk. The Basic Indicator Approach requires banks to hold operational risk capital equal to the average over the previous three years of a fixed percentage of positive annual gross income. The Standardized Approach divides the bank's business activities into eight business lines. For each business line, gross income is multiplied by an assigned factor, and the total capital charge is calculated as the three year average of the simple summation of regulatory capital charges across the business lines in each year. MBC and MTC collectively apply the Basic Indicator Approach to determine operational risk capital requirements.

The following sections outline the Bank's risk management framework and include pertinent disclosures under Basel III Pillar 3 and under OSFI Guideline B-6 Liquidity Principles and B-20 Residential Mortgage Underwriting Practices and Procedures for MBC and MTC.

[4] The financial information included in this Pillar 3 regulatory disclosures below are unaudited and in millions of Canadian dollars, unless otherwise stated.

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.

Key risk factors

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

Policies establish exposure limits by borrower, quality rating, industry, and geographic region. The Bank currently does not participate in the credit derivative market and does not have exposure to credit default swaps. The Chief Risk Officer ("CRO") and the Manulife Bank Executive 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 CRO monitors compliance with all credit policies and limits.

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

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, chequing and savings accounts, and credit card debt. The Proactive Account Monitoring ("PAM") 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.

As at June 30, 2020, the residential mortgage loans portfolio includes $16.9 billion of Manulife One accounts (December 31, 2019 — $16.8 billion), with the remaining comprising primarily of amortizing residential mortgage loans. 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.

Derivative counterparties

Derivative financial instrument contracts are entered into for asset-liability management purposes to better match the cash flows resulting from different re-pricing, currency and maturity dates of assets and liabilities. The Bank employs defensive hedging strategies to reduce risks in the banking book.

Interest rate risk is the risk that changing interest rates will adversely impact MBC's financial results. The Bank primarily uses vanilla interest rate swaps, where fixed and floating interest payments based on a specified amount of notional principal for a specified time period are exchanged with a swap counterparty. Foreign exchange risk refers to losses that could result from changes in foreign exchange rates arising from assets and liabilities that are denominated in foreign currency.

MBC limits the types of authorized derivatives and application strategies. Approval is required from MBC's Asset Liability Committee ("ALCO") and MFC's Global ALCO for derivative application strategies and they regularly monitor hedge effectiveness. Counterparties are required to post collateral to cover positive market positions (refer to the Collateral Management section within this document). The derivative counterparty exposure is measured as net potential credit exposure, which takes into consideration mark-to-market values of all transactions with each counterparty and net of any collateral held. Market standard valuation methodologies are used for over the counter ("OTC") derivatives. Key variables impacting valuations include the Banker's Acceptance ("BA"), swap rates and foreign currency. Inputs to models are consistent with what market participants would use when pricing the instruments and are deemed observable. Inputs that are not observable in the market or cannot be derived principally from, or corroborated by, observable market data include broker quotes and inputs that are outside the observable portion. These unobservable inputs may involve significant management judgment or estimation. It should be noted that even when unobservable, inputs are based on assumptions deemed appropriate given the circumstances and consistent with what market participants would use when pricing such instruments. The Bank has not used unobservable inputs in the valuation of OTC derivatives held as at June 30, 2020.

A portion of the swaps qualify as fair value hedges for accounting purposes. Accordingly, the gains or losses recognized on derivatives are offset by the corresponding gains or losses recognized on the hedged items in income. In the second quarter of 2020, a net gain of $0.03 million (net gain of $0.7 million for the second quarter of 2019) was recognized in income for swaps due to hedge ineffectiveness and a net loss of $0.1 million for the six months ended June 30, 2020 (net gain of $1.0 million for the six months ended June 30, 2019).

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 MLI's credit risk management department on a quarterly basis. Quantitative tables at the end of this section break down MBC's major credit exposure by counterparty, location and residual contractual maturities.

The average quarterly gross exposure for mortgages was $20.3 billion (second quarter of 2019 – $19.8 billion) and the 2020 average quarterly gross exposure for other loans was $2.3 billion (second quarter of 2019 – $2.1 billion). The average quarterly gross exposure for undrawn commitments was $11.3 billion (second quarter of 2019 – $10.1 billion).

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 the Bank advances credit. Residential real estate and liquid investments are examples of acceptable collateral.

Summary of Exposure Covered by Eligible Financial Collateral [1]					
	Q2 2020	Q1 2020	Q4 2019	Q3 2019	Q2 2019
Bank [2]	**$ 1**	$ 1	$ -	$ -	$ -
Other loans [3]	**1,919**	1,793	1,743	1,741	1,777
Total Exposure	**$ 1,920**	$ 1,794	$ 1,743	$ 1,741	$ 1,777

[1] Eligible financial collateral includes cash and deposits as well as qualifying debt securities, equities and mutual funds.
[2] Includes exposures to deposit taking institutions, securities firms and certain public sector entities.
[3] The maximum exposure is equal to the loan value advanced to a borrower as the value of financial collateral exceeds the amount drawn. The exposure amounts presented are net of allowance for credit losses.

Derivatives

The Bank has established policies and limits for managing credit risk exposures that may arise with counterparties when entering into derivative transactions. Gross derivative counterparty exposure is measured as the total fair value (including accrued interest) of all outstanding contracts in gain positions excluding any offsetting contracts in negative positions and the impact of collateral on hand.

The Bank limits the risk of credit losses from derivative counterparties by:

- Establishing a minimum acceptable counterparty credit rating from external rating agencies;
- Entering into master netting arrangements which permit the offsetting of contracts in a loss position in the case of a counterparty default; and
- Entering into Credit Support Annex ("CSA") agreements, whereby collateral must be provided when the exposure exceeds a certain threshold.

The collateral pledged from or to counterparties are primarily investments in the form of government and agency securities. The Bank pledges investments as collateral when the derivative mark-to-market position is negative. When the derivative mark-to-market position is positive, the counterparty is required to pledge investments as collateral. The net market value position of the collateral posted by swap counterparties as at June 30, 2020 was $1 million (December 31, 2019 – nil). As at June 30, 2020, MBC was not required to post collateral to its swap counterparties due to the favourable derivative positions for the Bank (December 31, 2019 – collateral of $6 million was posted to its swap counterparties due to unfavourable derivative positions for the Bank).

The Bank monitors the encumbrances of liquid assets as part of its Liquidity Risk Management Framework. This is accomplished by stress testing collateral requirements based on interest rate shocks. As at June 30, 2020, the Bank has no collateral posting thresholds based on credit rating downgrade scenarios.

Fair Value of Derivative Instruments and Net Derivative Exposure

	Q2 2020			Q1 2020			Q4 2019		Q3 2019		Q2 2019	
	Fair value net [1]	**Collateral held**	**Net derivative exposure**	Fair value net [1]	Collateral held	Net derivative exposure	Fair value net [1]	Net derivative exposure	Fair value net [1]	Net derivative exposure	Fair value net [1]	Net derivative exposure
Derivative instruments	**$ 1**	**$ 1**	**$ -**	$ 1	$ 1	$ -	$ (6)	$ (6)	$ (5)	$ (5)	$ (4)	$ (4)
Less: accrued interest	**-**	**-**	**-**	-	-	-	(1)	-	(1)	-	(1)	-
Total	**$ 1**	**$ 1**	**$ -**	$ 1	$ 1	$ -	$ (5)	$ (6)	$ (4)	$ (5)	$ (3)	$ (4)

[1] Net reflects contractual netting at default. Net amount equals the gross positive or gross negative fair value as there are no offsetting positions held.

Credit quality

Under IFRS 9 *Financial Instruments* ("IFRS 9"), impairment of financial assets classified as amortized cost or fair value through other comprehensive income ("FVOCI"), and certain undrawn loan commitments and financial guarantees[5] are calculated through an expected credit loss ("ECL") model. The Bank's financial instruments in scope of the impairment requirements include the Bank's lending assets and off-balance sheet commitments, debt securities and other financial assets measured at FVOCI.

ECL allowances represent credit losses that reflect an unbiased and probability-weighted estimate, determined by evaluating a range of possible outcomes and includes forward-looking information. ECLs are calculated on an individual basis or a collective basis, depending on the nature of the underlying portfolio. Changes in the required ECL allowance are recorded in the provision for credit losses in the Consolidated Statements of Income.

The ECL model measures credit losses using a three-stage approach[6]:

- Stage 1 is comprised of all performing financial instruments which have not experienced a significant increase in credit risk ("SICR") since initial recognition. The determination of SICR varies by product and considers the relative change in the risk of default since origination. 12-month ECLs are recognized for all Stage 1 financial instruments. 12-month ECLs represent the portion of lifetime ECLs that result from default events possible within 12 months of the reporting date.
- Stage 2 is comprised of all non-impaired financial instruments which have experienced a SICR since original recognition which is not considered to be in default. Full lifetime ECLs are recognized, which represent ECLs that result from all possible default events over the remaining lifetime of the financial instrument. The remaining lifetime is generally based on a financial instrument's remaining contractual life, except for certain revolving products, where remaining lifetime is based on the period over which the Bank expects to be exposed to credit losses.
- Stage 3 is comprised of financial instruments identified as credit-impaired. Full lifetime ECLs are recognized for Stage 3 financial instruments.

[5] The ECL for off-balance sheet commitments and undrawn facilities is reported in other liabilities in the Bank's Consolidated Statements of Financial Position.
[6] Financial instruments can migrate in both directions through the stages of the impairment model.

