Q2 2023

Quarterly Report to Shareholders

Scotiabank reports second quarter results

TORONTO, May 24, 2023 – Scotiabank reported second quarter net income of $2,159 million compared to $2,747 million in the same period last year. Diluted earnings per share ("EPS") were $1.69, compared to $2.16 in the same period a year ago.

Adjusted net income[(1)] for the second quarter was $2,174 million and EPS was $1.70, down from $2.18 last year. Adjusted return on equity was 12.4% compared to 16.4% a year ago.

The Bank reported a strengthened Common Equity Tier 1 ("CET1") capital ratio[(2)] of 12.3% and announced a quarterly dividend increase of 3 cents to $1.06 per share. The Bank also made progress in building its liquidity position with double digit year-over-year customer deposit growth, which outpaced loan growth in the quarter. The Liquidity Coverage Ratio ("LCR")[(3)] was a healthy 131% at quarter end, up from 122% in the prior period.

"I am pleased with the Bank's stable operational performance in the quarter and encouraged that our strong capital and liquidity profile positioned us well to manage through the current environment of heightened macroeconomic uncertainty." said Scott Thomson, President and CEO of Scotiabank. "We are committed to delivering long-term profitable and sustainable growth through a focus on customers, capital discipline and operational excellence."

Canadian Banking delivered adjusted earnings[(1)] of $1,061 million this quarter, impacted by normalization in provision for credit losses. Pre-tax pre-provision earnings[(4)] increased due to strong revenue growth and net interest margin expansion of eight basis points.

International Banking generated adjusted earnings[(1)] of $673 million, affected by higher provision for credit losses. Pre-tax pre-provision earnings[(4)] increased year-over-year as a result of strong loan growth and net interest margin expansion of 16 basis points, partly offset by higher non-interest expenses.

Global Wealth Management adjusted earnings[(1)] were $362 million. Challenging market conditions continue to impact fee income growth in Canada, partly offset by strong growth across our international businesses and continued prudent expense management.

Global Banking and Markets generated earnings of $401 million. The results reflect strong loan and deposit growth, and were impacted by challenging market conditions and higher performing loan provisions.

(1) Refer to Non-GAAP Measures section starting on page 4.
(2) This measure has been disclosed in this document in accordance with OSFI Guideline – Capital Adequacy Requirements (February 2023).
(3) This measure has been disclosed in this document in accordance with OSFI Guideline – Public Disclosure Requirements for Domestic Systemically Important Banks on Liquidity Coverage Ratio (April 2015).
(4) Pre-tax, pre-provision (PTPP) earnings are calculated as revenue net of non-interest expenses. This is a non-GAAP measure. PTPP earnings do not have a standardized meaning under GAAP and may not be comparable to similar measures disclosed by other financial institutions. The Bank uses PTPP earnings to assess its ability to generate earnings growth excluding the impact of credit losses and income taxes. The Bank believes that certain non-GAAP measures provide readers with a better understanding of how management assesses performance.

Live audio Web broadcast of the Bank's analysts' conference call. See page 91 for details.

Scotiabank

Enhanced Disclosure Task Force (EDTF) Recommendations

Below is the index of EDTF recommendations to facilitate easy reference in the Bank's public disclosure documents available on www.scotiabank.com/investorrelations.

Reference Table for EDTF

			Q2 2023		2022 Annual Report	
Type of risk	Number	Disclosure	Quarterly Report	Supplementary Regulatory Capital Disclosures	MD&A	Financial Statements
General	1	The index of risks to which the business is exposed.			14	
	2	The Bank's risk to terminology, measures and key parameters.			74-78	
	3	Top and emerging risks, and the changes during the reporting period.			80-81, 85-91	
	4	Discussion on the regulatory development and plans to meet new regulatory ratios.	44, 48-52		54-57, 99-102, 114-116	
Risk governance, risk management and business model	5	The Bank's Risk Governance structure.			72-74	
	6	Description of risk culture and procedures applied to support the culture.			74-78	
	7	Description of key risks from the Bank's business model.			79	
	8	Stress testing use within the Bank's risk governance and capital management.			75-76	
Capital Adequacy and risk-weighted assets	9	Pillar 1 capital requirements, and the impact for global systemically important banks.	48-49	3-4	54-57	206
	10	a) Regulatory capital components.	48-49, 79	21-24	58	
		b) Reconciliation of the accounting balance sheet to the regulatory balance sheet.		18-19		
	11	Flow statement of the movements in regulatory capital since the previous reporting period, including changes in common equity tier 1, additional tier 1 and tier 2 capital.	48-49	78	59-60	
	12	Discussion of targeted level of capital, and the plans on how to establish this.			54-57	
	13	Analysis of risk-weighted assets by risk type, business, and market risk RWAs.		6-7, 37, 38, 41-54, 62-65, 69, 81, 87	63-67, 79, 123	176, 229
	14	Analysis of the capital requirements for each Basel asset class.		16-17, 37-55, 61-65, 69, 74-77	63-67	176, 223-229
	15	Tabulate credit risk in the Banking Book.	82-83	16-17, 37-55, 74-77	63-67	224
	16	Flow statements reconciling the movements in risk-weighted assets for each risk-weighted asset type.		56, 68, 80	63-67	
	17	Discussion of Basel III Back-testing requirement including credit risk model performance and validation.		85	64-66	
Liquidity Funding	18	Analysis of the Bank's liquid assets.	39-42		97-102	
	19	Encumbered and unencumbered assets analyzed by balance sheet category.	39-42		99	
	20	Consolidated total assets, liabilities and off-balance sheet commitments analyzed by remaining contractual maturity at the balance sheet date.	46-47		103-105	
	21	Analysis of the Bank's sources of funding and a description of the Bank's funding strategy.	44-45		102-103	
Market Risk	22	Linkage of market risk measures for trading and non-trading portfolios and the balance sheet.	38-39		96	
	23	Discussion of significant trading and non-trading market risk factors.	84		92-97	228-229
	24	Discussion of changes in period on period VaR results as well as VaR assumptions, limitations, backtesting and validation.	37, 84		92-97	228-229
	25	Other risk management techniques e.g. stress tests, stressed VaR, tail risk and market liquidity horizon.			92-97	229
Credit Risk	26	Analysis of the aggregate credit risk exposures, including details of both personal and wholesale lending.		6-7, 37-38, 41-54, 62-65	85-91, 117-123	186-187, 225-227
	27	Discussion of the policies for identifying impaired loans, defining impairments and renegotiated loans, and explaining loan forbearance policies.				155-157, 187
	28	Reconciliations of the opening and closing balances of impaired loans and impairment allowances during the year.	67	34, 35	88, 117-118, 120, 121	187
	29	Analysis of counterparty credit risk that arises from derivative transactions.	49, 82-83	86	83-84	174-177
	30	Discussion of credit risk mitigation, including collateral held for all sources of credit risk.	82-83		83-84, 89	
Other risks	31	Quantified measures of the management of operational risk.			67, 106	
	32	Discussion of publicly known risk items.	50		71	

MANAGEMENT'S DISCUSSION & ANALYSIS

The Management's Discussion and Analysis (MD&A) is provided to enable readers to assess the Bank's financial condition and results of operations as at and for the period ended April 30, 2023. The MD&A should be read in conjunction with the Bank's unaudited Condensed Interim Consolidated Financial Statements included in this Report to Shareholders, and the Bank's 2022 Annual Report. This MD&A is dated May 24, 2023.

Additional information relating to the Bank, including the Bank's 2022 Annual Report, is available on the Bank's website at www.scotiabank.com. As well, the Bank's 2022 Annual Report and Annual Information Form are available on SEDAR at www.sedar.com and on the EDGAR section of the SEC's website at www.sec.gov.

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Forward-looking Statements From time to time, our public communications include oral or written forward-looking statements. Statements of this type are included in this document, and may be included in other filings with Canadian securities regulators or the U.S. Securities and Exchange Commission ("SEC"), or in other communications. In addition, representatives of the Bank may include forward-looking statements orally to analysts, investors, the media and others. All such statements are made pursuant to the "safe harbor" provisions of the U.S. Private Securities Litigation Reform Act of 1995 and any applicable Canadian securities legislation. Forward-looking statements may include, but are not limited to, statements made in this document, the Management's Discussion and Analysis in the Bank's 2022 Annual Report under the headings "Outlook" and in other statements regarding the Bank's objectives, strategies to achieve those objectives, the regulatory environment in which the Bank operates, anticipated financial results, and the outlook for the Bank's businesses and for the Canadian, U.S. and global economies. Such statements are typically identified by words or phrases such as "believe," "expect," "foresee," "forecast," "anticipate," "intend," "estimate," "plan," "goal," "target," "project," "commit," "objective," and similar expressions of future or conditional verbs, such as "will," "may," "should," "would," "might," "can" and "could" and positive and negative variations thereof.

By their very nature, forward-looking statements require us to make assumptions and are subject to inherent risks and uncertainties, which give rise to the possibility that our predictions, forecasts, projections, expectations or conclusions will not prove to be accurate, that our assumptions may not be correct and that our financial performance objectives, vision and strategic goals will not be achieved.

We caution readers not to place undue reliance on these statements as a number of risk factors, many of which are beyond our control and effects of which can be difficult to predict, could cause our actual results to differ materially from the expectations, targets, estimates or intentions expressed in such forward-looking statements.

The future outcomes that relate to forward-looking statements may be influenced by many factors, including but not limited to: general economic and market conditions in the countries in which we operate; changes in currency and interest rates; increased funding costs and market volatility due to market illiquidity and competition for funding; the failure of third parties to comply with their obligations to the Bank and its affiliates; changes in monetary, fiscal, or economic policy and tax legislation and interpretation; changes in laws and regulations or in supervisory expectations or requirements, including capital, interest rate and liquidity requirements and guidance, and the effect of such changes on funding costs; changes to our credit ratings; the possible effects on our business of war or terrorist actions and unforeseen consequences arising from such actions; operational and infrastructure risks; reputational risks; the accuracy and completeness of information the Bank receives on customers and counterparties; the timely development and introduction of new products and services, and the extent to which products or services previously sold by the Bank require the Bank to incur liabilities or absorb losses not contemplated at their origination; our ability to execute our strategic plans, including the successful completion of acquisitions and dispositions, including obtaining regulatory approvals; critical accounting estimates and the effect of changes to accounting standards, rules and interpretations on these estimates; global capital markets activity; the Bank's ability to attract, develop and retain key executives; the evolution of various types of fraud or other criminal behaviour to which the Bank is exposed; disruptions in or attacks (including cyber-attacks) on the Bank's information technology, internet, network access, or other voice or data communications systems or services; increased competition in the geographic and business areas in which we operate, including through internet and mobile banking and non-traditional competitors; exposure related to significant litigation and regulatory matters; climate change and other environmental and social risks, including sustainability that may arise, including from the Bank's business activities; the occurrence of natural and unnatural catastrophic events and claims resulting from such events; inflationary pressures; Canadian housing and household indebtedness; the emergence of widespread health emergencies or pandemics, including the magnitude and duration of the COVID-19 pandemic and its impact on the global economy, financial market conditions and the Bank's business, results of operations, financial condition and prospects; and the Bank's anticipation of and success in managing the risks implied by the foregoing. A substantial amount of the Bank's business involves making loans or otherwise committing resources to specific companies, industries or countries. Unforeseen events affecting such borrowers, industries or countries could have a material adverse effect on the Bank's financial results, businesses, financial condition or liquidity. These and other factors may cause the Bank's actual performance to differ materially from that contemplated by forward-looking statements. The Bank cautions that the preceding list is not exhaustive of all possible risk factors and other factors could also adversely affect the Bank's results, for more information, please see the "Risk Management" section of the Bank's 2022 Annual Report, as may be updated by quarterly reports.

Material economic assumptions underlying the forward-looking statements contained in this document are set out in the 2022 Annual Report under the headings "Outlook", as updated by quarterly reports. The "Outlook" and "2023 Priorities" sections are based on the Bank's views and the actual outcome is uncertain. Readers should consider the above-noted factors when reviewing these sections. When relying on forward-looking statements to make decisions with respect to the Bank and its securities, investors and others should carefully consider the preceding factors, other uncertainties and potential events. Any forward-looking statements contained in this document represent the views of management only as of the date hereof and are presented for the purpose of assisting the Bank's shareholders and analysts in understanding the Bank's financial position, objectives and priorities, and anticipated financial performance as at and for the periods ended on the dates presented, and may not be appropriate for other purposes. Except as required by law, the Bank does not undertake to update any forward-looking statements, whether written or oral, that may be made from time to time by or on its behalf.

Additional information relating to the Bank can be located on the SEDAR website at www.sedar.com and on the EDGAR section of the SEC's website at www.sec.gov.

Non-GAAP Measures

The Bank uses a number of financial measures and ratios to assess its performance, as well as the performance of its operating segments. Some of these financial measures and ratios are presented on a non-GAAP basis and are not calculated in accordance with Generally Accepted Accounting Principles (GAAP), which are based on International Financial Reporting Standards (IFRS) as issued by the International Accounting Standards Board (IASB), are not defined by GAAP and do not have standardized meanings and therefore might not be comparable to similar financial measures and ratios disclosed by other issuers. The Bank believes that non-GAAP measures and ratios are useful as they provide readers with a better understanding of how management assesses performance. These non-GAAP measures and ratios are used throughout this report and defined below.

Adjusted results and diluted earnings per share

The following tables present a reconciliation of GAAP reported financial results to non-GAAP adjusted financial results. Management considers both reported and adjusted results and measures useful in assessing underlying ongoing business performance. Adjusted results and measures remove certain specified items from revenue, non-interest expenses, income taxes and non-controlling interest. Presenting results on both a reported basis and adjusted basis allows readers to assess the impact of certain items on results for the periods presented, and to better assess results and trends excluding those items that may not be reflective of ongoing business performance. Net income and diluted earnings per share have been adjusted for the following:

Adjustments impacting current and prior periods:

1. **Amortization of acquisition-related intangible assets:**

   These costs relate to the amortization of intangibles recognized upon the acquisition of businesses, excluding software, and are recorded in the Canadian Banking, International Banking and Global Wealth Management operating segments.

2. **Canada Recovery Dividend, recorded in Q1, 2023:**

   In Q1 2023, the Bank recognized an additional income tax expense of $579 million reflecting the present value of the amount payable for the Canada Recovery Dividend (CRD). The CRD is a Canadian federal tax measure which requires the Bank to pay a one-time tax of 15% on taxable income in excess of $1 billion, based on the average taxable income for the 2020 and 2021 taxation years. The CRD is payable in equal amounts over five years; however, the present value of these payments must be recognized as a liability in the quarter enacted. The charge was recorded in the Other operating segment.

Adjustments impacting Q4, 2022 only:

1. **Restructuring provision:**

   The Bank recorded a restructuring charge of $66 million ($85 million pre-tax) related to the realignment of the Global Banking and Markets businesses in Asia Pacific and reductions in technology employees, driven by ongoing technology modernization and digital transformation. This charge was recorded in the Other operating segment.

2. **Support costs for the Scene+ loyalty program:**

   The Bank recorded costs of $98 million ($133 million pre-tax) to support the expansion of the Scene+ loyalty program to include Empire Company Limited as a partner. These committed costs relate to operational support, transition marketing and technology initiatives and were recognized as an expense in the Other operating segment.

3. **Net loss on divestitures and wind-down of operations:**

   In Q4 2022, the Bank sold its investments in associates in Venezuela and Thailand. Additionally, the Bank wound down its operations in India and Malaysia in relation to its realignment of the business in the Asia Pacific region. Collectively, the sale and wind-down of these entities resulted in a net loss of $340 million ($361 million pre-tax), of which $294 million ($315 million pre-tax) related to the reclassification of cumulative foreign currency translation losses net of hedges, from accumulated other comprehensive income to non-interest income in the Consolidated Statement of Income. This net loss was recorded in the Other operating segment. For further details on these transactions, please refer to Note 36 of the consolidated financial statements, in the 2022 Annual Report to Shareholders.

T1 Reconciliation of reported and adjusted results and diluted earnings per share

	For the three months ended			For the six months ended	
($ millions)	**April 30 2023**	January 31 2023	April 30 2022	**April 30 2023**	April 30 2022
Reported Results					
Net interest income	**$4,466**	$4,569	$4,473	**$ 9,035**	$ 8,817
Non-interest income	**3,463**	3,411	3,469	**6,874**	7,174
Total revenue	**7,929**	7,980	7,942	**15,909**	15,991
Provision for credit losses	**709**	638	219	**1,347**	441
Non-interest expenses	**4,576**	4,464	4,159	**9,040**	8,382
Income before taxes	**2,644**	2,878	3,564	**5,522**	7,168
Income tax expense	**485**	1,106	817	**1,591**	1,681
Net income	**$2,159**	$1,772	$2,747	**$ 3,931**	$ 5,487
Net income attributable to non-controlling interests in subsidiaries (NCI)	**26**	40	78	**66**	166
Net income attributable to equity holders	**2,133**	1,732	2,669	**3,865**	5,321
Net income attributable to preferred shareholders and other equity instrument holders	**104**	101	74	**205**	118
Net income attributable to common shareholders	**$2,029**	$1,631	$2,595	**$ 3,660**	$ 5,203
Diluted earnings per share *(in dollars)*	**$ 1.69**	$ 1.36	$ 2.16	**$ 3.04**	$ 4.30
Weighted average number of diluted common shares outstanding *(millions)*	**1,197**	1,199	1,201	**1,199**	1,225
Adjustments					
Adjusting items impacting non-interest expenses (Pre-tax)					
Amortization of acquisition-related intangible assets	**$ 21**	$ 21	$ 24	**$ 42**	$ 49
Total non-interest expense adjusting items (Pre-tax)	**21**	21	24	**42**	49
Total impact of adjusting items on net income before taxes	**21**	21	24	**42**	49
Impact of adjusting items on income tax expense					
Canada recovery dividend	**–**	579	–	**579**	–
Amortization of acquisition-related intangible assets	**(6)**	(6)	(6)	**(12)**	(13)
Total impact of adjusting items on income tax expense	**(6)**	573	(6)	**567**	(13)
Total impact of adjusting items on net income	**$ 15**	$ 594	$ 18	**$ 609**	$ 36
Impact of adjusting items on NCI	**–**	–	–	**–**	–
Total impact of adjusting items on net income attributable to equity holders and common shareholders	**$ 15**	$ 594	$ 18	**$ 609**	$ 36
Adjusted Results					
Net interest income	**$4,466**	$4,569	$4,473	**$ 9,035**	$ 8,817
Non-interest income	**3,463**	3,411	3,469	**6,874**	7,174
Total revenue	**7,929**	7,980	7,942	**15,909**	15,991
Provision for credit losses	**709**	638	219	**1,347**	441
Non-interest expenses	**4,555**	4,443	4,135	**8,998**	8,333
Income before taxes	**2,665**	2,899	3,588	**5,564**	7,217
Income tax expense	**491**	533	823	**1,024**	1,694
Net Income	**$2,174**	$2,366	$2,765	**$ 4,540**	$ 5,523
Net income attributable to NCI	**26**	40	78	**66**	166
Net income attributable to equity holders	**2,148**	2,326	2,687	**4,474**	5,357
Net income attributable to preferred shareholders and other equity instrument holders	**104**	101	74	**205**	118
Net income attributable to common shareholders	**$2,044**	$2,225	$2,613	**$ 4,269**	$ 5,239
Diluted earnings per share *(in dollars)*	**$ 1.70**	$ 1.85	$ 2.18	**$ 3.55**	$ 4.33
Impact of adjustments on diluted earnings per share *(in dollars)*	**$ 0.01**	$ 0.49	$ 0.02	**$ 0.51**	$ 0.03
Weighted average number of diluted common shares outstanding *(millions)*	**1,197**	1,210	1,201	**1,199**	1,225

T1A Reconciliation of reported and adjusted results by business line

	For the three months ended April 30, 2023[1]					
($ millions)	**Canadian Banking**	**International Banking**	**Global Wealth Management**	**Global Banking and Markets**	**Other**	**Total**
Reported net income (loss)	**$1,060**	**$665**	**$356**	**$401**	**$(323)**	**$2,159**
Net income attributable to non-controlling interests in subsidiaries (NCI)	**–**	**23**	**3**	**–**	**–**	**26**
Reported net income attributable to equity holders	**1,060**	**642**	**353**	**401**	**(323)**	**2,133**
Reported net income attributable to preferred shareholders and other equity instrument holders	**1**	**1**	**1**	**1**	**100**	**104**
Reported net income attributable to common shareholders	**$1,059**	**$641**	**$352**	**$400**	**$(423)**	**$2,029**
Adjustments:						
Adjusting items impacting non-interest expenses (Pre-tax)						
Amortization of acquisition-related intangible assets	**1**	**11**	**9**	**–**	**–**	**21**
Total non-interest expenses adjustments (Pre-tax)	**1**	**11**	**9**	**–**	**–**	**21**
Total impact of adjusting items on net income before taxes	**1**	**11**	**9**	**–**	**–**	**21**
Impact of adjusting items on income tax expense	**–**	**(3)**	**(3)**	**–**	**–**	**(6)**
Total impact of adjusting items on net income	**1**	**8**	**6**	**–**	**–**	**15**
Total impact of adjusting items on net income attributable to equity holders and common shareholders	**1**	**8**	**6**	**–**	**–**	**15**
Adjusted net income (loss)	**$1,061**	**$673**	**$362**	**$401**	**$(323)**	**$2,174**
Adjusted net income attributable to equity holders	**$1,061**	**$650**	**$359**	**$401**	**$(323)**	**$2,148**
Adjusted net income attributable to common shareholders	**$1,060**	**$649**	**$358**	**$400**	**$(423)**	**$2,044**

(1) Refer to Business Segment Review on page 18.

	For the three months ended January 31, 2023[1]					
($ millions)	Canadian Banking	International Banking	Global Wealth Management	Global Banking and Markets	Other	Total
Reported net income (loss)	$1,087	$692	$387	$519	$ (913)	$1,772
Net income attributable to non-controlling interests in subsidiaries (NCI)	–	38	2	–	–	40
Reported net income attributable to equity holders	1,087	654	385	519	(913)	1,732
Reported net income attributable to preferred shareholders and other equity instrument holders	1	1	–	1	98	101
Reported net income attributable to common shareholders	$1,086	$653	$385	$518	$(1,011)	$1,631
Adjustments:						
Adjusting items impacting non-interest expenses (Pre-tax)						
Amortization of acquisition-related intangible assets	2	10	9	–	–	21
Total non-interest expenses adjustments (Pre-tax)	2	10	9	–	–	21
Total impact of adjusting items on net income before taxes	2	10	9	–	–	21
Impact of adjusting items on income tax expense						
Canada recovery dividend	–	–	–	–	579	579
Impact of other adjusting items on income tax expense	(1)	(3)	(2)	–	–	(6)
Total impact of adjusting items on income tax expense	(1)	(3)	(2)	–	579	573
Total impact of adjusting items on net income	1	7	7	–	579	594
Total impact of adjusting items on net income attributable to equity holders and common shareholders	1	7	7	–	579	594
Adjusted net income (loss)	$1,088	$699	$394	$519	$ (334)	$2,366
Adjusted net income attributable to equity holders	$1,088	$661	$392	$519	$ (334)	$2,326
Adjusted net income attributable to common shareholders	$1,087	$660	$392	$518	$ (432)	$2,225

(1) Refer to Business Segment Review on page 18.

