Manulife Bank

Manulife Bank of Canada Consolidated Financial Statements

For the year ended December 31, 2022

Independent auditor's report

To the Shareholder of Manulife Bank of Canada

Opinion

We have audited the consolidated financial statements of **Manulife Bank of Canada**, which comprise the consolidated statements of financial position as at December 31, 2022, and the consolidated statements of comprehensive income, consolidated statements of changes in equity and consolidated statements of cash flows for the year then ended, and notes to the consolidated financial statements, including a summary of significant accounting policies.

In our opinion, the accompanying consolidated financial statements present fairly, in all material respects, the financial position of the Bank as at December 31, 2022, and its consolidated financial performance and its consolidated cash flows for the year then ended in accordance with International Financial Reporting Standards ["IFRSs"].

Basis for opinion

We conducted our audit in accordance with Canadian generally accepted auditing standards. Our responsibilities under those standards are further described in the *Auditor's responsibilities for the audit of the financial statements* section of our report. We are independent of the Bank in accordance with the ethical requirements that are relevant to our audit of the consolidated financial statements in Canada, and we have fulfilled our other ethical responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Responsibilities of management and the audit committee of the board of directors for the consolidated financial statements

Management is responsible for the preparation and fair presentation of the consolidated financial statements in accordance with IFRSs, and for such internal control as management determines is necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the consolidated financial statements, management is responsible for assessing the Bank's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate the Bank or to cease operations, or has no realistic alternative but to do so.

The Audit Committee of the Board of Directors is responsible for overseeing the Bank's financial reporting process.

Auditor's responsibilities for the audit of the consolidated financial statements

Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with Canadian generally accepted auditing standards will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated financial statements.



As part of an audit in accordance with Canadian generally accepted auditing standards, we exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the consolidated financial statements, whether due
 to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence
 that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material
 misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion,
 forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are
 appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the
 Bank's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based
 on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may
 cast significant doubt on the Bank's ability to continue as a going concern. If we conclude that a material
 uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the
 consolidated financial statements or, if such disclosures are inadequate, to modify our opinion. Our
 conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future
 events or conditions may cause the Bank to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and whether the consolidated financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

We communicate with the Audit Committee of the Board of Directors regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

Waterloo, Canada February 17, 2023

Ernst + young LLP

Chartered Professional Accountants Licensed Public Accountants



Consolidated Statements of Financial Position

As at December 31,

(Canadian \$ in millions)		2022		2021
ASSETS	•	0.070	¢	2 010
Cash and cash equivalents	\$	3,979	\$	3,013
Restricted cash <i>(Note 15)</i>		136		76
Securities (Note 5)		366		394
Mortgage and other loans, net (Note 6)		24,778		23,446
Current tax receivable (Note 8)		-		1
Deferred tax asset (Note 8)		128		146
Other assets (Note 7)		143		125
Total assets	\$	29,530	\$	27,201
LIABILITIES and EQUITY				
Liabilities				
Demand deposits	\$	13,202	\$	12,746
Term deposits		9,340		8,057
Notes payable <i>(Note 15)</i>		5,023		4,598
Current tax liability (<i>Note 8)</i>		7		-
Deferred tax liability (Note 8)		1		1
Other liabilities (Note 9)		175		120
Total liabilities	\$	27,748	\$	25,522
Equity				
Issued share capital (Notes 10 and 17)				
Preferred shares	\$	229	\$	229
Common shares		267		267
Contributed surplus		442		428
Retained earnings		847		755
Accumulated other comprehensive (loss) income		(3)		-
Total equity	\$	1,782	\$	1,679
Total liabilities and equity	\$	29,530	\$	27,201

The accompanying notes are an integral part of these Consolidated Financial Statements.

On behalf of the Board:

TJunft.

This

Director

Director and CEO

Manulife Bank of Canada | 2022 Consolidated Financial Statements

Consolidated Statements of Income

For the years ended December 31,

Tor the years ended becember 51,		
(Canadian \$ in millions)	 2022	2021
Revenue		
Net interest income		
Interest income <i>(Note 11)⁽¹⁾</i>	\$ 952	\$ 654
Interest expense <i>(Note 11)</i>	497	242
Net interest income	\$ 455	\$ 412
Non-interest income		
Fee income <i>(Note 12)</i>	\$ 24	\$ 25
Net (losses) gains on securities measured at FVTPL (Note 5)	(7)	38
Net losses on derivatives measured at FVTPL (Note 4)	(2)	-
Total non-interest income	\$ 15	\$ 63
Total revenue	\$ 470	\$ 475
Provision for (recovery of) credit losses (Note 6)	\$ 3	\$ (3)
Non-interest expenses		
Salaries and employee benefits	\$ 74	\$ 77
Information services	41	43
Commission expense (Notes 13 and 17)	26	26
Business development	26	26
Office administration	24	22
Other	50	38
Total non-interest expenses	\$ 241	\$ 232
Net income before income taxes	\$ 226	\$ 246
Net income before income taxes Income tax expense <i>(Note 8)</i>	\$ 226 69	\$ 246 65

(1) Interest income included \$945 for the year ended December 31, 2022 that is calculated based on the effective interest rate method (2021 – \$648).

The accompanying notes are an integral part of these Consolidated Financial Statements.

Consolidated Statements of Comprehensive Income

For the years ended December 31,

(Canadian \$ in millions)	2022	2021
Net income	\$ 157	\$ 181
Other comprehensive loss, net of income tax, that is subject to subsequent reclassification to net income:		
Net change in debt securities at fair value through other comprehensive income		
Net unrealized losses, net of tax recovery of \$3 (2021 – tax recovery of \$2)	\$ (7)	\$ (5)
Net realized losses, net of tax recovery of \$1 (2021 – tax recovery of \$2), reclassified to net income	4	4
Total other comprehensive loss, net of income taxes	\$ (3)	\$ (1)
Total comprehensive income, net of income taxes	\$ 154	\$ 180

The accompanying notes are an integral part of these Consolidated Financial Statements.

Consolidated Statements of Changes in Equity

(Canadian \$ in millions)

							,	ccumulated other			
							con	nprehensive			
		Share c	apita	al			(10	oss) income			
	Pre	eferred	Сс	ommon	Re	etained		FVOCI	Со	ontributed	
		shares	1	shares	ea	arnings		securities		surplus	Total
As at December 31, 2020	\$	229	\$	267	\$	755	\$	1	\$	428	\$ 1,680
Net income		-		-		181		-		-	181
Other comprehensive loss		-		-		-		(1)		-	(1)
Dividends on preferred shares (Notes 10 and 17c)		-		-		(13)		-		-	(13)
Dividends on common shares (Notes 10 and 17c)		-		-		(168)		-		-	(168)
As at December 31, 2021	\$	229	\$	267	\$	755	\$	-	\$	428	\$ 1,679
Net income		-		-		157		-		-	157
Other comprehensive loss		-		-		-		(3)		-	(3)
Dividends on preferred shares (Notes 10 and 17c)		-		-		(13)		-		-	(13)
Dividends on common shares (Notes 10 and 17c)		-		-		(52)		-		-	(52)
Increase in contributed surplus		-		-		-		-		14	14
As at December 31, 2022	\$	229	\$	267	\$	847	\$	(3)	\$	442	\$ 1,782

The accompanying notes are an integral part of these Consolidated Financial Statements.

Consolidated Statements of Cash Flows

For the years ended December 31,

(Canadian \$ in millions)		2022		2021
Operating activities				
Net income	\$	157	\$	181
Adjustments for non-cash items in net income:				
Provision for (recovery of) credit losses		3		(3)
Deferred taxes		32		35
Amortization		41		40
Net losses (gains) on securities measured at FVTPL		7		(38)
Net losses on derivatives measured at FVTPL		2		-
Gain on sale of mortgages		(2)		(2)
Foreign currency losses		21		6
Changes in operating assets and liabilities (Note 16)		802		(776)
Net cash provided by (used in) operating activities	\$	1,063	\$	(557)
Financing activities	\$	(5.2)	¢	(16.0)
Common share dividends paid	Ş	(52)	Ф	(168)
Preferred share dividends paid	\$	(13)	¢	(13)
Net cash used in financing activities	\$	(65)	Φ	(181)
Investing activities				
Acquisition of securities	\$	(207)	\$	(201)
Proceeds from sale of securities		240		228
Acquisition of capital and intangible assets		(5)		(4)
Net cash provided by investing activities	\$	28	\$	23
Net increase (decrease) in cash and cash equivalents and restricted cash	\$	1,026	\$	(715)
Cash and cash equivalents, beginning of year		3,089		3,804
Cash and cash equivalents, end of year	\$	4,115	\$	3,089
Comprised as follows:				
Cash and cash equivalents	\$	3,979	\$	3,013
Restricted cash	Ş	3, <i>91 9</i> 136	φ	76
Cash and cash equivalents, end of year	\$	4,115	\$	3,089
cash and cash equivalents, end of year	Ŷ	т,113	Ψ	3,005
Supplementary Disclosure of Cash Flow Information				
Interest paid during the year	\$	444	\$	246
Interest received during the year		943		653
Income taxes paid during the year		30		29
Dividends received during the year		4		4

The accompanying notes are an integral part of these Consolidated Financial Statements.

Notes to Consolidated Financial Statements

(Canadian \$ in millions except when otherwise indicated)

Note 1: Nature of Operations

(a) Reporting entity

Manulife Bank of Canada ("MBC") and its subsidiaries (collectively known as the "Bank") provide a wide range of financial products and services including mortgages, investment loans and deposit products. The Bank is a Schedule 1 Bank under the *Bank Act* (Canada) incorporated and domiciled in Canada, with its registered offices located at 500 King Street North, Waterloo, Ontario, Canada. The Bank is wholly owned by The Manufacturers Life Insurance Company of Canada ("MLI"). The Bank's ultimate parent company, Manulife Financial Corporation ("MFC"), is a publicly traded life insurance company listed on the Toronto, New York, Philippines and Hong Kong stock exchanges.

These Consolidated Financial Statements as at and for the years ended December 31, 2022 and 2021 were authorized for issue in accordance with a resolution by the Board of Directors on February 9, 2023.

(b) Basis of preparation

These Consolidated Financial Statements have been prepared in accordance with International Financial Reporting Standards ("IFRS") as issued by the International Accounting Standards Board ("IASB"), including the accounting requirements of the Office of the Superintendent of Financial Institutions ("OSFI"). The Consolidated Financial Statements are presented in Canadian dollars, the Bank's functional currency. All values are rounded to the nearest million dollars except when otherwise indicated.

The preparation of the Consolidated Financial Statements in conformity with IFRS requires management to make judgments, estimates and assumptions that affect the application of accounting policies. Therefore, the reported amounts of assets and liabilities, including the disclosure of contingent assets and liabilities at the date of the Consolidated Financial Statements, as well as the reported amounts of revenue and expenses during the reporting periods, may differ from actual results due to these estimates. The most significant estimation processes relate to the allowance for expected credit losses ("ECLs"), (Notes 2(f) and 6), the amortization period of capitalized acquisition costs ("CAC") and the fair value of certain financial instruments including derivatives.

The estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognized in the year in which the estimates are revised and in any future periods affected. Although some variability is inherent in these estimates, management believes that the amounts recorded are appropriate. The significant accounting policies used, and the most significant judgments made by management in applying these accounting policies in the preparation of these Consolidated Financial Statements are summarized below.

Note 2: Significant Accounting Policies

(a) Basis of consolidation

The Bank's Consolidated Financial Statements include the assets, liabilities, results of operations and cash flows of MBC and all subsidiaries and structured entities ("SEs") controlled by MBC, after elimination of intercompany transactions, balances, revenue and expenses.

Subsidiaries are those entities over which MBC has control, where control is defined as the power to govern the financial and operating policies so as to obtain benefits from the entity's activities. Subsidiaries will be consolidated from the date control is obtained and will continue to be consolidated until the date when control ceases to exist. Manulife Trust Company ("MTC") is a wholly owned subsidiary of the Bank and was formed on April 7, 2010.

SEs are entities that are created to accomplish a narrow and well-defined objective. SEs are consolidated when an assessment of the factors indicates that the Bank controls the SE. When assessing whether the Bank has to consolidate a SE, the Bank evaluates a range of factors, including whether in substance: (i) the activities of the SE are conducted according to the Bank's specific business needs so that the Bank obtains the benefits from the SE's operations; (ii) the Bank has the decision-making powers to obtain the majority of the benefits of the activities of the SE; (iii) the Bank will obtain the majority of the benefits of the activities of the SE; (iii) the Bank will obtain the majority of the benefits of the activities of the SE; and (iv) the Bank retains the majority of the residual ownership risks related to the assets or SE in order to obtain the benefits from its activities. Platinum Canadian Mortgage Trust II ("Platinum Trust II"), has been identified as an SE that requires consolidation. Platinum Trust II was established to provide financing for MBC's uninsured mortgage products and commenced operations on May 26, 2016.

Consolidation conclusions are reassessed at the end of each financial reporting period.

(b) Financial instruments

Financial assets and liabilities, with the exception of mortgages and loans, are initially recognized at trade date, the date that the Bank becomes a party to the contractual provisions of the instrument. Mortgages and loans are recognized when the funds are transferred to the customer. Under IFRS 9, *Financial Instruments* ("IFRS 9"), financial instruments are initially measured at fair value plus/minus transaction costs for financial instruments recognized at amortized cost or fair value through other comprehensive income ("FVOCI").

The classification of financial instruments at initial recognition depends on their contractual terms and the business model for managing the instruments.

The Bank determines its business model at the portfolio level and not on an instrument-by-instrument basis, as the portfolio level best reflects how it manages groups of financial assets. The business model assessment is based on observable factors such as:

- How performance of the portfolio of financial assets is evaluated and reported to key management personnel;
- The risks that affect the performance of the business model, and how those risks are managed;
- How managers of the business are compensated for performance; and
- The frequency, value and timing of sales.

As a second step of the classification process, the Bank assesses the contractual terms of the financial asset to identify if the contractual terms of the financial asset give rise on specified dates to cash flows that are solely payments of principal and interest ("SPPI") on the principal amount outstanding.

The most significant elements of interest within a lending arrangement are typically the consideration for the time value of money and credit risk. To make the SPPI assessment, the Bank applies judgment and considers relevant factors such as the currency in which the asset is denominated and the period for which the interest rate is set. Contractual terms that introduce a more than *de minimis* exposure to risks or **Manulife Bank of Canada** | 2022 Consolidated Financial Statements 2

volatility and cash flows that are unrelated to a basic lending arrangement would not meet the SPPI test. In such cases, the financial asset is required to be measured at fair value through profit or loss ("FVTPL").

Financial assets are measured at amortized cost if both of the following conditions are met:

- The financial asset is held within a business model with the objective to hold financial assets in order to collect contractual cash flows; and
- The contractual terms of the financial asset meet the SPPI test.

The Bank's financial assets classified and measured at amortized cost are mortgages, loans and other financial assets.