ECLs are measured under four probability-weighted macroeconomic scenarios, which measure the difference between all contractual cash flows that are due to the Bank in accordance with the contract and all the cash flows that the entity expects to receive, discounted at the original effective interest rate. This includes consideration of past events, current market conditions and reasonable supportable information about future economic conditions.

Forward-looking macroeconomic variables used in the models are the variables which are most closely related with credit losses in the relevant portfolio. The ECL calculations also include the following elements:

- The probability of default ("PD"); an estimate of the likelihood of default over a given time horizon;
- The loss given default ("LGD"); an estimate of the loss arising in the case where a default occurs at a given time. It is based on the difference between the contractual cash flows due and those the lender expects to receive, including from the realization of collateral (net of expected costs of realization and any amounts legally required to be paid to the borrowers) and other credit enhancements that are integral to the contract terms; and
- The exposure at default ("EAD"); an estimate of the exposure at a future default date, considering expected changes in the exposure after the reporting date.

Financial instruments are written off, either partially or in full, against the related allowance for credit losses when there is no realistic prospect of recovery in respect of those amounts. In subsequent periods, any recoveries of amounts previously written-off are credited to the provision for credit losses.

The estimation and application of forward-looking information and the assessment of SICR requires significant judgement. The Q2 2020 ECLs reflect management's best estimate of future credit losses based on current market conditions and reasonable and supportable information about forecasts of future economic conditions. Revisions made to these estimates during the quarter did not have a significant impact on the ECLs compared to the prior quarter. The Q2 2020 ECLs include additional expert credit judgement to account for risk factors where certain elements of risk, or risk mitigation were not able to be directly incorporated into the Bank's model calculations.

During the second quarter, the Bank continued to provide relief assistance to clients experiencing financial hardship due to COVID-19, including deferred residential mortgage payment options for up to six months and the opportunity for relief on other credit products. As at June 30, 2020, the Bank approved payment deferrals and other relief measures for approximately 5,400 clients, representing a gross carrying value of loans totaling approximately $1.4 billion. Consistent with accounting and regulatory guidance, loans under a payment deferral program are not considered to automatically trigger a SICR, all else being equal. These loans are reported in the delinquency bucket where they were previously classified at the time the payment deferral was granted. Aging for deferred loans will commence subsequent to the expiry of the deferral period.

Any subsequent changes in forward-looking information will be reflected in the measurement of ECLs in future quarters as appropriate. As the impact to actual credit losses from COVID-19 is uncertain, actual results may differ materially from current estimates.

Mortgages and Other Loans by Risk Category [1]

	Q2 2020				Q1 2020			
	Stage 1	**Stage 2**	**Stage 3**	**Total**	Stage 1	Stage 2	Stage 3	Total
Mortgage loans								
1	**$ 6,043**	**$ 195**	**$ -**	**$ 6,238**	$ 5,930	$ 360	$ -	$ 6,290
2	**12,410**	**431**	**-**	**12,841**	11,773	872	-	12,645
3	**653**	**164**	**-**	**817**	689	194	-	883
4 or higher	**532**	**211**	**-**	**743**	550	224	-	774
Default	**-**	**-**	**82**	**82**	-	-	63	63
Total mortgage loans	**$ 19,638**	**$ 1,001**	**$ 82**	**$ 20,721**	$ 18,942	$ 1,650	$ 63	$ 20,655
Allowance for ECLs	**$ 5**	**$ 6**	**$ 4**	**$ 15**	$ 3	$ 7	$ 5	$ 15
Mortgages, net of allowance	**$ 19,633**	**$ 995**	**$ 78**	**$ 20,706**	$ 18,939	$ 1,643	$ 58	$ 20,640
Other loans [2]								
2	**$ 191**	**$ -**	**$ -**	**$ 191**	$ 182	$ -	$ -	$ 182
3	**1,306**	**50**	**-**	**1,356**	1,175	56	-	1,231
4 or higher	**343**	**27**	**-**	**370**	358	23	-	381
Default	**-**	**-**	**6**	**6**	-	-	3	3
Total other loans	**$ 1,840**	**$ 77**	**$ 6**	**$ 1,923**	$ 1,715	$ 79	$ 3	$ 1,797
Allowance for ECLs	**$ 1**	**$ 2**	**$ 1**	**$ 4**	$ 1	$ 2	$ 1	$ 4
Other loans, net of allowance	**$ 1,839**	**$ 75**	**$ 5**	**$ 1,919**	$ 1,714	$ 77	$ 2	$ 1,793
Total								
1	**$ 6,043**	**$ 195**	**$ -**	**$ 6,238**	$ 5,930	$ 360	$ -	$ 6,290
2	**12,601**	**431**	**-**	**13,032**	11,955	872	-	12,827
3	**1,959**	**214**	**-**	**2,173**	1,864	250	-	2,114
4 or higher	**875**	**238**	**-**	**1,113**	908	247	-	1,155
Default	**-**	**-**	**88**	**88**	-	-	66	66
Total mortgage and other loans	**$ 21,478**	**$ 1,078**	**$ 88**	**$ 22,644**	$ 20,657	$ 1,729	$ 66	$ 22,452
Allowance for ECLs	**$ 6**	**$ 8**	**$ 5**	**$ 19**	$ 4	$ 9	$ 6	$ 19
Total mortgage and other loans, net of allowance	**$ 21,472**	**$ 1,070**	**$ 83**	**$ 22,625**	$ 20,653	$ 1,720	$ 60	$ 22,433
Undrawn credit facilities and other off-balance sheet exposures								
1	**$ 2,803**	**$ 36**	**$ -**	**$ 2,839**	$ 2,737	$ 106	$ -	$ 2,843
2	**7,049**	**65**	**-**	**7,114**	6,627	195	-	6,822
3	**236**	**10**	**-**	**246**	225	9	-	234
4 or higher	**1,391**	**1**	**-**	**1,392**	1,130	1	-	1,131
Default	**-**	**-**	**4**	**4**	-	-	3	3
Total off-balance sheet exposures	**$ 11,479**	**$ 112**	**$ 4**	**$ 11,595**	$ 10,719	$ 311	$ 3	$ 11,033
Allowance for ECLs	**$ 3**	**$ 2**	**$ 3**	**$ 8**	$ 3	$ 3	$ 2	$ 8
Total off-balance sheet exposures, net of allowance	**$ 11,476**	**$ 110**	**$ 1**	**$ 11,587**	$ 10,716	$ 308	$ 1	$ 11,025

[1] For mortgages and loans, an internal risk rating is assigned ranging from "1 - low risk", " 2 – normal risk", "3 - medium risk", "4 & higher – high risk" to "default". The internal risk ratings reflect the credit quality of the lending assets. All lending assets that MBC originates are assigned a risk rating.

[2] Other loans include credit card.

Mortgages and Other Loans by Risk Category [1]

	Q4 2019				Q3 2019			
	Stage 1	Stage 2	Stage 3	Total	Stage 1	Stage 2	Stage 3	Total
Mortgage loans								
1	$ 6,107	$ 213	$ -	$ 6,320	$ 6,157	$ 211	$ -	$ 6,368
2	11,979	427	-	12,406	11,807	373	-	12,180
3	679	190	-	869	664	194	-	858
4 or higher	542	248	-	790	573	251	-	824
Default	-	-	60	60	-	-	57	57
Total mortgage loans	$ 19,307	$ 1,078	$ 60	$ 20,445	$ 19,201	$ 1,029	$ 57	$ 20,287
Allowance for ECLs	$ 3	$ 5	$ 3	$ 11	$ 3	$ 5	$ 4	$ 12
Mortgages, net of allowance	$ 19,304	$ 1,073	$ 57	$ 20,434	$ 19,198	$ 1,024	$ 53	$ 20,275
Other loans [2]								
2	$ 174	$ -	$ -	$ 174	$ 164	$ -	$ -	$ 164
3	1,200	37	-	1,237	1,227	35	-	1,262
4 or higher	305	19	-	324	289	22	-	311
Default	-	-	9	9	-	-	5	5
Total other loans	$ 1,679	$ 56	$ 9	$ 1,744	$ 1,680	$ 57	$ 5	$ 1,742
Allowance for ECLs	$ 1	$ -	$ -	$ 1	$ -	$ -	$ 1	$ 1
Other loans, net of allowance	$ 1,678	$ 56	$ 9	$ 1,743	$ 1,680	$ 57	$ 4	$ 1,741
Total								
1	$ 6,107	$ 213	$ -	$ 6,320	$ 6,157	$ 211	$ -	$ 6,368
2	12,153	427	-	12,580	11,971	373	-	12,344
3	1,879	227	-	2,106	1,891	229	-	2,120
4 or higher	847	267	-	1,114	862	273	-	1,135
Default	-	-	69	69	-	-	62	62
Total mortgage and other loans	$ 20,986	$ 1,134	$ 69	$ 22,189	$ 20,881	$ 1,086	$ 62	$ 22,029
Allowance for ECLs	$ 4	$ 5	$ 3	$ 12	$ 3	$ 5	$ 5	$ 13
Total mortgage and other loans, net of allowance	$ 20,982	$ 1,129	$ 66	$ 22,177	$ 20,878	$ 1,081	$ 57	$ 22,016
Undrawn credit facilities and other off-balance sheet exposures								
1	$ 2,785	$ 35	$ -	$ 2,820	$ 2,813	$ 29	$ -	$ 2,842
2	6,501	54	-	6,555	6,341	41	-	6,382
3	217	10	-	227	219	9	-	228
4 or higher	1,026	1	-	1,027	928	3	-	931
Default	-	-	3	3	-	-	3	3
Total off-balance sheet exposures	$ 10,529	$ 100	$ 3	$ 10,632	$ 10,301	$ 82	$ 3	$ 10,386
Allowance for ECLs	$ 1	$ 2	$ 3	$ 6	$ 2	$ 2	$ 1	$ 5
Total off-balance sheet exposures, net of allowance	$ 10,528	$ 98	$ -	$ 10,626	$ 10,299	$ 80	$ 2	$ 10,381

[1] For mortgages and loans, an internal risk rating is assigned ranging from "1 - low risk", " 2 – normal risk", "3 - medium risk", "4 & higher – high risk" to "default". The internal risk ratings reflect the credit quality of the lending assets. All lending assets that MBC originates are assigned a risk rating.