($ millions)	Canadian Banking	International Banking	Global Wealth Management	Global Banking and Markets	Other	Total
	For the three months ended April 30, 2022[(1)]					
Reported net income (loss)	$1,179	$681	$409	$488	$(10)	$2,747
Net income attributable to non-controlling interests in subsidiaries (NCI)	–	76	2	–	–	78
Reported net income attributable to equity holders	1,179	605	407	488	(10)	2,669
Reported net income attributable to preferred shareholders and other equity instrument holders	1	2	–	1	70	74
Reported net income attributable to common shareholders	$1,178	$603	$407	$487	$(80)	$2,595
Adjustments:						
Adjusting items impacting non-interest expenses (Pre-tax)						
Amortization of acquisition-related intangible assets	5	10	9	–	–	24
Total non-interest expenses adjustments (Pre-tax)	5	10	9	–	–	24
Total impact of adjusting items on net income before taxes	5	10	9	–	–	24
Impact of adjusting items on income tax expense	(1)	(2)	(3)	–	–	(6)
Total impact of adjusting items on net income	4	8	6	–	–	18
Total impact of adjusting items on net income attributable to equity holders and common shareholders	4	8	6	–	–	18
Adjusted net income (loss)	$1,183	$689	$415	$488	$(10)	$2,765
Adjusted net income attributable to equity holders	$1,183	$613	$413	$488	$(10)	$2,687
Adjusted net income attributable to common shareholders	$1,182	$611	$413	$487	$(80)	$2,613

(1) Refer to Business Segment Review on page 18.

($ millions)	**Canadian Banking**	**International Banking**	**Global Wealth Management**	**Global Banking and Markets**	**Other**	**Total**
	For the six months ended April 30, 2023[(1)]					
Reported net income (loss)	**$2,147**	**$1,357**	**$743**	**$920**	**$(1,236)**	**$3,931**
Net income attributable to non-controlling interests in subsidiaries (NCI)	**–**	**61**	**5**	**–**	**–**	**66**
Reported net income attributable to equity holders	**2,147**	**1,296**	**738**	**920**	**(1,236)**	**3,865**
Reported net income attributable to preferred shareholders and other equity instrument holders	**2**	**2**	**1**	**2**	**198**	**205**
Reported net income attributable to common shareholders	**$2,145**	**$1,294**	**$737**	**$918**	**$(1,434)**	**$3,660**
Adjustments:						
Adjusting items impacting non-interest expenses (Pre-tax)						
Amortization of acquisition-related intangible assets	**3**	**21**	**18**	**–**	**–**	**42**
Total non-interest expenses adjustments (Pre-tax)	**3**	**21**	**18**	**–**	**–**	**42**
Total impact of adjusting items on net income before taxes	**3**	**21**	**18**	**–**	**–**	**42**
Impact of adjusting items on income tax expense						
Canada recovery dividend	**–**	**–**	**–**	**–**	**579**	**579**
Impact of other adjusting items on income tax expense	**(1)**	**(6)**	**(5)**	**–**	**–**	**(12)**
Total impact of adjusting items on income tax expense	**(1)**	**(6)**	**(5)**	**–**	**579**	**567**
Total impact of adjusting items on net income	**2**	**15**	**13**	**–**	**579**	**609**
Total impact of adjusting items on net income attributable to equity holders and common shareholders	**2**	**15**	**13**	**–**	**579**	**609**
Adjusted net income (loss)	**$2,149**	**$1,372**	**$756**	**$920**	**$ (657)**	**$4,540**
Adjusted net income attributable to equity holders	**$2,149**	**$1,311**	**$751**	**$920**	**$ (657)**	**$4,474**
Adjusted net income attributable to common shareholders	**$2,147**	**$1,309**	**$750**	**$918**	**$ (855)**	**$4,269**

(1) Refer to Business Segment Review on page 18.

($ millions)	Canadian Banking	International Banking	Global Wealth Management	Global Banking and Markets	Other	Total
	For the six months ended April 30, 2022[1]					
Reported net income (loss)	$2,380	$1,311	$824	$1,049	$ (77)	$5,487
Net income attributable to non-controlling interests in subsidiaries (NCI)	–	161	5	–	–	166
Reported net income attributable to equity holders	2,380	1,150	819	1,049	(77)	5,321
Reported net income attributable to preferred shareholders and other equity instrument holders	4	5	2	3	104	118
Reported net income attributable to common shareholders	$2,376	$1,145	$817	$1,046	$(181)	$5,203
Adjustments:						
Adjusting items impacting non-interest expenses (Pre-tax)						
Amortization of acquisition-related intangible assets	11	20	18	–	–	49
Total non-interest expenses adjustments (Pre-tax)	11	20	18	–	–	49
Total impact of adjusting items on net income before taxes	11	20	18	–	–	49
Impact of adjusting items on income tax expense	(3)	(5)	(5)	–	–	(13)
Total impact of adjusting items on net income	8	15	13	–	–	36
Total impact of adjusting items on net income attributable to equity holders and common shareholders	8	15	13	–	–	36
Adjusted net income (loss)	$2,388	$1,326	$837	$1,049	$ (77)	$5,523
Adjusted net income attributable to equity holders	$2,388	$1,165	$832	$1,049	$ (77)	$5,357
Adjusted net income attributable to common shareholders	$2,384	$1,160	$830	$1,046	$(181)	$5,239

(1) Refer to Business Segment Review on page 18.

Constant Dollar

International Banking business segment results are analyzed on a constant dollar basis which is a non-GAAP measure. Under the constant dollar basis, prior period amounts are recalculated using current period average foreign currency rates. The following table presents the reconciliation between reported, adjusted and constant dollar results for International Banking for prior periods. The Bank believes that constant dollar is useful for readers to understand business performance without the impact of foreign currency translation and is used by management to assess the performance of the business segment. The tables below are computed on a basis that is different than the table "Impact of foreign currency translation" in Overview of Performance on page 15.

T2 Reconciliation of International Banking's reported and adjusted results and constant dollar results

Reported Results	For the three months ended						For the six months ended		
($ millions)	January 31, 2023			April 30, 2022			April 30, 2022		
(Taxable equivalent basis)	Reported	Foreign exchange	Constant dollar	Reported	Foreign exchange	Constant dollar	Reported	Foreign exchange	Constant dollar
Net interest income	$1,899	$ (73)	$1,972	$1,687	$(140)	$1,827	$3,335	$(245)	$3,580
Non-interest income	802	(35)	837	720	(5)	725	1,469	16	1,453
Total revenue	2,701	(108)	2,809	2,407	(145)	2,552	4,804	(229)	5,033
Provision for credit losses	404	(18)	422	276	(16)	292	550	(33)	583
Non-interest expenses	1,436	(51)	1,487	1,268	(84)	1,352	2,553	(149)	2,702
Income tax expense	169	(2)	171	182	(3)	185	390	(2)	392
Net income	$ 692	$ (37)	$ 729	$ 681	$ (42)	$ 723	$ 1,311	$ (45)	$1,356
Net income attributable to non-controlling interest in subsidiaries (NCI)	$ 38	$ (2)	$ 40	$ 76	$ (5)	$ 81	$ 161	$ (6)	$ 167
Net income attributable to equity holders of the Bank	$ 654	$ (35)	$ 689	$ 605	$ (37)	$ 642	$1,150	$ (39)	$1,189
Other measures									
Average assets *($ billions)*	$ 228	$ (9)	$ 237	$ 204	$ (16)	$ 220	$ 200	$ (5)	$ 205
Average liabilities *($ billions)*	$ 169	$ (7)	$ 176	$ 149	$ (12)	$ 161	$ 146	$ (10)	$ 156

Adjusted Results	For the three months ended						For the six months ended		
($ millions)	January 31, 2023			April 30, 2022			April 30, 2022		
(Taxable equivalent basis)	Adjusted	Foreign exchange	Constant dollar adjusted	Adjusted	Foreign exchange	Constant dollar adjusted	Adjusted	Foreign exchange	Constant dollar adjusted
Net interest income	$1,899	$ (73)	$1,972	$1,687	$(140)	$1,827	$3,335	$(245)	$3,580
Non-interest income	802	(35)	837	720	(5)	725	1,469	16	1,453
Total revenue	2,701	(108)	2,809	2,407	(145)	2,552	4,804	(229)	5,033
Provision for credit losses	404	(18)	422	276	(16)	292	550	(33)	583
Non-interest expenses	1,426	(51)	1,477	1,258	(83)	1,341	2,533	(148)	2,681
Income tax expense	172	(1)	173	184	(4)	188	395	(2)	397
Net income	$ 699	$ (38)	$ 737	$ 689	$ (42)	$ 731	$ 1,326	$ (46)	$1,372
Net income attributable to NCI	$ 38	$ (2)	$ 40	$ 76	$ (5)	$ 81	$ 161	$ (7)	$ 168
Net income attributable to equity holders of the Bank	$ 661	$ (36)	$ 697	$ 613	$ (37)	$ 650	$1,165	$ (39)	$1,204

Reconciliation of average total assets, core earning assets and core net interest income

Earning assets

Earning assets are defined as income generating assets which include deposits with financial institutions, trading assets, investment securities, investments in associates, securities borrowed or purchased under resale agreements, loans net of allowances, and customers' liability under acceptances. This is a non-GAAP measure.

Non-earning assets

Non-earning assets are defined as cash, precious metals, derivative financial instruments, property and equipment, goodwill and other intangible assets, deferred tax assets and other assets. This is a non-GAAP measure.

Core earning assets

Core earning assets are defined as interest-bearing deposits with financial institutions, investment securities and loans net of allowances. This is a non-GAAP measure. The Bank believes that this measure is useful for readers as it represents the main interest-generating assets and eliminates the impact of trading businesses.

Core net interest income

Core net interest income is defined as net interest income earned from core earning assets. This is a non-GAAP measure.

Net interest margin

Net interest margin is calculated as core net interest income (annualized) for the business line divided by average core earning assets. Net interest margin is a non-GAAP ratio.

T3 Reconciliation of average total assets, average earning assets, average core earning assets and net interest margin by business line

Consolidated Bank

	For the three months ended			For the six months ended	
($ millions)	**April 30 2023**	January 31 2023	April 30 2022	**April 30 2023**	April 30 2022
Average total assets – Reported(1)	**$1,390,459**	$1,380,008	$1,264,193	**$1,385,602**	$1,250,641
Less: Non-earning assets	**111,261**	118,465	102,901	**115,377**	97,909
Average total earning assets(1)	**$1,279,198**	$1,261,543	$1,161,292	**$1,270,225**	$1,152,732
Less:					
Trading assets	**115,611**	119,974	144,501	**117,829**	153,845
Securities purchased under resale agreements and securities borrowed	**189,757**	174,942	127,255	**182,227**	129,210
Other deductions	**73,073**	70,779	59,618	**71,908**	58,812
Average core earning assets(1)	**$ 900,757**	$ 895,848	$ 829,918	**$ 898,261**	$ 810,865
Net Interest Income – Reported	**$ 4,466**	$ 4,569	$ 4,473	**$ 9,035**	$ 8,817
Less: Non-core net interest income	**(204)**	(205)	(33)	**(409)**	(10)
Core net interest income	**$ 4,670**	$ 4,774	$ 4,506	**$ 9,444**	$ 8,827
Net interest margin	**2.13%**	2.11%	2.23%	**2.12%**	2.20%

(1) Average balances represent the average of daily balances for the period.

Canadian Banking

	For the three months ended			For the six months ended	
($ millions)	**April 30 2023**	January 31 2023	April 30 2022	**April 30 2023**	April 30 2022
Average total assets – Reported(1)	**$ 450,634**	$ 450,040	$ 423,218	**$ 450,332**	$ 417,388
Less: Non-earning assets	**3,957**	4,035	4,035	**3,997**	4,083
Average total earning assets(1)	**$ 446,677**	$ 446,005	$ 419,183	**$ 446,335**	$ 413,305
Less:					
Trading assets	**–**	–	–	**–**	–
Securities purchased under resale agreements and securities borrowed	**–**	–	–	**–**	–
Other deductions	**28,655**	27,284	22,478	**27,958**	21,514
Average core earning assets(1)	**$418,022**	$418,721	$396,705	**$418,377**	$391,791
Net Interest Income – Reported	**$ 2,340**	$ 2,386	$ 2,144	**$ 4,726**	$ 4,277
Less: Non-core net interest income	**–**	–	–	**–**	–
Core net interest income	**$ 2,340**	$ 2,386	$ 2,144	**$ 4,726**	$ 4,277
Net interest margin	**2.30%**	2.26%	2.22%	**2.28%**	2.20%

(1) Average balances represent the average of daily balances for the period.

International Banking

	For the three months ended			For the six months ended	
($ millions)	**April 30 2023**	January 31 2023	April 30 2022	**April 30 2023**	April 30 2022
Average total assets – Reported(1)	**$ 238,705**	$ 228,374	$ 203,875	**$ 233,454**	$ 199,923
Less: Non-earning assets	**20,050**	19,103	17,371	**19,569**	16,694
Average total earning assets(1)	**$ 218,655**	$ 209,271	$ 186,504	**$ 213,885**	$ 183,229
Less:					
Trading assets	**6,059**	5,132	4,376	**5,587**	4,839
Securities purchased under resale agreements and securities borrowed	**2,868**	3,033	145	**2,952**	173
Other deductions	**7,240**	7,565	6,707(2)	**7,406**	6,712(2)
Average core earning assets(1)	**$202,488**	$193,541	$175,276	**$197,940**	$171,505
Net Interest Income – Reported	**$ 2,007**	$ 1,899	$ 1,687	**$ 3,906**	$ 3,335
Less: Non-core net interest income	**(27)**	(54)	(4)	**(81)**	8
Core net interest income	**$ 2,034**	$ 1,953	$ 1,691	**$ 3,987**	$ 3,327
Net interest margin	**4.12%**	4.00%	3.96%	**4.06%**	3.91%

(1) Average balances represent the average of daily balances for the period.
(2) Prior period has been restated to reflect the deduction of non-interest-bearing deposits with financial institutions, to align with the Bank's definition.

Return on equity

Return on equity is a profitability measure that presents the net income attributable to common shareholders (annualized) as a percentage of average common shareholders' equity.

The Bank attributes capital to its business lines on a basis that approximates 10.5% of Basel III common equity capital requirements which includes credit, market and operational risks and leverage inherent within each business segment.

Return on equity for the business segments is calculated as a ratio of net income attributable to common shareholders (annualized) of the business segment and the capital attributed.

Adjusted return on equity is a non-GAAP ratio which represents adjusted net income attributable to common shareholders (annualized) as a percentage of average common shareholders' equity.

T4 Return on equity by operating segment

	For the three months ended April 30, 2023					
($ millions)	**Canadian Banking**	**International Banking**	**Global Wealth Management**	**Global Banking and Markets**	**Other**	**Total**
Reported						
Net income attributable to common shareholders	**$ 1,059**	**$ 641**	**$ 352**	**$ 400**	**$ (423)**	**$ 2,029**
Total average common equity	**19,077**	**19,866**	**9,732**	**15,587**	**3,332**	**67,594**
Return on equity	**22.8%**	**13.2%**	**14.8%**	**10.5%**	**nm(1)**	**12.3%**
Adjusted(2)						
Net income attributable to common shareholders	**$ 1,060**	**$ 649**	**$ 358**	**$ 400**	**$ (423)**	**$ 2,044**
Return on equity	**22.8%**	**13.4%**	**15.1%**	**10.5%**	**nm(1)**	**12.4%**

(1) Not meaningful
(2) Refer to Tables on page 5.

	For the three months ended January 31, 2023						For the three months ended April 30, 2022					
($ millions)	Canadian Banking	International Banking	Global Wealth Management	Global Banking and Markets	Other	Total	Canadian Banking	International Banking	Global Wealth Management	Global Banking and Markets	Other	Total
Reported												
Net income attributable to common shareholders	$ 1,086	$ 653	$ 385	$ 518	$(1,011)	$ 1,631	$ 1,178	$ 603	$ 407	$ 487	$ (80)	$ 2,595
Total average common equity	18,753	19,302	9,835	15,535	2,206	65,631	17,848	18,804	9,529	12,832	6,490	65,503
Return on equity	23.0%	13.4%	15.5%	13.2%	nm(1)	9.9%	27.1%	13.2%	17.5%	15.6%	nm(1)	16.2%
Adjusted(2)												
Net income attributable to common shareholders	$ 1,087	$ 660	$ 392	$ 518	$ (432)	$ 2,225	$ 1,182	$ 611	$ 413	$ 487	$ (80)	$ 2,613
Return on equity	23.0%	13.6%	15.8%	13.2%	nm(1)	13.4%	27.2%	13.3%	17.8%	15.6%	nm(1)	16.4%

(1) Not meaningful
(2) Refer to Tables on page 5.

	For the six months ended April 30, 2023						For the six months ended April 30, 2022					
($ millions)	**Canadian Banking**	**International Banking**	**Global Wealth Management**	**Global Banking and Markets**	**Other**	**Total**	Canadian Banking	International Banking	Global Wealth Management	Global Banking and Markets	Other	Total
Reported												
Net income attributable to common shareholders	**$ 2,145**	**$ 1,294**	**$ 737**	**$ 918**	**$(1,434)**	**$ 3,660**	$ 2,376	$ 1,145	$ 817	$ 1,046	$ (181)	$ 5,203
Total average common equity	**18,913**	**19,580**	**9,784**	**15,561**	**2,942**	**66,780**	17,607	18,176	9,485	12,774	7,210	65,252
Return on equity	**22.9%**	**13.3%**	**15.2%**	**11.9%**	**nm(1)**	**11.1%**	27.2%	12.7%	17.4%	16.5%	nm(1)	16.1%
Adjusted(2)												
Net income attributable to common shareholders	**$ 2,147**	**$ 1,309**	**$ 750**	**$ 918**	**$ (855)**	**$ 4,269**	$ 2,384	$ 1,160	$ 830	$ 1,046	$ (181)	$ 5,239
Return on equity	**22.9%**	**13.5%**	**15.5%**	**11.9%**	**nm(1)**	**12.9%**	27.3%	12.9%	17.6%	16.5%	nm(1)	16.2%

(1) Not meaningful
(2) Refer to Tables on page 5.

Return on tangible common equity

Return on tangible common equity is a profitability measure that is calculated by dividing the net income attributable to common shareholders (annualized), adjusted for the amortization of intangibles (excluding software), by average tangible common equity. Tangible common equity is defined as common shareholders' equity adjusted for goodwill and intangible assets (excluding software), net of deferred taxes. This is a non-GAAP ratio.

Adjusted return on tangible common equity represents adjusted net income attributable to common shareholders as a percentage of average tangible common equity. This is a non-GAAP ratio.

T5 Return on tangible common equity

	For the three months ended			For the six months ended	
($ millions)	**April 30 2023**	January 31 2023	April 30 2022	**April 30 2023**	April 30 2022
Reported					
Average common equity – Reported[1]	**$67,594**	$65,631	$65,503	**$66,780**	$65,252
Average goodwill[1][2]	**(9,513)**	(9,334)	(9,263)	**(9,410)**	(9,234)
Average acquisition-related intangibles (net of deferred tax)[1]	**(3,747)**	(3,760)	(3,817)	**(3,754)**	(3,823)
Average tangible common equity[1]	**$54,334**	$52,537	$52,423	**$53,616**	$52,195
Net income attributable to common shareholders – reported	**$ 2,029**	$ 1,631	$ 2,595	**$ 3,660**	$ 5,203
Amortization of acquisition-related intangible assets (after tax)[3]	**15**	15	18	**30**	36
Net income attributable to common shareholders adjusted for amortization of acquisition-related intangible assets (after tax)	**$ 2,044**	$ 1,646	$ 2,613	**$ 3,690**	$ 5,239
Return on tangible common equity[4]	**15.4%**	12.4%	20.4%	**13.9%**	20.2%
Adjusted[3]					
Adjusted net income attributable to common shareholders	**$ 2,044**	$ 2,225	$ 2,613	**$ 4,269**	$ 5,239
Return on tangible common equity – adjusted[4]	**15.4%**	16.8%	20.4%	**16.1%**	20.2%

(1) Average amounts calculated using methods intended to approximate the daily average balances for the period.
(2) Includes imputed goodwill from investments in associates.
(3) Refer to Table on page 5.
(4) Calculated on full dollar amounts.

Adjusted productivity ratio

Adjusted productivity ratio represents adjusted non-interest expenses as a percentage of adjusted total revenue. This is a non-GAAP ratio.

Management uses the productivity ratio as a measure of the Bank's efficiency. A lower ratio indicates improved productivity.

Adjusted operating leverage

This financial metric measures the rate of growth in adjusted total revenue less the rate of growth in adjusted non-interest expenses. This is a non-GAAP ratio.

Management uses operating leverage as a way to assess the degree to which the Bank can increase operating income by increasing revenue.

Trading-related revenue (Taxable equivalent basis)

Trading-related revenue consists of net interest income and non-interest income. Included are unrealized gains and losses on security positions held, realized gains and losses from the purchase and sale of securities, fees and commissions from securities borrowing and lending activities, and gains and losses on trading derivatives. Underwriting and other advisory fees, which are shown separately in the Consolidated Statement of Income, are excluded. Trading-related revenue includes certain net interest income and non-interest income items on a taxable equivalent basis (TEB). This methodology grosses up tax-exempt income earned on certain securities to an equivalent before tax basis. This is a non-GAAP measure.

Management believes that this basis for measurement of trading-related revenue provides a uniform comparability of net interest income and non-interest income arising from both taxable and non-taxable sources and facilitates a consistent basis of measurement. While other banks also use TEB, their methodology may not be comparable to the Bank's methodology.

Adjusted effective tax rate

The adjusted effective tax rate is calculated by dividing adjusted income tax expense by adjusted income before taxes. This is a non-GAAP ratio.