The FVOCI category is applied when both of the following conditions are met:

- The financial asset is held within a business model with the objective achieved by both collecting contractual cash flows and selling financial assets; and
- The contractual terms of the financial asset meet the SPPI test.

The Bank's financial assets classified and measured at FVOCI are cash and cash equivalents and debt securities, as these assets are used for liquidity management purposes.

The Bank's equity securities and derivatives are classified and measured at FVTPL.

Financial liabilities, other than loan commitments and financial guarantees, are measured at amortized cost.

(c) Cash and cash equivalents

Cash and cash equivalents comprise unrestricted balances held with banks and other federally regulated financial institutions. The Bank considers all highly liquid investments with an original maturity of 90 days or less to be cash equivalents. Cash and cash equivalents are carried at fair value and classified at FVOCI, as the financial asset is held within a business model whose objective is achieved by both collecting contractual cash flows and selling financial assets. Cash and cash equivalents are subject to the impairment requirements of IFRS 9.

(d) Restricted cash

Restricted cash comprises cash and cash equivalents held that are not available for general use due to legal or other reasons. Restricted cash has been established in relation to the Bank's securitization activities (Note 15) and the Bank's automated banking machine ("ABM") network, as the cash is expressly for use within the ABM network and unavailable for general use.

(e) Securities

Securities include debt and equity securities. Debt securities are classified and measured at FVOCI as the contractual terms of the financial asset give rise, on specified dates, to cash flows that are 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 accumulated other comprehensive income (loss) ("AOCI") with the exception of 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 AOCI to the Consolidated Statements of Income.

Debt securities measured at FVOCI are subject to the impairment requirements of IFRS 9. As the Bank's debt securities have a low risk of default and the borrower has a strong capacity to meet contractual cash flow obligations, these financial instruments are deemed to have low credit risk as of the reporting date. As such, the Bank measures a loss allowance at an amount equal to 12-month ECLs. ECLs are calculated on

Manulife Bank of Canada | 2022 Consolidated Financial Statements

an instrument-by-instrument basis. 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 other comprehensive income (loss) ("OCI") as an accumulated impairment amount, with a corresponding charge to profit or loss. The accumulated loss recognized in OCI is recycled to profit or loss upon derecognition of the assets.

Equity securities are classified and measured at FVTPL, as these instruments contain contractual cash flows that do not meet the SPPI test. Equity securities are initially recognized at fair value plus directly attributable transaction costs in the Consolidated Statements of Financial Position. Changes in fair value and realized gains and losses are recognized in non-interest income in the Consolidated Statements of Income under net gains (losses) on securities measured at FVTPL. Dividend income is recorded in interest income. Equity securities at FVTPL are not subject to the impairment requirements under IFRS 9.

(f) Mortgage and other loans

Mortgage and other loans are classified and carried at amortized cost, including CAC and net of allowances for ECLs. Mortgage loans include traditional residential amortizing mortgages, Home Equity Lines of Credit ("HELOCs") and commercial amortizing mortgages. Other loans primarily include personal and credit card loans. Acquisition costs are deferred when they relate directly to the acquisition or issuance of new business and are incremental in nature. Amortized cost is calculated by considering any discount or premium on acquisition and fees and costs that are an integral part of the effective interest rate ("EIR"). The effective interest is included in interest income in the Consolidated Statements of Income. Realized gains and losses from derecognition are recorded in income immediately.

Allowance for ECLs

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 EIR. This includes consideration of past events, current market conditions and reasonable supportable information about future economic conditions. Forward-looking macroeconomic variables used within the models represent variables that are the most closely related with credit losses in the relevant portfolio.

The measurement of impairment losses requires significant judgment. These estimates are driven by many elements, changes in which can result in different levels of allowances. Particularly, the estimation of the amount and timing of future cash flows, the Bank's criteria for assessing if there has been a significant increase in credit risk ("SICR"), the selection of forward-looking macroeconomic scenarios and their probability weights, the application of expert credit judgment in the development of the models, inputs and, when applicable, overlay adjustments. It is the Bank's process to regularly review its models in the context of actual loss experience and adjust when necessary. The Bank has implemented formal policies, procedures and controls over all significant impairment processes, which include the establishment of an IFRS 9 Governance Committee, who provides oversight over material components of the IFRS 9 impairment provision and includes members of the Bank's Executive Leadership Team.

The ECL calculations for material portfolios include the following elements:

- Probability of default ("PD"), is an estimate of the likelihood of default over a given time horizon;
- Loss given default ("LGD"), is 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. To calculate the LGDs, the Bank categorizes its products into smaller homogeneous portfolios, based on key characteristics that are relevant to the estimation of future cash flows. The applied data is based on historically collected loss data as well as borrower and transaction characteristics. Forward-looking economic scenarios are used to determine the LGD rate for each group of financial instruments; and

Manulife Bank of Canada | 2022 Consolidated Financial Statements

 Exposure at default ("EAD"), is an estimate of the exposure at a future default date, considering expected changes in the exposure after the reporting date. The Bank determines EADs by modelling the range of possible exposure outcomes at various points in time, corresponding to the multiple scenarios. The PDs are then assigned to each economic scenario based on the outcome of the Bank's models.

Simplified measurement approaches may be applied to immaterial portfolios that lack detailed historical information and/or loss experience.

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

- Stage 1 comprises all performing financial instruments that have not experienced a SICR since initial recognition. The determination of SICR varies by product and considers the relative change in the risk of default since origination. The 12-month ECLs are recognized for all Stage 1 financial instruments. The 12-month ECLs represent the portion of lifetime ECLs that result from default events possible within 12 months of the reporting date. These expected 12-month default probabilities are applied to a forecast EAD, multiplied by the expected LGD and discounted by an approximation to the original EIR. This calculation is made for each of four macroeconomic scenarios.
- Stage 2 comprises all non-impaired financial instruments that have experienced a SICR since original recognition and/or financial instruments with principal or interest payments contractually 30 days in arrears. Full lifetime ECLs are recognized, which represent ECLs that result from all possible default events over the remaining lifetime of the financial instrument. The mechanics are consistent with Stage 1, except PDs and LGDs are estimated over the lifetime of the instrument. In subsequent reporting periods, if the credit risk of a financial instrument improves such that there is no longer a SICR since initial recognized. Financial instrument will migrate back to Stage 1 and 12-month ECLs will be recognized. Financial instruments can migrate in both directions through the stages of the impairment model.
- Stage 3 comprises financial instruments identified as credit-impaired. Similar to Stage 2 assets, full lifetime ECLs are recognized for Stage 3 financial instruments, but the PD is set at 100%. The Bank identifies a financial asset as credit-impaired when one or more events that have a detrimental impact on the estimated future cash flows of that financial instrument have occurred. Evidence that a financial instrument is credit-impaired includes indication that a borrower is experiencing significant financial difficulty, or a default or delinquency has occurred. The Bank considers a financial instrument in default when the borrower becomes 90 days past due on its contractual payments. A financial instrument is no longer considered impaired when all past due amounts, including interest, have been recovered, and it is determined that the principal and interest are fully collectible in accordance with the original contractual terms. Interest income on Stage 3 financial instruments is calculated based on the amortized cost of the asset, net of the loss allowance, rather than on its gross carrying amount. Gross carrying amount is used for calculating interest income for both Stage 1 and Stage 2 exposures.

IFRS 9 also contains specific accounting requirements for purchased or originated credit-impaired ("POCI") assets. POCI assets are financial assets that are credit-impaired on initial recognition. During the year ended December 31, 2022, the Bank did not purchase or originate any POCI assets (2021 – nil).

For material Stage 1 and Stage 2 exposures, an ECL is generated for each individual exposure; however, the relevant parameters are modelled on a collective basis with all collective parameters captured by the individual loan-level models. The Bank groups exposures into smaller homogeneous portfolios, based on a combination of internal and external characteristics, such as product type, origination details, balance history, geographic location, credit history and loan-to-value ratios. Stage 3 ECLs are either individually or collectively assessed, depending on the nature of the impairment.

Stage 3 credit impairments are measured as the difference between the asset's carrying amount and the present value of estimated future cash flows discounted at the asset's original EIR and reduced by estimated collection costs. Expected future cash flows are typically determined in reference to the fair value of collateral security and other credit enhancements underlying the mortgage loans, net of expected costs of

Manulife Bank of Canada | 2022 Consolidated Financial Statements

realization and any amounts legally required to be paid to the borrowers, or observable market prices for the mortgage loans, if any.

ECLs related to financial guarantee contracts, letters of credit and undrawn and other loan commitments are recognized as a provision within other liabilities. When estimating lifetime ECLs for undrawn loan commitments, the Bank estimates the expected portion of the loan commitment that will be drawn down over its expected life. The ECL is then based on the present value of the expected shortfalls in cash flows if the loan is drawn down, based on a probability weighting of the four scenarios. The expected cash shortfalls are discounted at an approximation to the expected EIR on the loan.

In assessing whether credit risk has increased significantly, the Bank compares the risk of default occurring over the remaining expected life from the reporting date and the date of initial recognition. The assessment varies by product and risk category. The assessment incorporates the Bank's internal credit risk ratings and a combination of borrower-specific and portfolio-level assessments, including the incorporation of forward-looking macroeconomic data. The assessment of SICR considers both absolute and relative thresholds. If contractual payments are more than 30 days past due, the credit risk is automatically deemed to have increased significantly since initial recognition.

When estimating ECLs, the Bank considers four scenarios. Economic forward-looking inputs include Gross Domestic Product ("GDP") growth, unemployment rates ("UEs") and house and share price indices. Application of each input varies by product. Depending on their usage in the models, macroeconomic inputs are projected at the country, province or more granular level. Each macroeconomic scenario used includes a projection of all relevant macroeconomic variables for a five-year period, subsequently reverting to long-run averages. In order to achieve an unbiased estimate, economic data used in the models is supplied by an external source. This information is compared to other publicly available forecasts, and the scenarios are assigned a probability weighting based on statistical analysis and management judgment.

The inputs and models used for calculating ECLs may not always capture all characteristics of the market at the date of the Consolidated Financial Statements. Qualitative factors that are not already considered in the modelling may be incorporated by exercising expert credit judgment in determining the final ECL.

When measuring the lifetime of a loan, the Bank considers the maximum contractual period, except for the Bank's revolving products (HELOCs, credit cards and other revolving loans), where the expected life is estimated based on the period over which the Bank is exposed to credit risk. The period the Bank is exposed to credit risk is the period that reflects the Bank's expectations of the customer behaviour, its likelihood of default and when applicable, any potential risk mitigation procedures.

Changes in the required ECL allowance are recorded in the provision for credit losses in the Consolidated Statements of Income. 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. This is considered a (partial) derecognition of the financial asset. In subsequent periods, any recoveries of amounts previously written off are credited to the provision for credit losses.

(g) Other assets

Other assets include prepaid expenses, accrued interest receivable, other receivables, capital assets, finitelife intangible assets and securitization retained interests. Accrued interest receivable, securitization retained interests and other financial assets are classified and measured at amortized cost. Capital assets are carried at cost less accumulated amortization computed on a straight-line basis over their estimated useful lives, which range from 2 to 10 years. Intangible assets are recorded at cost, including expenditures that are directly attributable to the acquisition of the items, less accumulated amortization and impairment losses. Additions and subsequent expenditures are capitalized only to the extent that they enhance the future economic benefits expected to be derived from the assets. Intangible assets are amortized on a straight-line basis over their estimated useful lives of three to five years. Amortization of intangible assets is recorded in the Consolidated Statements of Income under other non-interest expenses.

Intangible assets are assessed for indicators of impairment at each reporting period, or more frequently when events or changes in circumstances dictate. If any indication of impairment exists, these assets are subject to an impairment test. When the carrying value exceeds the estimated recoverable amount, the assets are considered impaired and written down to their recoverable amount. Any impairment arising from a decline in value of intangible assets is charged to income in the period in which the losses are incurred.

(h) Derivative financial instruments and hedge accounting

The Bank uses derivative financial instruments ("derivatives") to manage exposures to interest rate risk arising from the Bank's on-balance sheet financial instruments. Derivatives embedded in other financial instruments ("host instruments") are separately recorded as derivatives when their economic characteristics and risks are not clearly and closely related to those of the host instrument, the terms of the embedded derivative are the same as those of a stand-alone derivative and the host instrument itself is not recorded as derivatives with unrealized gains are reported as derivative financial assets, and derivatives with unrealized losses are reported as derivative financial liabilities. Derivative assets and liabilities are offset and the net amount is presented in the Consolidated Statements of Financial Position when the Bank has a current legally enforceable right to offset the recognized amounts and intends to settle on a net basis or to realize the asset and settle the liability simultaneously.

Derivatives not in qualified hedging relationships are recorded at FVTPL and changes in their fair values are recorded in interest income.

A determination is made for each potential hedging relationship as to whether hedge accounting can be applied. Where the Bank has elected to use hedge accounting, a hedge relationship is designated and documented at inception. Hedge effectiveness is evaluated at inception and throughout the term of the hedge. Hedge accounting is only applied when the Bank expects that each hedging instrument will be highly effective in achieving offsetting changes in fair value attributable to the risk being hedged. The assessment of hedge effectiveness is performed quarterly. When it is determined that the hedging relationship is no longer effective, or the hedging instrument or the hedged item has been sold or terminated, the Bank discontinues hedge accounting prospectively. In such cases, if the derivative hedging instruments are not sold or terminated, any subsequent changes in fair value of the derivative are recognized in interest income.

The regression method is generally used to test hedge effectiveness and determine the hedge ratio. The main sources of potential hedge ineffectiveness are as follows:

- Differences in the cash flows due to derivative rate reset frequencies and timing of cash flows.
- Differences in the discounting factors due to timing of cash flows and yield basis differences.

For derivatives that are designated as hedging instruments, changes in fair values are recognized according to the nature of the risk being hedged, as described below.

Fair value hedges

In a fair value hedging relationship, changes in the fair value of the hedging instrument are recorded in interest income along with the changes in the fair value of the hedged item attributable to the hedged risk. The carrying value of the hedged item is adjusted for changes in fair value attributable to the hedged risk. To the extent that changes in the fair value of the derivative do not offset the changes in the fair value of the hedged risk, any ineffectiveness will remain in income. When hedge accounting is discontinued, the carrying value of the hedged item is no longer adjusted and the cumulative fair value adjustments are amortized to income over the remaining term of the hedged item unless the hedged item is sold, at which time the balance is recognized immediately in income.

(i) Demand and term deposits

Term deposits include guaranteed investment certificates ("GICs") and unsecured notes. Demand and term deposits are measured at amortized cost, net of related CAC.

Manulife Bank of Canada | 2022 Consolidated Financial Statements

7

(j) Provisions and contingent liabilities

Provisions are liabilities of uncertain timing and amount. A provision is recognized when the Bank has a present obligation (legal or constructive) arising from a past event, when it is probable that an outflow of economic resources will be required to settle the obligation and when the amount of the obligation can be reliably estimated. Provisions are based on the Bank's best estimates of the economic resources required to settle the present obligation, given all relevant risks and uncertainties and, where it is significant, the effect of the time value of money.