[2] Other loans include credit card.

Mortgages and Other Loans by Risk Category [1]

	Q2 2019			
	Stage 1	Stage 2	Stage 3	Total
Mortgage loans				
1	$ 6,297	$ 163	$ -	$ 6,460
2	11,805	263	-	12,068
3	650	171	-	821
4 or higher	544	240	-	784
Default	-	-	59	59
Total mortgage loans	$ 19,296	$ 837	$ 59	$ 20,192
Allowance for ECLs	$ 3	$ 5	$ 4	$ 12
Mortgages, net of allowance	$ 19,293	$ 832	$ 55	$ 20,180
Other loans [2]				
2	$ 165	$ -	$ -	$ 165
3	1,251	35	-	1,286
4 or higher	295	26	-	321
Default	-	-	6	6
Total other loans	$ 1,711	$ 61	$ 6	$ 1,778
Allowance for ECLs	$ -	$ -	$ 1	$ 1
Other loans, net of allowance	$ 1,711	$ 61	$ 5	$ 1,777
Total				
1	$ 6,297	$ 163	$ -	$ 6,460
2	11,970	263	-	12,233
3	1,901	206	-	2,107
4 or higher	839	266	-	1,105
Default	-	-	65	65
Total mortgage and other loans	$ 21,007	$ 898	$ 65	$ 21,970
Allowance for ECLs	$ 3	$ 5	$ 5	$ 13
Total mortgage and other loans, net of allowance	$ 21,004	$ 893	$ 60	$ 21,957
Undrawn credit facilities and other off-balance sheet exposures				
1	$ 2,866	$ 13	$ -	$ 2,879
2	6,217	19	-	6,236
3	204	7	-	211
4 or higher	960	10	-	970
Default	-	-	2	2
Total off-balance sheet exposures	$ 10,247	$ 49	$ 2	$ 10,298
Allowance for ECLs	$ 2	$ 2	$ 2	$ 6
Total off-balance sheet exposures, net of allowance	$ 10,245	$ 47	$ -	$ 10,292

[1] For mortgages and loans, an internal risk rating is assigned ranging from "1 - low risk", " 2 – normal risk", "3 - medium risk", "4 & higher – high risk" to "default". The internal risk ratings reflect the credit quality of the lending assets. All lending assets that MBC originates are assigned a risk rating.

[2] Other loans include credit card.

Gross Credit Exposure [1]

	Q2 2020						Q1 2020					
	Drawn [2]	Undrawn [3]	Other off-balance sheet [4]	Debt securities[5]	OTC [6]	Total	Drawn [2]	Undrawn [3]	Other off-balance sheet [4]	Debt securities[5]	OTC [6]	Total
By geographic location												
Country [7]												
Canada	$ -	$ -	$ -	$ -	$ 1	$ 1	$ -	$ -	$ -	$ -	$ 1	$ 1
United States	-	-	-	220	-	220	-	-	-	226	-	226
Other	-	-	-	34	-	34	-	-	-	31	-	31
Province [7]												
Canada												
Ontario	$ 8,808	$ 5,336	$ 7	$ 3	$ -	$ 14,154	$ 8,834	$ 5,005	$ 5	$ 13	$ -	$ 13,857
British Columbia	3,583	2,051	-	-	-	5,634	3,496	1,974	-	-	-	5,470
Alberta	2,959	1,239	2	-	-	4,200	2,904	1,189	1	-	-	4,094
Quebec	4,954	1,886	-	-	-	6,840	4,892	1,842	-	-	-	6,734
Saskatchewan	779	368	-	-	-	1,147	775	354	-	-	-	1,129
Manitoba	469	233	-	-	-	702	462	219	-	-	-	681
Atlantic provinces	1,090	473	-	-	-	1,563	1,087	444	-	-	-	1,531
Territories	2	-	-	-	-	2	2	-	-	-	-	2
Total exposure	$ 22,644	$ 11,586	$ 9	$ 257	$ 1	$ 34,497	$ 22,452	$ 11,027	$ 6	$ 270	$ 1	$ 33,756
By counterparty												
Manulife One	$ 16,894	$ 10,410	$ -	$ -	$ -	$ 27,304	$ 16,921	$ 9,826	$ -	$ -	$ -	$ 26,747
Residential mortgages	3,430	121	-	-	-	3,551	3,333	177	-	-	-	3,510
Financial institution [8]	-	-	-	64	1	65	-	-	-	58	1	59
Corporate	700	-	-	193	-	893	710	-	-	202	-	912
Personal loans	1,620	1,055	-	-	-	2,675	1,488	1,024	-	-	-	2,512
Sovereign [9]	-	-	-	-	-	-	-	-	-	10	-	10
Other [10]	-	-	9	-	-	9	-	-	6	-	-	6
Total exposure	$ 22,644	$ 11,586	$ 9	$ 257	$ 1	$ 34,497	$ 22,452	$ 11,027	$ 6	$ 270	$ 1	$ 33,756
By contractual maturity												
Within 1 year	$ 2,489	$ 713	$ -	$ 84	$ -	$ 3,286	$ 2,402	$ 694	$ -	$ 71	$ -	$ 3,167
1 to 5 years	6,762	-	-	173	1	6,936	6,528	-	-	199	1	6,728
Over 5 years	15	-	-	-	-	15	14	-	-	-	-	14
No specific maturity	13,378	10,873	9	-	-	24,260	13,508	10,333	6	-	-	23,847
Total exposure	$ 22,644	$ 11,586	$ 9	$ 257	$ 1	$ 34,497	$ 22,452	$ 11,027	$ 6	$ 270	$ 1	$ 33,756

(1) Gross credit risk exposure is before credit risk mitigants. This table excludes equity exposures.
(2) The amount of credit risk exposure resulting from loans advanced to a borrower. The exposure amounts presented in the above tables are gross of allowance for credit losses.
(3) The amount of credit risk exposure resulting from the unutilized portion of an authorized credit line or unfunded committed credit facility. These commitments have no fixed maturity dates.
(4) Other off-balance sheet items include letters of credit and indemnities.
(5) Includes short-term debt securities classified as cash equivalents.
(6) Includes OTC Derivatives.
(7) Geographic information is based upon address of property mortgaged for mortgage loans and based upon residence of borrower for other loans.
(8) Includes exposures to deposit taking institutions, contractual institutions and investment institutes.
(9) Includes exposures to governments, central banks and certain public sector entities.
(10) Other includes securitized investments in bonds and Residential Mortgage Backed Securities.

Gross Credit Exposure [1] (Continued)

	Q4 2019						Q3 2019					
	Drawn [2]	Undrawn [3]	Other off-balance sheet [4]	Debt securities[5]	OTC [6]	Total	Drawn [2]	Undrawn [3]	Other off-balance sheet [4]	Debt securities[5]	OTC [6]	Total
By geographic location												
Country [7]												
Canada	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
United States	-	-	-	197	-	197	-	-	-	188	-	188
Other	-	-	-	32	-	32	-	-	-	31	-	31
Province [7]												
Canada												
Ontario	$ 8,709	$ 4,769	$ 5	$ 13	$ -	$ 13,496	$ 8,644	$ 4,665	$ 5	$ 13	$ -	$ 13,327
British Columbia	3,450	1,935	-	-	-	5,385	3,422	1,894	-	-	-	5,316
Alberta	2,868	1,172	1	-	-	4,041	2,825	1,154	1	-	-	3,980
Quebec	4,837	1,758	-	-	-	6,595	4,820	1,697	-	-	-	6,517
Saskatchewan	782	344	-	-	-	1,126	784	340	-	-	-	1,124
Manitoba	456	217	-	-	-	673	446	205	-	-	-	651
Atlantic provinces	1,086	431	-	-	-	1,517	1,087	425	-	-	-	1,512
Territories	1	-	-	-	-	1	1	-	-	-	-	1
Total exposure	$ 22,189	$ 10,626	$ 6	$ 242	$ -	$ 33,063	$ 22,029	$ 10,380	$ 6	$ 232	$ -	$ 32,647
By counterparty												
Manulife One	$ 16,786	$ 9,579	$ -	$ -	$ -	$ 26,365	$ 16,726	$ 9,428	$ -	$ -	$ -	$ 26,154
Residential mortgages	3,297	69	-	-	-	3,366	3,229	51	-	-	-	3,280
Financial institution [8]	-	-	-	56	-	56	-	-	-	57	-	57
Corporate	653	-	-	176	-	829	610	-	-	165	-	775
Personal loans	1,453	978	-	-	-	2,431	1,464	901	-	-	-	2,365
Sovereign [9]	-	-	-	10	-	10	-	-	-	10	-	10
Other [10]	-	-	6	-	-	6	-	-	6	-	-	6
Total exposure	$ 22,189	$ 10,626	$ 6	$ 242	$ -	$ 33,063	$ 22,029	$ 10,380	$ 6	$ 232	$ -	$ 32,647
By contractual maturity												
Within 1 year	$ 2,270	$ 451	$ -	$ 58	$ -	$ 2,779	$ 2,144	$ 441	$ -	$ 59	$ -	$ 2,644
1 to 5 years	6,377	-	-	184	-	6,561	6,161	-	-	173	-	6,334
Over 5 years	16	-	-	-	-	16	19	-	-	-	-	19
No specific maturity	13,526	10,175	6	-	-	23,707	13,705	9,939	6	-	-	23,650
Total exposure	$ 22,189	$ 10,626	$ 6	$ 242	$ -	$ 33,063	$ 22,029	$ 10,380	$ 6	$ 232	$ -	$ 32,647