Financial Highlights

T6 Financial highlights

	As at and for the three months ended			For the six months ended	
(Unaudited)	**April 30 2023**	January 31 2023	April 30 2022	**April 30 2023**	April 30 2022
Operating results *($ millions)*					
Net interest income	**4,466**	4,569	4,473	**9,035**	8,817
Non-interest income	**3,463**	3,411	3,469	**6,874**	7,174
Total revenue	**7,929**	7,980	7,942	**15,909**	15,991
Provision for credit losses	**709**	638	219	**1,347**	441
Non-interest expenses	**4,576**	4,464	4,159	**9,040**	8,382
Income tax expense	**485**	1,106	817	**1,591**	1,681
Net income	**2,159**	1,772	2,747	**3,931**	5,487
Net income attributable to common shareholders	**2,029**	1,631	2,595	**3,660**	5,203
Operating performance					
Basic earnings per share *($)*	**1.70**	1.37	2.16	**3.07**	4.32
Diluted earnings per share *($)*	**1.69**	1.36	2.16	**3.04**	4.30
Return on equity *(%)*[1]	**12.3**	9.9	16.2	**11.1**	16.1
Return on tangible common equity *(%)*[2]	**15.4**	12.4	20.4	**13.9**	20.2
Productivity ratio *(%)*[1]	**57.7**	55.9	52.4	**56.8**	52.4
Net interest margin *(%)*[2]	**2.13**	2.11	2.23	**2.12**	2.20
Financial position information *($ millions)*					
Cash and deposits with financial institutions	**63,893**	81,386	85,910		
Trading assets	**114,695**	116,346	133,644		
Loans	**764,068**	755,157	689,702		
Total assets	**1,373,198**	1,374,438	1,288,506		
Deposits	**945,538**	949,887	876,554		
Common equity	**69,077**	66,112	64,833		
Preferred shares and other equity instruments	**8,075**	8,075	5,552		
Assets under administration[1]	**684,170**	664,683	640,227		
Assets under management[1]	**329,502**	322,423	326,223		
Capital and liquidity measures					
Common Equity Tier 1 (CET1) capital ratio *(%)*[3]	**12.3**	11.5	11.6		
Tier 1 capital ratio *(%)*[3]	**14.1**	13.2	12.8		
Total capital ratio *(%)*[3]	**16.2**	15.2	15.0		
Total loss absorbing capacity (TLAC) ratio *(%)*[4]	**28.3**	27.9	30.1		
Leverage ratio *(%)*[5]	**4.2**	4.2	4.2		
TLAC Leverage ratio *(%)*[4]	**8.4**	8.9	9.8		
Risk-weighted assets *($ millions)*[3]	**451,063**	471,528	445,273		
Liquidity coverage ratio (LCR) *(%)*[6]	**131**	122	125		
Net stable funding ratio (NSFR) *(%)*[7]	**111**	109	109		
Credit quality					
Net impaired loans *($ millions)*	**3,554**	3,450	2,660		
Allowance for credit losses *($ millions)*[8]	**5,931**	5,668	5,375		
Gross impaired loans as a % of loans and acceptances[1]	**0.67**	0.65	0.60		
Net impaired loans as a % of loans and acceptances[1]	**0.45**	0.44	0.37		
Provision for credit losses as a % of average net loans and acceptances (annualized)[1][9]	**0.37**	0.33	0.13	**0.35**	0.13
Provision for credit losses on impaired loans as a % of average net loans and acceptances (annualized)[1][9]	**0.33**	0.29	0.24	**0.31**	0.24
Net write-offs as a % of average net loans and acceptance (annualized)[1]	**0.29**	0.29	0.25	**0.29**	0.26
Adjusted results[2]					
Adjusted net income *($ millions)*	**2,174**	2,366	2,765	**4,540**	5,523
Adjusted diluted earnings per share *($)*	**1.70**	1.85	2.18	**3.55**	4.33
Adjusted return on equity *(%)*	**12.4**	13.4	16.4	**12.9**	16.2
Adjusted return on tangible common equity *(%)*	**15.4**	16.8	20.4	**16.1**	20.2
Adjusted productivity ratio *(%)*	**57.5**	55.7	52.1	**56.6**	52.1
Common share information					
Closing share price *($)* (TSX)	**67.63**	72.03	81.35		
Shares outstanding *(millions)*					
Average – Basic	**1,192**	1,192	1,199	**1,192**	1,205
Average – Diluted	**1,197**	1,199	1,201	**1,199**	1,225
End of period	**1,198**	1,192	1,198		
Dividends paid per share *($)*	**1.03**	1.03	1.00	**2.06**	2.00
Dividend yield *(%)*[1]	**6.0**	6.1	4.5	**6.0**	4.6
Market capitalization *($ millions)* (TSX)	**81,033**	85,842	97,441		
Book value per common share *($)*[1]	**57.65**	55.47	54.13		
Market value to book value multiple[1]	**1.2**	1.3	1.5		
Price to earnings multiple (trailing 4 quarters)[1]	**9.9**	9.9	9.8		
Other information					
Employees (full-time equivalent)	**91,030**	91,264	90,619		
Branches and offices[10]	**2,398**	2,411	2,460		

(1) Refer to Glossary on page 54 for the description of the measure.
(2) Refer to Non-GAAP Measures section starting on page 4.
(3) Q2 2023 regulatory capital ratios are based on Revised Basel III requirements as determined in accordance with OSFI Guideline – Capital Adequacy Requirements (February 2023). Prior period regulatory capital ratios were prepared in accordance with OSFI Guideline – Capital Adequacy Requirements (November 2018).
(4) This measure has been disclosed in this document in accordance with OSFI Guideline – Total Loss Absorbing Capacity (September 2018).
(5) Q2 2023 leverage ratios are based on Revised Basel III requirements as determined in accordance with OSFI Guideline – Leverage Requirements (February 2023). Prior period leverage ratios were prepared in accordance with OSFI Guideline – Leverage Requirements (November 2018).
(6) This measure has been disclosed in this document in accordance with OSFI Guideline – Public Disclosure Requirements for Domestic Systemically Important Banks on Liquidity Coverage Ratio (April 2015).
(7) This measure has been disclosed in this document in accordance with OSFI Guideline – Net Stable Funding Ratio Disclosure Requirements (January 2021).
(8) Includes allowance for credit losses on all financial assets – loans, acceptances, off-balance sheet exposures, debt securities and deposits with financial institutions.
(9) Includes provision for credit losses on certain financial assets – loans, acceptances and off-balance sheet exposures.
(10) Prior period amounts have been restated to include MD Financial and Jarislowsky Fraser offices.

Overview of Performance

Financial performance summary

The Bank's reported net income this quarter was $2,159 million, compared to $2,747 million in the same period last year, and $1,772 million last quarter which included the impact of the Canada Recovery Dividend (CRD) of $579 million. Diluted earnings per share were $1.69 compared to $2.16 in the same period last year and $1.36 last quarter. Return on equity was 12.3%, compared to 16.2% in the same period last year and 9.9% last quarter.

Adjusted net income was $2,174 million compared to $2,765 million last year, a decrease of 21%. The decrease was due mainly to higher provision for credit losses and non-interest expenses, partly offset by lower provision for income taxes.

Adjusted net income was $2,174 million this quarter compared to $2,366 million last quarter, a decrease of 8%. The decrease was due mainly to lower net interest income, higher provision for credit losses and non-interest expenses, partly offset by lower provision for income taxes.

Adjusted diluted earnings per share were $1.70 compared to $2.18 last year and $1.85 last quarter. Adjusted return on equity was 12.4% compared to 16.4% a year ago and 13.4% last quarter.

Refer to non-GAAP measures starting on page 4 for details of adjustments.

Economic summary and outlook

The economic outlook has remained relatively stable over the last quarter despite tensions in the U.S. banking system. Growth is expected to slow meaningfully over coming quarters although there was a stronger than anticipated start to the year. This strength early in the year is expected to be offset to some extent by the consequences of the challenges experienced in some U.S. banks which is likely to lead to a modest pullback in lending in the U.S. as the year progresses. More broadly, and despite these developments, the global economy remains resilient to the broad range of headwinds that would normally slow economic activity. Against this background, inflation is slowing less rapidly than forecasted in Canada and the U.S. and remains elevated in a broad range of countries. Many central banks are at the end or nearing the end of their tightening cycles, but cuts to policy rates are unlikely this year and expected in 2024.

In Canada, we expect that the Bank of Canada will raise its policy rate one final time owing to the persistence of inflation and signs of a sharp improvement in housing markets. A mild recession is still expected and there is evidence of cooling economic activity late in the first quarter, but employment growth remains strong. Inflation remains on a very gradual path to 2% in 2024 but it is slowing less rapidly than expected. Risks to the inflation outlook appear tilted towards higher inflation. To balance risks around the inflation outlook, we expect the Bank of Canada will raise its policy rate by an additional 25 basis points to 4.75%. A process of gradual cuts is expected to commence in early 2024.

A similar dynamic is at play in the United States. Inflation is on a downward path but is slowing less rapidly than in Canada. Strong employment growth continues to be observed. The challenge faced by some U.S. banks should lead to a modest drag on growth as bank lending is impacted. A mild recession in the United States is forecasted as policymakers engineer weaker growth through higher policy rates, although the Federal Reserve is likely done raising its policy rate and is expected to undertake a series of gradual rate cuts commencing early 2024.

Inflation remains more challenging in the Pacific Alliance Countries as central banks have had to tighten more than expected to subdue it. As in many other countries, regional central banks are either done or nearly done raising rates. The economic outlook is softening as expected. Commodity prices continue to support economic activity in the region, though an improvement in copper prices is expected as the year progresses owing to a clearly deficient supply for the next few years. Political developments continue to influence the outlook but the environment is now more stable, suggesting that the economic consequences of the political shifts are fading.

Impact of foreign currency translation

The table below reflects the estimated impact of foreign currency translation on key income statement items and is computed on a basis that is different than the "*Constant dollar*" table in Non-GAAP Measures on page 8.

T7 Impact of foreign currency translation

	Average exchange rate			% Change	
For the three months ended	**April 30, 2023**	January 31, 2023	April 30, 2022	April 30, 2023 vs. January 31, 2023	April 30, 2023 vs. April 30, 2022
U.S dollar/Canadian dollar	**0.738**	0.742	0.790	(0.5)%	(6.5)%
Mexican Peso/Canadian dollar	**13.549**	14.342	16.072	(5.5)%	(15.7)%
Peruvian Sol/Canadian dollar	**2.799**	2.853	2.964	(1.9)%	(5.5)%
Colombian Peso/Canadian dollar	**3,469.331**	3,567.606	3,033.704	(2.8)%	14.4%
Chilean Peso/Canadian dollar	**594.071**	646.312	637.946	(8.1)%	(6.9)%

	Average exchange rate		% Change
For the six months ended	**April 30, 2023**	April 30, 2022	April 30, 2023 vs. April 30, 2022
U.S dollar/Canadian dollar	**0.740**	0.789	(6.2)%
Mexican Peso/Canadian dollar	**13.952**	16.230	(14.0)%
Peruvian Sol/Canadian dollar	**2.827**	3.055	(7.5)%
Colombian Peso/Canadian dollar	**3,519.268**	3,081.854	14.2%
Chilean Peso/Canadian dollar	**620.625**	646.099	(3.9)%

	For the three months ended		For the six months ended
Impact on net income[1] *($ millions except EPS)*	April 30, 2023 vs. April 30, 2022	April 30, 2023 vs. January 31, 2023	April 30, 2023 vs. April 30, 2022
Net interest income	$ 159	$ 81	$ 288
Non-interest income[2]	36	157	(42)
Total revenue	195	238	246
Non-interest expenses	(123)	(57)	(219)
Other items (net of tax)[2]	(26)	(59)	(38)
Net income	$ 46	$ 122	$ (11)
Earnings per share (diluted)	$ 0.04	$ 0.10	$(0.01)
Impact by business line *($ millions)*			
Canadian Banking	$ 2	$ –	$ 3
International Banking[2]	28	88	(9)
Global Wealth Management	4	(3)	14
Global Banking and Markets	23	–	45
Other[2]	(11)	37	(64)
Net income	$ 46	$ 122	$ (11)

(1) Includes the impact of all currencies.
(2) Includes the impact of foreign currency hedges.

Group Financial Performance

Net income

Q2 2023 vs Q2 2022

Net income was $2,159 million compared to $2,747 million. Adjusted net income was $2,174 million compared to $2,765 million, a decrease of 21%, due mainly to higher provision for credit losses and non-interest expenses, partly offset by lower provision for income taxes and the positive impact of foreign currency translation.

Q2 2023 vs Q1 2023

Net income was $2,159 million compared to $1,772 million, an increase of 22%. Adjusted net income was $2,174 million compared to $2,366 million, a decrease of 8%, due mainly to lower net interest income, higher provision for credit losses and non-interest expenses, partly offset by lower provision for income taxes and the positive impact of foreign currency translation.

Year-to-date Q2 2023 vs Year-to-date Q2 2022

Net income was $3,931 million compared to $5,487 million. Adjusted net income was $4,540 million compared to $5,523 million, a decrease of 18%, due mainly to higher provision for credit losses and non-interest expenses and lower non-interest income, partly offset by higher net interest income and a lower provision for income taxes.

Total revenue

Q2 2023 vs Q2 2022

Revenues were $7,929 million compared to $7,942 million, a decrease of $13 million.

Net interest income was $4,466 million, down $7 million. Asset growth in mortgages, commercial and corporate loans, and the positive impact of foreign currency translation were mostly offset by a lower net interest margin. Net interest margin was down ten basis points to 2.13%, driven primarily by a lower contribution from asset/liability management activities related to higher funding costs, as well as lower margins in Global Banking and Markets. This was partly offset by higher margins in International and Canadian Banking both benefitting from central bank rate increases.

Non-interest income was $3,463 million, down $6 million. The decrease was due mainly to lower wealth management and trading revenues and unrealized losses on non-trading derivatives, which were largely offset by higher banking revenues, other fees and commissions, and the positive impact of foreign currency translation.

Q2 2023 vs Q1 2023

Revenues were $7,929 million, compared to $7,980 million, a decrease of 1%.

Net interest income was down $103 million or 2%, as higher margins were more than offset by the impact of three fewer days in the quarter. Net interest margin was up two basis points driven by higher margins in International and Canadian Banking, partly offset by a lower contribution from asset/liability management activities related to higher funding costs, and lower margins in Global Banking and Markets.

Non-interest income was up $52 million or 2%. The impact of foreign currency translation was a positive 5%. The remaining decrease of 3% was due primarily to lower trading and banking revenues, which were partly offset by higher other fees and commissions, underwriting and advisory fees, and income from associated corporations.

Year-to-date Q2 2023 vs Year-to-date Q2 2022

Revenues were $15,909 million compared to $15,991 million, a decrease of 1%.

Net interest income was $9,035 million, an increase of $218 million or 2%. Strong mortgage, commercial and corporate loan growth and the positive impact of foreign currency translation were partly offset by a lower net interest margin. Net interest margin was down eight basis points to 2.12%, driven primarily by a lower contribution from asset/liability management activities related to higher funding costs, partly offset by higher margins in International and Canadian Banking both benefitting from central bank rate increases.

Non-interest income was down $300 million or 4% due primarily to lower wealth management revenues, unrealized losses on non-trading derivatives, lower underwriting and advisory fees and income from associated corporations, as well as the negative impact of foreign currency translation. These were partly offset by higher banking revenues and other fees and commissions.

Provision for credit losses

Q2 2023 vs Q2 2022

The provision for credit losses was $709 million, compared to $219 million, an increase of $490 million. The provision for credit losses ratio increased 24 basis points to 37 basis points.

The provision for credit losses on performing loans was $88 million, compared to a net reversal of $187 million. The provision this period was driven primarily by the less favourable macroeconomic outlook, impacting mainly the corporate and commercial portfolios, as well as higher retail provisions due to challenging market conditions in Chile and Colombia driven by higher inflation. This was partly offset by reversals in Canada, including credit migration to impaired.

The provision for credit losses on impaired loans was $621 million, compared to $406 million, an increase of $215 million or 53%, due primarily to higher formations in the retail portfolios in Canadian and International Banking. The provision for credit losses ratio on impaired loans was 33 basis points, an increase of nine basis points.

Q2 2023 vs Q1 2023

The provision for credit losses was $709 million, compared to $638 million, an increase of $71 million or 11%. The provision for credit losses ratio increased four basis points to 37 basis points.

The provision for credit losses on performing loans was $88 million, compared to $76 million, an increase of $12 million from the continued unfavourable macroeconomic outlook, impacting mainly the corporate and commercial portfolios, as well as higher retail provisions due to challenging market conditions in Colombia and Chile driven by higher inflation. This was partly offset by reversals in Canada, including credit migration to impaired.

The provision for credit losses on impaired loans was $621 million, compared to $562 million, an increase of $59 million or 10% due primarily to higher formations in the retail portfolios in Canadian and International Banking. The provision for credit losses ratio on impaired loans was 33 basis points, an increase of four basis points.

Year-to-date Q2 2023 vs Year-to-date Q2 2022

The provision for credit losses was $1,347 million, compared to $441 million, an increase of $906 million. The provision for credit losses ratio increased 22 basis points to 35 basis points.

Provision for credit losses on performing loans was $164 million, compared to a net reversal of $370 million. The provision this period was driven by higher retail provisions due to challenging market conditions in Colombia and Chile from higher inflation, portfolio growth across markets primarily in retail, and a less favourable macroeconomic outlook primarily impacting commercial and corporate portfolios.

Provision for credit losses on impaired loans was $1,183 million compared to $811 million, an increase of $372 million or 46% due primarily to higher formations in the retail portfolios in Canadian and International Banking. The provision for credit losses ratio on impaired loans increased seven basis points to 31 basis points.

Non-interest expenses

Q2 2023 vs Q2 2022

Non-interest expenses were $4,576 million, up $417 million or 10%. Adjusted non-interest expenses were $4,555 million, up $420 million or 10%, driven by higher personnel costs from increased staffing levels and inflationary adjustments, advertising costs to support business growth, as well as the unfavourable impact of foreign currency translation.

The productivity ratio was 57.7% compared to 52.4%. The adjusted productivity ratio was 57.5% compared to 52.1%.

Q2 2023 vs Q1 2023

Non-interest expenses were up $112 million or 3%. Adjusted non-interest expenses were also up $112 million or 3%. The increase was driven by higher share-based compensation, communication and professional fees, and the unfavourable impact of foreign currency translation. This was partly offset by the impact of three fewer days in the quarter.

The productivity ratio was 57.7% compared to 55.9%. The adjusted productivity ratio was 57.5% compared to 55.7%.

Year-to-date Q2 2023 vs Year-to-date Q2 2022

Non-interest expenses were $9,040 million, up $658 million or 8%. Adjusted non-interest expenses were $8,998 million, up $665 million or 8%, driven by higher advertising and technology costs to support business growth, business and capital taxes, personnel costs from increased staffing levels and inflationary adjustments, and the unfavourable impact of foreign currency translation. Partly offsetting were lower professional fees and share-based compensation.

The productivity ratio was 56.8% compared to 52.4%. The adjusted productivity ratio was 56.6% compared to 52.1%.

Operating leverage was negative 8.4% on a reported basis and negative 8.5% on an adjusted basis.

Taxes

Q2 2023 vs Q2 2022

The effective tax rate was 18.4% compared to 22.9% due primarily to higher income from lower tax rate jurisdictions and higher tax-exempt income in the current quarter.

Q2 2023 vs Q1 2023

The effective tax rate was 18.4% compared to 38.4%. The decrease was due primarily to the recognition of the CRD of $579 million in the prior quarter. On an adjusted basis, the effective tax rate was 18.4% in line with the prior quarter.

Year-to-date Q2 2023 vs Year-to-date Q2 2022

The effective tax rate was 28.8% compared to 23.4% due primarily to the impact of the CRD in the current year. On an adjusted basis, the effective rate was 18.4% compared to 23.5% due primarily to higher income from lower tax rate jurisdictions and higher tax-exempt income in the current year.

Business Segment Review

Business segment results are presented on a taxable equivalent basis, adjusted for the following:

- The Bank analyzes revenues on a taxable equivalent basis (TEB) for business lines. This methodology grosses up tax-exempt income earned on certain securities reported in either net interest income or non-interest income to an equivalent before tax basis. A corresponding increase is made to the provision for income taxes; hence, there is no impact on net income. Management believes that this basis for measurement provides a uniform comparability of net interest income and non-interest income arising from both taxable and non-taxable sources and facilitates a consistent basis of measurement. While other banks may also use TEB, their methodology may not be comparable to the Bank's methodology. A segment's revenue and provision for income taxes are grossed up by the taxable equivalent amount. The elimination of the TEB gross-up is recorded in the Other segment.
- For business line performance assessment and reporting, net income from associated corporations, which is an after tax number, is adjusted to normalize for income taxes. The tax normalization adjustment grosses up the amount of net income from associated corporations and normalizes the effective tax rate in the business lines to better present the contribution of the associated corporations to the business line results.

Canadian Banking

T8 Canadian Banking financial performance

	For the three months ended			For the six months ended	
(Unaudited) ($ millions) *(Taxable equivalent basis)*	**April 30 2023**	January 31 2023	April 30 2022	**April 30 2023**	April 30 2022
Reported Results					
Net interest income	**$ 2,340**	$2,386	$2,144	**$ 4,726**	$4,277
Non-interest income[1]	**794**	778	759	**1,572**	1,500
Total revenue	**3,134**	3,164	2,903	**6,298**	5,777
Provision for credit losses	**218**	218	(12)	**436**	(47)
Non-interest expenses	**1,457**	1,449	1,324	**2,906**	2,606
Income tax expense	**399**	410	412	**809**	838
Net income	**$ 1,060**	$1,087	$1,179	**$ 2,147**	$2,380
Net income attributable to non-controlling interest in subsidiaries	**$ –**	$ –	$ –	**$ –**	$ –
Net income attributable to equity holders of the Bank	**$ 1,060**	$1,087	$1,179	**$ 2,147**	$2,380
Other financial data and measures					
Return on equity[2]	**22.8%**	23.0%	27.1%	**22.9%**	27.2%
Net interest margin[2]	**2.30%**	2.26%	2.22%	**2.28%**	2.20%
Provision for credit losses – performing (Stage 1 and 2)	**$ (5)**	$ 31	$ (143)	**$ 26**	$ (303)
Provision for credit losses – impaired (Stage 3)	**$ 223**	$ 187	$ 131	**$ 410**	$ 256
Provision for credit losses as a percentage of average net loans and acceptances (annualized)[3]	**0.20%**	0.19%	(0.01)%	**0.20%**	(0.02)%
Provision for credit losses on impaired loans as a percentage of average net loans and acceptances (annualized)[3]	**0.21%**	0.17%	0.13%	**0.19%**	0.12%
Net write-offs as a percentage of average net loans and acceptances (annualized)[3]	**0.18%**	0.16%	0.14%	**0.17%**	0.14%
Average assets *($ billions)*	**$ 451**	$ 450	$ 423	**$ 450**	$ 417
Average liabilities *($ billions)*	**$ 367**	$ 357	$ 326	**$ 362**	$ 323

(1) Includes income (on a taxable equivalent basis) from associated corporations for the three months ended April 30, 2023 – $25 (January 31, 2023 – $15; April 30, 2022 – $18) and for the six months ended April 30, 2023 – $40 (April 30, 2022 – $26).
(2) Refer to Non-GAAP Measures starting on page 4 for the description of the measure.
(3) Refer to Glossary on page 54 for the description of the measure.

T8A Adjusted Canadian Banking financial performance

	For the three months ended			For the six months ended	
(Unaudited) ($ millions) *(Taxable equivalent basis)*	**April 30 2023**	January 31 2023	April 30 2022	**April 30 2023**	April 30 2022
Adjusted Results[1]					
Net interest income	**$ 2,340**	$2,386	$2,144	**$4,726**	$4,277
Non-interest income	**794**	778	759	**1,572**	1,500
Total revenue	**3,134**	3,164	2,903	**6,298**	5,777
Provision for credit losses	**218**	218	(12)	**436**	(47)
Non-interest expenses[2]	**1,456**	1,447	1,319	**2,903**	2,595
Income tax expense	**399**	411	413	**810**	841
Net income	**$ 1,061**	$1,088	$1,183	**$2,149**	$2,388
Net income attributable to non-controlling interest in subsidiaries	**$ –**	$ –	$ –	**$ –**	$ –
Net income attributable to equity holders of the Bank	**$ 1,061**	$1,088	$1,183	**$2,149**	$2,388

(1) Refer to Non-GAAP Measures starting on page 4 for adjusted results.
(2) Includes adjustment for amortization of acquisition-related intangible assets, excluding software for the three months ended April 30, 2023 – $1 (January 31, 2023 – $2; April 30, 2022 – $5) and for the six months ended April 30, 2023 – $3 (April 30, 2022 – $11).

Net income

Q2 2023 vs Q2 2022

Net income attributable to equity holders was $1,060 million, compared to $1,179 million. Adjusted net income attributable to equity holders was $1,061 million, down $122 million or 10%. The decline was due primarily to higher provision for credit losses and non-interest expenses, partly offset by higher revenue.

Q2 2023 vs Q1 2023

Net income attributable to equity holders and adjusted net income attributable to equity holders declined $27 million. The decline was due to lower revenue and higher non-interest expenses.

Year-to-date Q2 2023 vs Year-to-date Q2 2022

Net income attributable to equity holders was $2,147 million, compared to $2,380 million. Adjusted net income attributable to equity holders was $2,149 million, down $239 million or 10%. The decline was due primarily to higher provision for credit losses and non-interest expenses, partly offset by higher revenue.

Average assets

Q2 2023 vs Q2 2022

Average assets were $451 billion, an increase of $28 billion or 6%. The growth included $13 billion or 18% in business loans and acceptances, $9 billion or 3% in residential mortgages, $4 billion or 6% in personal loans, and $1 billion or 16% in credit cards.

Q2 2023 vs Q1 2023

Average assets were in line with prior quarter. The growth of $2 billion or 2% in business loans and acceptances was offset by a decline of $2 billion or 1% in residential mortgages.

Year-to-date Q2 2023 vs Year-to-date Q2 2022

Average assets were $450 billion, an increase of $33 billion or 8%. The growth included $14 billion or 20% in business loans and acceptances, $14 billion or 5% in residential mortgages, $4 billion or 6% in personal loans, and $1 billion or 14% in credit cards.

Average liabilities

Q2 2023 vs Q2 2022

Average liabilities were $367 billion, an increase of $41 billion or 13%. The growth included $29 billion or 15% in personal deposits, primarily in term products, and $5 billion or 5% in non-personal deposits.

Q2 2023 vs Q1 2023

Average liabilities increased $10 billion or 3%. The growth included $8 billion or 4% in personal deposits, primarily in term products, and $1 billion or 1% in non-personal deposits.