Contingent liabilities are possible obligations that arise from past events whose existence will be confirmed only by the occurrence or non-occurrence of one or more uncertain future events not wholly within the control of the Bank, or are present obligations that have arisen from past events, but are not recognized because it is not probable that settlement will require the outflow of economic benefits.

Management exercises judgment in determining whether a past event or transaction may result in the recognition of a provision or the disclosure of a contingent liability, for instance, in the case of legal actions or pending litigation.

(k) Other liabilities

Other liabilities are recorded at amortized cost. Other liabilities consist of payables to related parties, accrued interest payable, contract liabilities from contracts with customers (unearned revenue), credit card accrued loyalty provision, accounts payable and other accrued liabilities. Other liabilities also include the ECL allowance for undrawn loan commitments and other off-balance sheet exposures in scope of the IFRS 9 impairment requirements.

(I) Income taxes

The Bank provides for income taxes using the liability method of tax allocation. Under this method, income tax expense is calculated based on income tax laws and income tax rates substantively enacted at the date of the Consolidated Statements of Financial Position. The income tax expense comprises two components: current income taxes and deferred income taxes. Current and deferred taxes relating to items recognized in OCI or directly in equity are similarly recognized in OCI or directly in equity.

Current income taxes are amounts expected to be payable or recoverable as a result of operations in the current year and any adjustments to income taxes payable in respect of previous years.

Deferred income taxes result from temporary differences between the carrying values of assets and liabilities and their respective tax bases. Deferred taxes are measured at the substantively enacted tax rates that are expected to be applied to temporary differences when they are expected to be recovered or settled.

A deferred tax asset is recognized to the extent that future realization of the tax benefit is probable. Deferred tax assets are reviewed at each reporting date and are reduced to the extent that it is no longer probable that the tax benefit will be realized. Current tax assets and liabilities are offset if there is a legally enforceable right to offset and they relate to income taxes levied by the same tax authority on the same taxable entity. Deferred tax assets and liabilities are offset.

Deferred tax liabilities are recognized for all taxable temporary differences, except in respect of taxable temporary differences associated with investments in subsidiaries and investments subject to significant influence, where the timing of the reversal of the temporary differences can be controlled and it is probable that the temporary differences will not reverse in the foreseeable future.

(m) Foreign currency translation

Transactions in foreign currencies are initially recorded at the functional currency rate prevailing at the date of the transaction. Monetary assets and liabilities denominated in foreign currencies are retranslated to the functional currency at the exchange rate in effect at the reporting date. Revenue and expenses denominated in foreign currencies are translated at the average exchange rate prevailing during the reporting period. Exchange gains and losses on monetary items are recognized in income.

(n) Securitization transactions

The Bank periodically securitizes uninsured HELOCs through Platinum Trust II and participates in two Canada Mortgage and Housing Corporation ("CMHC") securitization programs: the Mortgage-Backed Securities ("MBS") program under the *National Housing Act* (Canada) MBS program ("NHA MBS") and the Canada Mortgage Bond ("CMB") program.

When the Bank retains the right to receive cash flows from the financial assets or substantially all of the risks and rewards of the transferred assets, the transferred assets are not derecognized from its Consolidated Statements of Financial Position and are accounted for as secured financing transactions.

Financial assets are derecognized when the Bank's contractual rights to the cash flows from the assets have expired, or when the Bank retains the rights to receive the cash flows of the assets, but assumes an obligation to pay those cash flows to a third party subject to certain pass-through requirements, or when the Bank transfers its contractual rights to receive the cash flows and substantially all of the risk and rewards of the assets have been transferred. In the determination of whether the Bank has transferred substantially all of the risk and rewards of the transferred assets, management also considers the Bank's exposure to the variability in the amount and timing of net cash flows of the transferred assets before and after the transfer. If the variability in cash flows does not change significantly as a result of the transfer, the Bank is considered to have retained substantially all of the risks and rewards of ownership.

The Platinum Trust II internal securitization program does not meet derecognition requirements. HELOCs securitized through Platinum Trust II remain on the Bank's Consolidated Statements of Financial Position, as the Bank retains the prepayment and interest rate risk associated with these accounts, which represents substantially all of the risks and rewards associated with the transferred assets. The Bank continues to recognize the accounts as assets and records a notes payable liability, which is accounted for at amortized cost. Interest income on the assets and interest expense on the notes payable are recorded using the EIR method. Transactions under the Platinum Trust II program are consolidated with the Bank.

Single-family residential mortgages securitized through the NHA MBS and CMB programs remain on the Bank's Consolidated Statements of Financial Position as the Bank retains the prepayment, interest rate, other price risks and the interest spread between the securities and the underlying mortgage assets. Mortgages that have been securitized through the NHA MBS program, but have not been sold to external parties, and mortgages sold to Canada Housing Trust ("CHT") through the CMB program are included in mortgage and other loans. The Bank continues to classify and measure these assets at amortized cost.

The Bank periodically purchases CMHC-insured multi-unit residential mortgages from third-party originators and pools the mortgages into the NHA MBS and CMB programs. As the Bank's continuing exposure to prepayment and credit risk on the sold mortgages is negligible, the transaction qualifies for partial balance sheet derecognition. These mortgages are recognized on the Bank's Consolidated Statements of Financial Position only to the extent of the Bank's continuing involvement in the mortgages, which is limited to its retained interest. Securitization retained interests are classified and measured at amortized cost and included in other assets. Gains or losses on these transactions are recognized as gain on sale of mortgages and recognized in interest income in the Consolidated Statements of Income.

(o) Recognition of income and expenses

Interest income and expense

Interest income and expense are recognized in the Consolidated Statements of Income using the EIR method for all interest-bearing financial instruments except those classified as FVTPL. The EIR method is a method

of calculating the amortized cost of a financial asset or liability and of allocating the interest income or interest expense over the expected life of the financial instrument. The EIR is the rate that exactly discounts the estimated future cash payments or receipts over the expected life of the financial instrument or, when appropriate, a shorter period, to the net carrying amount of the financial asset or financial liability. The EIR is calculated by taking into account any discount or premium on acquisition, fees and costs that are an integral part of the EIR.

The Bank calculates interest income by applying the EIR to the gross carrying amount of financial assets other than credit-impaired assets. When a financial asset becomes credit-impaired, interest income is calculated by applying the EIR to the net amortized cost of the financial asset. If the financial asset cures and is no longer credit-impaired, interest income is calculated on a gross basis.

Dividend income is recognized in interest income when the Bank's right to receive payment is established.

Fee income

Revenue from contracts with customers is recognized as fee income when obligations under the terms of a contract with the customer are satisfied. Revenue is measured at the amount of consideration received, or expected to be received, in exchange for services rendered. Revenue excludes amounts collected on behalf of third parties.

Fee income includes revenue from transaction processing, administration and other services provided to the customer on a pay-as-you-go basis. These fees include ABM fees, certain referral fees and transaction fees relating to the Bank's mortgage, loan, deposit and credit card products. Revenue is recognized at a point in time, when the service is rendered. Timing of billing and cash collection typically occurs at the time of transaction. The fees have no variable consideration, non-cash consideration or significant financing components. Consideration received is non-refundable.

Revenue from monthly administration and annual service fees are recognized on a straight-line basis over the term of the contract, consistent with the satisfaction of the Bank's performance obligations. The Bank usually has a single performance obligation for each contract consisting of similar related services for the customer. Fees recognized over time include monthly administrative fees, annual loan and credit card fees, certain referral fees, and Trustee and Custodial fees. The fees have no variable consideration, non-cash consideration or significant financing components. Consideration received is non-refundable.

Fee income is recognized gross of related expenses, with the exception of certain credit card fees that are presented on a net basis. For these credit card fees, the expense arises concurrently to the related revenue, and net presentation reflects the substance of the transaction. Additionally, credit card interchange fee income is accounted for net of credit card loyalty expense. Credit card loyalty expense is treated as consideration payable to the customer and recognized as a reduction to the transaction price. A net presentation reflects the substance of the transaction as these expenses occur concurrently with the related revenue and relate to the same counterparty as part of the same agreement.

In some circumstances, the Bank acts as agent in the satisfaction of performance obligations to the customer. These include certain credit card services and referral services. Under these circumstances, the Bank recognizes the net amount of consideration received as revenue.

A contract liability is recognized when the Bank has an obligation to transfer services to a customer for which the Bank has received consideration. The Bank recognizes annual credit card fees as a contract liability when consideration is received from the customer. Contract liabilities are included within other liabilities. These fees are amortized to income on a straight-line basis over the 12-month contract term, consistent with the satisfaction of the Bank's performance obligations. The Bank applies the practical expedient in paragraph 121 of IFRS 15, *Revenue from Contracts with Customers* and does not disclose information about remaining performance obligations at the reporting date that have original expected durations of one year or less.

Consideration that the Bank is entitled to for services performed is recognized as a receivable if there are no other conditions other than the passage of time. Receivables from contracts with customers are recognized within other assets. A contract asset is recognized when the Bank has a right to consideration in exchange for services that the Bank has transferred to a customer when that right is conditioned on something other than the passage of time. There were no contract assets recognized by the Bank as at December 31, 2022 (2021 – nil).

Incremental costs of obtaining or fulfilling a contract with a customer are recognized as an asset when certain criteria are met. Costs that relate to satisfied performance obligations are expensed. No assets for costs to obtain or fulfill a contract were recognized by the Bank as at December 31, 2022 (2021 – nil).

Non-interest expenses

Non-interest expenses are recognized when incurred.

Note 3: Future Accounting and Reporting Changes

The following amendments have been issued but are not yet effective. The Bank is currently assessing the impact of the application of these amendments on its Consolidated Financial Statements and will adopt these standards when they become effective.

(a) Amendments to IAS 1, *Presentation of Financial Statements* ("IAS 1")

Amendments to IAS 1 and IFRS Practice Statement 2, *Making Materiality Judgements* were issued in February 2021 and are effective prospectively on or after January 1, 2023, with earlier application permitted. The amendments address the process of selecting accounting policy disclosures, which will be based on assessments of the materiality of the accounting policies to the entity's financial statements. Adoption of these amendments is not expected to have a significant impact on the Bank's Consolidated Financial Statements.

(b) Amendments to IAS 8, *Accounting Policies, Changes to Accounting Estimates and Errors* ("IAS 8")

Amendments to IAS 8 were issued in February 2021, and are effective prospectively on or after January 1, 2023, with earlier application permitted. The amendments include new definitions of estimate and change in accounting estimate, intended to help clarify the distinction among changes in accounting estimates, changes in accounting policies, and corrections of errors. Adoption of these amendments is not expected to have a significant impact on the Bank's Consolidated Financial Statements.

Note 4: Derivatives

Derivatives are financial instruments that have value derived from underlying interest rates, foreign exchange rates, other financial instruments' prices, commodity prices or indices. The Bank uses derivatives to manage current and anticipated exposures to changes in interest rates and to better match the cash flows of assets and liabilities.

The Bank historically uses vanilla interest rate swaps, which are over-the-counter ("OTC") contractual agreements to exchange fixed and floating rate interest payments based on a specified amount of notional principal with a swap counterparty. During 2022, the Bank entered into the sale of a bond forward contract to manage risk associated with the cost of CMB funding. The specified notional of the bond forward matched the expected CMB issuance amount and the maturity of the bond forward contract is aligned with the expected CMB pricing date. This bond forward contract was closed during Q3 2022 when the CMB was funded. As at December 31, 2022, the Bank had no active derivative contracts.

The Bank uses derivatives for economic hedging purposes. In certain circumstances, these hedges also meet the requirements for hedge accounting. The changes in fair value of such derivatives flow directly to the Consolidated Statements of Income. During the year, the Bank recorded a realized loss of \$2 (2021 – nil) on the derivatives, which were not designated as hedging instruments, and this loss has been recognized in non-interest income. As at December 31, 2022, the Bank had no active hedging relationships. Historical hedging relationships eligible for hedge accounting were designated as fair value hedges.

Derivatives in fair value hedging relationships

The Bank recognizes gains and losses on derivatives used in fair value hedges, as well as gains and losses on the related hedged items in interest income. As at December 31, 2022, the Bank held no fair value hedges and recognized nil income on fair value hedges during the year ended December 31, 2022.

The following table summarizes the effects of fair value hedges on the Consolidated Statements of Financial Position and Consolidated Statements of Income for the year ended December 31, 2021.

												ad	cumulated ljustments remaining
										Асси	umulated	for a	ny hedged
										adjı	ustments	iter	n that has
	Hedged items									includ	led in the	cea	ased to be
	in fair value	Gains (losses)	Gains	(losses)	Ineffe	ectiveness	(Carrying	carryi	ing value	ac	ljusted for
For the year ended	hedging	recogn	zed on	recogn	ized for	reco	ognized in		value of	0	f hedged	hedg	ging gains
December 31, 2021	relationships	deri	vatives	hedge	d items		income ⁽¹⁾	hedg	ed item		items	ä	and losses
Interest rate swaps	Term deposits	\$	-	\$	-	\$	-	\$	30	\$	-	\$	1

⁽¹⁾ Hedge ineffectiveness is recognized in interest income in the Consolidated Statements of Income.

Fair value of derivatives

The pricing models used to value OTC interest rate swaps and the sale of bond forwards are based on market standard valuation methodologies, and the inputs to these models are consistent with what a market participant would use when pricing the instruments. Derivative valuations can be affected by changes in Banker's Acceptance ("BA") swap rates, credit spreads and default risk (including default risk of the counterparties to the contract). The valuation of bond forward contracts used to hedge CMB funding cost risk are impacted by several key factors that are observable or are derived from observable market variables. These include the spot price and yield of the underlying hedging instrument at the trade date and unwind date; the price and yield of the hedged item, or if the hedged item is a to-be-issued CMB, an interpolated yield based on underlying spot prices of current on-the-run bonds; and the repo rate applied to the transaction.

The significant inputs to the pricing models for most OTC derivatives are inputs that are observable or can be corroborated by observable market data and are classified as Level 2 as per the fair value measurement

hierarchy described in Note 14. Inputs that are observable generally include interest rates and BA swap curves and volatilities. The Bank has not used unobservable inputs in the valuation of the OTC interest rate swaps or bond forward transactions held as at December 31, 2021. The credit risk of both the counterparty and the Bank are considered in determining the fair value for all OTC derivatives after considering the effects of netting agreements and collateral arrangements.

As at December 31, 2022, the Bank held no derivatives. The carrying value and fair value of derivative assets held as at December 31, 2021 were insignificant and all derivative contracts matured during the year ended December 31, 2022.

The gross notional amount and the fair value of derivatives contracts by the underlying risk exposure for all derivatives in hedging and economic hedging relationships held as at December 31, 2021, are summarized by term to maturity in the following table.