(1) Gross credit risk exposure is before credit risk mitigants. This table excludes equity exposures.
(2) The amount of credit risk exposure resulting from loans advanced to a borrower. The exposure amounts presented in the above tables are gross of allowance for credit losses.
(3) The amount of credit risk exposure resulting from the unutilized portion of an authorized credit line or unfunded committed credit facility. These commitments have no fixed maturity dates.
(4) Other off-balance sheet items include letters of credit and indemnities.
(5) Includes short-term debt securities classified as cash equivalents.
(6) Includes OTC Derivatives.
(7) Geographic information is based upon address of property mortgaged for mortgage loans and based upon residence of borrower for other loans.
(8) Includes exposures to deposit taking institutions, contractual institutions and investment institutes.
(9) Includes exposures to governments, central banks and certain public sector entities.
(10) Other includes securitized investments in bonds and Residential Mortgage Backed Securities.

Gross Credit Exposure [1] (Continued)

	Q2 2019					
	Drawn [2]	Undrawn [3]	Other off-balance sheet [4]	Debt securities[5]	OTC [6]	Total
By geographic location						
Country [7]						
Canada	$ -	$ -	$ -	$ -	$ -	$ -
United States	-	-	-	173	-	173
Other	-	-	-	30	-	30
Province [7]						
Canada						
Ontario	$ 8,618	$ 4,583	$ 5	$ 20	$ -	$ 13,226
British Columbia	3,391	1,864	-	-	-	5,255
Alberta	2,809	1,170	1	-	-	3,980
Quebec	4,838	1,698	-	7	-	6,543
Saskatchewan	788	346	-	-	-	1,134
Manitoba	436	203	-	-	-	639
Atlantic provinces	1,089	428	-	-	-	1,517
Territories	1	-	-	-	-	1
Total exposure	$ 21,970	$ 10,292	$ 6	$ 230	$ -	$ 32,498
By counterparty						
Manulife One	$ 16,684	$ 9,356	$ -	$ -	$ -	$ 26,040
Residential mortgages	3,202	73	-	-	-	3,275
Financial institution [8]	-	-	-	49	-	49
Corporate	574	10	-	157	-	741
Personal loans	1,510	853	-	-	-	2,363
Sovereign [9]	-	-	-	24	-	24
Other [10]	-	-	6	-	-	6
Total exposure	$ 21,970	$ 10,292	$ 6	$ 230	$ -	$ 32,498
By contractual maturity						
Within 1 year	$ 1,993	$ 459	$ -	$ 94	$ -	$ 2,546
1 to 5 years	6,107	-	-	136	-	6,243
Over 5 years	23	-	-	-	-	23
No specific maturity	13,847	9,833	6	-	-	23,686
Total exposure	$ 21,970	$ 10,292	$ 6	$ 230	$ -	$ 32,498

(1) Gross credit risk exposure is before credit risk mitigants. This table excludes equity exposures.
(2) The amount of credit risk exposure resulting from loans advanced to a borrower. The exposure amounts presented in the above tables are gross of allowance for credit losses.
(3) The amount of credit risk exposure resulting from the unutilized portion of an authorized credit line or unfunded committed credit facility. These commitments have no fixed maturity dates.
(4) Other off-balance sheet items include letters of credit and indemnities.
(5) Includes short-term debt securities classified as cash equivalents.
(6) Includes OTC Derivatives.
(7) Geographic information is based upon address of property mortgaged for mortgage loans and based upon residence of borrower for other loans.
(8) Includes exposures to deposit taking institutions, contractual institutions and investment institutes.
(9) Includes exposures to governments, central banks and certain public sector entities.
(10) Other includes securitized investments in bonds and Residential Mortgage Backed Securities.

Loan Impairment by Counterparty and by Geographic Area

	Q2 2020					Q1 2020					Q4 2019				
	Past-due but not impaired					Past-due but not impaired					Past-due but not impaired				
	31 days to 60 days	61 days to 90 days	Total past-due but not impaired	Gross impaired loans	Total past due or impaired	31 days to 60 days	61 days to 90 days	Total past-due but not impaired	Gross impaired loans	Total past due or impaired	31 days to 60 days	61 days to 90 days	Total past-due but not impaired	Gross impaired loans	Total past due or impaired
By geographic location															
Province [1]															
Canada															
Ontario	**$ 19**	**$ 9**	**$ 28**	**$ 17**	**$ 45**	$ 17	$ 2	$ 19	$ 10	$ 29	$ 11	$ 4	$ 15	$ 14	$ 29
British Columbia	**9**	**7**	**16**	**7**	**23**	6	-	6	6	12	6	2	8	7	15
Alberta	**7**	**3**	**10**	**15**	**25**	12	1	13	15	28	8	3	11	14	25
Quebec	**18**	**8**	**26**	**30**	**56**	21	2	23	23	46	12	5	17	23	40
Saskatchewan	**1**	**2**	**3**	**8**	**11**	5	-	5	5	10	3	-	3	5	8
Manitoba	**-**	**1**	**1**	**2**	**3**	1	-	1	1	2	-	1	1	1	2
Atlantic provinces	**4**	**2**	**6**	**9**	**15**	5	1	6	6	12	4	1	5	5	10
Total	**$ 58**	**$ 32**	**$ 90**	**$ 88**	**$ 178**	$ 67	$ 6	$ 73	$ 66	$ 139	$ 44	$ 16	$ 60	$ 69	$ 129
By counterparty															
Manulife One	**$ 36**	**$ 22**	**$ 58**	**$ 68**	**$ 126**	$ 48	$ -	$ 48	$ 51	$ 99	$ 26	$ 11	$ 37	$ 52	$ 89
Residential mortgages	**15**	**6**	**21**	**14**	**35**	16	4	20	12	32	13	4	17	8	25
Other loans	**7**	**4**	**11**	**6**	**17**	3	2	5	3	8	5	1	6	9	15
Total	**$ 58**	**$ 32**	**$ 90**	**$ 88**	**$ 178**	$ 67	$ 6	$ 73	$ 66	$ 139	$ 44	$ 16	$ 60	$ 69	$ 129

	Q3 2019					Q2 2019				
	Past-due but not impaired					Past-due but not impaired				
	31 days to 60 days	61 days to 90 days	Total past-due but not impaired	Gross impaired loans	Total past due or impaired	31 days to 60 days	61 days to 90 days	Total past-due but not impaired	Gross impaired loans	Total past due or impaired
By geographic location										
Province [1]										
Canada										
Ontario	$ 16	$ 1	$ 17	$ 8	$ 25	$ 10	$ 4	$ 14	$ 11	$ 25
British Columbia	6	4	10	5	15	6	2	8	7	15
Alberta	10	5	15	11	26	7	2	9	9	18
Quebec	13	8	21	27	48	13	6	19	25	44
Saskatchewan	4	1	5	4	9	5	1	6	5	11
Manitoba	1	-	1	1	2	-	-	-	1	1
Atlantic provinces	5	2	7	6	13	5	3	8	7	15
Total	$ 55	$ 21	$ 76	$ 62	$ 138	$ 46	$ 18	$ 64	$ 65	$ 129
By counterparty										
Manulife One	$ 34	$ 15	$ 49	$ 47	$ 96	$ 31	$ 12	$ 43	$ 50	$ 93
Residential mortgages	13	5	18	10	28	11	4	15	9	24
Other loans	8	1	9	5	14	4	2	6	6	12
Total	$ 55	$ 21	$ 76	$ 62	$ 138	$ 46	$ 18	$ 64	$ 65	$ 129

[1] Based upon address of property mortgaged for mortgage loans and residence of borrowers for other loans.