Year-to-date Q2 2023 vs Year-to-date Q2 2022

Average liabilities were $362 billion, an increase of $39 billion or 12%. The growth included $27 billion or 14% in personal deposits, primarily in term products, and $5 billion or 5% in non-personal deposits.

Total revenue

Q2 2023 vs Q2 2022

Revenues were $3,134 million, up $231 million or 8%.

Net interest income of $2,340 million increased $196 million or 9%, due primarily to strong loan and deposit growth, as well as margin expansion. The net interest margin increased eight basis points to 2.30%, due mainly to higher deposit margins and the impact of the Bank of Canada rate increases, partly offset by lower loan margins.

Non-interest income of $794 million increased $35 million or 5%. The increase was due primarily to elevated private equity gains, higher insurance revenue, foreign exchange fees, and income from associated corporations, partly offset by lower banking revenue and mutual fund distribution fees.

Q2 2023 vs Q1 2023

Revenues declined $30 million or 1%.

Net interest income decreased $46 million or 2%, due primarily to the impact of three fewer days in the quarter, partly offset by margin expansion and strong deposit growth. The net interest margin increased four basis points to 2.30% as higher loan margins were partly offset by lower deposit margins.

Non-interest income increased $16 million or 2%. The increase was due primarily to higher insurance revenue, income from associated corporations, and foreign exchange fees, partly offset by lower banking revenue.

Year-to-date Q2 2023 vs Year-to-date Q2 2022

Revenues were $6,298 million, up $521 million or 9%.

Net interest income of $4,726 million increased $449 million or 11%, due primarily to strong loan and deposit growth, as well as margin expansion. The net interest margin increased eight basis points to 2.28%, due mainly to higher deposit margins and the impact of the Bank of Canada rate increases, partly offset by lower loan margins.

Non-interest income of $1,572 million increased $72 million or 5%. The increase was due primarily to elevated private equity gains, and higher insurance revenue, income from associated corporations and foreign exchange fees, partly offset by lower mutual fund distribution fees.

Provision for credit losses

Q2 2023 vs Q2 2022

The provision for credit losses was $218 million, compared to a net reversal of $12 million. The provision for credit losses ratio increased 21 basis points to 20 basis points.

Provision for credit losses on performing loans was a net reversal of $5 million, compared to a net reversal of $143 million. The provision reversals this period related to retail provisions primarily in unsecured revolving loans, including credit migration to impaired, and were partly offset by the less favourable macroeconomic outlook.

Provision for credit losses on impaired loans was $223 million, compared to $131 million, an increase of $92 million due primarily to higher retail formations. The provision for credit losses ratio on impaired loans was 21 basis points, an increase of eight basis points.

Q2 2023 vs Q1 2023

The provision for credit losses was $218 million, in line with last quarter. The provision for credit losses ratio increased one basis point to 20 basis points.

Provision for credit losses on performing loans was a net reversal of $5 million, compared to $31 million. The provision reversals this period related to retail provisions primarily in unsecured revolving loans, including credit migration to impaired, and were partly offset by the continued unfavourable macroeconomic outlook.

Provision for credit losses on impaired loans was $223 million, compared to $187 million, an increase of $36 million or 19% due primarily to higher retail formations. The provision for credit losses ratio on impaired loans was 21 basis points, an increase of four basis points.

Year-to-date Q2 2023 vs Year-to-date Q2 2022

The provision for credit losses was $436 million, an increase of $483 million. The provision for credit losses ratio was 20 basis points, an increase of 22 basis points.

Provision for credit losses on performing loans was $26 million, compared to a net reversal of $303 million. The provision for credit losses this period was driven primarily by commercial provisions due to a less favourable macroeconomic outlook.

Provision for credit losses on impaired loans was $410 million compared to $256 million, an increase of $154 million due primarily to higher retail formations. The provision for credit losses ratio on impaired loans was 19 basis points, an increase of seven basis points.

Non-interest expenses

Q2 2023 vs Q2 2022

Non-interest expenses were $1,457 million compared to $1,324 million, up 10%. Adjusted non-interest expenses were $1,456 million, up $137 million or 10%, due primarily to higher personnel costs from increased client-facing staffing levels and inflationary adjustments, and higher advertising and business development costs to support business growth.

Q2 2023 vs Q1 2023

Non-interest expenses were up $8 million or 1%, due largely to higher premises and personnel-related costs to support business growth, partly offset by the impact of three fewer days in the quarter.

Year-to-date Q2 2023 vs Year-to-date Q2 2022

Non-interest expenses were $2,906 million compared to $2,606 million, up 12%. Adjusted non-interest expenses were $2,903 million, up $308 million or 12%, due primarily to higher personnel costs from increased client-facing staffing levels and inflationary adjustments, higher technology, advertising, and business development costs to support business growth.

Taxes

Q2 2023 vs Q2 2022

The effective tax rate was 27.4% compared to 25.9% driven mainly by the higher Canadian statutory tax rate.

Q2 2023 vs Q1 2023

The effective tax rate was 27.4%, in line with prior quarter.

Year-to-date Q2 2023 vs Year-to-date Q2 2022

The effective tax rate was 27.4% compared to 26.0% driven mainly by the higher Canadian statutory tax rate.

International Banking

T9 International Banking financial performance

	For the three months ended			For the six months ended	
(Unaudited) ($ millions) *(Taxable equivalent basis)*	**April 30 2023**	January 31 2023	April 30 2022	**April 30 2023**	April 30 2022
Reported Results					
Net interest income	**$2,007**	$1,899	$1,687	**$3,906**	$3,335
Non-interest income[1]	**745**	802	720	**1,547**	1,469
Total revenue	**2,752**	2,701	2,407	**5,453**	4,804
Provision for credit losses	**436**	404	276	**840**	550
Non-interest expenses	**1,479**	1,436	1,268	**2,915**	2,553
Income tax expense	**172**	169	182	**341**	390
Net income	**$ 665**	$ 692	$ 681	**$ 1,357**	$1,311
Net income attributable to non-controlling interest in subsidiaries	**$ 23**	$ 38	$ 76	**$ 61**	$ 161
Net income attributable to equity holders of the Bank	**$ 642**	$ 654	$ 605	**$ 1,296**	$1,150
Other financial data and measures					
Return on equity[2]	**13.2%**	13.4%	13.2%	**13.3%**	12.7%
Net interest margin[2][3]	**4.12%**	4.00%	3.96%	**4.06%**	3.91%
Provision for credit losses – performing (Stage 1 and 2)	**$ 40**	$ 29	$ (2)	**$ 69**	$ (14)
Provision for credit losses – impaired (Stage 3)	**$ 396**	$ 375	$ 278	**$ 771**	$ 564
Provision for credit losses as a percentage of average net loans and acceptances (annualized)[4]	**1.03%**	0.96%	0.77%	**0.99%**	0.77%
Provision for credit losses on impaired loans as a percentage of average net loans and acceptances (annualized)[4]	**0.94%**	0.89%	0.77%	**0.91%**	0.79%
Net write-offs as a percentage of average net loans and acceptances (annualized)[4]	**0.83%**	0.88%	0.76%	**0.86%**	0.82%
Average assets *($ billions)*	**$ 239**	$ 228	$ 204	**$ 233**	$ 200
Average liabilities *($ billions)*	**$ 181**	$ 169	$ 149	**$ 175**	$ 146

(1) Includes income (on a taxable equivalent basis) from associated corporations for the three months ended April 30, 2023 – $69 (January 31, 2023 – $63; April 30, 2022 – $77) and for the six months ended April 30, 2023 – $132 (April 30, 2022 – $145).
(2) Refer to Non-GAAP Measures starting on page 4 for the description of the measure.
(3) Prior period has been restated to reflect the deduction of non-interest-bearing deposits with financial institutions, to align with the Bank's definition.
(4) Refer to Glossary on page 54 for the description of the measure.

T9A Adjusted International Banking financial performance

	For the three months ended			For the six months ended	
(Unaudited) ($ millions) *(Taxable equivalent basis)*	**April 30 2023**	January 31 2023	April 30 2022	**April 30 2023**	April 30 2022
Adjusted Results[1]					
Net interest income	**$2,007**	$1,899	$1,687	**$3,906**	$3,335
Non-interest income	**745**	802	720	**1,547**	1,469
Total revenue	**2,752**	2,701	2,407	**5,453**	4,804
Provision for credit losses	**436**	404	276	**840**	550
Non-interest expenses[2]	**1,468**	1,426	1,258	**2,894**	2,533
Income tax expense	**175**	172	184	**347**	395
Net income	**$ 673**	$ 699	$ 689	**$ 1,372**	$1,326
Net income attributable to non-controlling interest in subsidiaries	**$ 23**	$ 38	$ 76	**$ 61**	$ 161
Net income attributable to equity holders of the Bank	**$ 650**	$ 661	$ 613	**$ 1,311**	$1,165

(1) Refer to Non-GAAP Measures starting on page 4 for adjusted results.
(2) Includes adjustment for amortization of acquisition-related intangible assets, excluding software for the three months ended April 30, 2023 – $11 (January 31, 2023 – $10; April 30, 2022 – $10) and for the six months ended April 30, 2023 – $21 (April 30, 2022 – $20).

Net income

Q2 2023 vs Q2 2022

Net income attributable to equity holders was $642 million, an increase of 6% from $605 million. Adjusted net income attributable to equity holders was $650 million, an increase of $37 million or 6%. The increase was driven by higher revenues and the positive impact of foreign currency translation, partly offset by higher non-interest expenses and provision for credit losses.

Q2 2023 vs Q1 2023

Net income attributable to equity holders decreased by $12 million or 2%. The decrease was due primarily to lower non-interest income, higher non-interest expenses and provision for credit losses, partly offset by higher net interest income and the positive impact of foreign currency translation.

Year-to-date Q2 2023 vs Year-to-date Q2 2022

Net income attributable to equity holders was $1,296 million, an increase of 13% from $1,150 million. Adjusted net income attributable to equity holders was $1,311 million, an increase of $146 million or 13%. The increase was driven by higher net interest income and non-interest income, and lower provision for income taxes, partly offset by higher non-interest expenses and provision for credit losses.

Financial Performance on a Constant Dollar Basis

The discussion below on the results of operations is on a constant dollar basis. Under the constant dollar basis, prior period amounts are recalculated using current period average foreign currency rates, which is a non-GAAP financial measure (refer to Non-GAAP Measures starting on page 4). The Bank believes that constant dollar is useful for readers in assessing ongoing business performance without the impact of foreign currency translation and is used by management to assess the performance of the business segment. Ratios are on a reported basis.

T10 International Banking financial performance on reported and constant dollar basis

	For the three months ended			For the six months ended	
(Unaudited) ($ millions) *(Taxable equivalent basis)*	**April 30 2023**	January 31 2023	April 30 2022	**April 30 2023**	April 30 2022
Constant dollars – Reported(1)					
Net interest income	**$2,007**	$1,972	$1,827	**$3,906**	$3,580
Non-interest income(2)	**745**	837	725	**1,547**	1,453
Total revenue	**2,752**	2,809	2,552	**5,453**	5,033
Provision for credit losses	**436**	422	292	**840**	583
Non-interest expenses	**1,479**	1,487	1,352	**2,915**	2,702
Income tax expense	**172**	171	185	**341**	392
Net income	**$ 665**	$ 729	$ 723	**$ 1,357**	$1,356
Net income attributable to non-controlling interest in subsidiaries	**$ 23**	$ 40	$ 81	**$ 61**	$ 167
Net income attributable to equity holders of the Bank	**$ 642**	$ 689	$ 642	**$ 1,296**	$1,189
Other financial data and measures					
Average assets *($ billions)*	**$ 239**	$ 237	$ 220	**$ 233**	$ 205
Average liabilities *($ billions)*	**$ 181**	$ 176	$ 161	**$ 175**	$ 156

(1) Refer to Non-GAAP Measures starting on page 4 for adjusted results.
(2) Includes income (on a taxable equivalent basis) from associated corporations for the three months ended April 30, 2023 – $69 (January 31, 2023 – $64; April 30, 2022 – $80) and for the six months ended April 30, 2023 – $132 (April 30, 2022 – $149).

T10A International Banking financial performance on adjusted and constant dollar basis

	For the three months ended			For the six months ended	
(Unaudited) ($ millions) *(Taxable equivalent basis)*	**April 30 2023**	January 31 2023	April 30 2022	**April 30 2023**	April 30 2022
Constant dollars – Adjusted(1)					
Net interest income	**$2,007**	$1,972	$1,827	**$3,906**	$3,580
Non-interest income	**745**	837	725	**1,547**	1,453
Total revenue	**2,752**	2,809	2,552	**5,453**	5,033
Provision for credit losses	**436**	422	292	**840**	583
Non-interest expenses	**1,468**	1,477	1,341	**2,894**	2,681
Income tax expense	**175**	173	188	**347**	397
Net income	**$ 673**	$ 737	$ 731	**$ 1,372**	$1,372
Net income attributable to non-controlling interest in subsidiaries	**$ 23**	$ 40	$ 81	**$ 61**	$ 168
Net income attributable to equity holders of the Bank	**$ 650**	$ 697	$ 650	**$ 1,311**	$1,204
Other financial data and measures					
Average assets *($ billions)*	**$ 239**	$ 237	$ 220	**$ 233**	$ 205
Average liabilities *($ billions)*	**$ 181**	$ 176	$ 161	**$ 175**	$ 156

(1) Refer to Non-GAAP Measures starting on page 4 for adjusted results.

Net income

Q2 2023 vs Q2 2022

Net income attributable to equity holders was $642 million, in line with the prior year. Adjusted net income attributable to equity holders was $650 million, in line with the prior year, driven by higher revenues and lower provision for income taxes, offset by higher provision for credit losses and non-interest expenses.

Q2 2023 vs Q1 2023

Net income attributable to equity holders decreased by $47 million or 7%. The decrease was due primarily to lower non-interest income, and higher provision for credit losses and provision for income taxes, partly offset by higher net interest income and lower non-interest expenses.

Year-to-date Q2 2023 vs Year-to-date Q2 2022

Net income attributable to equity holders was $1,296 million, an increase of 9% from $1,189 million. Adjusted net income attributable to equity holders was $1,311 million, an increase of $107 million or 9%. The increase was driven by higher revenues and lower provision for income taxes, partly offset by higher provision for credit losses and non-interest expenses.

Average assets

Q2 2023 vs Q2 2022

Average assets were $239 billion, an increase of $19 billion or 9%. Total loan growth was 9%, due primarily to growth in Chile and Mexico. Residential mortgages increased by 12%, personal loans and credit cards increased by 8%, and business loans increased by 8%.

Q2 2023 vs Q1 2023

Average assets increased by $2 billion or 1%.

Year-to-date Q2 2023 vs Year-to-date Q2 2022

Average assets were $233 billion, an increase of $28 billion or 14%. Total loan growth was 11%, due primarily to growth in Chile and Mexico. Residential mortgages increased by 13%, business loans increased by 11%, and personal loans and credit cards increased by 8%.

Average liabilities

Q2 2023 vs Q2 2022

Average liabilities were $181 billion, an increase of $20 billion or 12%. Total deposits increased by 10% driven mainly by Mexico and Chile. Non-personal deposits increased by 13% and personal deposits by 3%. Term deposits increased by 29% and non-term deposits decreased by 6%.

Q2 2023 vs Q1 2023

Average liabilities were $181 billion, an increase of $4 billion. Total deposits increased by 2% driven mainly by Mexico and Colombia. Non-personal deposits increased by 3% and personal deposits remained in line with the prior period. Term deposits increased by 6% and non-term deposits decreased by 2%.

Year-to-date Q2 2023 vs Year-to-date Q2 2022

Average liabilities were $175 billion, an increase of $18 billion. Total deposits increased by 10% driven mainly by Mexico and Chile. Non-personal deposits increased by 14% and personal deposits increased by 4%. Term deposits increased by 30% and non-term deposits decreased by 5%.

Total revenue

Q2 2023 vs Q2 2022

Revenues were $2,752 million, an increase of $200 million or 8%.

Net interest income was $2,007 million, an increase of $180 million or 10%, driven by growth in business loans, residential mortgages, credit cards and personal loans, as well as margin expansion. Net interest margin increased by 16 basis points to 4.12%, driven by asset repricing margin expansion in the Caribbean and Central America and changes in asset mix, partly offset by lower inflation.

Non-interest income was $745 million an increase of $20 million, driven mainly by higher capital market revenues, partly offset by lower net fees and commissions and income from associated corporations.

Q2 2023 vs Q1 2023

Revenues decreased by $57 million or 2%.

Net interest income increased by $35 million or 2%, driven by growth in residential mortgages, credit cards and personal loans, and margin expansion, partly offset by the decrease in business loans. Net interest margin increased by 12 basis points to 4.12%, driven by asset repricing, and higher inflation.

Non-interest income decreased by $92 million or 11%, driven by lower net fees and commissions, partly offset by higher income from associated corporations and capital market revenues.

Year-to-date Q2 2023 vs Year-to-date Q2 2022

Revenues were $5,453 million, an increase of $420 million or 8%.

Net interest income was $3,906 million, an increase of $326 million or 9%, driven by growth in business loans, residential mortgages, credit cards and personal loans, as well as margin expansion. Net interest margin increased by 15 basis points to 4.06%, driven by asset repricing and changes in asset mix, partly offset by lower inflation.

Non-interest income was $1,547 million an increase of $94 million, driven mainly by higher net fees and commissions and capital market revenues, partly offset by lower income from associated corporations.

Provision for credit losses

Q2 2023 vs Q2 2022

The provision for credit losses was $436 million compared to $292 million, an increase of $144 million or 49%. The provision for credit losses ratio increased 26 basis points to 103 basis points.

Provision for credit losses on performing loans was $40 million, compared to a reversal of $2 million. The increase is from higher retail provisions due to challenging market conditions in Chile and Colombia, portfolio growth across markets and a less favourable macroeconomic outlook impacting primarily the commercial portfolio.

Provision for credit losses on impaired loans was $396 million, compared to $294 million, an increase of $102 million or 35%. This was due primarily to higher retail provisions driven by higher formations, primarily in Peru and Colombia. The provision for credit losses ratio on impaired loans was 94 basis points, an increase of 17 basis points.

Q2 2023 vs Q1 2023

The provision for credit losses was $436 million, compared to $422 million, an increase of $14 million or 3%. The provision for credit losses ratio increased by seven basis points to 103 basis points.

Provision for credit losses on performing loans was $40 million compared to $29 million, an increase of $11 million. The increase is from higher retail provisions due to challenging market conditions in Chile and Colombia, portfolio growth across markets and the continued unfavourable macroeconomic outlook, impacting primarily the commercial portfolio.

Provision for credit losses on impaired loans was $396 million compared to $393 million, an increase of $3 million or 1% due to higher retail provisions driven by higher formations, primarily in Peru and Colombia. The provision for credit losses ratio on impaired loans increased by five basis points to 94 basis points.

Year-to-date Q2 2023 vs Year-to-date Q2 2022

The provision for credit losses was $840 million, an increase of $257 million or 44%. The provision for credit losses ratio was 99 basis points, an increase of 22 basis points.

Provision for credit losses on performing loans was $69 million, compared to a net reversal of $12 million. The increase related mainly to higher retail provisions due to challenging market conditions in Chile and Colombia, portfolio growth across markets, and the less favourable macroeconomic outlook, impacting primarily the commercial portfolio.

Provision for credit losses on impaired loans was $771 million, compared to $595 million, an increase of $176 million due primarily to higher retail provisions driven by higher formations, primarily in Chile, Peru and Colombia. The provision for credit losses ratio on impaired loans was 91 basis points, an increase of 12 basis points.

Non-interest expenses

Q2 2023 vs Q2 2022

Non-interest expenses were $1,479 million, an increase of $127 million or 9%. Adjusted non-interest expenses were $1,468 million, up 9%, driven mainly by inflationary adjustments on salaries and benefits, partly offset by the benefits realized from efficiency initiatives executed in the prior year.

Q2 2023 vs Q1 2023

Non-interest expenses were $1,479 million, a decrease of 1%. Adjusted non-interest expenses decreased $9 million or 1% from $1,477 million due to seasonal business taxes in the Caribbean in the prior quarter, partly offset by higher salaries and benefits.

Year-to-date Q2 2023 vs Year-to-date Q2 2022

Non-interest expenses were $2,915 million, an increase of $213 million or 8%. On an adjusted basis, non-interest expenses were $2,894 million, an increase of 8%, driven by inflationary adjustments on salaries and benefits, higher business taxes and software amortization.

Taxes

Q2 2023 vs Q2 2022

The effective tax rate was 20.6%, compared to 21.0%. On an adjusted basis, the effective tax rate was 20.7% compared to 21.1%, due to changes in earnings mix across jurisdictions, partly offset by lower inflationary adjustments in Mexico and Chile.

Q2 2023 vs Q1 2023

The effective tax rate was 20.6%, compared to 19.6%. On an adjusted basis, the effective tax rate was 20.7% compared to 19.7% due primarily to lower inflationary adjustments in Mexico and Chile and lower tax-exempt income.

Year-to-date Q2 2023 vs Year-to-date Q2 2022

The effective tax rate was 20.1% compared to 22.9%. On an adjusted basis, the effective tax rate was 20.2% compared to 23.0% due primarily to changes in earnings mix across jurisdictions, partly offset by lower inflationary adjustments in Mexico and Chile.

Global Wealth Management

T11 Global Wealth Management financial performance

(Unaudited) ($ millions) (Taxable equivalent basis)	For the three months ended April 30 2023	January 31 2023	April 30 2022	For the six months ended April 30 2023	April 30 2022
Reported Results					
Net interest income	**$ 209**	$ 213	$ 184	**$ 422**	$ 358
Non-interest income	**1,091**	1,110	1,174	**2,201**	2,422
Total revenue	**1,300**	1,323	1,358	**2,623**	2,780
Provision for credit losses	**2**	1	1	**3**	–
Non-interest expenses	**818**	802	803	**1,620**	1,665
Income tax expense	**124**	133	145	**257**	291
Net income	**$ 356**	$ 387	$ 409	**$ 743**	$ 824
Net income attributable to non-controlling interest in subsidiaries	**$ 3**	$ 2	$ 2	**$ 5**	$ 5
Net income attributable to equity holders of the Bank	**$ 353**	$ 385	$ 407	**$ 738**	$ 819
Other financial data and measures					
Return on equity[1]	**14.8%**	15.5%	17.5%	**15.2%**	17.4%
Assets under administration *($ billions)*[2]	**$ 624**	$ 607	$ 591	**$ 624**	$ 591
Assets under management *($ billions)*[2]	**$ 330**	$ 322	$ 326	**$ 330**	$ 326
Average assets *($ billions)*	**$ 34**	$ 34	$ 32	**$ 34**	$ 32
Average liabilities *($ billions)*	**$ 41**	$ 42	$ 48	**$ 42**	$ 48

(1) Refer to Non-GAAP Measures starting on page 4 for the description of the measure.
(2) Refer to Glossary on page 54 for the description of the measure.

T11A Adjusted Global Wealth Management financial performance

(Unaudited) ($ millions) (Taxable equivalent basis)	For the three months ended April 30 2023	January 31 2023	April 30 2022	For the six months ended April 30 2023	April 30 2022
Adjusted Results[1]					
Net interest income	**$ 209**	$ 213	$ 184	**$ 422**	$ 358
Non-interest income	**1,091**	1,110	1,174	**2,201**	2,422
Total revenue	**1,300**	1,323	1,358	**2,623**	2,780
Provision for credit losses	**2**	1	1	**3**	–
Non-interest expenses[2]	**809**	793	794	**1,602**	1,647
Income tax expense	**127**	135	148	**262**	296
Net income	**$ 362**	$ 394	$ 415	**$ 756**	$ 837
Net income attributable to non-controlling interest in subsidiaries	**$ 3**	$ 2	$ 2	**$ 5**	$ 5
Net income attributable to equity holders of the Bank	**$ 359**	$ 392	$ 413	**$ 751**	$ 832

(1) Refer to Non-GAAP Measures starting on page 4 for adjusted results.
(2) Includes adjustment for Amortization of acquisition-related intangible assets, excluding software for the three months ended April 30, 2023 – $9 (January 31, 2023 – $9; April 30, 2022 – $9) and for the six months ended April 30, 2023 – $18 (April 30, 2022 – $18).