	Remai	ning te	erm t	o maturit	ty (no	otional)		F	air va	lue					Risk-
As at December 31, 2021	Less	s than 1 year		1 to 5 years		Total	Posi	tival	Vlogat	ivo	Net	Credi equival		•	ghted
		i yeai		years		TOLA	1 0 31	livei	vega		INEL	equival	ent	anno	unt
Interest rate swaps ⁽¹⁾ Qualifying hedging relationships Non-qualifying hedge	\$		\$	-	\$	-	\$	-	\$	-	\$ -	\$	-	\$	-
accounting relationships		31		-		31		-		-	-		-		-
Total	\$	31	\$	-	\$	31	\$	-	\$	-	\$ -	\$	-	\$	-

⁽¹⁾ The average fixed interest rate as at December 31, 2021, of the hedging instrument was 1.5%.

(2) Credit risk equivalent is the sum of replacement cost and the potential future credit exposure. Replacement cost represents the current cost of replacing all contracts with a positive fair value. The amounts take into consideration legal contracts that permit offsetting of positions. The potential future credit exposure is calculated based on a formula prescribed by OSFI.

⁽³⁾ Risk-weighted amount represents the credit risk equivalent, weighted according to the creditworthiness of the counterparty, as prescribed by OSFI.

Embedded derivatives

The Bank does not have any financial instruments or contracts that contain embedded derivatives requiring bifurcation.

Note 5: Securities

The Bank's debt securities are classified as FVOCI and equity securities are classified as FVTPL. The following tables outline the carrying values of the securities by contractual maturity.

		Re	emai	ning ter	m to	maturit	/					
										With no		
	١	Nithin 1		1 to 3		3 to 5		Over 5		specific		
As at December 31, 2022		year		years		years		years		maturity		Total
Debt securities measured as FVOCI												
United States ⁽¹⁾	\$	34	\$	111	\$	29	\$	-	\$	-	\$	174
International ⁽¹⁾		13		34		4		-		-		51
Total debt securities measured as FVOCI	\$	47	\$	145	\$	33	\$	-	\$	-	\$	225
Equity securities measured as FVTPL												
Canadian public equities ⁽¹⁾	ć		ć		ć		ć		ć	1/1	ċ	1/1
Total securities	<u>\$</u> \$	47	\$ \$	- 145	\$ \$	33	\$ \$	-	<u>\$</u> \$	<u>141</u> 141	<u>\$</u> \$	<u>141</u> 366
Total securities	Ŷ	1	Ŷ	ITJ	Ŷ	55	Ŷ	-	Ŷ	171	Ŷ	300
		Re	ema	ining ter	m to	o maturit	у					
									•	With no		
		Within 1		1 to 3		3 to 5		Over 5		specific		
As at December 31, 2021		year		years		years		years		maturity		Total
Debt securities measured as FVOCI												
United States ⁽¹⁾	\$	68	\$	87	\$	40	\$	4	\$	-	\$	199
International ⁽¹⁾		-		40		4		-		-		44
Total debt securities measured as FVOCI	\$	68	\$	127	\$	44	\$	4	\$	-	\$	243
Equity securities measured as FVTPL												
Canadian public equities ⁽¹⁾	¢		¢		¢		¢		¢	151	¢	151
Total securities	\$ \$	- 68	\$ \$	- 127	ф Ф	- 44	¢	-	<u>ቀ</u>	<u>151</u> 151	\$ \$	151
I otal securities	Ŧ	00	Þ	127	Φ	44	Þ	4	\$	101	Ф	394

⁽¹⁾ Geographic location based on country of issuer.

As at December 31, 2022 and 2021, all debt securities measured and classified as FVOCI are classified in Stage 1, with their credit quality falling mainly in the "Investment Grade" category according to the Bank's internal risk-rating categories.

Net losses on securities measured as FVTPL in the Consolidated Statements of Income for the year ended December 31, 2022 of \$7 includes \$27 of net realized gains on the sale of securities and \$34 of net unrealized losses (2021 – net gains of \$38 includes \$29 of net realized gains on the sale of securities and \$9 of net unrealized gains).

Note 6: Mortgage and Other Loans

The following tables summarize total amounts of mortgage and other loans (gross and net of allowances) and gross impaired mortgages and other loans for the Bank.

As at December 31, 2022	Gross amount of loans	Allo Stage 1	wa	<u>nce for E</u> Stage 2		s Stage 3	Total	Net amount of loans	i	Gross npaired loans
Mortgage loans ⁽¹⁾	\$ 21,998	\$ 3	\$	5	\$	2	\$ 10	\$ 	\$	46
Other loans ⁽²⁾	2,793	1		2		-	3	2,790		9
Total	\$ 24,791	\$ 4	\$	7	\$	2	\$ 13	\$ 24,778	\$	55
	Gross amount	Allo	wa	nce for E	CLs	5		Net amount	ii	Gross npaired
As at December 31, 2021	of loans	Stage 1		Stage 2		Stage 3	Total	of loans		loans
Mortgage loans ⁽¹⁾	\$ 20,945	\$ 3	\$	7	\$	2	\$ 12	\$ 20,933	\$	24
Other loans ⁽²⁾	2,514	1		-			1	2,513		4
Total	\$ 23,459	\$ 4	\$	7	\$	2	\$ 13	\$ 23,446	\$	28

⁽¹⁾ Mortgage loans include CAC and HELOCs.

⁽²⁾ Other loans include CAC.

As at December 31, 2022, the Bank had 14.2 per cent (2021 – 17.3 per cent) of its total mortgage loan portfolio insured through CMHC and 17.7 per cent (2021 – 17.4 per cent) insured through private insurers.

An analysis of changes in the ECL allowances in relation to mortgage loans is as follows.

		EC	Ls		
Mortgage loans	Stage 1	Stage 2		Stage 3	Total
As at January 1, 2022:	\$ 4	\$ 10	\$	2	\$ 16
New financial assets originated or purchased during the year	1	-		-	1
Transfers:					
Transfers in (out) of Stage 1 ⁽¹⁾	3	(3)		-	-
Remeasurement ⁽²⁾	(4)	1		3	-
Derecognition and maturities	-	(1)		-	(1)
Derecognitions due to credit write-offs	-	-		(2)	(2)
As at December 31, 2022	\$ 4	\$ 7	\$	3	\$ 14
Includes:					
Amounts drawn	\$ 3	\$ 5	\$	2	\$ 10
Off-balance sheet exposures	1	2		1	4
	\$ 4	\$ 7	\$	3	\$ 14

		EC	Ls		
Mortgage loans	Stage 1	Stage 2		Stage 3	Total
As at January 1, 2021:	\$ 5	\$ 14	\$	4	\$ 23
New financial assets originated or purchased during the year	1	-		-	1
Transfers:					
Transfers in (out) of Stage 1 ⁽¹⁾	6	(5)		(1)	-
Transfers in (out) of Stage 2 ⁽¹⁾	(1)	1		-	-
Remeasurement ⁽²⁾	(7)	2		1	(4)
Derecognition and maturities	-	(2)		-	(2)
Derecognitions due to credit write-offs	-	-		(2)	(2)
As at December 31, 2021	\$ 4	\$ 10	\$	2	\$ 16
Includes:					
Amounts drawn	\$ 3	\$ 7	\$	2	\$ 12
Off-balance sheet exposures	1	3		-	4
	\$ 4	\$ 10	\$	2	\$ 16

(1)

Transfers represent stage transfer movements prior to ECL remeasurement. Remeasurement includes the impact of changes in risk parameters, model assumptions, expert credit judgment and the impact of changes in the forecasts of forward-looking information subsequent to stage migration. (2)

The contractual amount outstanding on mortgage loans that have been written off, but were still subject to enforcement activity, was nil as at December 31, 2022 (2021 – nil).

		EC	Ľs		
Other loans	Stage 1	Stage 2		Stage 3	Total
As at January 1, 2022:	\$ 3	\$ -	\$	1	\$ 4
New financial assets originated or purchased during the year	2	-		-	2
Remeasurement ⁽¹⁾	-	2		1	3
Derecognition and maturities	(2)	-		-	(2)
Derecognitions due to credit write-offs	-	-		(2)	(2)
As at December 31, 2022	\$ 3	\$ 2	\$	-	\$ 5
Includes:					
Amounts drawn	\$ 1	\$ 2	\$	-	\$ 3
Off-balance sheet exposures	2	-		-	2
	\$ 3	\$ 2	\$	-	\$ 5
		FC	Ls		
Other loans	 Stage 1	Stage 2		Stage 3	Total
As at January 1, 2021:	\$ 3	\$ -	\$		\$ 3
Remeasurement ⁽¹⁾	-	-		2	2
Derecognitions due to credit write-offs	-	-		(1)	(1)
As at December 31, 2021	\$ 3	\$ -	\$	1	\$ 4
Includes:					
Amounts drawn	\$ 1	\$ -	\$	-	\$ 1
Off-balance sheet exposures	 2	 -		1	 3
	\$ 3	\$ -	\$	1	\$ 4

An analysis of changes in the ECL allowances in relation to other loans is as follows.

(1) Remeasurement includes the impact of changes in risk parameters, model assumptions, expert credit judgment and the impact of changes in the forecasts of forward-looking information subsequent to stage migration.

The contractual amount outstanding on other loans that have been written off, but were still subject to enforcement activity, was 4 as at December 31, 2022 (2021 – 1).

During 2021, the Bank provided support to clients through the Canada Emergency Business Account ("CEBA") program. Under this program, the loans are funded by the Government of Canada, with the Bank retaining no credit risk. The CEBA loans qualify for derecognition from the Bank's Consolidated Statements of Financial Position under IFRS 9. CEBA loans funded as at December 31, 2022 and 2021 were insignificant to the Bank's Consolidated Financial Statements.

The table below presents a reconciliation of the ECLs in the Consolidated Statements of Financial Position by line item.

Balance, December 31, 2022	\$	10	\$ 3	\$	6	\$ 19
Write-offs ⁽¹⁾		(2)	(2)		-	(4)
Provision for credit losses		-	4		(1)	3
Balance, December 31, 2021	\$	12	\$ 1	\$	7	\$ 20
Write-offs ⁽¹⁾		(2)	(1)		-	(3)
Provision for credit losses		(3)	1		(1)	(3)
Balance, January 1, 2021	\$	17	\$ 1	\$	8	\$ 26
		loans	loans	ехро	sures ⁽²⁾	Total
	М	ortgage	Other		sheet	
				Off-	balance	

⁽¹⁾ Included in write-offs are recoveries of \$0.4 in 2022 (2021 – \$1).

⁽²⁾ The allowance for ECLs on off-balance sheet exposures is presented within other liabilities.

Macroeconomic variables

The following tables represent the average values of the macroeconomic variables used in the Bank's calculation of ECLs over the next 12 months and the remaining 4-year forecast period for the base forecast and 5-year forecast period for the other scenarios.

	Base f	orecast	Downside	Halfshock	Upside
	Next	Remaining	5-year	5-year	5-year
Macroeconomic variables	12 months ⁽¹⁾	4-year period ⁽¹⁾	period ⁽¹⁾	period ⁽¹⁾	period ⁽¹⁾
As at December 31, 2022					
Unemployment rate (UE) Gross Domestic Product (GDP) Housing Price Index (HPI) Stock Price Index (SPI)	6.3% 0.0% (11.3%) 3.4%	5.9% 2.1% 4.5% 4.4%	7.2% 0.6% (3.9%) (1.1%)	6.4% 1.0% (2.1%) 0.7%	5.5% 2.3% 3.0% 5.6%
	Base f	orecast	Downside	Halfshock	Upside
	Next	Remaining	5-year	5-year	5-year
Macroeconomic variables	12 months ⁽¹⁾	4-year period ⁽¹⁾	period ⁽¹⁾	period ⁽¹⁾	period ⁽¹⁾
As at December 31, 2021					
Unemployment rate (UE)	6.0%	6.3%	7.6%	6.8%	5.9%
Gross Domestic Product (GDP)	3.4%	2.3%	0.6%	1.6%	3.3%
Housing Price Index (HPI)	2.6%	2.6%	(3.2%)	(1.1%)	4.3%
Stock Price Index (SPI)	(4.7%)	3.7%	(2.0%)	0.5%	3.2%

⁽¹⁾ The numbers represent forecast estimates relative to closing values as at the reporting date with the exception of UE, where forecasts are presented on an absolute basis.

Sensitivity of allowance for expected credit losses

The allowance for credit losses is sensitive to the inputs used in the ECL models, macroeconomic variables in the forward-looking forecasts and respective probability weightings in determining the probability-weighted ECL. Changes in these inputs, assumptions, models and judgments would have an impact on the assessment for SICR and the measurement of ECLs.

The following table presents the base ECL scenario compared to the probability-weighted ECL derived from using four ECL scenarios. The difference reflects the impact of deriving multiple scenarios around the base ECL and change in ECL due to sensitivity to using macroeconomic forecasts.

2022

2021

As at December 31,

As at Determber of,		2021
Probability-weighted ECL	\$ 19	\$ 20
Base ECL	18	18
Difference - in amount	\$ 1	\$ 2
Difference - in percentage	5.9%	11.7%

Note 7: Other Assets

Other assets consist of the following:

As at December 31,	2022	2021
Prepaid expenses	\$ 35	\$ 30
Accrued interest receivable on other financial assets	18	9
Intangible assets, net	15	15
Receivable from related parties (Note 17)	-	1
Securitization retained interest (Note 15)	65	58
Other receivables	10	12
Total other assets	\$ 143	\$ 125

The following table presents the intangible asset movement during the year.

	gene	rnally rated tware	intar	Other ngible sets ⁽¹⁾	Total
Cost					
Balance, January 1, 2021	\$	28	\$	5	\$ 33
Additions		4		-	4
Balance, December 31, 2021		32		5	37
Additions		5		-	5
Balance, December 31, 2022	\$	37	\$	5	\$ 42
Accumulated amortization Balance, January 1, 2021 Amortization	\$	12 5	\$	5	\$ 17 5
Balance, December 31, 2021		17		5	22
Amortization		5		-	5
Balance, December 31, 2022	\$	22	\$	5	\$ 27
Net carrying amount Balance, December 31, 2021	\$	15	\$	-	\$ 15
Balance, December 31, 2022	\$	15	\$	-	\$ 15

⁽¹⁾ Other intangible assets primarily consist of software licenses.

Internally generated software includes 5 (2021 - 4) pertaining to projects under development yet to be amortized.

Note 8: Income Taxes

Components of the income tax expense are as follows:

For the years ended December 31,	2022	2021
Current tax expense	\$ 37	\$ 30
Deferred taxes		
Reversal of temporary differences	32	35
Income tax expense	\$ 69	\$ 65

Federal Bill C-32 received royal assent on December 15, 2022, which includes certain tax measures applicable to banking and life insurer groups. Included in these measures and applicable to MBC is an additional tax of 1.5% on taxable income, applicable for taxation years ending after April 7, 2022 (prorated for taxation years straddling this effective date), resulting in an increase to MBC's corporate income tax rate. As at December 31, 2022, \$6 was recognized in the Consolidated Statements of Income, and \$14 was recognized in contributed surplus as a result of this change.