Allowances by Counterparty and by Geographic Area

	Q2 2020				Q1 2020				Q4 2019			
	Allowance				Allowance				Allowance			
	Stage 1	Stage 2	Stage 3	Total	Stage 1	Stage 2	Stage 3	Total	Stage 1	Stage 2	Stage 3	Total
By geographic location												
Province [1]												
Ontario	**$ 4**	**$ 3**	**$ 1**	**$ 8**	$ 3	$ 4	$ 2	$ 9	$ 3	$ 2	$ 1	$ 6
British Columbia	**1**	**1**	**-**	**2**	1	1	-	2	1	-	-	1
Alberta	**1**	**1**	**1**	**3**	1	1	1	3	-	1	1	2
Quebec	**2**	**4**	**4**	**10**	2	5	4	11	1	3	3	7
Saskatchewan	**-**	**-**	**1**	**1**	-	-	-	-	-	-	-	-
Atlantic provinces	**1**	**1**	**1**	**3**	-	1	1	2	-	1	1	2
Total	**$ 9**	**$ 10**	**$ 8**	**$ 27**	$ 7	$ 12	$ 8	$ 27	$ 5	$ 7	$ 6	$ 18
By counterparty												
Manulife One												
Drawn	**$ 2**	**$ 4**	**$ 3**	**$ 9**	$ 2	$ 5	4	$ 11	$ 2	$ 4	$ 2	$ 8
Undrawn [2]	**1**	**2**	**3**	**6**	1	3	1	5	1	2	2	5
Other Loans												
Drawn	**4**	**4**	**2**	**10**	2	4	2	8	2	1	1	4
Undrawn [2]	**2**	**-**	**-**	**2**	2	-	1	3	-	-	1	1
Total	**$ 9**	**$ 10**	**$ 8**	**$ 27**	$ 7	$ 12	$ 8	$ 27	$ 5	$ 7	$ 6	$ 18

	Q3 2019				Q2 2019			
	Allowance				Allowance			
	Stage 1	Stage 2	Stage 3	Total	Stage 1	Stage 2	Stage 3	Total
By geographic location								
Province [1]								
Ontario	$ 3	$ 2	$ 1	$ 6	$ 2	$ 2	$ 1	$ 5
British Columbia	1	-	-	1	1	-	-	1
Alberta	-	1	1	2	-	1	1	2
Quebec	1	3	3	7	2	3	3	8
Saskatchewan	-	-	-	-	-	-	1	1
Atlantic provinces	-	1	1	2	-	1	1	2
Total	$ 5	$ 7	$ 6	$ 18	$ 5	$ 7	$ 7	$ 19
By counterparty								
Manulife One								
Drawn	$ 2	$ 4	$ 3	$ 9	$ 1	$ 4	$ 4	$ 9
Undrawn [2]	-	2	2	4	1	2	2	5
Other Loans								
Drawn	2	1	1	4	2	1	1	4
Undrawn [2]	1	-	-	1	1	-	-	1
Total	$ 5	$ 7	$ 6	$ 18	$ 5	$ 7	$ 7	$ 19

[1] Based upon address of property mortgaged for mortgage loans and residence of borrowers for other loans.

[2] Allowance for ECLs relating to off-balance sheet exposures are included as a provision in other liabilities.

Allowances for Impairment on Mortgages and Loans

	Q2 2020				Q1 2020				Q4 2019			
	Allowance				Allowance				Allowance			
	Stage 1	Stage 2	Stage 3	Total	Stage 1	Stage 2	Stage 3	Total	Stage 1	Stage 2	Stage 3	Total
Balance, beginning of period	**$ 7**	**$ 12**	**$ 8**	**$ 27**	$ 5	$ 7	$ 6	$ 18	$ 5	$ 7	$ 6	$ 18
Provision for credit losses:												
Transfers to (from) Stage 1 [1]	**4**	**(3)**	**(1)**	**-**	2	(2)	-	-	-	-	-	-
Transfers to (from) Stage 2 [1]	**-**	**-**	**-**	**-**	-	1	(1)	-	1	(1)	-	-
Transfers to (from) Stage 3 [1]	**-**	**(1)**	**1**	**-**	-	-	-	-	-	-	-	-
Remeasurement [2]	**(2)**	**2**	**1**	**1**	-	6	5	11	(1)	1	2	2
Write-offs net of recoveries	**-**	**-**	**(1)**	**(1)**	-	-	(2)	(2)	-	-	(2)	(2)
Balance, end of period	**$ 9**	**$ 10**	**$ 8**	**$ 27**	$ 7	$ 12	$ 8	$ 27	$ 5	$ 7	$ 6	$ 18
Includes:												
Amounts drawn [3]	**$ 6**	**$ 8**	**$ 5**	**$ 19**	$ 4	$ 9	$ 6	$ 19	$ 4	$ 5	$ 3	$ 12
Off-balance sheet exposures [4]	**3**	**2**	**3**	**8**	3	3	2	8	1	2	3	6
	$ 9	**$ 10**	**$ 8**	**$ 27**	$ 7	$ 12	$ 8	$ 27	$ 5	$ 7	$ 6	$ 18

	Q3 2019				Q2 2019				Fiscal 2019			
	Allowance				Allowance				Allowance			
	Stage 1	Stage 2	Stage 3	Total	Stage 1	Stage 2	Stage 3	Total	Stage 1	Stage 2	Stage 3	Total
Balance, beginning of period	$ 5	$ 7	$ 7	19	$ 5	$ 7	$ 6	$ 18	$ 5	$ 12	$ 5	$ 22
Provision for credit losses:												
Transfers to (from) Stage 2 [1]	2	(2)	-	-	2	(3)	1	-	6	(6)	-	-
Remeasurement [2]	(2)	2	-	-	(2)	3	2	3	(6)	2	6	2
Derecognitions and maturities	-	-	-	-	-	-	-	-	-	(1)	-	(1)
Write-offs net of recoveries	-	-	(1)	(1)	-	-	(2)	(2)	-	-	(5)	(5)
Balance, end of period	$ 5	$ 7	$ 6	$ 18	$ 5	$ 7	$ 7	$ 19	$ 5	$ 7	$ 6	$ 18
Includes:												
Amounts drawn [3]	$ 3	$ 5	$ 5	$ 13	$ 3	$ 5	$ 5	$ 13	$ 4	$ 5	$ 3	$ 12
Off-balance sheet exposures [4]	2	2	1	5	2	2	2	6	1	2	3	6
	$ 5	$ 7	$ 6	$ 18	$ 5	$ 7	$ 7	$ 19	$ 5	$ 7	$ 6	$ 18

[1] Transfers represent stage transfer movements prior to ECL remeasurement.
[2] Remeasurement includes the impact of changes in risk parameters, model assumptions, expert credit judgement and the impact of changes in the forecasts of forward-looking information subsequent to stage migration.
[3] Allowance for ECLs relating to amounts drawn is presented as a deduction to the gross carrying amount of the financial asset.
[4] Allowance for ECLs relating to off-balance sheet exposures are included as a provision in other liabilities.

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, liquidity, interest rate risk, pledging and investment policies. The Board of Directors have ultimately delegated the responsibility for the strategic management of market, interest rate and liquidity risks to 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 policy guidelines and limits are adhered to. Positions are reported to ALCO on a monthly basis and to MFC's Global ALCO on a quarterly basis. The Bank invests in common equities based on limits set within the Investment Policy.

Securities

Debt securities are classified and measured as FVOCI 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, 2020, the total pre-tax unrealized gains recorded in AOCI related to FVOCI debt securities was $1 million (December 31, 2019 – $1 million). The cumulative realized gains (losses) arising from the sale of FVOCI debt securities for the three months ended June 30, 2020 was nil, and for the six months ended June 30, 2020 was nil (three months ended June 30, 2019 – nil and six months ended June 30 2019 – nil).

Debt securities measured as FVOCI are subject to the impairment requirements of IFRS 9. The 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 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. No ECL was recognized as at June 30, 2020 (December 31, 2019 – nil).

Periodically, MBC holds mortgage backed securities ("MBS") and asset backed securities ("ABS"), which are classified as FVOCI debt investments, and recorded at market values. MBC manages securitization exposures related to short-term and long-term investments to approved limits and rating requirements specified by investment policy guidelines. These securitization positions are managed using a combination of market standard systems and third-party data providers to monitor performance data and manage risks associated with the investments. All securitization

exposures are included in the banking book. As at June 30, 2020, the Bank held nil (December 31, 2019 – nil) MBS and ABS. Refer to the liquidity risk section of this document for quantitative disclosures of the securitization exposures in the banking book.

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 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, 2020, the Bank held $114 million of publicly traded FVTPL equity securities (December 31, 2019 – $133 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 gains arising from the sale of FVTPL equity securities for the three months ended June 30, 2020, were $1 million (June 30, 2019 – nil) and for the six months ended June 30, 2020 were $6 million (six months ended June 30, 2019 – $2 million). Net unrealized gains recognized in profit or loss for the three months ended June 30, 2020, were $10 million (net unrealized gains of $3 million for the three months ended June 30, 2019) and net unrealized losses for the six months ended June 30, 2020 were $23 million (net unrealized gains of $16 million for the six months ended June 30, 2019).

Interest rate risk

Interest rate risk is identified using a variety of techniques and measures that are primarily based on projecting asset and liability cash flows under a range of current and future interest rate and market return scenarios. MBC uses traditional asset-liability management techniques as well as quantitative methods to stress test the asset-liability portfolio.

MBC applies monthly sensitivity analysis to specifically assess interest rate risk. The results of the analyses are reviewed by ALCO to determine whether they are within prescribed limits for sensitivity of net interest income to changes in the yield curve. The following table shows the sensitivity of MBC's consolidated pre-tax net interest income to interest rate risk over the next 12 months.