Net income

Q2 2023 vs Q2 2022

Net income attributable to equity holders was $353 million, compared to $407 million. Adjusted net income attributable to equity holders was $359 million, down $54 million or 13%. The decline was due primarily to lower mutual fund fees and brokerage revenues, partly offset by higher net interest income.

Q2 2023 vs Q1 2023

Net income attributable to equity holders decreased $32 million or 8%. Adjusted net income attributable to equity holders decreased $33 million or 8%, due primarily to lower fee revenue and net interest income, and higher non-interest expenses.

Year-to-date Q2 2023 vs Year-to-date Q2 2022

Net income attributable to equity holders was $738 million, compared to $819 million. Adjusted net income attributable to equity holders was $751 million, down $81 million or 10%. The decline was due primarily to lower fee income, partly offset by higher net interest income and lower non-interest expenses.

Assets under management (AUM) and assets under administration (AUA)

Q2 2023 vs Q2 2022

Assets under management of $330 billion increased $4 billion or 1% driven by market appreciation partly offset by net redemptions. Assets under administration of $624 billion increased $33 billion or 5% due primarily to higher net sales and market appreciation.

Q2 2023 vs Q1 2023

Assets under management increased $8 billion or 2% due primarily to market appreciation partly offset by net redemptions. Assets under administration increased $17 billion or 3% due primarily to market appreciation and higher net sales.

Total revenue

Q2 2023 vs Q2 2022

Revenues were $1,300 million, down $58 million or 4% due primarily to lower mutual fund fees and brokerage revenues, partly offset by higher net interest income driven by strong loan growth and improved margins.

Q2 2023 vs Q1 2023

Revenues were down $23 million or 2% due primarily to lower brokerage revenues, mutual fund fees, and net interest income from the impact of three fewer days in the quarter, partly offset by improved margins.

Year-to-date Q2 2023 vs Year-to-date Q2 2022

Revenues were $2,623 million, down $157 million or 6% due primarily to lower mutual fund fees and brokerage revenues, partly offset by higher net interest income driven by strong loan growth and improved margins.

Provision for credit losses

Q2 2023 vs Q2 2022

The provision for credit losses was $2 million, an increase of $1 million. The provision for credit losses ratio increased four basis points to five basis points.

Q2 2023 vs Q1 2023

The provision for credit losses was $2 million, an increase of $1 million. The provision for credit losses ratio increased four basis points to five basis points.

Year-to-date Q2 2023 vs Year-to-date Q2 2022

The provision for credit losses was $3 million, an increase of $3 million. The provision for credit losses ratio was three basis points, an increase of three basis points.

Non-interest expenses

Q2 2023 vs Q2 2022

Non-interest expenses of $818 million were up $15 million or 2%, driven largely by higher personnel and technology costs to support business growth.

Q2 2023 vs Q1 2023

Non-interest expenses were up $16 million or 2%, driven largely by higher personnel and technology costs to support business growth.

Year-to-date Q2 2023 vs Year-to-date Q2 2022

Non-interest expenses of $1,620 million were down $45 million or 3%, driven largely by lower volume-related expenses.

Taxes

The effective tax rate was 25.8% compared to 26.2% in the prior year and 25.6% in the prior quarter.

Year-to-date Q2 2023 vs Year-to-date Q2 2022

The effective tax rate was 25.7% compared to 26.1% in the prior year.

Global Banking and Markets

T12 Global Banking and Markets financial performance

	For the three months ended			For the six months ended	
(Unaudited) ($ millions) *(Taxable equivalent basis)*	**April 30 2023** [(1)]	January 31 2023 [(1)]	April 30 2022 [(1)]	**April 30 2023** [(1)]	April 30 2022 [(1)]
Reported Results					
Net interest income	**$ 384**	$ 454	$ 360	**$ 838**	$ 733
Non-interest income	**968**	1,049	902	**2,017**	1,933
Total revenue	**1,352**	1,503	1,262	**2,855**	2,666
Provision for credit losses	**53**	15	(46)	**68**	(62)
Non-interest expenses	**752**	773	653	**1,525**	1,323
Income tax expense	**146**	196	167	**342**	356
Net income	**$ 401**	$ 519	$ 488	**$ 920**	$1,049
Net income attributable to non-controlling interest in subsidiaries	**$ –**	$ –	$ –	**$ –**	$ –
Net income attributable to equity holders of the Bank	**$ 401**	$ 519	$ 488	**$ 920**	$1,049
Other financial data and measures					
Return on equity[(2)]	**10.5%**	13.2%	15.6%	**11.9%**	16.5%
Provision for credit losses – performing (Stage 1 and 2)	**$ 54**	$ 13	$ (42)	**$ 67**	$ (50)
Provision for credit losses – impaired (Stage 3)	**$ (1)**	$ 2	$ (4)	**$ 1**	$ (12)
Provision for credit losses as a percentage of average net loans and acceptances (annualized)[(3)]	**0.15%**	0.04%	(0.16)%	**0.10%**	(0.11)%
Provision for credit losses on impaired loans as a percentage of average net loans and acceptances (annualized)[(3)]	**–%**	–%	(0.01)%	**–%**	(0.02)%
Net write-offs as a percentage of average net loans and acceptances[(3)]	**–%**	0.02%	0.02%	**0.01%**	0.01%
Average assets *($ billions)*	**$ 488**	$ 481	$ 431	**$ 484**	$ 438
Average liabilities *($ billions)*	**$ 446**	$ 455	$ 400	**$ 450**	$ 403

(1) Includes the gross-up of tax-exempt income earned on certain securities reported in either net interest income or non-interest income for the three months ended April 30, 2023 of $109 (January 31, 2023 – $110; April 30, 2022 – $82) and for the six months ended April 30, 2023 of $219 (April 30, 2022 – $165).
(2) Refer to Non-GAAP Measures on page 4 for the description of the measure.
(3) Refer to Glossary on page 54 for the description of the measure.

Net income

Q2 2023 vs Q2 2022

Net income attributable to equity holders was $401 million, a decrease of $87 million or 18%, due mainly to higher provision for credit losses and non-interest expenses, partly offset by higher revenue and the positive impact of foreign currency translation.

Q2 2023 vs Q1 2023

Net income attributable to equity holders decreased by $118 million or 23% due to higher provision for credit losses and lower revenue, partly offset by lower non-interest expenses.

Year-to-date Q2 2023 vs Year-to-date Q2 2022

Net income attributable to equity holders was $920 million, a decrease of $129 million or 12% due to higher provision for credit losses and non-interest expenses, partly offset by higher revenue and the positive impact of foreign currency translation.

Average assets

Q2 2023 vs Q2 2022

Average assets were $488 billion, an increase of $57 billion or 13% due mainly to increases in business loans which increased 29%, securities purchased under resale agreements, and the impact of foreign currency translation, partly offset by lower trading securities.

Q2 2023 vs Q1 2023

Average assets increased $7 billion or 1% due mainly to increases in securities purchased under resale agreements, partly offset by lower trading securities.

Year-to-date Q2 2023 vs Year-to-date Q2 2022

Average assets were $484 billion, an increase of $46 billion or 11% due mainly to increases in business loans which increased 32%, securities purchased under resale agreements, and the impact of foreign currency translation, partly offset by lower trading securities.

Average liabilities

Q2 2023 vs Q2 2022

Average liabilities were $446 billion, an increase of $46 billion or 12% due mainly to increases in deposits, securities sold under repurchase agreements, and the impact of foreign currency translation. Deposits increased 11% compared to the same period last year.

Q2 2023 vs Q1 2023

Average liabilities decreased $9 billion or 2% due mainly to decreases in securities sold under repurchase agreements, deposits and the impact of foreign currency translation.

Year-to-date Q2 2023 vs Year-to-date Q2 2022

Average liabilities were $450 billion, an increase of $47 billion or 12% due mainly to increases in deposits, securities sold under repurchase agreements and the impact of foreign currency translation. Deposits increased 12% compared to the same period last year.

Total revenue

Q2 2023 vs Q2 2022

Revenues were $1,352 million, an increase of $90 million or 7%.

Net interest income was $384 million, an increase of $24 million or 7% due mainly to growth in business loans and deposits, higher loan fees and the positive impact of foreign currency translation, partly offset by higher trading-related funding costs. Business loans increased 29%, primarily in the U.S. and Canada.

Non-interest income was $968 million, an increase of $66 million or 7% due mainly to higher trading-related revenue, banking fees and the positive impact of foreign currency translation.

Q2 2023 vs Q1 2023

Revenues decreased by $151 million or 10%.

Net interest income decreased by $70 million or 15% due mainly to lower loan and deposits margins, higher trading-related funding costs and three fewer days in the quarter.

Non-interest income decreased by $81 million or 8%, due mainly to lower trading-related revenue in fixed income and equities, partly offset by higher underwriting and advisory fees.

Year-to-date Q2 2023 vs Year-to-date Q2 2022

Revenues increased by $189 million or 7%.

Net interest income was $838 million, an increase of $105 million or 14%, due mainly to growth in business loans and deposits, increased deposit margins, higher loan fees and the positive impact of foreign currency translation, partly offset by higher trading-related funding costs.

Non-interest income was $2,017 million, an increase of $84 million or 4%, due mainly to higher banking and trading-related revenue and the positive impact of foreign currency translation, partly offset by lower underwriting and advisory fees.

Provision for credit losses

Q2 2023 vs Q2 2022

The provision for credit losses was $53 million compared to a net reversal of $46 million. The provision for credit losses ratio was 15 basis points, an increase of 31 basis points.

Provision for credit losses on performing loans was $54 million, compared to a net reversal of $42 million. The provision this period was driven primarily by the less favourable macroeconomic outlook.

Provision for credit losses on impaired loans was a net reversal of $1 million, compared to a net reversal of $4 million. The provision for credit losses ratio on impaired loans was nil, an increase of one basis point.

Q2 2023 vs Q1 2023

The provision for credit losses was $53 million compared to $15 million, an increase of $38 million. The provision for credit losses ratio was 15 basis points, an increase of 11 basis points.

Provision for credit losses on performing loans was $54 million compared to $13 million. The provision this period was driven primarily by the continued unfavourable macroeconomic outlook.

Provision for credit losses on impaired loans was a net reversal of $1 million, a decrease of $3 million. The provision for credit losses ratio on impaired loans was nil, in line with last quarter.

Year-to-date Q2 2023 vs Year-to-date Q2 2022

The provision for credit losses was $68 million compared to a net reversal of $62 million. The provision for credit losses ratio was ten basis points, an increase of 21 basis points.

Provision for credit losses on performing loans was $67 million, compared to a net reversal of $50 million. The provision this period was driven primarily by the less favourable macroeconomic outlook.

Provision for credit losses on impaired loans was $1 million compared to a net reversal of $12 million, an increase of $13 million. The provision for credit losses ratio on impaired loans increased by two basis points.

Non-interest expenses

Q2 2023 vs Q2 2022

Non-interest expenses of $752 million, were up $99 million or 15%, due mainly to higher personnel and technology costs to support business growth, and the negative impact of foreign currency translation.

Q2 2023 vs Q1 2023

Non-interest expenses decreased $21 million or 3% due mainly to decreases in performance-related compensation costs and three fewer days in the quarter.

Year-to-date Q2 2023 vs Year-to-date Q2 2022

Non-interest expenses of $1,525 million increased $202 million or 15% due mainly to increases in personnel and technology costs to support business development, and the negative impact of foreign currency translation.

Taxes

Q2 2023 vs Q2 2022

The effective tax rate was 26.7% compared to 25.5% due mainly to an increase in the Canadian statutory tax rate.

Q2 2023 vs Q1 2023

The effective tax rate was 26.7% compared to 27.5% due mainly to the change in earnings mix across jurisdictions.

Year-to-date Q2 2023 vs Year-to-date Q2 2022

The effective tax rate was 27.1% compared to 25.4% due mainly to an increase in the Canadian statutory tax rate and the change in earnings mix across jurisdictions.

Other(1)

T13 Other financial performance

	For the three months ended			For the six months ended	
(Unaudited) ($ millions) *(Taxable equivalent basis)*	**April 30 2023**	January 31 2023	April 30 2022	**April 30 2023**	April 30 2022
Reported Results					
Net interest income(2)	**$(474)**	$(383)	$ 98	**$ (857)**	$ 114
Non-interest income(2)(3)	**(135)**	(328)	(86)	**(463)**	(150)
Total revenue	**(609)**	(711)	12	**(1,320)**	(36)
Provision for credit losses	**–**	–	–	**–**	–
Non-interest expenses	**70**	4	111	**74**	235
Income tax expense/(benefit)(2)	**(356)**	198	(89)	**(158)**	(194)
Net income (loss)	**$(323)**	$(913)	$ (10)	**$(1,236)**	$ (77)
Net income (loss) attributable to non-controlling interest in subsidiaries	**$ –**	$ –	$ –	**$ –**	$ –
Net income (loss) attributable to equity holders	**$(323)**	$(913)	$ (10)	**$(1,236)**	$ (77)
Other measures					
Average assets *($ billions)*	**$ 178**	$ 187	$174	**$ 185**	$ 164
Average liabilities *($ billions)*	**$ 278**	$ 282	$269	**$ 280**	$ 258

(1) Includes all other smaller operating segments and corporate adjustments, such as the elimination of the tax-exempt income gross-up reported in net interest income, non-interest income and provision for income taxes and differences in the actual amount of costs incurred and charged to the operating segments.
(2) Includes the elimination of the tax-exempt income gross-up reported in net interest income, non-interest income and provision for income taxes for the three months ended April 30, 2023 – $119 (January 31, 2023 – $120; April 30, 2022 – $92) and for six months ended April 30, 2023 – $239 (April 30, 2022 – $184) to arrive at the amounts reported in the Consolidated Statement of Income.
(3) Income (on a taxable equivalent basis) from associated corporations and the provision for income taxes in each period include the tax normalization adjustments related to the gross-up of income from associated companies for the three months ended April 30, 2023 – $(35) (January 31, 2023 – $(65); April 30, 2022 – $(16)) and for the six months ended April 30, 2023 – $(100) (April 30, 2022 – $(2)).

T13A Adjusted Other financial performance

	For the three months ended			For the six months ended	
(Unaudited) ($ millions) *(Taxable equivalent basis)*	**April 30 2023**	January 31 2023	April 30 2022	**April 30 2023**	April 30 2022
Adjusted Results(1)					
Net interest income	**$(474)**	$(383)	$ 98	**$ (857)**	$ 114
Non-interest income	**(135)**	(328)	(86)	**(463)**	(150)
Total revenue	**(609)**	(711)	12	**(1,320)**	(36)
Provision for credit losses	**–**	–	–	**–**	–
Non-interest expenses	**70**	4	111	**74**	235
Income tax expense/(benefit)(2)	**(356)**	(381)	(89)	**(737)**	(194)
Net income (loss)	**$(323)**	$(334)	$ (10)	**$ (657)**	$ (77)
Net income (loss) attributable to non-controlling interest in subsidiaries	**$ –**	$ –	$ –	**$ –**	$ –
Net income (loss) attributable to equity holders	**$(323)**	$(334)	$ (10)	**$ (657)**	$ (77)

(1) Refer to Non-GAAP Measures starting on page 4 for adjusted results.
(2) Includes adjustment for the Canada Recovery Dividend of $579 in Q1, 2023.

The Other segment includes Group Treasury, smaller operating segments and corporate items which are not allocated to a business line. Group Treasury is primarily responsible for Balance Sheet, Liquidity and Interest Rate Risk management, which includes the Bank's wholesale funding activities.

Net interest income, non-interest income, and the provision for income taxes in each period include the elimination of tax-exempt income gross-up. This amount is included in the operating segments, which are reported on a taxable equivalent basis.

Net income from associated corporations and the provision for income taxes in each period include the tax normalization adjustments related to the gross-up of income from associated companies. This adjustment normalizes the effective tax rate in the divisions to better present the contribution of the associated companies to the divisional results.

Q2 2023 vs Q2 2022

Net income attributable to equity holders was a net loss of $323 million, compared to a $10 million net loss in the prior year. The decrease of $313 million was due mainly to lower revenues of $621 million, partly offset by lower expenses and taxes. Lower revenue due primarily to higher funding costs and lower income from hedges, was partly offset by higher income from liquid assets and investment gains.

Q2 2023 vs Q1 2023

Net income attributable to equity holders increased $590 million, due mainly to the recognition of the CRD of $579 million in the prior quarter. On an adjusted basis, net income attributable to equity holders increased $11 million, due mainly to higher revenues, partly offset by higher non-interest expenses and provision for income taxes. The higher revenue is due primarily to treasury activities related to higher income from liquid assets and income from hedges, which were partly offset by higher term funding costs. Also contributing were higher investment gains and income from associated corporations this period.

Year-to-date Q2 2023 vs Year-to-date Q2 2022

Net income attributable to equity holders was a net loss of $1,236 million compared to net income of $77 million. Adjusted net income attributable to equity holders was a net loss of $657 million, a decrease of $580 million, due mainly to lower revenues of $1,284 million, partly offset by lower taxes and lower non-interest expenses. The lower revenue is due primarily to treasury activities related to higher funding costs and lower income from hedges, which were partly offset by higher income from liquid assets. Also contributing to the lower revenue was lower income from associated corporations.

Geographic Highlights

T14 Geographic highlights

	For the three months ended April 30, 2023								
(Unaudited) ($ millions)	**Canada**	**U.S.**	**Mexico**	**Peru**	**Chile**	**Colombia**	**Caribbean and Central America**	**Other**	**Total**
Reported results									
Net interest income	**$2,067**	**$249**	**$512**	**$323**	**$470**	**$134**	**$448**	**$263**	**$4,466**
Non-interest income	**2,109**	**334**	**219**	**122**	**147**	**100**	**206**	**226**	**3,463**
Total revenue	**4,176**	**583**	**731**	**445**	**617**	**234**	**654**	**489**	**7,929**
Provision for credit losses	**238**	**34**	**58**	**83**	**153**	**104**	**25**	**14**	**709**
Non-interest expenses	**2,555**	**306**	**366**	**177**	**265**	**163**	**358**	**386**	**4,576**
Income tax expense	**189**	**68**	**76**	**45**	**27**	**(16)**	**58**	**38**	**485**
Net income	**1,194**	**175**	**231**	**140**	**172**	**(17)**	**213**	**51**	**2,159**
Net income attributable to non-controlling interests in subsidiaries	**–**	**–**	**6**	**–**	**4**	**(11)**	**27**	**–**	**26**
Net income attributable to equity holders of the Bank	**$ 1,194**	**$175**	**$225**	**$140**	**$168**	**$ (6)**	**$186**	**$ 51**	**$2,133**
Adjusted results[(1)]									
Adjustments	**6**	**–**	**–**	**2**	**5**	**–**	**1**	**1**	**15**
Adjusted net income (loss) attributable to equity holders of the Bank	**$1,200**	**$175**	**$225**	**$142**	**$173**	**$ (6)**	**$187**	**$ 52**	**$2,148**
Average Assets *($ billions)*	**$ 837**	**$217**	**$ 57**	**$ 28**	**$ 64**	**$ 14**	**$ 34**	**$139**	**$1,390**

	For the three months ended January 31, 2023								
(Unaudited) ($ millions)	Canada	U.S.	Mexico	Peru	Chile	Colombia	Caribbean and Central America	Other	Total
Reported results									
Net interest income	$ 2,232	$ 296	$ 514	$ 331	$ 379	$134	$ 428	$255	$ 4,569
Non-interest income	2,005	310	205	134	207	96	201	253	3,411
Total revenue	4,237	606	719	465	586	230	629	508	7,980
Provision for credit losses	228	3	56	98	122	74	36	21	638
Non-interest expenses	2,469	313	351	178	240	156	361	396	4,464
Income tax expense	811	82	67	45	33	3	49	16	1,106
Net income	729	208	245	144	191	(3)	183	75	1,772
Net income attributable to non-controlling interests in subsidiaries	–	–	5	1	11	(4)	27	–	40
Net income attributable to equity holders of the Bank	$ 729	$ 208	$ 240	$ 143	$ 180	$ 1	$ 156	$ 75	$ 1,732
Adjusted results[(1)]									
Adjustments	586	–	–	1	5	–	1	1	594
Adjusted net income (loss) attributable to equity holders of the Bank	$ 1,315	$ 208	$ 240	$ 144	$ 185	$ 1	$ 157	$ 76	$ 2,326
Average Assets *($ billions)*	$ 834	$ 212	$ 54	$ 28	$ 59	$ 13	$ 34	$146	$ 1,380

	For the three months ended April 30, 2022								
(Unaudited) ($ millions)	Canada	U.S.	Mexico	Peru	Chile	Colombia	Caribbean and Central America	Other	Total
Reported results									
Net interest income	$2,480	$207	$ 412	$295	$ 410	$175	$ 329	$ 165	$ 4,473
Non-interest income	2,191	254	192	108	141	104	194	285	3,469
Total revenue	4,671	461	604	403	551	279	523	450	7,942
Provision for credit losses	(35)	(22)	51	89	38	53	39	6	219
Non-interest expenses	2,421	259	287	156	219	169	319	329	4,159
Income tax expense	534	57	54	46	31	20	49	26	817
Net income	1,751	167	212	112	263	37	116	89	2,747
Net income attributable to non-controlling interests in subsidiaries	(1)	–	4	3	34	16	22	–	78
Net income attributable to equity holders of the Bank	$ 1,752	$167	$ 208	$109	$ 229	$ 21	$ 94	$ 89	$ 2,669
Adjusted results[(1)]									
Adjustments	9	–	–	2	5	–	1	1	18
Adjusted net income (loss) attributable to equity holders of the Bank	$ 1,761	$167	$ 208	$ 111	$ 234	$ 21	$ 95	$ 90	$ 2,687
Average Assets *($ billions)*	$ 751	$210	$ 44	$ 27	$ 53	$ 14	$ 31	$ 134	$ 1,264

	For the six months ended April 30, 2023								
(Unaudited) ($ millions)	**Canada**	**U.S.**	**Mexico**	**Peru**	**Chile**	**Colombia**	**Caribbean and Central America**	**Other**	**Total**
Reported results									
Net interest income	**$4,299**	**$ 545**	**$1,026**	**$654**	**$ 849**	**$268**	**$ 876**	**$518**	**$ 9,035**
Non-interest income	**4,114**	**644**	**424**	**256**	**354**	**196**	**407**	**479**	**6,874**
Total revenue	**8,413**	**1,189**	**1,450**	**910**	**1,203**	**464**	**1,283**	**997**	**15,909**
Provision for credit losses	**466**	**37**	**114**	**181**	**275**	**178**	**61**	**35**	**1,347**
Non-interest expenses	**5,024**	**619**	**717**	**355**	**505**	**319**	**719**	**782**	**9,040**
Income tax expense	**1,000**	**150**	**143**	**90**	**60**	**(13)**	**107**	**54**	**1,591**
Net income	**1,923**	**383**	**476**	**284**	**363**	**(20)**	**396**	**126**	**3,931**
Net income attributable to non-controlling interests in subsidiaries	**–**	**–**	**11**	**1**	**15**	**(15)**	**54**	**–**	**66**
Net income attributable to equity holders of the Bank	**$ 1,923**	**$ 383**	**$ 465**	**$283**	**$ 348**	**$ (5)**	**$ 342**	**$126**	**$ 3,865**
Adjusted results[(1)]									
Adjustments	**592**	**–**	**–**	**3**	**10**	**–**	**2**	**2**	**609**
Adjusted net income (loss) attributable to equity holders of the Bank	**$ 2,515**	**$ 383**	**$ 465**	**$286**	**$ 358**	**$ (5)**	**$ 344**	**$128**	**$ 4,474**
Average Assets *($ billions)*	**$ 836**	**$ 215**	**$ 55**	**$ 28**	**$ 61**	**$ 13**	**$ 34**	**$144**	**$ 1,386**

	For the six months ended April 30, 2022								
(Unaudited) ($ millions)	Canada	U.S.	Mexico	Peru	Chile	Colombia	Caribbean and Central America	Other	Total
Reported results									
Net interest income	$4,866	$408	$ 833	$574	$ 815	$337	$ 654	$ 330	$ 8,817
Non-interest income	4,503	532	365	227	280	207	377	683	7,174
Total revenue	9,369	940	1,198	801	1,095	544	1,031	1,013	15,991
Provision for credit losses	(72)	(28)	111	164	77	99	79	11	441
Non-interest expenses	4,883	514	576	305	443	344	653	664	8,382
Income tax expense	1,074	116	114	94	83	38	83	79	1,681
Net income	3,484	338	397	238	492	63	216	259	5,487
Net income attributable to non-controlling interests in subsidiaries	(1)	–	8	5	84	27	43	–	166
Net income attributable to equity holders of the Bank	$ 3,485	$338	$ 389	$233	$ 408	$ 36	$ 173	$ 259	$ 5,321
Adjusted results[(1)]									
Adjustments	19	–	–	3	10	–	2	2	36
Adjusted net income (loss) attributable to equity holders of the Bank	$3,504	$338	$ 389	$236	$ 418	$ 36	$ 175	$ 261	$ 5,357
Average Assets *($ billions)*	$ 735	$212	$ 44	$ 26	$ 52	$ 14	$ 31	$ 137	$ 1,251

(1) Refer to Non-GAAP Measures section starting on page 4.