Reconciliation of income tax expense

The effective income tax rate reported in the Consolidated Statements of Income varies from the Canadian tax rate of 27.87 per cent for the year ended December 31, 2022 (2021 – 26.61 percent) for the following reasons:

For the years ended December 31,	2022	2021
Net income before income taxes	\$ 226 \$	5 246
Income tax expense at Canadian statutory tax rate	\$ 64 \$	66
Increase (decrease) in income taxes due to:		
Deferred tax rate increase	6	-
Tax-exempt investment income	(1)	(1)
Income tax expense	\$ 69 \$	65

Deferred taxes

(a) Recognized deferred tax assets and liabilities

Deferred tax assets and liabilities are offset when there is a legally enforceable right to offset current income tax assets against current income tax liabilities and they relate to the same tax authority in the same taxable entity.

As at December 31,	2022	2021
Deferred tax asset		
Loss carryforward	\$ 217	\$ 223
Allowance for expected credit losses	4	4
Deferred tax asset	\$ 221	\$ 227
Deferred tax liability		
Deferred expenses	\$ 90	\$ 78
Intangible assets	4	4
Deferred tax liability	\$ 94	\$ 82
Net deferred tax asset ⁽¹⁾	\$ 127	\$ 145

(1) 2022 deferred tax asset balance of \$127 (2021 - \$145) in above table comprises the MBC deferred tax asset balance of \$128 (2021 - \$146) and the deferred tax liability relating to MTC of \$1 (2021 - \$1).

(b)	Movement in	net deferred	tax asset and	liability
-----	-------------	--------------	---------------	-----------

	carı	Loss yforwards	-	wance for expected dit losses	Intangible assets	Deferred expenses	Total
Balance, January 1, 2022	\$	223	\$	4	\$ (4)	\$ (78)	\$ 145
Recognized in profit or loss		(20)		-	-	(12)	(32)
Recognized in equity		14		-	-	-	14
Balance, December 31, 2022	\$	217	\$	4	\$ (4)	\$ (90)	\$ 127

			Allo	wance for			
		Loss		expected	Intangible	Deferred	
	carr	yforwards	crea	dit losses	assets	expenses	Total
Balance, January 1, 2021	\$	252	\$	6	\$ (4)	\$ (74)	\$ 180
Recognized in profit or loss		(29)		(2)	-	(4)	(35)
Balance, December 31, 2021	\$	223	\$	4	\$ (4)	\$ (78)	\$ 145

As at December 31, 2022, the Bank has approximately \$766 (2021 – \$836) of tax loss carryforwards available, which will expire in the years 2039–2042. A tax benefit, related to these tax loss carryforwards, in the amount of \$217 (2021 – \$223) has been recognized in deferred income taxes for 2022.

The Bank is subject to income tax laws in various jurisdictions. Tax laws are complex and potentially subject to different interpretations by the taxpayer and the relevant tax authority. Income tax expense and deferred tax represents management's interpretation of the relevant tax laws and its estimate of current and future income tax implications of the transactions and events during the reporting periods. The Bank may be required to change its income tax expense or deferred tax balances when the ultimate deductibility of certain items is successfully challenged by taxing authorities or if estimates used in determining the amount of deferred tax assets change significantly, or when receipt of new information indicates the need for adjustments in the amount of deferred taxes to be recognized. Additionally, future events, such as changes in tax laws, tax regulations, or interpretations of such laws or regulations, may have an impact on income tax expense, deferred tax balances and the effective income tax rate. Any such changes may materially affect the amounts reported in the Consolidated Financial Statements in the year these changes occur.

Note 9: Other Liabilities

The Bank's other liabilities consist of the following:

As at December 31,	2022	2021
Accrued interest payable	\$ 110	\$ 57
Payable to related parties <i>(Note 17e)</i>	30	30
Accounts payable and accrued liabilities	29	26
Allowance for ECLs on off-balance sheet exposures <i>(Note 6)</i> ⁽¹⁾	6	7
Total other liabilities	\$ 175	\$ 120

(1) An allowance for ECLs on off-balance sheet exposures is calculated and reported in other liabilities.

Note 10: Share Capital

(a) Authorized

The authorized capital of the Bank consists of:

- an unlimited number of voting, non-redeemable common shares without nominal or par value; and
- an unlimited number of non-voting, redeemable preferred shares (subject to regulatory approval) entitled to non-cumulative dividends at an average dividend rate of 5.56%, issuable in series, without nominal or par value.

(b) Issued and outstanding *Common shares*

1,809,923 (2021 – 1,809,923) common shares that are voting and entitled to dividends as declared. These common shares are non-redeemable, and at dissolution, the holders have the right to receive the remaining property of the Bank.

The Bank has the following issued and outstanding common shares:

	2022		2021					
	Number of shares	Number of shares						
	outstanding	Amount	outstanding	Amount				
Balance, January 1	1,809,923 \$	267	1,809,923 \$	267				
Balance, December 31	1,809,923 \$	267	1,809,923 \$	267				

During 2022, the Bank declared and paid dividends of \$52 (2021 – \$168) on its common shares.

Preferred shares

As at December 31, 2022, the Bank has 229,000 (2021 - 229,000) issued and outstanding preferred shares valued at \$229 (2021 - \$229).

All redemptions or cancellations of preferred shares are subject to the consent and approval of OSFI.

The following table presents a breakdown of the Bank's preferred shares by series.

				2022		2021				
		Annual	Number of	Dividends	Dividends	Number of	Dividends	Dividends		
		rate of	shares	declared	declared	shares	declared	declared		
Series	lssue date	dividend	outstanding	('000')	\$/per share	outstanding	('000')	\$/per share		
G	February 23, 2006	5.00%	9,000	\$ 450	50.00	9,000	\$ 450	50.00		
Н	June 29, 2006 to	5.25%	60,000	3,150	53.00	60,000	3,150	53.00		
	November 28, 2008									
I	December 19, 2008	6.25%	35,000	2,188	63.00	35,000	2,188	63.00		
	to February 25, 2009									
J	December 23, 2010	5.50%	50,000	2,750	55.00	50,000	2,750	55.00		
Κ	December 21, 2017	5.60%	75,000	4,200	56.00	75,000	4,200	56.00		
Total			229,000	\$12,738		229,000	\$ 12,738			

Terms of preferred shares

Preferred shares are non-voting and entitled to non-cumulative preferential cash dividends payable quarterly, if and when declared. With regulatory approval, the shares may be redeemed by the Bank on or after the fifth anniversary of the issuance date, in whole or in part.

Note 11: Net Interest Income

Interest income consists of the following:

For the years ended December 31,	2022	2021
Interest income calculated using the EIR method		
Cash and cash equivalents at FVOCI	\$ 79	\$ 12
Debt securities at FVOCI	4	2
Mortgage and other loans at amortized cost	862	634
Dividend income on securities measured at FVTPL	5	4
Gains on sale of securitized mortgages	2	2
Total interest income	\$ 952	\$ 654

Interest expense consists of the following:

For the years ended December 31,	202	2	2021
Deposits	\$ 38	4 \$	185
Notes payable	1 1	3	57
Total interest expense	\$ 49	7 \$	242

Note 12: Fee Income

Fee income consists of the following:

	Tra	nsfer of	Transfer of	
	ser	vices at	services	
For the year ended December 31, 2022	a point	in time	over time	Total
Transaction processing, administration and service fees	\$	6	\$ 16	\$ 22
Trustee and custodial fees		-	2	2
Total	\$	6	\$ 18	\$ 24

		nsfer of vices at	Transfer of services	
For the year ended December 31, 2021	a point	: in time	over time	Total
Transaction processing, administration and service fees	\$	6	\$ 17	\$ 23
Trustee and custodial fees		-	1	1
Other		-	1	1
Total	\$	6	\$ 19	\$ 25

Note 13: Commission Expense

Commission expense consists of the following:

For the years ended December 31,	2	022	2021
Demand deposits	\$	14	\$ 15
Mortgage loans		11	10
Other loans		1	1
Total commission expense	\$	26	\$ 26

Note 14: Fair Value Measurement

Fair value is defined as the price that would be received to sell an asset or paid to transfer a liability in a transaction between market participants at the measurement date, that is, an exit value. The exit value assumes the asset or liability is exchanged in an orderly transaction; it is not a forced liquidation or distressed sale.

When available, quoted market prices are used to determine fair value. If quoted market prices are not available, fair value is typically based upon alternative valuation techniques such as discounted cash flows, matrix pricing, consensus pricing services and other techniques. The Bank's quality assurance process includes a review of price movements relative to the market, a comparison of prices between vendors, and a comparison to internal matrix pricing that uses external observable data. Broker quotes are used only when external public vendor prices are not available.

The following table presents the fair values and carrying amounts of the Bank's financial instruments.

	20	22					
	 Carrying		Fair		Carrying		Fair
As at December 31,	value		value		value		value
Assets							
Cash, cash equivalents and restricted cash	\$ 4,115	\$	4,115	\$	3,089	\$	3,089
Securities	366		366		394		394
Mortgage and other loans, net	24,778		24,366		23,446		23,585
Other financial assets	92		92		80		80
Liabilities							
Demand deposits	13,202		13,202		12,746		12,746
Term deposits	9,340		9,103		8,057		8,084
Notes payable	5,023		4,865		4,598		4,601
Other financial liabilities	165		165		110		110

Fair values are based on the following methods of valuation and assumptions:

For financial instruments that are not carried on the Consolidated Statements of Financial Position at fair value and where the Bank considers the carrying value to be a reasonable approximation of fair value due to their short-term nature or variable rate features, the fair values disclosed for these financial instruments are assumed equal to their carrying value. These financial instruments are other financial assets, demand deposits and other financial liabilities.

Equity securities' fair value is determined using quoted active market prices.

Debt securities' fair value is based on quoted market prices when available. When market prices are not available, fair value is generally determined by discounting the future cash flows, using market inputs for similar financial instruments with comparable terms and credit quality. The significant inputs into these models include, but are not limited to, yield curves, credit risks and spreads, measures of volatility and prepayment rates.

Fair value for fixed rate residential and commercial mortgage loans is determined using the discounted cash flow method. Inputs used for valuation primarily comprise prevailing interest rates as well as posted client rates and prepayment rates, if applicable. Fair value of floating rate mortgage loans and credit card loans is assumed to equal carrying value, since interest rate changes have minimal impact on fair value of these loans. Where a floating rate mortgage has a fixed spread above the benchmark rate, the mortgage loan is valued using current market spreads for equivalent-rated borrowers.

Fixed rate bank loans' fair value is determined using the discounted cash flow method. Inputs used for the valuation primarily comprise the prevailing interest rate as well as posted client rates. Fair value of floating rate bank loans is assumed to be their carrying value, since interest rate changes have minimal impact on fair value of such loans.

Term deposits' fair value is determined by discounting the contractual cash flows using interest rates currently offered for deposits with similar terms.

The Bank categorizes fair value measurements according to a three-level hierarchy. The hierarchy prioritizes the inputs used by the Bank's valuation techniques. A level is assigned to each fair value measurement based on the lowest level input significant to the fair value measurement in its entirety. The three levels of the fair value hierarchy are defined as follows:

Level 1 – Fair value measurements that reflect unadjusted, quoted prices in active markets for identical assets and liabilities that the Bank has the ability to access at the measurement date. Valuations are based on quoted prices reflecting market transactions involving assets or liabilities identical to those being measured.

Level 2 – Fair value measurements using inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly or indirectly. These measurements include quoted prices for similar assets and liabilities in active markets, quoted prices for identical or similar assets and liabilities in inactive markets, inputs that are observable that are not prices (such as interest rates and credit risks) and inputs that are derived from or corroborated by observable market data. Most debt securities are classified within Level 2. Also, included in the Level 2 category are derivative financial assets and liabilities that are priced using models with observable market inputs.

Level 3 – Fair value measurements using significant non-market observable inputs. These include valuations for assets and liabilities that are derived using data, some or all of which is not market observable, including assumptions about risk. Level 3 securities include less liquid securities such as structured asset-backed securities, commercial MBS, other securities that have little or no price transparency and mortgages due to the observability and significance of valuation inputs. Embedded and complex derivatives are also included in Level 3 when these instruments exist.
The following tables present the fair value of the Bank's financial instruments measured at fair value in the Consolidated Statements of Financial Position, categorized by level under the fair value hierarchy.

	Total fair			
As at December 31, 2022	value	Level 1	Level 2	Level 3
Assets				
Cash, cash equivalents and restricted cash	\$ 4,115	\$ 4,115	\$ -	\$ -
Securities	366	141	225	-
Total assets carried at fair value	\$ 4,481	\$ 4,256	\$ 225	\$ -
As at December 31, 2021	Total fair value	Level 1	Level 2	Level 3
Assets				
Cash, cash equivalents and restricted cash	\$ 3,089	\$ 3,089	\$ -	\$ -
Securities	394	151	243	-
Total assets carried at fair value	\$ 3,483	\$ 3,240	\$ 243	\$ -

There were no financial liabilities measured at fair value as at December 31, 2022 (2021 - nil).

The following tables present the financial instruments that are not measured at fair value in the Consolidated Statements of Financial Position and their classifications in the fair value hierarchy.

	Total fair				
As at December 31, 2022	value	Level 1	Level 2		Level 3
Assets:					
Mortgage and other loans ^(1, 2)	\$ 24,366	\$ -	\$ 2,762	Ş	21,604
Other financial assets	92	-	92		
Total assets disclosed at fair value	\$ 24,458	\$ -	\$ 2,854	\$	21,604
Liabilities:					
Demand deposits	\$ 13,202	\$ -	\$ 13,202	\$	-
Term deposits	9,103	-	9,103		-
Secured borrowing	4,865	-	4,865		-
Other financial liabilities	165	-	165		-
Total liabilities disclosed at fair value	\$ 27,335	\$ -	\$ 27,335	\$	-
	Total fair				
As at December 31, 2021	value	Level 1	Level 2		Level 3
Assets:					
Mortgage and other loans ^(1, 2)	\$ 23,585	\$ -	\$ 2,506	\$	21,079
Other financial assets	80	-	80		-
Total assets disclosed at fair value	\$ 23,665	\$ -	\$ 2,586	\$	21,079
Liabilities:					
Demand deposits	\$ 12,746	\$ -	\$ 12,746	\$	-
Term deposits	8,084	-	8,084		-
Secured borrowing	4,601	-	4,601		-
Other financial liabilities	 110	-	110		-
Total liabilities disclosed at fair value	\$ 25,541	\$ -	\$ 25,541	\$	-

⁽¹⁾ The fair value of fixed rate mortgage loans is determined using the discounted cash flow method. Inputs used for valuation primarily comprise prevailing interest rates as well as posted client rates and prepayment rates, if applicable. Fair value of floating rate mortgage loans is assumed to be their carrying value, since interest rate changes have minimal impact on fair value of such mortgages.

(2) The fair value of fixed rate bank loans is determined using the discounted cash flow method. Inputs used for the valuation primarily comprise the prevailing interest rate as well as posted client rates (Level 2). Fair value of floating rate bank loans is assumed to be their carrying value, since interest rate changes have minimal impact on fair value of such loans (Level 2).