Interest Rate Risk [1]

	Q2 2020 [2]	Q1 2020 [2]	Q4 2019 [2]	Q3 2019 [2]	Q2 2019 [2]
100 basis point rate increase	**$ 12**	$ 11	$ 11	$ 11	$ 15
200 basis point rate increase	**24**	23	21	22	31
25/100 basis point rate decrease [3]	**(6)**	(7)	(11)	(11)	(15)
25/200 basis point rate decrease [3]	**(6)**	(7)	(18)	(18)	(26)

[1] A parallel movement in interest rates includes a change in government, swap and corporate rates, with a floor of zero on government rates and corporate spreads.

[2] 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.

[3] Commencing in Q1 2020, the maximum downward shock is capped at the Bank of Canada overnight rate (25 basis points as at June 30, 2020) to account for certain rates being floored at zero due to the low interest rate environment. Downward shocks presented for comparative periods are based on a 100 and 200 basis point rate decrease. The floor of zero on government rates and corporate spreads limits the impact of a 200 basis point decrease in rates.

Derivatives are used to manage interest rate risk. To mitigate the unique risks associated with the use of derivatives, the Bank has specific risk management policies and processes. The policies include limits on the maximum exposure on derivative transactions, authorized types of derivatives and derivative applications, delegated authorization limits for specific personnel and collateral management. The policies also require pre-approval of all derivative application strategies and regular monitoring of the effectiveness of the strategies employed.

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 review and approve the Liquidity Management Policy and review 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 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[7], which includes the Net Cumulative Cash Flow ("NCCF") and the BCBS prescribed Liquidity Coverage Ratio ("LCR"). All liquidity stress testing is performed by the Bank's Treasury department on a monthly basis and is reported to ALCO and OSFI as required. Key assumptions of the internal stress tests are reviewed and approved on an annual basis by ALCO to ensure that they remain reasonable and appropriate.

To meet anticipated liquidity needs in both stable and stressed conditions, the Bank's Treasury department actively manages liquidity risk. The liquidity risk management processes are designed to enable the payment of the Bank's obligations as they come due, under both normal and adverse circumstances. 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, 2020, were $6.8 billion (25 per cent of total assets) compared to $6.4 billion as at December 31, 2019 (23 per cent of total assets).

Both the minimum NCCF and LCR regulatory targets were met by the Bank during the three months ended June 30, 2020.

[7] Effective January 1, 2020, the Bank implemented OSFI's revised LAR guideline.

Governance structure

The Board of Directors have the ultimate oversight responsibility for liquidity risk management of the Bank. The liquidity management responsibilities are delegated to the Chief Executive Officer ("CEO") by the Board of Directors, with the day to day liquidity management of the Bank being delegated to the Bank's Treasurer and oversight of the Bank's liquidity risk management framework delegated to the CRO. The Bank's Treasurer is responsible for providing comprehensive reporting to ALCO to assist the committee in fulfilling its liquidity risk oversight responsibilities.

Funding

The Bank has developed and continues to develop strategies to diversify funding sources in terms of funding channels and products, taking into consideration the level of reliance on individual funding sources. Diversification of funding is continually monitored and reported to ALCO and the Board of Directors. The Bank's ability to securitize high quality residential mortgage loans has provided a key source of diversified funding and contingent liquidity. Securitization funding provides the Bank with long-term funding at very attractive interest rates. Refer to the Securitization section below for details on the securitization programs.

In 2010, the Bank created a wholly owned subsidiary, MTC, which has been a strong source of deposit funding totalling $1.8 billion as at June 30, 2020 (December 31, 2019 – $1.7 billion).

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 a third-party and securitized in the NHA MBS program continue to be serviced by a 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 programs

MBC created two programs to securitize Manulife One accounts; PCMT and PCMT II ("the programs"). Manulife One accounts insured by CMHC were historically securitized under the PCMT program and uninsured Manulife One accounts are securitized under the PCMT II program.

PCMT
During the first quarter of 2020, the Bank entered into an agreement to purchase the outstanding PCMT term notes from the investor for consideration totaling the outstanding note balance of $1.5 billion. As a result of this transaction, there are no term notes outstanding on the legacy PCMT program (December 31, 2019 – $1.5 billion).

PCMT II
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 programs in exchange for cash. The programs fund 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 programs 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, 2020, cash reserve accounts have been funded for PCMT II in the amount of $0.1 million (December 31, 2019 – $0.2 million). The cash reserve account for PCMT II is funded according to criteria defined in the series agreements.

During the three-month period ended June 30, 2020, no secured term notes have been issued under PCMT II. During the six-month period ended June 30, 2020, a $1.5 billion secured term note was issued. As at June 30, 2020, term notes worth $2,250 million (December 31, 2019 – $750 million) are outstanding.

NHA MBS securitization program

MBC securitizes insured amortizing Canadian residential mortgage loans through the creation of MBS pools under the NHA MBS program and either holds them 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 insurable 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 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 programs do 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, interest rate and other price 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 programs 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 2020**	Q1 2020	Q4 2019	Q3 2019	Q2 2019
Manulife One securitization					
Securitized mortgages - PCMT [2]	**$ -**	$ -	$ 1,500	$ 1,500	$ 1,500
Securitized mortgages - PCMT II [3]	**2,250**	2,250	750	750	750
Restricted cash [4]	**-**	-	8	8	8
Total Manulife One securitization	**$ 2,250**	$ 2,250	$ 2,258	$ 2,258	$ 2,258
NHA MBS securitization					
NHA MBS unsold [5]	**$ 2,107**	$ 1,441	$ 1,504	$ 1,404	$ 1,483
Restricted cash [6]	**30**	30	24	24	24
Total NHA MBS securitization	**$ 2,137**	$ 1,471	$ 1,528	$ 1,428	$ 1,507
Sold to CMB	**1,884**	1,759	1,620	1,517	1,508
Total	**$ 6,271**	$ 5,480	$ 5,406	$ 5,203	$ 5,273

(1) These are securitized mortgages.
(2) Series 2011-1 note was repaid in full to the investor on January 15, 2020. There are no outstanding term notes in the PCMT structure.
(3) Remaining balance comprises a $500 million Series 2016-1 term note, a $250 million Series 2018-1 term note, and a $1,500 million Series 2020-1 term note which are supported by a pool of uninsured Manulife One accounts. The Series 2016-1 note is set to mature in the first quarter of 2022, Series 2018-1 note is expected to mature in the fourth quarter of 2022 and Series 2020-1 note is expected to mature in the fourth quarter of 2026. Under the terms of the Series 2016-1, Series 2018-1 and 2020-1 notes, additional collateral must also be provided to the noteholder as added credit protection.
(4) In conjunction with the repayment of the PCMT Series 2011-1 term note in Q1 2020, the $8 million cash reserve related to the note was repatriated to the Bank.
(5) When a security is created but remains unsold, no liability is recognized.
(6) The NHA MBS program requires issuers to maintain additional cash reserves within the NHA MBS principal and interest custodial account to cover deposits of unscheduled principal payments.

During the three months ended June 30, 2020, $178 million (three months ended June 30, 2019 – $93 million) of insured multi-unit residential mortgages were sold into the CMB program and derecognized from the Consolidated Financial Statements, and a $2 million gain on sale was recognized (three months ended June 30, 2019 – $1 million). As at June 30, 2020, $887 million (December 31, 2019 – $572 million) of insured multi-unit residential mortgages were derecognized from the Consolidated Financial Statements, and securitization retained interests totaling $47 million (December 31, 2019 – $31 million) were recorded as Other Assets.

Operational Risk

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

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, PCMT and PCMT II.

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 CRO and the Bank's Operational 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.

Capital Management

The Bank's Capital Management Framework provides the policies and processes for defining, measuring and strategically managing capital in a co-ordinated consistent manner. Within this framework, the Bank utilizes an internal capital adequacy assessment process, which forms strategies for achieving capital targets in a manner consistent with the Bank's risk assessments and business plans. The capital management framework together with related policies, enables the Bank to review its risk profile from a regulatory capital viewpoint with the intent of ensuring that capital levels:

- Remain sufficient to support the Bank's risk profile and outstanding commitments;
- Exceed minimum regulatory capital requirements by an acceptable margin;
- Are capable of withstanding a severe but plausible economic downturn stress scenario; and
- Remain consistent with strategic and operational goals, shareholder and rating agency expectations.

In the assessment of capital adequacy, the Bank adopts regulatory capital definitions and measures. To maintain or adjust the capital structure, the Bank may issue new shares or subordinated debt, adjust the dividend payment to its shareholders, or return capital to shareholders.

The Board of Directors approve the capital plan annually. The Capital Management Committee, which is comprised of executive members of the management team, meets on a regular basis in order to provide oversight of operational capital management. This includes reviews and recommendations of capital management policies for approval by the Board of Directors.

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 capital

Capital levels for banks are regulated pursuant to guidelines issued by OSFI, which are based on standards issued by the Bank for International Settlements. In December 2010, the BCBS issued "Basel III: A global regulatory framework for more resilient banks and banking systems" ("Basel III"), which focuses on improving the banking industry's ability to absorb shocks from financial and economic stress through increased quality and quantity of capital requirements, measures to reduce build-up of excessive leverage and pro-cyclicality in the banking sector, and new liquidity standards. Capital instruments issued by the Bank are required to meet qualifying criteria before inclusion in the relevant capital category. Effective January 1, 2013, the Bank implemented OSFI's CAR guideline, which reflect the Basel III capital requirements.