Quarterly Financial Highlights

T15 Quarterly financial highlights

	For the three months ended							
(Unaudited) ($ millions)	**April 30 2023**	January 31 2023	October 31 2022	July 31 2022	April 30 2022	January 31 2022	October 31 2021	July 31 2021
Reported results								
Net interest income	**$4,466**	$4,569	$4,622	$4,676	$ 4,473	$4,344	$4,217	$4,217
Non-interest income	**3,463**	3,411	3,004	3,123	3,469	3,705	3,470	3,540
Total revenue	**$7,929**	$7,980	$7,626	$7,799	$7,942	$8,049	$7,687	$7,757
Provision for credit losses	**709**	638	529	412	219	222	168	380
Non-interest expenses	**4,576**	4,464	4,529	4,191	4,159	4,223	4,271	4,097
Income tax expense	**485**	1,106	475	602	817	864	689	738
Net income	**$ 2,159**	$1,772	$2,093	$2,594	$ 2,747	$2,740	$2,559	$2,542
Basic earnings per share *($)*	**1.70**	1.37	1.64	2.10	2.16	2.15	1.98	2.00
Diluted earnings per share *($)*	**1.69**	1.36	1.63	2.09	2.16	2.14	1.97	1.99
Net interest margin *(%)*(1)	**2.13**	2.11	2.18	2.22	2.23	2.16	2.17	2.23
Effective tax rate *(%)*(2)	**18.4**	38.4	18.5	18.8	22.9	24.0	21.2	22.5
Adjusted results(1)								
Adjusting items impacting non-interest income and total revenue (Pre-tax)								
Net loss on divestitures and wind-down of operations	**$ –**	$ –	$ 361	$ –	$ –	$ –	$ –	$ –
Adjusting items impacting non-interest expenses (Pre-tax)								
Amortization of acquisition-related intangible assets	**21**	21	24	24	24	25	25	24
Restructuring and other provisions	**–**	–	85	–	–	–	188(3)	–
Support costs for the Scene+ loyalty program	**–**	–	133	–	–	–	–	–
Total non-interest expenses adjustments (Pre-tax)	**21**	21	242	24	24	25	213	24
Total impact of adjusting items on net income before taxes	**21**	21	603	24	24	25	213	24
Impact of adjusting items on income tax expense:								
Canada recovery dividend	**–**	579	–	–	–	–	–	–
Impact of other adjusting items on income tax expense	**(6)**	(6)	(81)	(7)	(6)	(7)	(56)	(6)
Total impact of adjusting items on net income	**15**	594	522	17	18	18	157	18
Adjusted net income	**$ 2,174**	$2,366	$2,615	$2,611	$ 2,765	$2,758	$2,716	$2,560
Adjusted diluted earnings per share *($)*	**1.70**	1.85	2.06	2.10	2.18	2.15	2.10	2.01

(1) Refer to Non-GAAP Measures section starting on page 4.
(2) Refer to Glossary on page 54 for the description of the measure.
(3) The Bank recorded restructuring and other provisions of $139 ($188 pre-tax) in the Other operating segment in Q4, 2021. The restructuring charge of $93 ($126 pre-tax) was substantially related to International Banking. The settlement and litigation provisions of $46 ($62 pre-tax) was in connection with the Bank's former metals business.

Trending analysis

Earnings over the period were driven by generally higher net interest income from steady loan and deposit growth and lower effective tax rates, partly offset by higher provision for credit losses and increased term funding costs.

Total revenue

Canadian Banking net interest income over the period has increased driven by strong loan and deposit growth. Recent quarters have benefitted from Bank of Canada rate increases. International Banking net interest income has trended upward driven by growth in residential mortgages and business loans and central bank rate increase. Global Wealth Management non-interest income has been impacted by recent adverse market conditions, resulting in lower fee-based assets and revenues. Global Banking and Markets revenues are affected by market conditions that impact client activity in the capital markets and corporate and investment banking businesses. Revenues in the Other segment were impacted by higher term funding costs and other treasury activities.

Provision for credit losses

Provision for credit losses trended upward during the period driven by lower reversals of provisions for credit losses on performing loans, a less favourable macroeconomic forecast, portfolio growth and higher impaired loan provisions due to credit migration.

Non-interest expenses

Non-interest expenses reflect the Bank's ongoing focus on expense management and efficiency initiatives, while continuing to invest in personnel and technology to support business growth. Seasonality, adjusting items and the impact of foreign currency translation have also contributed to fluctuations over the period.

Provision for income taxes

The effective tax rate was 18.4% this quarter. The effective tax rate average was 23.1% over the period and was impacted by divestitures, varying levels of provision for credit losses and net income earned in foreign jurisdictions, as well as the variability of tax-exempt dividend income and inflationary benefits.

Financial Position

T16 Condensed statement of financial position

	As at				
(Unaudited) ($ billions)	**April 30 2023**	October 31 2022	Change	Volume Change	FX Change
Assets					
Cash, deposits with financial institutions and precious metals	**$ 65.1**	$ 66.4	(2.0)%	(3.4)%	1.4%
Trading assets	**114.7**	113.2	1.4	0.3	1.1
Securities purchased under resale agreements and securities borrowed	**184.7**	175.3	5.3	3.7	1.6
Investment securities	**116.6**	110.0	6.0	4.7	1.3
Loans	**764.1**	745.0	2.6	1.2	1.4
Other	**128.0**	139.5	(8.2)	(13.7)	5.5
Total assets	**$1,373.2**	$1,349.4	1.8%	–%	1.8%
Liabilities					
Deposits	**$ 945.5**	$ 916.2	3.2%	1.9%	1.3%
Obligations related to securities sold under repurchase agreements and securities lent	**132.6**	139.0	(4.6)	(6.6)	2.0
Other liabilities	**207.5**	211.0	(1.6)	(6.0)	4.4
Subordinated debentures	**8.8**	8.5	3.7	3.9	(0.2)
Total liabilities	**$1,294.4**	$1,274.7	1.6%	(0.3)%	1.9%
Equity					
Common equity[1]	**$ 69.1**	$ 65.1	6.0%	4.6%	1.4%
Preferred shares and other equity instruments	**8.1**	8.1	–	–	–
Non-controlling interests in subsidiaries	**1.6**	1.5	4.9	4.1	0.8
Total equity	**$ 78.8**	$ 74.7	5.4%	4.2%	1.2%
Total liabilities and equity	**$1,373.2**	$1,349.4	1.8%	–%	1.8%

(1) Includes net impact of foreign currency translation, primarily change in spot rates on the translation of assets and liabilities from functional currency to Canadian dollar equivalent.

The Bank's total assets were $1,373 billion as at April 30, 2023, up $24 billion or 2% from October 31, 2022. Loans increased $19 billion. Residential mortgages increased $4 billion mainly in Chile and Mexico. Personal loans and credit cards increased $4 billion reflecting increased consumer spending. Business and government loans increased $11 billion mainly in Canada, Chile and Mexico. Securities purchased under resale agreements and securities borrowed increased $9 billion due to higher client demand. Investment securities increased $7 billion due to higher holdings of U.S. and other foreign government debt. Derivative instrument assets decreased by $11 billion due to changes in foreign exchange rates, interest rates and lower activity.

Total liabilities were $1,294 billion as at April 30, 2023, up $20 billion or 2% from October 31, 2022. Total deposits increased $29 billion. Personal deposits of $284 billion increased $18 billion due primarily to growth in term deposits in Canada. Business and government deposits grew by $14 billion mainly in Canada. Deposits by financial institutions decreased $2 billion. Financial instruments designated at fair value through profit or loss increased $5 billion due to the issuance of senior note liabilities. Other liabilities increased $4 billion due mainly to accrued interest and debt issuance by subsidiaries. Obligations related to securities sold under repurchase agreements and securities lent decreased by $6 billion. Derivative instrument liabilities decreased $15 billion due to changes in interest rates, foreign exchange rates and lower activity.

Total shareholders' equity was $79 billion, an increase of $4 billion from October 31, 2022. Equity was higher due to current year earnings of $3,931 million, other comprehensive income of $2,330 million and net share issuances of $450 million, mainly related to the Shareholder Dividend and Share Purchase Plan. Partly offsetting these items were dividends paid of $2,660 million.

Risk Management

The Bank's risk management policies and practices have not substantially changed from those outlined in the Bank's 2022 Annual Report. For a complete discussion of the risk management policies and practices and additional information on risk factors, refer to the "Risk Management" section in the 2022 Annual Report.

Significant developments that took place during this quarter are as follows:

Credit risk

Allowance for credit losses

IFRS 9 *Financial Instruments*, requires the consideration of past events, current conditions and reasonable and supportable forward-looking information over the life of the exposure to measure expected credit losses. Furthermore, to assess significant increases in credit risk, IFRS 9 requires that entities assess changes in the risk of a default occurring over the expected life of a financial instrument when determining staging. Consistent with the requirements of IFRS 9, the Bank considers both quantitative and qualitative information in the assessment of a significant increase in credit risk.

The Bank's models are calibrated to consider past performance and macroeconomic forward-looking variables as inputs, as further described below. Expert credit judgement may be applied in circumstances where, in the Bank's view, the inputs, assumptions, and/or modelling techniques do not capture all relevant risk factors, including the emergence of economic or political events of the market up to the date of the financial statements. Expert credit judgement continues to be applied in the assessment of underlying credit deterioration and migration of balances to progressive stages.

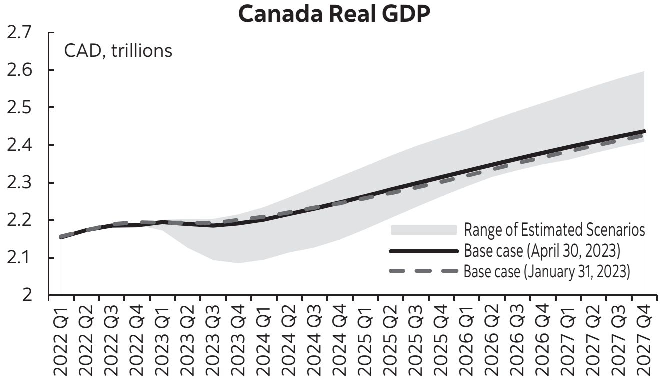
The Bank has generated a forward-looking base case scenario and three alternate forward-looking scenarios (one optimistic and two pessimistic) as key inputs into the expected credit loss provisioning models. The base case scenario shows stronger inflation pressures in both Canada and the U.S. compared to last quarter, which brings monetary policy rates to higher than forecasted levels. Rising interest rates, combined with the negative impact from the banking sector turmoil in the U.S. (and Europe to a lesser extent), are leading to a technical recession in Canada and the U.S., with their real GDP declining mildly in both the second and third quarter of this year. Despite this modest recession, GDP will still grow in 2023 in both economies – albeit at a slower pace than in the previous year – given a good starting point.

The optimistic scenario features somewhat stronger economic activity relative to the base case. The pessimistic scenario is now based on the recent banking sector turmoil in the U.S. and Europe and features deteriorating private sector financial conditions and confidence (unlike a stagflation shock in the previous quarter). These are reducing economic activity and inflation worldwide from the base case scenario, requiring central banks to reduce their monetary policy rates to mitigate the decline in economic activity and prevent inflation from falling below targeted ranges. Lastly, the very pessimistic (stagflation) scenario features further supply chain disruptions also leading to a protracted period of financial market uncertainty. This results in higher inflation rates, requiring central banks to raise their policy rate to higher levels than in the base case in order to bring inflation under control, which is dampening economic activity.

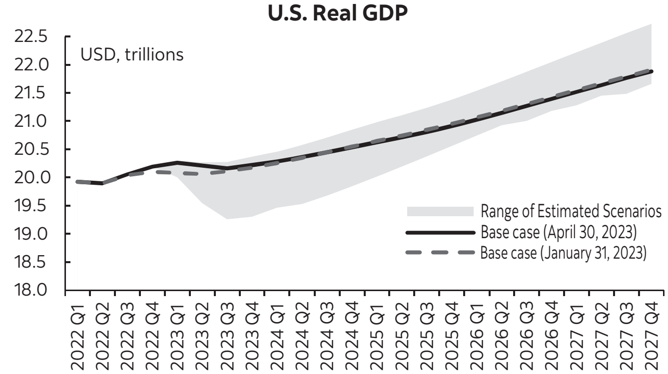
The following section provides additional detail on certain key macroeconomic variables used to calculate the modelled estimate for the allowance for credit losses (see page 68 for all key variables). Further changes in these variables up to the date of the financial statements are incorporated through expert credit judgement.

- **Gross Domestic Product (GDP):** The base case scenario assumes that a mild recession occurs in Canada and the U.S. owing to the impacts of monetary tightening on both economies. In Canada, we expect the economy will grow by about 0.7% in 2023 despite two quarters of negative growth mid-year. We then expect the economy to return to a moderate growth path in 2024. This is similar to the outlook used in the previous quarter. In the U.S., we expect an economic expansion of about 1% for 2023 and 2024, despite a mild recession in mid-2023. Relative to last quarter, this profile exhibits a bit more strength in 2023 at the expense of slower growth in 2024.

Canada Real GDP

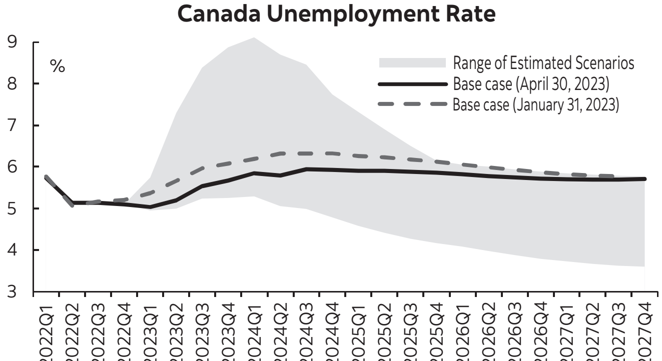


U.S. Real GDP

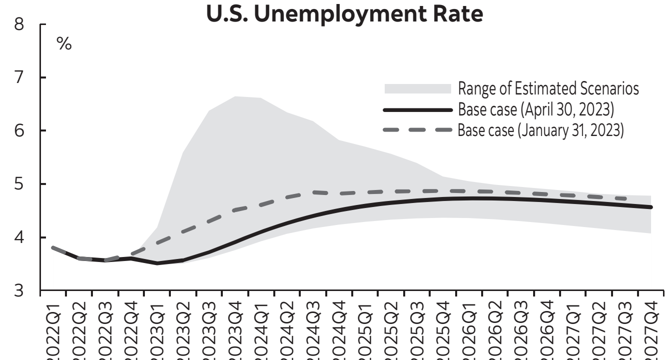


- **Unemployment Rate:** The base case scenario assumes a modest increase in the unemployment rate in both Canada and the U.S. this year and next. The employment response to the mild contraction in GDP predicted mid-year is expected to be muted relative to previous cycles owing to still high job vacancies and an expectation that firms will hold on to workers to a greater degree than previous recessions given the high costs of attracting and retaining workers. Unemployment rate projections for both countries are lower than they were last quarter owing to much stronger labour markets than previously assessed.

Canada Unemployment Rate



U.S. Unemployment Rate



The total allowance for credit losses as at April 30, 2023 was $5,931 million compared to $5,668 million last quarter. The allowance for credit losses ratio was 75 basis points, an increase of three basis points. The allowance for credit losses on loans was $5,736 million, up $223 million from the prior quarter. The increase was due primarily to the impact of foreign currency translation in the International Banking portfolios, as well as the impact of the continued unfavourable macroeconomic outlook primarily impacting the corporate and commercial portfolios, and higher provisions in International retail portfolios.

The allowance against performing loans was higher at $3,985 million compared to $3,859 million as at January 31, 2023. The allowance for performing loans ratio was 52 basis points, an increase of one basis point. The increase was due primarily to the impact of foreign currency translation in the International Banking portfolios, continued unfavourable macroeconomic outlook for the corporate and commercial portfolio and higher retail provisions in Chile and Colombia.

The allowance on impaired loans increased to $1,751 million from $1,654 million last quarter. The allowance for impaired loans ratio was 23 basis points, an increase of two basis points from the prior quarter. The increase was due primarily to higher retail provisions.

Impaired loans

Gross impaired loans increased to $5,305 million as at April 30, 2023, from $5,104 million last quarter. The increase was due primarily to the impact of foreign currency translation in International Banking, and net formations in retail portfolios. The gross impaired loan ratio was 67 basis points, an increase of two basis points from last quarter.

Net impaired loans in Canadian Banking were $724 million, an increase of $57 million from last quarter, due primarily to higher retail formations. International Banking's net impaired loans were $2,715 million, an increase of $65 million from last quarter, due primarily to the impact of foreign currency translation and net formations in the retail portfolio. In Global Banking and Markets, net impaired loans were $100 million, a decrease of $20 million from last quarter, due to recoveries and lower formations. In Global Wealth Management, net impaired loans were $15 million, an increase of $2 million from last quarter. Net impaired loans as a percentage of loans and acceptances were 0.45%, an increase of one basis point from 0.44% last quarter.

Overview of loan portfolio

The Bank has a well-diversified portfolio by product, business, and geography. Details of certain portfolios of current focus are highlighted below.

Real estate secured lending

A large portion of the Bank's lending portfolio is comprised of residential mortgages and consumer loans, which are well diversified by borrower. As at April 30, 2023, these loans amounted to $472 billion or 60% of the Bank's total loans and acceptances outstanding (January 31, 2023 – $470 billion or 60%). Of these, $376 billion or 80% are real estate secured loans (January 31, 2023 – $376 billion or 80%). The tables below provide more details by portfolios.

Insured and uninsured mortgages and home equity lines of credit[(1)]

The following table presents amounts of insured and uninsured residential mortgages and home equity lines of credit (HELOCs), by geographic areas.

T17 Insured and uninsured residential mortgages and HELOCs, by geographic areas

	As at April 30, 2023											
	Residential mortgages						**Home equity lines of credit**					
	Insured [(2)]		**Uninsured**		**Total**		**Insured [(2)]**		**Uninsured**		**Total**	
($ millions)	**Amount**	**%**	**Amount**	**%**	**Amount**	**%**	**Amount**	**%**	**Amount**	**%**	**Amount**	**%**
Canada:[(3)]												
Atlantic provinces	**$ 5,025**	**1.7%**	**$ 6,588**	**2.2%**	**$ 11,613**	**3.9%**	**$–**	**–%**	**$ 1,047**	**4.7%**	**$ 1,047**	**4.7%**
Quebec	**8,032**	**2.6**	**12,124**	**4.0**	**20,156**	**6.6**	**–**	**–**	**1,106**	**4.9**	**1,106**	**4.9**
Ontario	**33,105**	**11.0**	**133,085**	**44.4**	**166,190**	**55.4**	**–**	**–**	**13,149**	**58.5**	**13,149**	**58.5**
Manitoba & Saskatchewan	**5,518**	**1.8**	**4,669**	**1.6**	**10,187**	**3.4**	**–**	**–**	**631**	**2.8**	**631**	**2.8**
Alberta	**16,835**	**5.6**	**15,405**	**5.1**	**32,240**	**10.7**	**–**	**–**	**2,306**	**10.3**	**2,306**	**10.3**
British Columbia & Territories	**11,415**	**3.9**	**48,194**	**16.1**	**59,609**	**20.0**	**–**	**–**	**4,221**	**18.8**	**4,221**	**18.8**
Canada[(4)(5)]	**$79,930**	**26.6%**	**$220,065**	**73.4%**	**$299,995**	**100%**	**$–**	**–%**	**$22,460**	**100%**	**$22,460**	**100%**
International	**–**	**–**	**53,565**	**100**	**53,565**	**100**	**–**	**–**	**–**	**–**	**–**	**–**
Total	**$79,930**	**22.6%**	**$273,630**	**77.4%**	**$353,560**	**100%**	**$–**	**-%**	**$22,460**	**100%**	**$22,460**	**100%**
	As at January 31, 2023											
Canada[(4)(5)]	$81,622	27.0%	$220,685	73.0%	$302,307	100%	$–	–%	$22,087	100%	$22,087	100%
International	–	–	51,220	100	51,220	100	–	–	–	–	–	–
Total	$81,622	23.1%	$271,905	76.9%	$353,527	100%	$–	–%	$22,087	100%	$22,087	100%
	As at October 31, 2022											
Canada[(4)(5)]	$83,514	27.6%	$218,972	72.4%	$302,486	100%	$–	–%	$22,178	100%	$22,178	100%
International	–	–	46,793	100	46,793	100	–	–	–	–	–	–
Total	$83,514	23.9%	$265,765	76.1%	$349,279	100%	$–	–%	$22,178	100%	$22,178	100%

(1) The measures in this section have been disclosed in this document in accordance with OSFI Guideline – B20 – Residential Mortgage Underwriting Practices and Procedures (January 2018).
(2) Default insurance is contractual coverage for the life of eligible facilities whereby the Bank's exposure to real estate secured lending is protected against potential shortfalls caused by borrower default. This insurance is provided by either government-backed entities or private mortgage insurers.
(3) The province represents the location of the property in Canada.
(4) Includes multi-residential dwellings (4+ units) of $3,703 (January 31, 2023 – $3,737; October 31, 2022 – $3,782) of which $2,496 are insured (January 31, 2023 – $2,512; October 31, 2022 – $2,524).
(5) Variable rate mortgages account for 36% (January 31, 2023 – 37%; October 31, 2022 – 37%) of the Bank's total Canadian residential mortgage portfolio.

Amortization period ranges for residential mortgages[1]

The following table presents the distribution of residential mortgages by remaining amortization periods, and by geographic areas.

T18 Distribution of residential mortgages by amortization periods, and by geographic areas

	As at April 30, 2023					
	Residential mortgages by amortization period					
	Less than 20 years	**20-24 years**	**25-29 years**	**30-34 years**	**35 years and greater**	**Total residential mortgages**
Canada	**31.9%**	**38.9%**	**28.5%**	**0.5%**	**0.2%**	**100%**
International	**63.2%**	**17.9%**	**18.1%**	**0.8%**	**0.0%**	**100%**
	As at January 31, 2023					
Canada	30.7%	39.4%	28.4%	1.3%	0.2%	100%
International	61.2%	17.1%	18.3%	3.4%	0.0%	100%
	As at October 31, 2022					
Canada	29.2%	40.5%	28.5%	1.6%	0.2%	100%
International	62.8%	16.9%	17.5%	2.8%	0.0%	100%

(1) The measures in this section have been disclosed in this document in accordance with OSFI Guideline – B20 – Residential Mortgage Underwriting Practices and Procedures (January 2018).