The Bank's policy is to record transfers of assets and liabilities between Level 1 and Level 2 at their fair values as at the end of each reporting period, consistent with the date of the determination of fair value. Assets are transferred out of Level 1 when they are no longer transacted with sufficient frequency and volume in an active market. During the years ended December 31, 2022 and 2021, the Bank had no transfers from Level 1 to Level 2. Conversely, assets are transferred from Level 2 to Level 1 when transaction volume and frequency are indicative of an active market. The Bank also had no transfers from Level 2 to Level 1 during the years ended December 31, 2022 and 2021. There were no changes in fair value methods during the year.

Transfers to and from Level 3 can occur as a result of additional or new information regarding the valuation inputs and changes in their observability. There were no transfers to or from Level 3 during the years ended December 31, 2022 and 2021.

Manulife Bank of Canada | 2022 Consolidated Financial Statements

CONFIDENTIAL

Note 15: Mortgage Securitizations

The Bank has a program that periodically securitizes residential mortgage loans through the creation of MBS under the NHA MBS program and securitizes HELOCs through Platinum Trust II.

HELOCs

The Bank securitizes uninsured HELOC accounts through Platinum Trust II. The uninsured HELOC accounts, which meet eligibility criteria as defined in the program documentation, are pooled by the Bank, and undivided co-ownership interests are then sold to Platinum Trust II. Platinum Trust II funds the purchase of the co-ownership interests by issuing term notes, collateralized by the underlying pool of HELOCs, to institutional investors. The Bank's continuing involvement includes servicing the receivables and performing an administrative role for Platinum Trust II.

The Bank provides credit enhancements to Platinum Trust II in the form of over-collateralization of the pool and ownership interest, and excess spread consisting of excess cash receipts that are only attributable to the Bank after the periodic obligations of Platinum Trust II have been met.

The Bank provides loans to Platinum Trust II to pay upfront transaction costs. These loans rank subordinate to all notes issued by Platinum Trust II.

Assets transferred under the securitization programs are legally isolated from the Bank's assets. The cash flows received from these assets are used to settle the related notes payable. The transferred assets and related cash flows cannot be transferred or used for other purposes. Under the HELOC securitization program, receipts of principal are allocated to the Bank during the revolving period of the transaction or paid to the note holder during the reduction period where applicable.

During the year ended December 31, 2022, the Bank increased the note balance for Series 2016-1 by \$250, bringing notes payable for Platinum Trust II to a total of \$2,750 (2021 – \$2,500).

Canadian Residential Mortgage Loans

The Bank issues securities backed by insured, amortizing Canadian Residential Mortgage Loans (including amortizing sub-account components of HELOCs) through the NHA MBS program. NHA MBS are amortizing securities, with principal and interest paid to investors on a monthly basis.

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. As at December 31, 2022, the NHA MBS cash reserves totalled \$80 (2021 – \$62). This balance has been classified as restricted cash in the Consolidated Statements of Financial Position.

The MBS created through the NHA MBS program are sold to CHT as part of the CMB program or are held by the Bank. CHT issues CMB to institutional investors and uses the resulting proceeds to purchase NHA MBS from the Bank and other mortgage issuers within the Canadian market.

For securitized single-family residential mortgages, the Bank continues to be exposed to substantially all of the risks and rewards of the underlying mortgages, through the retention of a seller swap which transfers principal and interest payment risk on the NHA MBS back to the Bank in return for the semi-annual coupon paid on the CMB series. Single-family residential NHA MBS and sales of NHA MBS into the CMB program do not qualify for derecognition as the Bank continues to be exposed to substantially all of the risks and rewards of the underlying residential mortgages.

The Bank also securitizes CMHC-insured multi-unit residential mortgages from third-party originators, through the NHA MBS program, that are subsequently sold into the CMB program. As the Bank's continuing exposure to pre-payment and credit risk on the sold mortgages is negligible, the transaction qualifies for partial balance sheet derecognition. These mortgages are recognized on the Bank's Consolidated Statements of Financial Position only to the extent of the Bank's continuing involvement in the mortgages,

Manulife Bank of Canada | 2022 Consolidated Financial Statements

CONFIDENTIAL

which is limited to its retained interest. As at December 31, 2022, \$1,557 (2021 – \$1,388) of multi-unit NHA MBS have been sold into the CMB program.

During 2022, \$269 multi-unit residential mortgages were derecognized (2021 – \$233) and gains on sale of multi-unit residential mortgages of \$2 were recognized (2021 – \$2). As at December 31, 2022, \$1,411 (2021 – \$1,234) of purchased insured multi-unit residential mortgages were derecognized from the Bank's Consolidated Financial Statements, and \$65 (2021 – \$58) was recognized as securitization retained interests.

The carrying amounts of on-balance sheet securitized assets and the associated liabilities are as follows:

		Se				
Securitization program	Sec	Securitized		stricted		Notes
As at December 31, 2022	mo	ortgages		cash	Total	payable
HELOC securitization – Platinum Trust II ⁽¹⁾	\$	2,880	\$	44	\$ 2,924	\$ 2,750
NHA MBS unsold ⁽²⁾		1,859		80	1,939	-
CMB securitization		2,318		-	2,318	2,273
Total	\$	7,057	\$	124	\$ 7,181	\$ 5,023

		Sec						
Securitization program	Securitized			stricted				Notes
As at December 31, 2021	mortgages			cash		Total	Total	
HELOC securitization – Platinum Trust II	\$	2,618	\$	1	\$	2,619	\$	2,500
NHA MBS unsold		1,508		62		1,570		-
CMB securitization		2,075		-		2,075		2,098
Total	\$	6,201	\$	63	\$	6,264	\$	4,598

(1) The Platinum Trust II notes payable have floating rates of interest and are secured by Platinum Trust II assets. Under the terms of the agreements, no principal is expected to be repaid within one year, \$1,209 within 1–3 years, \$1,049 within 3–5 years and \$492 beyond 5 years. There is no specific maturity date for the contractual agreements. Under the terms of the notes, additional collateral must be provided to the series as added credit protection and the Series Purchase Agreements govern the amount of over-collateralization for each of the term notes outstanding.

⁽²⁾ When a security is created but remains unsold, no liability is recognized.

The fair values of the on-balance sheet securitized assets and associated liabilities are as follows:

	Securitized assets								
Securitization program	Sec	uritized	Re	stricted			Notes		Net
As at December 31, 2022	moi	rtgages		cash		Total	payable	F	osition
HELOC securitization – Platinum Trust II	\$	2,880	\$	44	\$	2,924	\$ 2,750	\$	174
NHA MBS unsold		1,799		80		1,879	-		1,879
CMB securitization		2,243		-		2,243	2,115		128
Total	\$	6,922	\$	124	\$	7,046	\$ 4,865	\$	2,181

	Securitized assets							
Securitization program	Sec	uritized	Re	stricted			Notes	Net
As at December 31, 2021	mor	rtgages		cash		Total	payable	position
HELOC securitization – Platinum Trust II	\$	2,618	\$	1	\$	2,619	\$ 2,500	\$ 119
NHA MBS unsold		1,531		62		1,593	-	1,593
CMB securitization		2,106		-		2,106	2,101	5
Total	\$	6,255	\$	63	\$	6,318	\$ 4,601	\$ 1,717

Interest and other fees on the notes payable totalled \$113 in 2022 (2021 - \$57).

Note 16: Changes in Operating Assets and Liabilities

For the years ended December 31,	2022	2021
Decrease in derivative assets	\$ - \$	1
Increase in mortgage loans and other loans	(1,371)	(714)
(Increase) decrease in current tax receivable	(1)	1
Increase in other assets	(18)	(1)
Increase (decrease) in deposits	1,692	(82)
Activity in securitization liabilities		
Proceeds from the issuance of securitization notes	928	624
Settlement and repayment of securitization liabilities	(490)	(599)
Increase in current tax liability	7	-
Increase (decrease) in other liabilities	55	(6)
Net change in operating assets and liabilities	\$ 802 \$	(776)

Note 17: Related Party Transactions

All related party transactions are with MFC and its subsidiaries. Unless otherwise indicated, related party payables and receivables are non-interest bearing with no specific terms of repayment.

Consolidated Statements of Financial Position

(a) The following table summarizes mortgage and other loans and deposits to/from related parties.

As at December 31,

(Canadian \$ in thousands)	202	2	2021
Mortgage and other loans			
Key management personnel ^(1,2)	\$ 6,34	1 \$	5,768
MFC ⁽³⁾	64,18	0	42,145
Total mortgage and other loans	\$ 70,52	1 \$	47,913
Deposits			
Key management personnel ⁽¹⁾	\$ 2,71	8 \$	3,569
MLI ⁽⁴⁾	100,46	6	100,068
MLI subsidiaries	34,57	9	35,473
Total deposits	\$ 137,76	3\$	139,110

⁽¹⁾ Key management personnel ("KMP") are those that have the authority and responsibility for planning, directing and controlling the activities of the Bank. KMP include all members of the Executive Leadership Team and the Board of Directors.

These loans and deposits are interest bearing at market rates and have the same contractual terms as those at an arm's-length transaction, with the exception of a select suite of mortgage, credit card and deposit products where the Bank offers a subsidy on fees and preferential interest rates to senior officers, which is the same offer extended to all employees of the Bank and MFC.
 These mortgage loans and other loans are business acquisition loans to the advicors affiliated with MEC. The loans are issued to

⁽³⁾ These mortgage loans and other loans are business acquisition loans to the advisors affiliated with MFC. The loans are issued to the advisors for the purpose of buying a block of business from another advisor.

⁽⁴⁾ Short-term deposit matures November 28, 2023.

(b) MLI holds all of the Bank's outstanding preferred and common shares.

(c) During 2022, the Bank paid \$13 in preferred share dividends (2021 – \$13) and \$52 in common share dividends (2021 – \$168) to MLI.

(d) The Bank has agreements with MLI that allow for the deposit and borrowing of funds with MLI as follows:

As at Dece	ecember 31, 2022			22	2021			
Туре	Rate ⁽¹⁾	Currency	Limit	Balance		Limit	Balance	
To deposit	1-month CDOR - 15bps	CDN	\$ 5,000	\$ 3,815	\$	5,000	\$ 2,775	
To borrow	1-month CDOR - 7bps	CDN	500	-		500	-	
To deposit	SOFR - 5bps	USD ⁽²⁾	1,500	319		1,500	316	
To borrow	SOFR + 3bps	USD ⁽²⁾	200	-	_	200	-	

⁽¹⁾ In 2021, the interest rate on Canadian dollar denominated deposits was CDOR - 4bps and on borrowing was CDOR + 4bps. The interest rate on USD denominated deposits was 1-month LIBOR - 12.5bps and on borrowing was 1-month LIBOR.

⁽²⁾ Limit reported in USD. Balance reported in CDN.

The Bank has deposited cash in Special Purpose Liquidity Pools that are managed by MLI and are backed by eligible investments, as governed by the MFC Liquidity Pool Investments Limits and Guidelines Policy, as well as the Bank's Investment Standard and Market and Liquidity Management Policy. The deposit is reported as cash and cash equivalents and is classified and measured at FVOCI.

(e) Other outstanding balances, transactions or arrangements with MLI and one of its subsidiaries are as follows:

As at December 31,	20	22	2021
Assets			
Other assets	\$	- \$	1
Liabilities			
Other liabilities		30	30
Other transactions and arrangements			
Guarantees and commitments ⁽¹⁾		69	50

⁽¹⁾ MLI has provided guarantees for certain loans outstanding and for the assets purchased from MLI that do not perform. Guarantees and commitments are measured at the greater of carrying value or authorized limit.

Consolidated Statements of Income

The Consolidated Statements of Income include the following transactions with MFC advisors, MLI and one of its subsidiaries.

For the years ended December 31,	2022		2021
Revenue			
Interest income on:			
Cash equivalent with MLI	\$	80 \$	12
Loans to MFC's advisors		3	1
Expenses			
Interest expense ⁽¹⁾		5	1
Commission expense ⁽²⁾		26	26
Other operating expenses			
Overhead support services		54	43
Administration fee expense		1	1

(1) Interest expense includes the following: interest on deposits from MLI subsidiaries, interest expense on notes payable to MLI and interest expense on segregated fund deposit accounts.

⁽²⁾ Commission expense includes fees paid to MFC advisors and brokers in relation to revenue-generating activities.

Compensation of KMP

The Bank participates in MFC's compensation programs. The table below provides aggregate information on compensation for KMP.

For the years ended December 31,	20)22	2021
Short-term employee benefits including salaries ⁽¹⁾	\$	4 \$	5
Share-based payments		2	2
Total	\$	6 \$	7

⁽¹⁾ Short-term employee benefits include post-employment benefits of \$0.3 (2021 – \$0.3).

The compensation is paid directly by the Bank with the exception of the share-based payments. MLI pays share-based payments to the Bank's KMP, and the expense is included in MLI's overhead costs for support services charged to the Bank.

In addition to the Bank's KMP, MLI provides support in planning, directing and controlling the activities of the Bank. During 2022, MLI charged the Bank \$1 (2021 – \$1) for this executive support, which is included in its overhead costs for support services above.

Note 18: Contingencies and Commitments

(a) Legal proceedings

The Bank is regularly involved in legal proceedings both as a defendant and as a plaintiff that arise in the ordinary course of business. The Bank does not expect the ultimate resolution of any of these proceedings to have a material impact on results.

(b) Standby letters of credit

Standby letters of credit are issued at the request of the Bank's related parties and customers in order to secure the related parties' or customers' payment or performance obligations to a third party. These letters of credit represent irrevocable obligations of the Bank to pay third-party beneficiaries upon presentation of the letter of credit and satisfaction of the documentary requirements stipulated therein without investigation

as to the validity of the beneficiary's claim against the customers. Generally, the terms of such letters of credit do not exceed one year. The types and amounts of collateral security or third-party guarantees held by the Bank for these letters of credit are generally the same as for loans. Due to changing rates and principal balances, the Bank cannot estimate the amount that may be demanded. As at December 31, 2022, the Bank had outstanding standby letters of credit of 5 (2021 - 6), of which nil (2021 - nil) was issued to related parties.

(c) Indemnifications

In the ordinary course of business, the Bank enters into many contracts that contain indemnification provisions, such as purchase contracts, service agreements, escrow arrangements, outsourcing agreements and clearing system agreements. In such contracts, the Bank may indemnify counterparties to the contracts for certain aspects of the Bank's past conduct if other parties fail to perform, or if certain events occur, such as changes in laws and regulations including tax legislation, changes in financial condition of third parties, infringements and breaches of representations and warranties, undisclosed liabilities and loss caused by the actions of third parties, or as a result of litigation claims by third parties. These indemnification provisions will vary based upon the contract. In certain types of arrangements, the Bank may in turn obtain indemnifications from other parties to the arrangement or may have access to collateral under recourse provisions. In many cases, there are no pre-determined amounts or limits included in these indemnification provisions and the occurrence of contingent events that will trigger payment under them is difficult to predict. Therefore, the Bank cannot estimate in all cases the maximum potential future amount that may be payable, nor the amount of collateral or assets available under recourse provisions that would mitigate any such payments. The Bank no longer provides MBNA Cards indemnification for clients' personal credit cards. In 2022, the Bank recovered nil (2021 – recovery \$0.1), as a result of this indemnification.