In response to the challenges posed by the COVID-19 pandemic, OSFI implemented a number of capital measures to build resilience of federally regulated financial institutions and improve the stability of the Canadian financial system and economy. This included transitional arrangements for the capital treatment of ECLs, and the temporary capital treatment for loans subject to payment deferral, which allows for these loans to continue to be treated as performing loans under the CAR Guideline during the deferral period. These measures were implemented by the Bank during the first quarter of 2020.

Basel III Regulatory Capital

		Q2 2020	Q1 2020	Q4 2019	Q3 2019	Q2 2019
	Common Equity Tier 1 capital: instruments and reserves					
1	Directly issued qualifying common share capital plus related stock surplus [1]	**$ 575**	$ 575	$ 575	$ 493	$ 494
2	Retained earnings [2]	**794**	755	759	736	715
3	Accumulated other comprehensive income (and other reserves)	**1**	(5)	-	-	-
6	**Common Equity Tier 1 capital before regulatory adjustments**	**$ 1,370**	$ 1,325	$ 1,334	$ 1,229	$ 1,209
	Common Equity Tier 1 capital: regulatory adjustments					
26	Other deductions or regulatory adjustments to CET1 as determined by OSFI [3]	**3**	3	n.a.	n.a.	n.a.
28	Total regulatory adjustments to Common Equity Tier 1	**(93)**	(100)	(100)	(26)	(32)
29	**Common Equity Tier 1 capital (CET1)**	**$ 1,280**	$ 1,228	$ 1,234	$ 1,203	$ 1,177
29a	**CET1 capital with transitional arrangements for ECL provisioning not applied [4]**	**$ 1,277**	$ 1,225	n.a.	n.a.	n.a.
	Additional Tier 1 capital: instruments					
33	Directly issued capital instruments subject to phase out from Additional Tier 1 [5]	**$ 229**	$ 229	$ 229	$ 229	$ 229
44	**Additional Tier 1 capital (AT1)**	**$ 229**	$ 229	$ 229	$ 229	$ 229
45	**Tier 1 capital (T1 = CET1 + AT1)**	**$ 1,509**	$ 1,457	$ 1,463	$ 1,432	$ 1,406
45a	**Tier 1 Capital with transitional arrangements for ECL provisioning not applied [4]**	**$ 1,506**	$ 1,454	n.a.	n.a.	n.a.
	Tier 2 capital: instruments and provisions					
50	Eligible allowances	**$ 10**	$ 11	$ 8	$ 8	$ 9
58	**Tier 2 capital (T2)**	**$ 10**	$ 11	$ 8	$ 8	$ 9
59	**Total Capital (TC = T1 +T2)**	**$ 1,519**	$ 1,468	$ 1,471	$ 1,440	$ 1,415
59a	**Total Capital with transitional arrangements for ECL provisioning not applied [4]**	**$ 1,516**	$ 1,465	n.a.	n.a.	n.a.
60	**Total risk weighted assets**	**$ 8,620**	$ 8,584	$ 8,511	$ 8,425	$ 8,211
	Capital ratios (%)					
61	CET1 Ratio (as percentage of risk-weighted assets)	**14.9%**	14.3%	14.5%	14.3%	14.3%
61a	CET1 Ratio with transitional arrangements for ECL provisioning not applied [4]	**14.8%**	14.3%	n.a.	n.a.	n.a.
62	Tier 1 Capital Ratio (as percentage of risk-weighted assets)	**17.5%**	17.0%	17.2%	17.0%	17.1%
62a	Tier 1 Capital Ratio with transitional arrangements for ECL provisioning not applied [4]	**17.5%**	16.9%	n.a.	n.a.	n.a.
63	Total Capital Ratio (as percentage of risk-weighted assets)	**17.6%**	17.1%	17.3%	17.1%	17.2%
63a	Total Capital Ratio with transitional arrangements for ECL provisioning not applied [4]	**17.6%**	17.1%	n.a.	n.a.	n.a.
	OSFI target					
69	CET1 capital target ratio	**7%**	7%	7%	7%	7%
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%

(1) MBC is authorized to issue an unlimited number of voting, non-redeemable common shares without nominal or par value. The Bank had 1,809,915 common shares outstanding as at June 30, 2020 (December 31, 2019 - 1,809,915) issued to MLI.

(2) As part of a dividend repatriation strategy implemented during the third quarter of 2015, a recurring quarterly common equity dividend is paid based on a targeted dividend payout ratio of 35%, subject to review and approval of the Board.

(3) As a result of COVID-19, OSFI introduced transitional arrangements for the capital treatment of expected credit loss provisioning. This transitional arrangement commencing in 2020 results in a portion of eligible allowances that would otherwise be included in Tier 2 capital to instead be included in CET1 capital. The adjustment to CET1 capital is measured as the increase in Stage 1 and Stage 2 allowances relative to December 31, 2019. This increased amount is adjusted for tax effects and subject to a scaling factor that will decrease over time. The scaling factor to be applied is 70% for 2020, 50% for 2021 and 25% for 2022.

(4) Calculation of regulatory capital without the application of OSFI's transitional arrangements for expected credit losses being applied.

(5) MBC is authorized to issue an unlimited number of non-voting, redeemable preferred shares (subject to regulatory approval) entitled to non-cumulative dividends at a predetermined dividend rate, issuable in series, without nominal or par value. As at June 30, 2020, the Bank has issued outstanding series of 229,000 preferred shares to related entities within MFC (December 31, 2019 – 229,000). The dividend rates on these preferred shares range from 5% to 6.25% per annum.

Risk-weighted Assets

	Q2 2020		Q1 2020		Q4 2019		Q3 2019		Q2 2019	
	Exposure amount [1]	Risk-weighted assets [2]	Exposure amount [1]	Risk-weighted assets [2]	Exposure amount [1]	Risk-weighted assets [2]	Exposure amount [1]	Risk-weighted assets [2]	Exposure amount [1]	Risk-weighted assets [2]
Residential mortgages [3]	**$ 20,462**	**$ 4,650**	$ 20,387	$ 4,780	$ 20,170	$ 4,710	$ 20,040	$ 4,638	$ 19,971	$ 4,558
Bank	**4,379**	**876**	4,189	838	4,589	919	4,889	979	4,316	864
Other loans	**2,030**	**1,630**	1,910	1,537	1,856	1,500	1,852	1,491	1,885	1,516
Sovereign	**-**	**-**	10	-	10	-	10	-	24	-
Equity	**114**	**114**	108	108	133	133	127	127	128	128
Corporate	**507**	**383**	513	385	446	336	408	303	380	279
Other	**247**	**121**	222	99	215	92	135	84	141	79
Total credit risk	**$ 27,739**	**$ 7,774**	$ 27,339	$ 7,747	$ 27,419	$ 7,690	$ 27,461	$ 7,622	$ 26,845	$ 7,424
Operational risk	**n.a.**	**846**	n.a.	837	n.a.	821	n.a.	803	n.a.	787
Total risk-weighted assets	**$ 27,739**	**$ 8,620**	$ 27,339	$ 8,584	$ 27,419	$ 8,511	$ 27,461	$ 8,425	$ 26,845	$ 8,211

(1) Total exposure represents exposure at default which is the expected gross exposure upon the default of an obligor. This amount is before any specific allowances or partial write-offs and does not reflect the impact of credit risk mitigation and collateral held.

(2) Per the guidelines issued by OSFI under the Basel III framework, the Bank calculates credit risk using the standardized approach to credit risk. Operational risk is calculated based on the basic indicator approach.

(3) Residential mortgages include Manulife One.

Leverage Ratio Common Disclosure

		Q2 2020	Q1 2020	Q4 2019	Q3 2019	Q2 2019
On-balance sheet exposures						
1	On-balance sheet items (excluding derivatives, SFTs and grandfathered securitization exposures but including collateral)	**$ 27,567**	$ 27,173	$ 27,310	$ 27,351	$ 26,733
4	(Asset amounts deducted in determining Tier 1 capital)	**(93)**	(100)	(100)	(26)	(32)
5	**Total on-balance sheet exposures (excluding derivatives and SFTs) (sum of lines 1 to 4)**	**$ 27,474**	$ 27,073	$ 27,210	$ 27,325	$ 26,701
Derivative exposures						
6	Replacement cost associated with all derivative transactions	**$ -**	$ -	$ -	$ -	$ -
7	Add-on amounts for potential future exposure associated with all derivative transactions	**1**	1	2	3	3
11	**Total derivative exposures (sum of lines 6 to 10)**	**$ 1**	$ 1	$ 2	$ 3	$ 3
Other off-balance sheet exposures						
17	Off-balance sheet exposure at gross notional amount	**$ 11,594**	$ 11,033	$ 10,631	$ 10,385	$ 10,298
18	(Adjustments for conversion to credit equivalent amounts)	**(10,356)**	(9,855)	(9,518)	(9,297)	(9,217)
19	**Off-balance sheet items (sum of lines 17 and 18)**	**$ 1,238**	$ 1,178	$ 1,113	$ 1,088	$ 1,081
Capital and Total Exposures						
20	Tier 1 capital	**$ 1,509**	$ 1,457	$ 1,463	$ 1,432	$ 1,406
20a	Tier 1 Capital with transitional arrangements for ECL provisioning not applied [1]	**$ 1,506**	$ 1,454	n.a.	n.a.	n.a.
21	Total Exposures (sum of lines 5, 11, 16 and 19)	**$ 28,713**	$ 28,252	$ 28,325	$ 28,416	$ 27,785
Leverage Ratio						
22	Basel III leverage ratio	**5.3%**	5.2%	5.2%	5.0%	5.1%
22a	Leverage ratio with transitional arrangements for ECL provisioning not applied [1]	**5.3%**	5.2%	n.a.	n.a.	n.a.