Loan to value ratios[1]

The Canadian residential mortgage portfolio is 73% uninsured (January 31, 2023 – 73%; October 31, 2022 – 72%). The average loan-to-value (LTV) ratio of the uninsured portfolio is 53% (January 31, 2023 – 52%; October 31, 2022 – 49%).

The following table presents the weighted average LTV ratio for total newly-originated uninsured residential mortgages and home equity lines of credit, which include mortgages for purchases, refinances with a request for additional funds and transfers from other financial institutions, by geographic areas in the current quarter.

T19 Loan to value ratios

	Uninsured LTV ratios	
	For the three months ended April 30, 2023	
	Residential mortgages	**Home equity lines of credit[2]**
	LTV%	**LTV%**
Canada:[3]		
Atlantic provinces	58.8%	63.4%
Quebec	60.5	68.2
Ontario	61.1	63.8
Manitoba & Saskatchewan	59.7	63.9
Alberta	61.6	69.5
British Columbia & Territories	59.3	63.5
Canada[3]	**60.6%**	**64.4%**
International	**72.6%**	**n/a**
	For the three months ended January 31, 2023	
Canada[3]	62.5%	64.0%
International	73.2%	n/a
	For the three months ended October 31, 2022	
Canada[3]	62.8%	63.1%
International	72.4%	n/a

(1) The measures in this section have been disclosed in this document in accordance with OSFI Guideline – B20 – Residential Mortgage Underwriting Practices and Procedures (January 2018).
(2) Includes all home equity lines of credit (HELOC). For Scotia Total Equity Plan HELOCs, LTV is calculated based on the sum of residential mortgages and the authorized limit for related HELOCs, divided by the value of the related residential property, and presented on a weighted average basis for newly originated mortgages and HELOCs.
(3) The province represents the location of the property in Canada.

Potential impact on residential mortgages and real estate home equity lines of credit in the event of an economic downturn

As part of its stress testing program, the Bank analyzes the impact of various combinations of home price declines and unemployment increases on the Bank's residential mortgage portfolios. Those results continue to show that credit losses and impacts on capital ratios are within a level the Bank considers manageable. In addition, the Bank has undertaken extensive all-Bank scenario analyses to assess the impact to the enterprise of different scenarios and is confident that it has the financial resources to withstand even a very negative outlook.

Commercial real estate exposures

The Bank's commercial real estate portfolio was $67.1 billion, or 8.5% of the Bank's total loans and acceptances outstanding as at April 30, 2023 (January 31, 2023 – $63.3 billion or 8.1%). This portfolio is largely comprised of loans to the residential and industrial sectors (75%), both undersupplied asset classes.

U.S. regional bank exposures

The Bank's exposure to U.S. regional banks is not material and mainly short-term or collateralized.

Regional non-retail exposures

The Bank's exposures outside Canada and the U.S. are diversified by region and product and are sized appropriately relative to the credit worthiness of the counterparties (64% of the exposures are to investment grade counterparties based on a combination of internal and external ratings). The Bank's exposures are carried at amortized cost or fair value using observable inputs, with negligible amounts valued using models with unobservable inputs (Level 3). There were no significant events in the quarter that have materially impacted the Bank's exposures.

The Bank has no direct exposure to Russia or Ukraine. While some customers may be negatively impacted by the conflict in the region and by trade restrictions as a result of sanctions, the impact to the Bank, to date, is immaterial and appropriately mitigated.

The Bank's exposures to sovereigns was $65.9 billion as at April 30, 2023 (January 31, 2023 – $69.5 billion; October 31, 2022 – $60.5 billion), $16.6 billion to banks (January 31, 2023 – $13.2 billion; October 31, 2022 – $16.3 billion) and $133.7 billion to corporates (January 31, 2023 – $131.5 billion; October 31, 2022 – $128.2 billion).

In addition to exposures detailed in the table below, the Bank had indirect exposures consisting of securities exposures to non-European entities whose parent company is domiciled in Europe of $0.3 billion as at April 30, 2023 (January 31, 2023 – $0.4 billion; October 31, 2022 – $0.4 billion).

The Bank's regional credit exposures are distributed as follows:

T20 Bank's regional credit exposures distribution

	As at								
	April 30, 2023							January 31 2023	October 31 2022
($ millions)	Loans and loan equivalents[1]	Deposits with financial institutions	Securities[2]	SFT and derivatives[3]	Funded total	Undrawn commitments[4]	**Total**	Total	Total
Latin America[5]	$ 95,581	$ 8,596	$25,335	$ 2,187	$131,699	$10,610	**$142,309**	$146,585	$130,858
Caribbean and Central America	12,275	3,829	4,049	26	20,179	3,553	**23,732**	23,553	24,186
Europe, excluding U.K.	8,196	2,113	2,464	3,505	16,278	9,410	**25,688**	23,746	24,298
U.K.	8,828	4,727	1,337	4,691	19,583	8,272	**27,855**	21,098	24,370
Asia	13,342	1,324	12,668	233	27,567	8,122	**35,689**	37,093	37,210
Other[6]	399	4	71	15	489	325	**814**	1,228	1,499
Total	$138,621	$20,593	$45,924	$10,657	$215,795	$40,292	**$256,087**	$253,303	$242,421

(1) Individual allowances for credit losses are $530. Letters of credit and guarantees are included as funded exposure as they have been issued. Included in loans and loans equivalent are letters of credit and guarantees which total $16,382 as at April 30, 2023 (January 31, 2023 – $16,151; October 31, 2022 – $15,462).
(2) Exposures for securities are calculated taking into account derivative positions where the security is the underlying reference asset and short trading positions, with net short positions in brackets.
(3) SFT comprise of securities purchased under resale agreements, obligations related to securities sold under repurchase agreements and securities lending and borrowing transactions. Gross and net funded exposures represent all net positive positions after taking into account collateral. Collateral held against derivatives was $5,193 and collateral held against SFT was $103,800.
(4) Undrawn commitments represent an estimate of the contractual amount that may be drawn upon by the obligor and include commitments to issue letters of credit on behalf of other banks in a syndicated bank lending arrangement.
(5) Includes countries in the Pacific Alliance plus Brazil, Uruguay, Venezuela, Ecuador and Argentina.
(6) Includes Middle East and Africa.

Market risk

Value at Risk (VaR) is a key measure of market risk in the Bank's trading activities. VaR includes both general market risk and debt specific risk components. The Bank also calculates a Stressed VaR measure.

T21 Market Risk Measures

	Average for the three months ended		
Risk factor *($ millions)*	**April 30 2023**	January 31 2023	April 30 2022
Credit spread plus interest rate	**$ 15.7**	$ 13.8	$10.4
Credit spread	**9.5**	7.5	5.7
Interest rate	**14.0**	13.1	9.6
Equities	**4.6**	3.5	4.0
Foreign exchange	**3.7**	2.1	2.0
Commodities	**6.3**	4.6	2.8
Debt specific	**3.7**	3.8	2.1
Diversification effect	**(16.6)**	(12.7)	(9.4)
Total VaR	**$ 17.4**	$ 15.1	$11.9
Total Stressed VaR	**$ 54.9**	$ 45.1	$26.4

In Q2 2023, the average one-day Total VaR increased from last quarter to $17.4 million, primarily attributed to increased exposure to credit spread and volatile markets driven by the banking sector turmoil in the U.S. and Europe.

In Q2 2023, the Stressed VaR also increased to $54.9 million from last quarter, driven mainly by higher equity and interest rate exposure and was calculated using the 2019/2020 COVID period, same as the prior quarter. In Q2 2022, the stressed VaR was calculated using the 2008/2009 credit crisis period.

There were two trading loss days this quarter. The quality and accuracy of the VaR models is validated by backtesting, which compares daily actual and theoretical profit and loss with the daily output of the VaR model.

Interest rate risk

Interest rate risk is the risk of loss due to the following: changes in the level, slope and curvature of the yield curve; the volatility of interest rates and changes in customer preferences (e.g. mortgage prepayment rates).

Non-trading interest rate sensitivity

The following table shows the pro-forma pre-tax impact on the Bank's net interest income over the next twelve months and economic value of equity of an immediate and sustained 100 basis points increase and decrease in interest rate across major currencies as defined by the Bank. Corresponding with the current interest rate environment, starting in Q3 2022, the net interest income and economic value for a down shock scenario are measured using 100 basis points decline. These calculations are based on models that consider a number of inputs and are on a constant balance sheet and make no assumptions for management actions to mitigate the risk.

T22 Structural interest sensitivity

	As at										
	April 30, 2023						January 31, 2023		April 30, 2022		
	Net interest income			**Economic value of equity**							
($ millions)	**Canadian dollar**	**Other currencies**	**Total**	**Canadian dollar**	**Other currencies**	**Total**	Net interest income	Economic value of equity		Net interest income	Economic value of equity
+100 bps	**$(52)**	**$ 6**	**$(46)**	**$(506)**	**$(741)**	**$(1,247)**	$(304)	$(1,689)	+100 bps	$(126)	$(1,699)
-100 bps	**16**	**(18)**	**(2)**	**272**	**524**	**796**	233	1,206	-25 bps	–	296

During the second quarter of 2023, both interest rate sensitivities remained within the Bank's approved consolidated limits.

The Bank's Asset/Liability Committee provides strategic direction for the management of structural interest rate risk within the risk appetite framework authorized by the Board of Directors. The asset/liability management strategy is executed by Group Treasury with the objective of protecting and enhancing net interest income within established risk tolerances.

The Bank supplements the immediate rate change impact analysis described above with more sophisticated analyses and tools for actual risk management purposes.

Market risk linkage to Consolidated Statement of Financial Position

Trading assets and liabilities are marked to market daily and included in trading risk measures such as VaR. Derivatives captured under trading risk measures are related to the activities of Global Banking and Markets, while derivatives captured under non-trading risk measures comprise those used in asset/liability management and designated in a hedge relationship. A comparison of Consolidated Statement of Financial Position items which are covered under the trading and non-trading risk measures is provided in the table below.

T23 Market risk linkage to Consolidated Statement of Financial Position of the Bank

As at April 30, 2023		**Market risk measure**			
($ millions)	**Consolidated Statement of Financial Position**	**Trading risk**	**Non-trading risk**	**Not subject to market risk**	**Primary risk sensitivity of non-trading risk**
Precious metals	**$ 1,191**	**$ 1,191**	**$ –**	**$ –**	**n/a**
Trading assets	**114,695**	**114,695**	**–**	**–**	**Interest rate, FX**
Derivative financial instruments	**44,725**	**32,063**	**12,662**	**–**	**Interest rate, FX, equity**
Investment securities	**116,595**	**–**	**116,595**	**–**	**Interest rate, FX, equity**
Loans	**764,068**	**–**	**764,068**	**–**	**Interest rate, FX**
Assets not subject to market risk(1)	**331,924**	**–**	**–**	**331,924**	**n/a**
Total assets	**$1,373,198**	**$147,949**	**$893,325**	**$331,924**	
Deposits	**$ 945,538**	**$ –**	**$899,145**	**$ 46,393**	**Interest rate, FX, equity**
Financial instruments designated at fair value through profit or loss	**26,935**	**–**	**26,935**	**–**	**Interest rate, equity**
Obligations related to securities sold short	**41,310**	**41,310**	**–**	**–**	**n/a**
Derivative financial instruments	**50,562**	**30,753**	**19,809**	**–**	**Interest rate, FX, equity**
Trading liabilities(2)	**456**	**456**	**–**	**–**	**n/a**
Pension and other benefit liabilities	**1,665**	**–**	**1,665**	**–**	**Interest rate, credit spread, equity**
Liabilities not subject to market risk(3)	**227,982**	**–**	**–**	**227,982**	**n/a**
Total liabilities	**$1,294,448**	**$ 72,519**	**$947,554**	**$274,375**	

(1) Includes goodwill, intangibles, other assets and securities purchased under resale agreements and securities borrowed.
(2) Gold and silver certificates and bullion included in other liabilities.
(3) Includes obligations related to securities sold under repurchase agreements and securities lent and other liabilities.

As at October 31, 2022		Market risk measure			
($ millions)	Consolidated Statement of Financial Position	Trading risk	Non-trading risk	Not subject to market risk	Primary risk sensitivity of non-trading risk
Precious metals	$ 543	$ 543	$ –	$ –	n/a
Trading assets	113,154	113,117	37	–	Interest rate, FX
Derivative financial instruments	55,699	43,436	12,263	–	Interest rate, FX, equity
Investment securities	110,008	–	110,008	–	Interest rate, FX, equity
Loans	744,987	–	744,987	–	Interest rate, FX
Assets not subject to market risk(1)	325,027	–	–	325,027	n/a
Total assets	$1,349,418	$157,096	$867,295	$325,027	
Deposits	$ 916,181	$ –	$869,219	$ 46,962	Interest rate, FX, equity
Financial instruments designated at fair value through profit or loss	22,421	–	22,421	–	Interest rate, equity
Obligations related to securities sold short	40,449	40,449	–	–	n/a
Derivative financial instruments	65,900	40,685	25,215	–	Interest rate, FX, equity
Trading liabilities(2)	372	372	–	–	n/a
Pension and other benefit liabilities	1,557	–	1,557	–	Interest rate, credit spread, equity
Liabilities not subject to market risk(3)	227,789	–	–	227,789	n/a
Total liabilities	$1,274,669	$ 81,506	$918,412	$274,751	

(1) Includes goodwill, intangibles, other assets and securities purchased under resale agreements and securities borrowed.
(2) Gold and silver certificates and bullion included in other liabilities.
(3) Includes obligations related to securities sold under repurchase agreements and securities lent and other liabilities.

Liquidity risk

Effective liquidity risk management is essential to maintain the confidence of depositors and counterparties, manage the Bank's cost of funds and to support core business activities, even under adverse circumstances.

Liquidity risk is managed within a framework of policies and limits that are approved by the Board of Directors, as outlined in Note 18 to the Condensed Interim Consolidated Financial Statements and in Note 35 to the Consolidated Financial Statements in the Bank's 2022 Annual Report.

Liquid assets are a key component of this framework. The determination of the appropriate levels for liquid asset portfolios is based on the amount of liquidity the Bank might need to fund expected cash flows in the normal course of business, as well as what might be required in periods of stress to meet cash outflows. Stress events include periods when there are disruptions in the capital markets or events which may impair the Bank's access to funding markets or liquidity. The Bank uses stress testing to assess the impact of stress events and to assess the amount of liquid assets that would be required in various stress scenarios.

Liquid assets

Liquid assets are a key component of liquidity management and the Bank holds these types of assets in sufficient quantity to meet potential needs.

Liquid assets can be used to generate cash either through sale, repurchase transactions or other transactions where these assets can be used as collateral to generate cash, or by allowing the asset to mature. Liquid assets include unrestricted deposits with central banks, deposits with financial institutions, call and other short-term loans, marketable securities, precious metals and securities received as collateral from securities financing and derivative transactions.

Marketable securities are securities traded in active markets, which can be converted to cash within a timeframe that is in accordance with the Bank's liquidity management framework. Assets are assessed considering a number of factors, including the expected time it would take to convert them to cash.

Marketable securities included in liquid assets are comprised of securities specifically held as a liquidity buffer or for asset/liability management purposes, trading securities primarily held by Global Banking and Markets, and collateral received from securities financing and derivative transactions.

The Bank maintains large holdings of unencumbered liquid assets to support its operations. These assets generally can be sold or pledged to meet the Bank's obligations. As at April 30, 2023 unencumbered liquid assets were $288 billion (October 31, 2022 – $260 billion). Securities including National Housing Act (NHA) mortgage-backed securities, comprised 79% of liquid assets (October 31, 2022 – 77%). Other unencumbered liquid assets, comprising cash and deposits with central banks, deposits with financial institutions and precious metals were 21% (October 31, 2022 – 23%). The increase in total unencumbered liquid assets was mainly attributable to an increase in Canadian and foreign government securities, NHA mortgage-backed securities, cash and deposits with central banks and precious metals, partly offset by a decrease in other liquid securities and deposits with financial institutions.

The carrying values outlined in the liquid asset table are consistent with the carrying values in the Bank's Consolidated Statement of Financial Position as at April 30, 2023. The liquidity value of the portfolio will vary under different stress events as different assumptions are used for the stress scenarios.

The Bank's liquid asset pool is summarized in the following table:

T24 Liquid asset pool

	As at April 30, 2023						
				Encumbered liquid assets		Unencumbered liquid assets	
($ millions)	**Bank-owned liquid assets**	**Securities received as collateral from securities financing and derivative transactions**	**Total liquid assets**	**Pledged as collateral**	**Other[(1)]**	**Available as collateral**	**Other**
Cash and deposits with central banks	**$ 57,999**	**$ –**	**$ 57,999**	**$ –**	**$5,687**	**$ 52,312**	**$–**
Deposits with financial institutions	**5,894**	**–**	**5,894**	**–**	**67**	**5,827**	**–**
Precious metals	**1,191**	**–**	**1,191**	**–**	**–**	**1,191**	**–**
Securities:							
Canadian government obligations	**54,567**	**36,491**	**91,058**	**31,782**	**–**	**59,276**	**–**
Foreign government obligations	**105,834**	**124,435**	**230,269**	**112,327**	**–**	**117,942**	**–**
Other securities	**58,735**	**92,429**	**151,164**	**124,839**	**–**	**26,325**	**–**
Loans:							
NHA mortgage-backed securities	**33,540**	**–**	**33,540**	**8,415**	**–**	**25,125**	**–**
Total	**$317,760**	**$253,355**	**$571,115**	**$277,363**	**$5,754**	**$287,998**	**$–**

	As at October 31, 2022						
				Encumbered liquid assets		Unencumbered liquid assets	
($ millions)	Bank-owned liquid assets	Securities received as collateral from securities financing and derivative transactions	Total liquid assets	Pledged as collateral	Other[(1)]	Available as collateral	Other
Cash and deposits with central banks	$ 56,720	$ –	$ 56,720	$ –	$5,254	$ 51,466	$–
Deposits with financial institutions	9,175	–	9,175	–	400	8,775	–
Precious metals	543	–	543	–	–	543	–
Securities:							
Canadian government obligations	51,114	29,484	80,598	40,290	–	40,308	–
Foreign government obligations	98,673	108,134	206,807	104,052	–	102,755	–
Other securities	60,783	90,675	151,458	115,995	–	35,463	–
Loans:							
NHA mortgage-backed securities	29,409	–	29,409	8,571	–	20,838	–
Total	$306,417	$228,293	$534,710	$268,908	$5,654	$260,148	$–

(1) Assets which are restricted from being used to secure funding for legal or other reasons.

A summary of total unencumbered liquid assets held by the parent bank and its branches, and domestic and foreign subsidiaries, is presented below:

T25 Total unencumbered liquid assets held by the parent bank and its branches, and domestic and foreign subsidiaries

	As at	
($ millions)	**April 30 2023**	October 31 2022
The Bank of Nova Scotia (Parent)	**$213,299**	$184,848
Bank domestic subsidiaries	**35,842**	26,912
Bank foreign subsidiaries	**38,857**	48,388
Total	**$287,998**	$260,148

The Bank's liquidity pool is held across major currencies, mostly comprised of Canadian and U.S. dollar holdings. As shown above, the vast majority (87%) of liquid assets are held by the Bank's corporate office, branches of the Bank, and Canadian subsidiaries of the Bank. To the extent a liquidity reserve held in a foreign subsidiary of the Bank is required for regulatory purposes, it is assumed to be unavailable to the rest of the Group. Other liquid assets held by a foreign subsidiary are assumed to be available only in limited circumstances. The Bank monitors and ensures compliance in relation to minimum levels of liquidity required and assets held within each entity, and/or jurisdiction.

Encumbered assets

In the course of the Bank's day-to-day activities, securities and other assets are pledged to secure an obligation, participate in clearing or settlement systems, or operate in a foreign jurisdiction. Securities are also pledged under repurchase agreements. A summary of encumbered and unencumbered assets is presented below:

T26 Asset Encumbrance

	As at April 30, 2023						
				Encumbered assets		Unencumbered assets	
($ millions)	**Bank-owned assets**	**Securities received as collateral from securities financing and derivative transactions**	**Total assets**	**Pledged as collateral**	**Other[1]**	**Available as collateral[2]**	**Other[3]**
Cash and deposits with central banks	**$ 57,999**	**$ –**	**$ 57,999**	**$ –**	**$ 5,687**	**$ 52,312**	**$ –**
Deposits with financial institutions	**5,894**	**–**	**5,894**	**–**	**67**	**5,827**	**–**
Precious metals	**1,191**	**–**	**1,191**	**–**	**–**	**1,191**	**–**
Liquid securities:							
Canadian government obligations	**54,567**	**36,491**	**91,058**	**31,782**	**–**	**59,276**	**–**
Foreign government obligations	**105,834**	**124,435**	**230,269**	**112,327**	**–**	**117,942**	**–**
Other liquid securities	**58,735**	**92,429**	**151,164**	**124,839**	**–**	**26,325**	**–**
Other securities	**3,019**	**8,603**	**11,622**	**5,711**	**–**	**–**	**5,911**
Loans classified as liquid assets:							
NHA mortgage-backed securities	**33,540**	**–**	**33,540**	**8,415**	**–**	**25,125**	**–**
Other loans	**737,438**	**–**	**737,438**	**4,728**	**79,699**	**12,451**	**640,560**
Other financial assets[4]	**256,243**	**(170,982)**	**85,261**	**13,355**	**–**	**–**	**71,906**
Non-financial assets	**58,738**	**–**	**58,738**	**–**	**–**	**–**	**58,738**
Total	**$1,373,198**	**$ 90,976**	**$1,464,174**	**$301,157**	**$85,453**	**$300,449**	**$777,115**

	As at October 31, 2022						
				Encumbered assets		Unencumbered assets	
($ millions)	Bank-owned assets	Securities received as collateral from securities financing and derivative transactions	Total assets	Pledged as collateral	Other[1]	Available as collateral[2]	Other[3]
Cash and deposits with central banks	$ 56,720	$ –	$ 56,720	$ –	$ 5,254	$ 51,466	$ –
Deposits with financial institutions	9,175	–	9,175	–	400	8,775	–
Precious metals	543	–	543	–	–	543	–
Liquid securities:							
Canadian government obligations	51,114	29,484	80,598	40,290	–	40,308	–
Foreign government obligations	98,673	108,134	206,807	104,052	–	102,755	–
Other liquid securities	60,783	90,675	151,458	115,995	–	35,463	–
Other securities	2,985	11,376	14,361	3,611	–	–	10,750
Loans classified as liquid assets:							
NHA mortgage-backed securities	29,409	–	29,409	8,571	–	20,838	–
Other loans	723,389	–	723,389	3,658	77,122	11,657	630,952
Other financial assets[4]	254,935	(160,410)	94,525	18,450	–	–	76,075
Non-financial assets	61,692	–	61,692	–	–	–	61,692
Total	$1,349,418	$ 79,259	$1,428,677	$294,627	$82,776	$271,805	$779,469

(1) Assets which are restricted from being used to secure funding for legal or other reasons.
(2) Assets that are readily available in the normal course of business to secure funding or meet collateral needs including central bank borrowing immediately available.
(3) Other unencumbered assets are not subject to any restrictions on their use to secure funding or as collateral but the Bank would not consider them to be readily available. These include loans, a portion of which may be used to access central bank facilities outside of the normal course or to raise secured funding through the Bank's secured funding programs.
(4) Securities received as collateral against other financial assets are included within liquid securities and other securities.

As at April 30, 2023 total encumbered assets of the Bank were $387 billion (October 31, 2022 – $377 billion). Of the remaining $1,078 billion (October 31, 2022 – $1,051 billion) of unencumbered assets, $300 billion (October 31, 2022 – $272 billion) are considered readily available in the normal course of business to secure funding or meet collateral needs as detailed above.