(d) Commitments to extend credit

In the normal course of business, various other indirect commitments are outstanding that are not reflected on the Consolidated Statements of Financial Position, including commitments to extend credit. Such commitments represent undertakings to make credit available 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. As at December 31, 2022, the Bank had committed to extend credit on mortgage, loans and credit cards for a total of \$427 (2021 – \$869). Unutilized credit commitments on lines of credit and credit cards as at December 31, 2022 were \$13,609 (2021 – \$12,355).

(e) ECLs on off-balance sheet exposures

The Bank is required to estimate credit losses on certain off-balance sheet exposures, including irrevocable commitments to extend credit, unutilized credit commitments and letters of credit. The ECLs for off-balance sheet exposures are included within other liabilities (Note 9); for additional disclosures, refer to Notes 2 and 6.

Note 19: Risk Management and Corporate Governance

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

(a) Risk management framework

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

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

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

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

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

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

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

(b) Risk governance and management structure

Board of Directors

The Board of Directors of both the Bank and MTC ("Board of Directors") oversees management's implementation of appropriate systems to identify and manage the principal risks of the business. The Board of Directors reviews and approves the enterprise risk management policy, risk-taking philosophy and overall risk appetite with the assistance of the Board committees: the Audit Committee, the Risk Committee and the Conduct Review and Governance Committee. The Chief Executive Officer is directly accountable to the Board of Directors for all risk-taking activities and risk management practices, and is supported by the CRO and the Executive Management Committees. The Executive Management Committees establish risk policies, guide risk-taking activities, monitor significant risk exposures and sponsor strategic risk management priorities for the Bank and MTC.

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

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

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

Executive Management Committees

The Bank has established several roles and committees as part of its governance and management structure.

The BERC provides advisory support to senior management regarding governance and risk oversight. The BERC also monitors the Bank's overall credit risk profile and compliance with credit risk policies, establishes overall Credit Quality Standards, and approves large individual credits and investments.

The Manulife Bank Credit Committee ("MBCC") provides ongoing review of Credit Standards, reviews credit reports and trending, and recommends action plans and policy and process revisions.

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

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

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

The IFRS 9 Governance Committee provides oversight and direction for all significant matters relating to the IFRS 9 impairment requirements.

(c) Credit risk

Credit risk is the risk of loss due to the inability or unwillingness of a borrower or counterparty to fulfill its payment obligations. The Bank's primary objective is to be methodical in its credit risk assessment in order to better understand, select and manage exposures.

The Bank has established policies that set exposure limits by borrower, quality rating, industry and geographic region. The Bank currently does not participate in the credit derivative market and has no exposure to credit default swaps. The CRO, together with the BERC, sets out objectives related to the overall quality and diversification of lending portfolios and establishes criteria for the selection of counterparties and intermediaries. The CRO monitors compliance with all credit policies and limits and reports the results to senior management and the Board of Directors.

The Board of Directors is responsible for reviewing and approving key credit risk management policies and material changes to management-level credit risk policies. A review system sensitized to prescribed total credit exposure and risk-rating thresholds is in place and is maintained so 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
- Commercial (non-personal) credits are reviewed at least annually 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.

For mortgage and other loans, an internal risk rating is assigned ranging from "1 – low risk", "2 – normal risk", "3 – medium risk", "4 to 8 – high risk" to "9 – default". The internal risk ratings reflect the credit quality and probability of default of the financial instrument. All lending assets that the Bank originates are assigned a risk rating.

The following table provides the PD ranges to risk rating categorization as at December 31, 2022 and 2021.

IRR value by PD	PD range	Risk assessment
1	<= 0.0015	Low
2	0.0016 - 0.0041	Normal
3	0.0042 - 0.0110	Medium
4	0.0111 - 0.0293	High
5	0.0294 - 0.0474	High
6	0.0475 - 0.0759	High
7	0.0760 - 0.1820	High
8	0.1821 - 1	High
9	N/A	Default

The following tables provide the gross carrying amount of mortgage and other loans and the contractual amounts of undrawn credit facilities and other off-balance sheet exposures based on the Bank's internal risk rating grades.

As at December 31, 2022		Stage 1		Stage 2		Stage 3		Total
Mortgage loans ^(1, 2)								
1	Ś	4,782	Ś	787	Ś	-	\$	5,569
2	Ŧ	13,378	•	1,400	Ŧ	-	Ŧ	14,778
3		618		251		-		869
4 or higher		502		234		-		736
Default		-		-		46		46
Total mortgage loans	\$	19,280		2,672	\$	46		21,998
Allowance for ECLs	\$	3	\$	5	\$	2	\$	10
Mortgages, net of allowance	\$	19,277	\$	2,667	\$	44	\$	21,988
Other loans ⁽¹⁾	~		~		~		~	
1	\$	-	\$	-	\$	-	\$	-
2		262		- 74		-		262
3 A su history		1,897 510		71 44		-		1,968
4 or higher		510		44		-		554 9
Default Total other loans	\$	2,669	ć	- 115	\$	<u>9</u> 9	\$	2,793
Allowance for ECLs	\$	2,009	\$		\$	- 9	\$	2,193
Other loans, net of allowance	Ś	2,668	\$	113	\$	9	\$	2,790
	Ŷ	2,000	Y	110	Ŷ	5	Ŷ	2,130
Total								
1	\$	4,782	\$	787	\$	-	\$	5,569
2		13,640		1,400		-		15,040
3		2,515		322		-		2,837
4 or higher		1,012		278		-		1,290
Default		-		-		55		55
Total mortgage and other loans	\$	21,949		2,787		55		24,791
Allowance for ECLs	\$	4	\$	7	\$	2	\$	13
Total mortgage and other loans, net of allowance	\$	21,945	\$	2,780	\$	53	\$	24,778
Undrawn credit facilities and other								
off-balance sheet exposures								
1	\$	1,860	\$	702	\$	-	\$	2,562
2		8,444		858		-		9,302
3		506		6		-		512
4 or higher		1,660		2		-		1,662
Default		-		-		2		2
Total off-balance sheet exposures	\$	12,470	Ś	1,568	\$	2	\$	14,040
Allowance for ECLs	\$	3		2	\$	1	\$	6
Total off-balance sheet exposures, net of allowance	\$	12,467		1,566	-	1	\$	14,034
• •								

(1) Mortgage loans and other loans include CAC. (2) The mortgage portfolio includes HELOCs.

As at December 31, 2021		Stage 1		Stage 2		Stage 3		Total
Mortgage loans ^(1, 2)								
1	\$	4,302	\$	1,285	\$	-	\$	5,587
2		10,845		3,026		-		13,871
3		632		218		-		850
4 or higher		471		142		-		613
Default		-		-		24		24
Total mortgage loans	\$	16,250	\$	4,671	\$	24	\$	20,945
Allowance for ECLs	\$	3	\$	7	\$	2	\$	12
Mortgages, net of allowance	\$	16,247	\$	4,664	\$	22	\$	20,933
Other loans ⁽¹⁾								
1	\$		\$	_	\$	-	\$	
2	Ψ	242	Ψ	-	Ψ	_	Ψ	242
3		1,780		42		_		1,822
4 or higher		430		16		_		446
Default				-		4		4
Total other loans	\$	2,452	\$	58	\$	4	\$	2,514
Allowance for ECLs	\$	1	\$		\$	-	\$	1
Other loans, net of allowance	\$	2,451	\$	58	\$	4	\$	2,513
T -4-1								
Total	ተ	1 200	ተ	1 005	ተ		ተ	E E 07
	\$	4,302	\$	1,285	\$	-	\$	5,587
2 3		11,087		3,026		-		14,113
		2,412		260		-		2,672
4 or higher		901		158		-		1,059
Default	\$	10 70 2	\$	4 7 2 0	\$	28	\$	28 23,459
Total mortgage and other loans Allowance for ECLs	_₽ \$	<u>18,702</u> 4	۹ \$	<u>4,729</u> 7	۹ \$	28 2	⊅ \$	23,439
Total mortgage and other loans, net of allowance	_₽ \$	18,698		4,722		26		23,446
Total montgage and other loans, net of anowance	ψ	10,090	ψ	4,722	ψ	20	ψ	23,440
Undrawn credit facilities and other								
off-balance sheet exposures								
1	\$	1,578	\$	1,137	\$	-	\$	2,715
2		6,580		1,840	•	-		8,420
3		331		6		-		337
4 or higher		1,756		1		-		1,757
Default		-		-		1		1
Total off-balance sheet exposures	\$	10,245	\$	2,984	\$	1	\$	13,230
Allowance for ECLs	\$	<u>,</u> 3	\$	<u>,</u> 3	\$	1	\$	7
Total off-balance sheet exposures, net of allowance	\$	10,242	\$	2,981	\$	-	\$	13,223

Mortgage loans and other loans include CAC. The mortgage portfolio includes HELOCs. (1)

(2)

Diversification

The Bank'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 mortgages and other loans, the portfolio is dispersed geographically within Canada. Credit risk exposures are monitored for concentration risk and such findings are reported to the Board of Directors, the BERC and MFC's Credit Risk Management Department on a quarterly basis.

	202	2	202 ⁻	1
As at December 31,	Mortgage loans	Other loans	Mortgage loans	Other loans
Ontario	42%	43%	41%	44%
Quebec	20%	22%	21%	21%
British Columbia	14%	23%	15%	23%
Alberta	14%	6%	13%	6%
Atlantic provinces	5%	3%	5%	3%
Saskatchewan	3%	2%	3%	2%
Manitoba	2%	1%	2%	1%
Total	100%	100%	100%	100%

The following table shows the concentration of mortgage and other loans by geographic area.

Collateral management

The purpose of collateral for credit risk mitigation is to minimize losses that would otherwise be incurred. The Bank generally requires borrowers to pledge collateral when credit is advanced. Residential real estate and high-quality liquid investments are examples of acceptable collateral.

The following table summarizes the net carrying amount of residential mortgage and other loans subject to credit exposure without taking into account collateral held or credit enhancements. The table also includes the net exposure to credit risk considering the Bank's estimate of fair value of financial and non-financial assets accepted as collateral.

	2	022			20	21	
	Net carrying	5	Net	Ne	t carrying		Net
As at December 31,	amoun	t	exposure		amount		exposure
Mortgage loans	\$ 21,988	\$\$	-	\$	20,933	\$	-
Other loans	2,790)	172		2,513		124
Total	\$ 24,778	\$\$	172	\$	23,446	\$	124

As at December 31, 2022, the net carrying amount of credit-impaired mortgages and other loans amounted to \$53 (2021 – \$26), and the value of identifiable collateral held against those loans amounted to \$42 (2021 – \$32). As at December 31, 2022, the Bank held \$225 (2021 – \$335) in mortgage and other loans for which no loss allowance is recognized because of collateral.

During the year ended December 31, 2022 and 2021, there were no changes to the Bank's collateral policies.

Derivatives

Derivative contracts are entered into for asset-liability management purposes to better match the cash flows resulting from different re-pricing or maturity dates of assets and liabilities. The Bank employs defensive hedging strategies to reduce interest rate risk for a number of funding strategies.

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

The Bank enters into Credit Support Annex agreements ("CSAs") with its derivative counterparties, whereby collateral must be provided when the exposure exceeds a certain threshold. The collateral pledged from or to counterparties is primarily in the form of government and agency securities. The Bank must pledge investments as collateral when the derivative mark-to-market position is negative. When the derivative mark-to-market position is negative. When the derivative mark-to-market value position of collateral posted by the Bank and by swap counterparties as at December 31, 2022, is nil (2021 – nil). As at the end of 2022, the Bank held no active derivatives contracts.

Offsetting financial assets and financial liabilities

The Bank does not offset financial instruments in the Consolidated Statements of Financial Position, as the rights of offset are conditional.

As at December 31, 2022, the effect of conditional master netting and similar arrangements was nil (2021 – nil). Similar arrangements may include global master repurchase agreements, global master securities lending agreements, and any related rights to financial collateral. As at December 31, 2022, the Bank held no derivative contracts. Balances related to derivative assets as at December 31, 2021 were insignificant and the amount of over-collateralization on OTC derivatives was nil.

During 2022, the Bank entered into the sale of a bond forward contract to manage risk associated with the cost of CMB funding. The specified notional of the bond forward matched the expected CMB issuance amount and the maturity of the bond forward contract is aligned with the expected CMB pricing date. If market rates increase, the underlying bond will decrease in value generating a gain when the position is closed which offsets increased CMB funding costs. Conversely, if market rates decrease, the underlying bond will increase in value generating a loss when the position is closed which offsets decreased CMB funding costs. The key interest rate risks of the strategy depend on the effectiveness of the hedge, or how closely changes in yield on the hedging instrument mirrors changes in yield of the hedged item, as well as the repo rate charged by the counterparty which is highest in periods of market volatility. The bond forward contract matured during the year and no balance was held as at December 31, 2022.

Credit quality The following tables reflect the aging of the Bank's financial assets considered past due. All accounts greater than 90 days past-due are deemed impaired. Refer to Note 2(f) for further details on the Bank's accounting policy for assessing impairment.

	Ace	coun	ts past du	le		
	 31–60		61–90	9'	1 days	
As at December 31, 2022	days		days	and gi	reater	Total
Mortgage loans	\$ 61	\$	28	\$	46	\$ 135
Other loans	10		4		9	23
Total	\$ 71	\$	32	\$	55	\$ 158

	Acc	coun	ts past dı	ie	
	 31–60		61–90	91 days	
As at December 31, 2021	days		days	and greater	Total
Mortgage loans	\$ 36	\$	14	\$ 24	\$ 74
Other loans	4		1	4	9
Total	\$ 40	\$	15	\$ 28	\$ 83

(d) 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.

The Board of Directors annually reviews and approves the interest rate and investment management policies and is informed of material changes to the foreign exchange risk management policy.

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.

Interest rate risk

The Bank historically used 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. From time to time, the Bank may use swaptions, which combine an interest rate swap and a cancellable option that allows the counterparty to cancel the swap on a predefined sequence of dates.

During 2022, the Bank entered into the sale of a bond forward contract to manage risk associated with the cost of CMB funding. The specified notional of the bond forward matched the expected CMB issuance amount and the maturity of the bond forward contract is aligned with the expected CMB pricing date. If market rates increase, the underlying bond will decrease in value generating a gain when the position is closed which offsets increased CMB funding costs. Conversely, if market rates decrease, the underlying bond will increase in value generating a loss when the position is closed which offsets decreased CMB funding costs. The key interest rate risks of the strategy depend on the effectiveness of the hedge, or how closely changes in yield on the hedging instrument mirrors changes in yield of the hedged item, as well as the repo rate charged by the counterparty which is highest in periods of market volatility.