[1] Calculation of regulatory capital without the application of OSFI's transitional arrangements for expected credit losses being applied.

B20 Disclosures

Residential mortgage loans and Manulife One

MBC has a conservative and high quality mortgage loans portfolio. As at June 30, 2020, MBC had $3.4 billion residential mortgage loans, of which $3.0 billion (88%) were insured[8] and $0.4 billion (12%) were uninsured. In addition, the Bank had $16.9 billion of Manulife One loans of which $3.6 billion (21%) were insured and $13.3 billion (79%) were uninsured. Overall as at June 30, 2020, MBC had $20.3 billion in residential mortgage and Manulife One mortgage loans of which $6.6 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 region[9] and type is included in the quantitative disclosures below.

Residential mortgage loans and Manulife One (fixed[10]) portfolios by amortization period

A summary of MBC's residential mortgage loans and Manulife One (fixed) by remaining amortization[11] period based on the contractual terms of the mortgage agreement is presented in the quantitative section below.

Average loan-to-value (LTV) ratio

TThe 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 53% as at June 30, 2020 (December 31, 2019 – 52%). 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 program (PAM), where the Bank proactively 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 region[12] and type for newly originated and acquired uninsured mortgage loans and HELOCs (including refinances with increase in funds or limits) during the current period.

[8] 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.
[9] Region is based upon address of property mortgaged.
[10] Fixed represents the amortizing portion of the Manulife One account.
[11] Remaining amortization is the difference between the contractual amortization and the time elapsed since origination.
[12] Region is based upon address of property mortgaged.

B20 - Mortgages by Province

	Q2 2020				Q1 2020				Q4 2019			
	Insured [2]	Uninsured [2]	Total	Total %	Insured [2]	Uninsured [2]	Total	Total %	Insured [2]	Uninsured [2]	Total	Total %
Residential mortgages [1]												
Alberta	**$ 570**	**$ 32**	**$ 602**	**18%**	$ 535	$ 32	$ 567	17%	$ 523	$ 33	$ 556	17%
Atlantic provinces	**141**	**30**	**171**	**5%**	131	34	165	5%	128	34	162	5%
British Columbia	**214**	**34**	**248**	**7%**	205	39	244	7%	199	40	239	7%
Manitoba	**70**	**5**	**75**	**2%**	65	6	71	2%	62	6	68	2%
Ontario	**531**	**116**	**647**	**19%**	491	132	623	19%	480	138	618	19%
Québec	**1,368**	**196**	**1,564**	**45%**	1,315	235	1,550	47%	1,299	242	1,541	47%
Saskatchewan	**110**	**13**	**123**	**4%**	100	13	113	3%	100	13	113	3%
Total	**$ 3,004**	**$ 426**	**$ 3,430**	**100%**	$ 2,842	$ 491	$ 3,333	100%	$ 2,791	$ 506	$ 3,297	100%
Manulife One												
Alberta	**$ 748**	**$ 1,464**	**$ 2,212**	**13%**	$ 773	$ 1,448	$ 2,221	13%	$ 783	$ 1,412	$ 2,195	13%
Atlantic provinces	**259**	**564**	**823**	**5%**	271	564	835	5%	272	560	832	5%
British Columbia	**632**	**2,256**	**2,888**	**17%**	657	2,204	2,861	17%	667	2,136	2,803	17%
Manitoba	**93**	**256**	**349**	**2%**	98	252	350	2%	100	249	349	2%
Ontario	**1,067**	**5,939**	**7,006**	**41%**	1,141	5,835	6,976	41%	1,163	5,818	6,981	41%
Québec	**596**	**2,421**	**3,017**	**18%**	632	2,432	3,064	18%	638	2,373	3,011	18%
Saskatchewan	**214**	**384**	**598**	**4%**	223	390	613	4%	225	390	615	4%
Territories	**-**	**1**	**1**	**0%**	-	1	1	0%	-	-	-	0%
Total	**$ 3,609**	**$ 13,285**	**$ 16,894**	**100%**	$ 3,795	$ 13,126	$ 16,921	100%	$ 3,848	$ 12,938	$ 16,786	100%

	Q3 2019				Q2 2019			
	Insured [2]	Uninsured [2]	Total	Total %	Insured [2]	Uninsured [2]	Total	Total %
Residential mortgages [1]								
Alberta	$ 487	$ 34	$ 521	16%	$ 465	$ 34	$ 499	16%
Atlantic provinces	125	33	158	5%	124	33	157	5%
British Columbia	186	41	227	7%	181	40	221	7%
Manitoba	58	6	64	2%	51	6	57	2%
Ontario	472	141	613	19%	480	143	623	19%
Québec	1,282	254	1,536	48%	1,275	260	1,535	48%
Saskatchewan	97	13	110	3%	96	14	110	3%
Total	$ 2,707	$ 522	$ 3,229	100%	$ 2,672	$ 530	$ 3,202	100%
Manulife One								
Alberta	$ 801	$ 1,391	$ 2,192	13%	$ 825	$ 1,373	$ 2,198	13%
Atlantic provinces	283	560	843	5%	294	554	848	5%
British Columbia	692	2,091	2,783	17%	717	2,039	2,756	17%
Manitoba	103	246	349	2%	105	242	347	2%
Ontario	1,213	5,717	6,930	41%	1,260	5,631	6,891	41%
Québec	665	2,343	3,008	18%	685	2,335	3,020	18%
Saskatchewan	231	390	621	4%	235	389	624	4%
Total	$ 3,988	$ 12,738	$ 16,726	100%	$ 4,121	$ 12,563	$ 16,684	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.

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

	Q2 2020				Q1 2020				Q4 2019			
	Residential	Manulife One [2]			Residential	Manulife One [2]			Residential	Manulife One [2]		
Average LTV ratio %	mortgages [1]	Revolving [3]	Fixed [3]	Total	mortgages [1]	Revolving [3]	Fixed [3]	Total	mortgages [1]	Revolving [3]	Fixed [3]	Total
Alberta	**78%**	**55%**	**18%**	**73%**	75%	55%	18%	73%	64%	51%	20%	71%
Atlantic provinces	**77%**	**51%**	**21%**	**72%**	73%	52%	20%	72%	75%	52%	19%	71%
British Columbia	**50%**	**51%**	**12%**	**63%**	63%	52%	10%	62%	49%	50%	13%	63%
Manitoba	**80%**	**60%**	**15%**	**75%**	79%	57%	15%	72%	80%	62%	12%	74%
Ontario	**62%**	**50%**	**15%**	**65%**	64%	51%	15%	66%	65%	52%	14%	66%
Quebec	**71%**	**58%**	**15%**	**73%**	62%	58%	15%	73%	69%	58%	15%	73%
Saskatchewan	**76%**	**52%**	**22%**	**74%**	0%	57%	16%	73%	62%	55%	16%	71%
Territories	**0%**	**65%**	**15%**	**80%**	0%	63%	17%	80%	0%	0%	0%	0%
Average	**69%**	**52%**	**15%**	**67%**	65%	53%	15%	68%	67%	53%	14%	67%

	Q3 2019				Q2 2019			
	Residential	Manulife One [2]			Residential	Manulife One [2]		
Average LTV ratio %	mortgages [1]	Revolving [3]	Fixed [3]	Total	mortgages [1]	Revolving [3]	Fixed [3]	Total
Alberta	76%	55%	17%	72%	68%	56%	15%	71%
Atlantic provinces	76%	56%	15%	71%	73%	53%	19%	72%
British Columbia	71%	51%	11%	62%	48%	51%	10%	61%
Manitoba	79%	58%	13%	71%	70%	58%	14%	72%
Ontario	65%	53%	14%	67%	70%	53%	11%	64%
Quebec	75%	57%	15%	72%	68%	57%	15%	72%
Saskatchewan	50%	53%	15%	68%	67%	52%	18%	70%
Average	71%	53%	14%	67%	68%	53%	12%	65%

[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 40% compared to 52% based on the authorized limits for the three month period ended June 30, 2020, and 43% compared to 53% based on the authorized limits for the three month period ended June 30, 2019.

B20 - Mortgages by Amortization Period

	Residential mortgages					Manulife One (fixed)				
	Q2 2020	Q1 2020	Q4 2019	Q3 2019	Q2 2019	**Q2 2020**	Q1 2020	Q4 2019	Q3 2019	Q2 2019
Less than 20 years	**21%**	21%	20%	20%	20%	**26%**	26%	27%	27%	27%
20-25 years	**72%**	72%	73%	72%	70%	**49%**	49%	47%	47%	46%
25-30 years	**7%**	7%	7%	8%	10%	**24%**	24%	25%	25%	26%
30 years and greater	**0%**	0%	0%	0%	0%	**1%**	1%	1%	1%	1%
Total	**100%**	100%	100%	100%	100%	**100%**	100%	100%	100%	100%

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 general 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 expensed 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.