The Bank limits the types of authorized derivatives and applications. The Bank requires pre-approval from MFC's Global ALCO for, and regularly monitors, derivative application strategies and their effectiveness.

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. The Bank performs a monthly sensitivity analysis to specifically assess interest rate risk. The results of the analysis are reviewed by ALCO to determine if they are within prescribed limits for sensitivity of net interest income to changes in the yield curve.

The following table shows the sensitivity of pre-tax net interest income to interest rate risk.

Rate change 100 basis point rate increase 200 basis point rate increase 100 basis point rate decrease (with 25 basis point cap) ⁽²⁾ 200 basis point rate decrease (with 25 basis point cap) ⁽²⁾		Sensitivity of net interest income to interest rate ris							
Rate change	2	2022 (1)	2021 (1)						
100 basis point rate increase	\$	5\$	-						
200 basis point rate increase		10	-						
100 basis point rate decrease (with 25 basis point cap) $^{(2)}$		(6)	(6)						
200 basis point rate decrease (with 25 basis point cap) $^{(2)}$		(16)	(6)						

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

⁽²⁾ The maximum downward shock was capped at 25 basis points as at December 31, 2021 to account for certain rates being floored at zero due to the low interest rate environment at the time

The Bank is exposed to interest rate risk as a result of the difference between the maturity or re-pricing date of interest-sensitive assets and liabilities.

The following tables show the interest sensitivity position in maturities of the Bank's assets and liabilities on the Consolidated Statements of Financial Position.

					Remainin	ig te	erm to r	natı	urity						
													Non-		
	Floating	Le	ess than	3	months		1 to 3		3 to 5		Over	i	nterest		
2022	rate	3	months	t	to 1 year		years		years	ļ	5 years	se	nsitive		Total
Assets															
Cash, cash equivalents															
and restricted cash	\$ 4,103	\$	-	\$	-	\$	-	\$	-	\$	-	\$	12	\$	4,115
Securities	-		2		45		145		33		-		141		366
Mortgage and other loans	12,912		383		1,137		3,979		6,261		60		46	2	24,778
Other assets	-		-		-		-		-		-		271		271
Total assets	\$ 17,015	\$	385	\$	1,182	\$	4,124	\$	6,294	\$	60	\$	470	\$2	29,530
Liabilities															
Deposit liabilities	\$13,202	\$	1,669	\$	2,055	\$	2,993	\$	2,623	\$	-	\$	-	\$2	22,542
Other liabilities	2,750		-		98		830		754		591		183		5,206
Total liabilities	\$15,952	\$	1,669	\$	2,153	\$	3,823	\$	3,377	\$	591	\$	183	\$2	27,748
Total gap	\$ 1,063	\$	(1,284)	\$	(971)	\$	301	\$	2,917	\$	(531)	\$	287	\$	1,782

					Remainir	ıg t	erm to n	nat	turity					
													Non-	
	Floating	Le	ess than	3	months		1 to 3		3 to 5		Over	i	nterest	
2021	rate	3	months		to 1 year		years		years	ļ	5 years	se	ensitive	Total
Assets														
Cash, cash equivalents														
and restricted cash	\$ 3,076	\$	-	\$	-	\$	-	\$	-	\$	-	\$	13	\$ 3,089
Securities	-		11		57		127		44		4		151	394
Mortgage and other loans	12,945		281		919		2,243		6,869		148		41	23,446
Other assets	-		-		-		-		-		-		272	272
Total assets	\$ 16,021	\$	292	\$	976	\$	2,370	\$	6,913	\$	152	\$	477	\$ 27,201
Liabilities														
Deposit liabilities	\$ 12,746	\$	1,158	\$	2,272	\$	2,593	\$	2,034	\$	-	\$	-	\$ 20,803
Other liabilities	2,500		-		490		206		907		495		121	4,719
Total liabilities	\$ 15,246	\$	1,158	\$	2,762	\$	2,799	\$	2,941	\$	495	\$	121	\$ 25,522
Total gap	\$ 775	\$	(866)	\$	(1,786)	\$	(429)	\$	3,972	\$	(343)	\$	356	\$ 1,679

Derivative transaction risk

Derivatives are used on a selective basis 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 including limits on the notional volume of derivative transactions, authorized types of derivatives and applications, delegated authorization limits for specific personnel, collateral management, as well as the pre-approval of all derivative application strategies and regular monitoring of the effectiveness of derivative strategies.

(e) Liquidity risk

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

At least annually, the Board of Directors reviews and approves the Liquidity Management Policy and reviews the Liquidity Contingency Plan, which ensures the Bank has the infrastructure and control functions in place to meet expected and unexpected liquidity obligations. Risk tolerances and limits are approved by the Board of Directors and define the maximum level of 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.

The Bank's Treasury department actively manages liquidity risk by maintaining a level of liquid assets in excess of minimum internal requirements at all times. 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 unencumbered liquid assets as at December 31, 2022 were \$6,218 (21 per cent of total assets) compared to \$4,929 as at December 31, 2021 (18 per cent of total assets).

In addition, in 2020 the Bank of Canada introduced the Standing Term Liquidity Facility (STLF), a permanent program that complements existing tools to provide liquidity and enhance the resilience of the Canadian financial system. Participation in this program, as and when appropriate, complements MBC's liquidity and funding strategy, which includes the objective of maintaining the strength and soundness of our Consolidated Statements of Financial Position.

Funding

The Bank diversifies funding across source, channel, product and term by offering registered and nonregistered retail savings accounts, GICs, as well as secured and unsecured wholesale term funding. The Bank does not have significant reliance on unsecured wholesale funding. The liquidity management policy sets out the limits on funding. Funding diversification is monitored and reported to ALCO and the Board of Directors.

In 2010, MBC created a wholly owned subsidiary, MTC; it has been a source of deposit funding. Deposits outstanding as at December 31, 2022 from MTC are \$1,743 (2021 – \$1,648).

Securitization programs

Securitization is used as a cost-effective source of funding and liquidity and also diversifies the Bank's funding program. 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 periodically invests in short-term and long-term investment grade asset-backed securities. Note 15 of these Consolidated Financial Statements provides an overview of the Bank's securitization programs.

Note 20: Capital Management

The Bank's objectives with respect to capital management are to remain in compliance with all regulatory requirements and to ensure safety and stability of its financial position, thereby protecting depositors and senior creditors to ensure that the Bank has the flexibility to take advantage of attractive business and investment opportunities as they arise, and to optimize the return on equity. 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 debt, adjust the dividend payment to its shareholder, or return capital to the shareholder. The Bank and the Bank's subsidiary are prohibited from distributing dividends if the distribution would be in contravention of its capital adequacy regulations. OSFI approval is required in order for the Bank or its subsidiary to redeem or repurchase and cancel capital. No changes were made in the objectives, policies and processes from the previous years.

The Board of Directors approves the capital plan annually. The CMC, which comprises 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 and strategies for approval by the Board of Directors.

Basel III Capital levels for banks are regulated pursuant to the Capital Adequacy Requirements ("CAR") Guideline issued by OSFI, which are based on standards issued by the Bank for International Settlements and the Basel Committee on Banking Supervision. Effective the first quarter of 2013, the Bank was required to calculate its risk-based ratios and leverage measure using the CAR Guideline, which incorporate the Basel III framework.

Regulatory capital is allocated to two tiers: Tier 1 and Tier 2. Tier 1 capital is broken into Common Equity Tier 1 ("CET 1") and Additional Tier 1 capital. CET 1 comprises the highest quality capital and consists of qualifying financial statement elements included in common equity, net of applicable regulatory adjustments. For MBC, CET 1 includes common shares, contributed surplus from the issuance of instruments included in CET 1, retained earnings and AOCI. Additional Tier 1 capital is composed of qualifying financial statement elements, net of applicable regulatory adjustments. For MBC, Additional Tier 1 includes non-cumulative perpetual preferred shares.

Tier 2 capital comprises supplementary capital instruments that contribute to the overall strength of a financial institution as a going concern. For MBC, Tier 2 capital is composed of general allowances. The general allowance includes Stage 1 and Stage 2 ECLs under IFRS 9. General allowances eligible for inclusion

Manulife Bank of Canada | 2022 Consolidated Financial Statements

CONFIDENTIAL

in Tier 2 capital will be limited to a maximum of 1.25% of credit risk-weighted assets calculated under the Standardized Approach. The Bank needs to meet all the principles and criteria in OSFI's IFRS 9 Guideline, "IFRS 9 Financial Instruments and Disclosures" for general allowances to be included in Tier 2 capital, but does not require prior written approval from OSFI. Total Capital is defined as the sum of Tier 1 and Tier 2 capital. Capital instruments issued by MBC are required to meet qualifying criteria before inclusion in the relevant capital category.

All non-common Tier 1 and Tier 2 capital instruments are required to include a non-viable contingent capital clause, under which these instruments are converted to common shares at an OSFI-prescribed trigger event or if the Bank has accepted or agreed to accept support from a federal or provincial government without which the Bank would have been determined to be non-viable by OSFI. These requirements are designed to ensure loss absorbency of capital at the point of non-viability.

The Bank's preferred shares meet the Basel III requirements for inclusion in regulatory capital under the OSFI CAR Guideline.

OSFI formally establishes risk-based minimum capital targets for all deposit-taking institutions in Canada. These targets are currently a CET 1 Capital Ratio of 7%, a Tier 1 Capital Ratio of 8.5% and a Total Capital Ratio of 10.5%. Regulatory risk-based capital ratios are calculated by dividing CET 1, Tier 1 and Total Capital by risk-weighted assets. In addition, Canadian banks are required to calculate a leverage measure, as a supplementary measure to the risk-based capital requirements. 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 exposures: (i) on-balance sheet assets; (ii) derivative exposures; (iii) securities financing transaction exposures; and (iv) other off-balance sheet exposures.

As at December 31,	2022	2021
Risk-weighted assets		
Credit risk	\$ 9,313	\$ 8,429
Operational risk	869	862
Total risk-weighted assets	\$ 10,182	\$ 9,291
Capital ratios		
CET1 ratio ⁽¹⁾	13.9%	13.9%
CET1 ratio with transitional arrangements for ECL provisioning not applied ⁽²⁾	13.9%	13.9%
Tier 1 capital ratio ⁽¹⁾	16.1%	16.4%
Tier 1 capital ratio with transitional arrangements for ECL provisioning not applied ⁽²⁾	16.1%	16.4%
Total capital ratio ⁽¹⁾	16.2%	16.5%
Total capital ratio with transitional arrangements for ECL provisioning not applied ⁽²⁾	16.2%	16.5%

The following table presents the Bank's capital and capital ratios.

(1) Figures include the transitional arrangements for the capital treatment of ECLs implemented by OSFI for fiscal 2020 to 2022. This transitional arrangement 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 was 70% for 2020, 50% for 2021 and 25% for 2022.

⁽²⁾ Calculation of regulatory capital without the application of OSFI's transitional arrangements for ECLs being applied.

Management regularly monitors performance and financial position against the minimum ratios and initiates action where appropriate. During the past year, the Bank has complied in full with all of its externally imposed capital requirements and continues to be capitalized in excess of all minimum regulatory requirements.

The following table presents the Bank's regulatory capital:

As at December 31,	2022	2021
Basel III regulatory capital		
Directly issued qualifying common share capital plus related stock surplus	\$ 267	\$ 267
Contributed surplus	442	428
Retained earnings	847	755
Accumulated other comprehensive (loss) income	(3)	
Common Equity Tier 1 capital before regulatory adjustments	\$ 1,553	\$ 1,450
Other deductions or regulatory adjustments to CET1 as determined by OSFI ⁽¹⁾	-	1
Total regulatory adjustments to Common Equity Tier 1	(139)	(156)
Total CET 1 capital	\$ 1,414	\$ 1,295
Total CET 1 capital with transitional arrangements for ECL provisioning not applied ⁽²⁾	\$ 1,414	\$ 1,294
Directly issued capital instruments subject to phase-out from Additional Tier 1	\$ 229	\$ 229
Additional Tier 1 capital	\$ 229	\$ 229
Total Tier 1 capital	\$ 1,643	\$ 1,524
Total Tier 1 capital with transitional arrangements for ECL provisioning not applied ⁽²⁾	\$ 1,643	\$ 1,523
Eligible allowances	\$ 10	\$ 10
Total Tier 2 capital	\$ 10	\$ 10
Total regulatory capital	\$ 1,653	\$ 1,534
Total regulatory capital with transitional arrangements for ECL provisioning not applied ⁽²⁾	\$ 1,653	\$ 1,533

Figures include the transitional arrangement for the capital treatment of ECLs. This transitional arrangement results in a portion of eligible allowances that would otherwise be included in Tier 2 capital to instead be included in CET1 capital. Calculation of regulatory capital without the application of OSFI's transitional arrangements for ECLs being applied. (1)

(2)

The following table presents the Bank's Leverage Ratio:

As at December 31,	2022	2021
On-balance sheet exposures		
1 On-balance sheet items (excluding derivatives, SFTs and grandfathered securitization exposures but		
including collateral)	\$ 29,530	\$ 27,201
4 (Asset amounts deducted in determining Tier 1 capital)	(139)	(157)
5 Total on-balance sheet exposures (excluding derivatives and SFTs) (sum of lines 1 to 4)	\$ 29,391	\$ 27,044
Derivative exposures		
7 Add-on amounts for potential future exposure associated with all derivative transactions	\$ -	\$ 1
11 Total derivative exposures (sum of lines 6 to 10)	\$ •	\$ 1
Other off-balance sheet exposures		
17 Off-balance sheet exposure at gross notional amount	\$ 14,040	\$ 13,230
18 (Adjustments for conversion to credit equivalent amounts)	(12,589)	(11,815)
19 Off-balance sheet items (sum of lines 17 and 18)	\$ 1,451	\$ 1,415
Capital and total exposures		
20 Tier 1 capital	\$ 1,643	\$ 1,524
20a Tier 1 Capital with transitional arrangements for ECL provisioning not applied ⁽¹⁾	\$ 1,643	\$ 1,523
21 Total Exposures (sum of lines 5, 11, 16 and 19)	\$ 30,842	\$ 28,460
Leverage ratio		
22 Basel III leverage ratio	5.3%	5.4%
22a Leverage ratio with transitional arrangements for ECL provisioning not applied ⁽¹⁾	5.3%	5.3%

⁽¹⁾ Calculation of regulatory capital without the application of OSFI's transitional arrangements for ECLs being applied.

Note 21: Pension Plans and Post-retirement Benefits

MLI sponsors and administers the staff pension plan for the Bank. The employees of the Bank are participants in the MLI staff pension plan. Retirees are entitled to benefits under the MLI post-retirement benefit plan. MLI is responsible for the accrued pension and post-retirement benefits of the employees of the Bank. The details of the MLI staff pension plan are available in MFC's Consolidated Financial Statements on its website.

Note 22: Comparatives

Certain comparative amounts have been reclassified to conform to the current year's presentation.