In some over-the-counter derivative contracts, the Bank would be required to post additional collateral or receive less collateral in the event its credit rating was downgraded. The Bank maintains access to sufficient collateral to meet these obligations in the event of a downgrade of its ratings by one or more of the rating agencies. As at April 30, 2023 the potential adverse impact on derivatives collateral that would result from a one-notch or two-notch downgrade of the Bank's rating below its lowest current rating was $46 million or $353 million, respectively.

Encumbered liquid assets are not considered to be available for liquidity management purposes. Liquid assets which are used to hedge derivative positions in trading books or for hedging purposes are considered to be available for liquidity management provided they meet the criteria discussed in liquid assets above.

Liquidity coverage ratio

The Liquidity Coverage Ratio (LCR) measure is based on a 30-day liquidity stress scenario, with assumptions defined in the Liquidity Adequacy Requirements (LAR) Guideline issued by the Office of the Superintendent of Financial Institutions (OSFI). The LCR is calculated as the ratio of high quality liquid assets (HQLA) to net cash outflows. The Bank is subject to a regulatory minimum LCR of 100%.

HQLA are defined in the LAR Guideline and are grouped into three main categories with varying haircuts applied to arrive at the amount included in the total weighted value in the table that follows.

The total weighted values for net cash outflows for the next 30 days are derived by applying the assumptions specified in the LAR Guideline to specific items, including loans, deposits, maturing debt, derivative transactions and commitments to extend credit.

The following table presents the Bank's LCR for the quarter ended April 30, 2023, based on the average daily positions in the quarter:

T27 Bank's average LCR(1)

For the quarter ended April 30, 2023 *($ millions)*(2)	Total unweighted value (Average)(3)	Total weighted value (Average)(4)
High-quality liquid assets		
Total high-quality liquid assets (HQLA)	*	**$252,277**
Cash outflows		
Retail deposits and deposits from small business customers, of which:	$234,899	$ 21,507
Stable deposits	91,726	2,961
Less stable deposits	143,173	18,546
Unsecured wholesale funding, of which:	305,796	140,634
Operational deposits (all counterparties) and deposits in networks of cooperative banks	107,853	26,030
Non-operational deposits (all counterparties)	166,736	83,397
Unsecured debt	31,207	31,207
Secured wholesale funding	*	43,778
Additional requirements, of which:	282,436	55,526
Outflows related to derivative exposures and other collateral requirements	45,252	23,582
Outflows related to loss of funding on debt products	6,141	6,141
Credit and liquidity facilities	231,043	25,803
Other contractual funding obligations	5,679	5,658
Other contingent funding obligations(5)	586,086	7,369
Total cash outflows	*	**$274,472**
Cash inflows		
Secured lending (e.g. reverse repos)	$251,322	$ 41,886
Inflows from fully performing exposures	32,553	19,633
Other cash inflows	20,675	20,675
Total cash inflows	**$304,550**	**$ 82,194**
		Total adjusted value(6)
Total HQLA	*	**$252,277**
Total net cash outflows	*	**$192,278**
Liquidity coverage ratio (%)	*	**131%**

For the quarter ended January 31, 2023 *($ millions)*		Total adjusted value(6)
Total HQLA	*	$230,287
Total net cash outflows	*	$188,170
Liquidity coverage ratio (%)	*	122%

* Disclosure is not required under regulatory guideline.
(1) This measure has been disclosed in this document in accordance with OSFI Guideline – Public Disclosure Requirements for Domestic Systemically Important Banks on Liquidity Coverage Ratio (April 2015).
(2) Based on the average of daily positions of the 61 business days in the quarter.
(3) Unweighted values represent outstanding balances maturing or callable within the next 30 days.
(4) Weighted values represent balances calculated after the application of HQLA haircuts or inflow and outflow rates, as prescribed by the OSFI LAR Guideline.
(5) Total unweighted value includes uncommitted credit and liquidity facilities, guarantees and letters of credit, outstanding debt securities with remaining maturity greater than 30 days, and other contractual cash outflows.
(6) Total adjusted value represents balances calculated after the application of both haircuts and inflow and outflow rates and any applicable caps.

HQLA is substantially comprised of Level 1 assets (as defined in the LAR Guideline), such as cash, deposits with central banks available to the Bank in times of stress, and highly rated securities issued or guaranteed by governments, central banks and supranational entities.

The increase in the Bank's average LCR for the quarter ended April 30, 2023 versus the average of the previous quarter was attributable to growth in deposits and unsecured wholesale funding, partly offset by growth in loans. The Bank monitors its significant currency exposures, Canadian and U.S. dollars, in accordance with its liquidity risk management framework and risk appetite.

Net stable funding ratio

The Net Stable Funding Ratio (NSFR) requires institutions to maintain a stable funding profile in relation to the composition of their assets and off-balance sheet exposures. It is calculated as the ratio of available stable funding (ASF) to required stable funding (RSF), with assumptions defined in the OSFI LAR Guideline. The Bank is subject to a regulatory minimum NSFR of 100%.

ASF is defined as the portion of capital and liabilities expected to be reliable over the time horizons considered by the NSFR. RSF is a function of the liquidity characteristics and residual maturities of the various assets held by the Bank as well as those of its off-balance sheet exposures.

The total weighted values for ASF and RSF included in the table that follows are derived by applying the assumptions specified in the LAR Guideline to balance sheet items, including capital instruments, wholesale funding, deposits, loans and mortgages, securities, derivatives and commitments to extend credit.

The following table presents the Bank's NSFR as at April 30, 2023:

T28 Bank's NSFR[(1)]

As at April 30, 2023 *($ millions)*	Unweighted Value by Residual Maturity				Weighted value[(3)]
	No maturity[(2)]	< 6 months	6-12 months	≥ 1 year	
Available Stable Funding (ASF) Item					
Capital:	$ 87,352	$ –	$ –	$ –	$ 87,352
Regulatory capital	87,352	–	–	–	87,352
Other capital instruments	–	–	–	–	–
Retail deposits and deposits from small business customers:	199,299	73,545	32,384	45,563	321,375
Stable deposits	83,612	18,981	10,565	11,265	118,764
Less stable deposits	115,687	54,564	21,819	34,298	202,611
Wholesale funding:	182,450	313,762	65,158	127,135	311,019
Operational deposits	94,885	–	–	–	47,443
Other wholesale funding	87,565	313,762	65,158	127,135	263,576
Liabilities with matching interdependent assets[(4)]	–	3,605	1,501	17,866	–
Other liabilities:	63,767		105,799		23,255
NSFR derivative liabilities			8,923		
All other liabilities and equity not included in the above categories	63,767	70,370	6,501	20,005	23,255
Total ASF					**$743,001**
Required Stable Funding (RSF) Item					
Total NSFR high-quality liquid assets (HQLA)					$ 14,322
Deposits held at other financial institutions for operational purposes	$ –	$ 247	$ –	$ –	$ 123
Performing loans and securities:	100,358	214,571	57,287	522,362	576,381
Performing loans to financial institutions secured by Level 1 HQLA	25	48,238	1,375	–	3,577
Performing loans to financial institutions secured by non-Level 1 HQLA and unsecured performing loans to financial institutions	2,625	65,073	12,027	11,123	27,340
Performing loans to non-financial corporate clients, loans to retail and small business customers, and loans to sovereigns, central banks and PSEs, of which:	57,621	85,154	31,101	230,705	297,449
With a risk weight of less than or equal to 35% under the Basel II standardised approach for credit risk	–	367	937	1,874	1,870
Performing residential mortgages, of which:	21,733	14,886	12,011	273,973	225,841
With a risk weight of less than or equal to 35% under the Basel II standardised approach for credit risk	21,733	14,624	11,687	260,031	213,697
Securities that are not in default and do not qualify as HQLA, including exchange-traded equities	18,354	1,220	773	6,561	22,174
Assets with matching interdependent liabilities[(4)]	–	3,605	1,501	17,866	–
Other assets:	3,416		156,177		56,530
Physical traded commodities, including gold	3,416				2,903
Assets posted as initial margin for derivative contracts and contributions to default funds of CCPs			10,166		8,641
NSFR derivative assets			5,020		–
NSFR derivative liabilities before deduction of variation margin posted			25,964		1,298
All other assets not included in the above categories	–	71,344	–	43,683	43,688
Off-balance sheet items			498,820		19,498
Total RSF					**$666,854**
Net Stable Funding Ratio (%)					**111%**

As at January 31, 2023 *($ millions)*	Weighted value[(3)]
Total ASF	$730,120
Total RSF	668,639
Net stable funding ratio (%)	109%

(1) This measure has been disclosed in this document in accordance with OSFI Guideline – Net Stable Funding Ratio Disclosure Requirements (January 2021).
(2) Items in the "no maturity" time bucket do not have a stated maturity. These may include, but are not limited to, items such as capital with perpetual maturity, non-maturity deposits, short positions, open maturity positions, non-HQLA equities, and physical traded commodities.
(3) Weighted values represent balances calculated after the application of ASF and RSF rates, as prescribed by the OSFI LAR Guideline.
(4) Interdependent assets and liabilities are primarily comprised of transactions related to the Canada Mortgage Bond program.

Available stable funding is primarily provided by the Bank's large pool of retail, small business and corporate customer deposits; secured and unsecured wholesale funding and capital. Required stable funding primarily originates from the Bank's loan and mortgage portfolio, securities holdings, off-balance sheet items and other assets.

The increase in the Bank's NSFR as at April 30, 2023 versus the previous quarter was attributable to higher ASF from retail deposits and deposits from small business customers.

Regulatory liquidity developments

OSFI's changes to the LAR Guideline were effective April 2023 and primarily comprise of enhancements to the Net Cumulative Cash Flow supervisory tool. Modifications are focused on the introduction of cash outflow factors for undrawn loan commitments and changes to cash inflow and outflow factors for certain loan and deposit products.

Funding

The Bank ensures that its funding sources are well diversified. Funding concentrations are regularly monitored and analyzed by type. The sources of funding are capital, deposits from retail and commercial clients sourced through the Canadian and international branch network, deposits from financial institutions as well as wholesale debt issuances.

Capital and personal deposits are key components of the Bank's core funding and these amounted to $377 billion as at April 30, 2023 (October 31, 2022 – $357 billion[(1)]). The increase since October 31, 2022 is due primarily to growth in personal deposits and common equity. A portion of commercial deposits, particularly those of an operating or relationship nature, are also considered part of the Bank's core funding. Furthermore, core funding is augmented by longer-term wholesale debt issuances (original maturity of 1 year or more) of $218 billion (October 31, 2022 – $204 billion). Longer-term wholesale debt issuances include senior notes, mortgage securitizations, asset-backed securities and covered bonds.

The Bank operates in many different currencies and countries. From a funding perspective, the most significant currencies are Canadian and U.S. dollars. With respect to the Bank's operations outside Canada, there are different funding strategies depending on the nature of the activities in each country. For those countries where the Bank operates a branch banking subsidiary, the strategy is for the subsidiary to be substantially self-funding in its local market. For other subsidiaries or branches outside Canada where local deposit gathering capability is not sufficient, funding is provided through the wholesale funding activities of the Bank.

From an overall funding perspective, the Bank's objective is to achieve an appropriate balance between the cost and the stability of funding. Diversification of funding sources is a key element of the funding strategy.

The Bank's wholesale debt diversification strategy is primarily executed via the Bank's main wholesale funding centres, located in Toronto, New York, London and Singapore. The majority of these funds are sourced in Canadian and U.S. dollars. Where required, these funds are swapped to fund assets in different currencies. The funding strategy deployed by wholesale funding centres and the management of associated risks, such as geographic and currency risk, are managed centrally within the framework of policies and limits that are approved by the Board of Directors.

In the normal course, the Bank uses a mix of unsecured and secured wholesale funding instruments across a variety of markets. The choice of instruments and markets is based on a number of factors, including relative cost, market capacity and diversification of funding. Market conditions can change over time, impacting cost and capacity in particular markets or instruments. Changing market conditions can include periods of stress where the availability of funding in particular markets or instruments is constrained. In these circumstances, the Bank would increase its focus on sources of funding in functioning markets and secured funding instruments. Should a period of extreme stress exist such that all wholesale funding sources are constrained, the Bank maintains a pool of liquid assets to mitigate its liquidity risk. This pool includes cash, deposits with central banks and securities.

In Canada, the Bank raises short and longer-term wholesale debt through the issuance of senior unsecured notes. Additional longer-term wholesale debt may be generated through the Bank's Canadian Debt and Equity Shelf, the securitization of Canadian insured residential mortgages through CMHC programs (such as Canada Mortgage Bonds), uninsured residential mortgages through the Bank's Covered Bond Program, retail credit card receivables through the Trillium Credit Card Trust II program, retail indirect auto loan receivables through the Securitized Term Auto Receivables Trust program and unsecured personal lines of credit receivables through the Halifax Receivables Trust program. CMHC securitization programs, while included in the Bank's view of wholesale debt issuance, do not historically entail the run-off risk that can be experienced in funding raised from capital markets.

Outside of Canada, short-term wholesale debt may be raised through the issuance of negotiable certificates of deposit in the United States, Hong Kong, the United Kingdom and Australia and the issuance of commercial paper in the United States. The Bank operates longer-term wholesale debt issuance registered programs in the United States, such as its SEC Registered Debt and Equity Shelf, and non-registered programs, such as the securitization of retail indirect auto loan receivables through the Securitized Term Auto Receivables Trust program and retail credit card receivables through the Trillium Credit Card Trust II program. The Bank may issue benchmark offerings via its Covered Bond Program (listed with the U.K. Listing Authority and the Swiss Stock Exchange), in Europe, the United Kingdom, the United States, Australia and Switzerland. The Bank also raises longer-term funding across a variety of currencies through its Australian Medium Term Note Programme, European Medium Term Note Programme (listed with the U.K. Listing Authority and the Swiss Stock Exchange) and Singapore Medium Term Note Programme (listed with the Singapore Exchange and the Taiwan Exchange).

The Department of Finance's bail-in regulations under the Canada Deposit Insurance Corporation (CDIC) Act and the Bank Act, became effective September 23, 2018. Senior unsecured debt issued by the Bank on or after September 23, 2018, that has an original term greater than 400 days and is marketable, subject to certain exceptions, is subject to the Canadian Bank Recapitalization (Bail-in) regime. Under the Bail-in regime, in circumstances when the Superintendent of Financial Institutions has determined that a bank may no longer be viable, the Governor in Council may, upon a recommendation of the Minister of Finance that they are of the opinion that it is in the public interest to do so, grant an order directing the CDIC to convert all or a portion of certain shares and liabilities of that bank into common shares. As at April 30, 2023, issued and outstanding liabilities of $77 billion (October 31, 2022 – $73 billion) were subject to conversion under the bail-in regime.

(1) Prior period amount has been restated to conform with current period presentation.

The table below provides the remaining contractual maturities of funding raised through wholesale funding sources. In the Consolidated Statement of Financial Position, these liabilities are primarily included in Business and Government Deposits.

Wholesale funding sources

T29 Wholesale funding[(1)]

	As at April 30, 2023									
($ millions)	Less than 1 month	1-3 months	3-6 months	6-9 months	9-12 months	Sub-Total ≤ 1 Year	1-2 years	2-5 years	>5 years	Total
Deposit by banks[(2)]	$ 2,743	$ 1,719	$ 670	$ 68	$ 11	$ 5,211	$ 905	$ –	$ –	$ 6,116
Bearer notes, commercial paper and certificate of deposits	12,583	23,808	26,642	20,428	9,543	93,004	2,078	274	79	95,435
Asset-backed commercial paper[(3)]	4,145	4,200	1,627	–	–	9,972	–	–	–	9,972
Senior notes[(4)(5)]	391	1,786	5,343	3,282	4,090	14,892	3,193	8,591	11,502	38,178
Bail-inable notes[(5)]	5,273	407	5,377	618	9,346	21,021	16,075	24,404	15,179	76,679
Asset-backed securities	–	–	589	–	2	591	8	1,361	847	2,807
Covered bonds	–	–	2,612	1,866	–	4,478	9,273	30,676	5,475	49,902
Mortgage securitization[(6)]	–	1,048	2,559	953	548	5,108	5,114	7,972	4,359	22,553
Subordinated debt[(7)]	–	–	–	–	3	3	44	2,222	8,380	10,649
Total wholesale funding sources	$25,135	$32,968	$45,419	$27,215	$23,543	$154,280	$36,690	$75,500	$45,821	$312,291
Of Which:										
Unsecured funding	$20,989	$27,720	$38,032	$24,396	$22,994	$134,131	$22,295	$35,491	$35,139	$227,056
Secured funding	4,146	5,248	7,387	2,819	549	20,149	14,395	40,009	10,682	85,235

	As at October 31, 2022									
($ millions)	Less than 1 month	1-3 months	3-6 months	6-9 months	9-12 months	Sub-Total ≤ 1 Year	1-2 years	2-5 years	>5 years	Total
Deposit by banks[(2)]	$ 2,182	$ 799	$ 319	$ 600	$ 298	$ 4,198	$ 128	$ 12	$ –	$ 4,338
Bearer notes, commercial paper and certificate of deposits	8,739	18,053	29,042	17,568	9,958	83,360	824	416	50	84,650
Asset-backed commercial paper[(3)]	1,767	5,418	2,337	68	–	9,590	–	–	–	9,590
Senior notes[(4)(5)]	1,998	1,605	8,335	1,925	5,161	19,024	2,720	6,048	11,003	38,795
Bail-inable notes[(5)]	1,311	682	1,420	5,500	5,408	14,321	13,678	29,887	14,630	72,516
Asset-backed securities	–	1	–	1	592	594	3	648	103	1,348
Covered bonds	–	859	3,919	–	2,356	7,134	4,375	26,973	7,423	45,905
Mortgage securitization[(6)]	–	1,721	806	1,048	2,562	6,137	4,069	8,854	4,778	23,838
Subordinated debt[(7)]	–	–	–	–	–	–	3	2,108	8,566	10,677
Total wholesale funding sources	$15,997	$29,138	$46,178	$26,710	$26,335	$144,358	$25,800	$74,946	$46,553	$291,657
Of Which:										
Unsecured funding	$14,231	$21,138	$39,117	$25,592	$20,825	$120,903	$17,353	$38,471	$34,248	$210,975
Secured funding	1,766	8,000	7,061	1,118	5,510	23,455	8,447	36,475	12,305	80,682

(1) Wholesale funding sources exclude obligations related to securities sold under repurchase agreements and bankers' acceptances, which are disclosed in the contractual maturities table below. Amounts are based on remaining term to maturity.
(2) Only includes commercial bank deposits.
(3) Wholesale funding sources also exclude asset-backed commercial paper (ABCP) issued by certain ABCP conduits that are not consolidated for financial reporting purposes.
(4) Not subject to bail-in.
(5) Includes structured notes issued to institutional investors.
(6) Represents residential mortgages funded through Canadian Federal Government agency sponsored programs. Funding accessed through such programs does not impact the funding capacity of the Bank in its own name.
(7) Although subordinated debentures are a component of regulatory capital, they are included in this table in accordance with EDTF recommended disclosures.

Wholesale funding generally bears a higher risk of run-off in a stressed environment than other sources of funding. The Bank mitigates this risk through funding diversification, ongoing engagement with investors and by maintaining a large holding of unencumbered liquid assets. Unencumbered liquid assets of $288 billion as at April 30, 2023 (October 31, 2022 – $260 billion) were well in excess of wholesale funding sources which mature in the next twelve months.

Contractual maturities

The table below provides the maturity of assets and liabilities as well as the off-balance sheet commitments as at April 30, 2023, based on the contractual maturity date. From a liquidity risk perspective the Bank considers factors other than contractual maturity in the assessment of liquid assets or in determining expected future cash flows. In particular, for securities with a fixed maturity date, the ability and time horizon to raise cash from these securities is more relevant to liquidity management than contractual maturity. For other assets and deposits the Bank uses assumptions about rollover rates to assess liquidity risk for normal course and stress scenarios. Similarly, the Bank uses assumptions to assess the potential drawdown of credit commitments in various scenarios.

T30 Contractual maturities

	As at April 30, 2023									
($ millions)	Less than one month	One to three months	Three to six months	Six to nine months	Nine to twelve months	One to two years	Two to five years	Over five years	No specific maturity	Total
Assets										
Cash and deposits with financial institutions and precious metals	$ 59,495	$ 241	$ 19	$ 19	$ 26	$ 143	$ 216	$ 180	$ 4,745	$ 65,084
Trading assets	3,220	7,812	6,412	1,751	4,165	6,709	18,482	17,978	48,166	114,695
Securities purchased under resale agreements and securities borrowed	164,928	11,226	7,482	685	119	–	–	244	–	184,684
Derivative financial instruments	2,463	3,537	3,175	3,274	1,973	6,648	11,270	12,385	–	44,725
Investment securities – FVOCI	4,752	5,606	11,968	3,146	6,138	9,414	27,283	15,672	2,580	86,559
Investment securities – amortized cost	158	1,728	832	980	735	2,135	4,982	16,727	–	28,277
Investment securities – FVTPL	–	–	–	–	–	–	–	–	1,759	1,759
Loans	68,627	46,393	35,397	33,638	32,722	112,975	321,591	54,992	57,733	764,068
Residential mortgages	3,242	10,262	11,342	9,986	10,239	54,906	209,696	42,457	1,430(1)	353,560
Personal loans	3,783	2,515	3,842	3,400	3,773	12,685	24,676	6,940	40,564	102,178
Credit cards	–	–	–	–	–	–	–	–	16,053	16,053
Business and government	61,602	33,616	20,213	20,252	18,710	45,384	87,219	5,595	5,422(2)	298,013
Allowance for credit losses	–	–	–	–	–	–	–	–	(5,736)	(5,736)
Customers' liabilities under acceptances	18,002	3,768	75	18	38	–	–	–	–	21,901
Other assets	–	–	–	–	–	–	–	–	61,446	61,446
Total assets	$321,645	$80,311	$65,360	$43,511	$45,916	$138,024	$383,824	$118,178	$176,429	$1,373,198
Liabilities and equity										
Deposits	$109,108	$67,734	$72,543	$57,737	$51,642	$ 62,246	$ 85,450	$ 25,593	$413,485	$ 945,538
Personal	16,527	14,257	15,495	16,319	16,232	21,061	15,287	452	168,021	283,651
Non-personal	92,581	53,477	57,048	41,418	35,410	41,185	70,163	25,141	245,464	661,887
Financial instruments designated at fair value through profit or loss	401	492	1,254	974	1,580	6,297	3,635	12,302	–	26,935
Acceptances	18,052	3,768	75	18	38	–	–	–	–	21,951
Obligations related to securities sold short	1,762	1,093	1,313	2,345	1,184	2,529	7,234	7,861	15,989	41,310
Derivative financial instruments	2,474	3,386	3,067	3,328	1,806	6,771	12,089	17,641	–	50,562
Obligations related to securities sold under repurchase agreements and securities lent	131,145	824	350	308	4	–	–	–	–	132,631
Subordinated debentures	–	–	–	–	–	35	1,915	6,834	–	8,784
Other liabilities	825	1,392	2,081	1,352	1,190	8,416	5,859	8,170	37,452	66,737
Total equity	–	–	–	–	–	–	–	–	78,750	78,750
Total liabilities and equity	$263,767	$78,689	$80,683	$66,062	$57,444	$ 86,294	$116,182	$ 78,401	$545,676	$1,373,198
Off-balance sheet commitments										
Credit commitments(3)	$ 4,918	$14,272	$20,133	$19,722	$15,769	$ 47,171	$138,083	$ 11,230	$ 7,167	$ 278,465
Financial guarantees(4)	–	–	–	–	–	–	–	–	48,250	48,250
Outsourcing obligations(5)	18	36	54	53	53	139	45	34	–	432

(1) Includes primarily impaired mortgages.
(2) Includes primarily overdrafts and impaired loans.
(3) Includes the undrawn component of committed credit and liquidity facilities.
(4) Includes outstanding balances of guarantees, standby letters of credit and commercial letters of credit which may expire undrawn.
(5) The Bank relies on outsourcing arrangements for certain support and/or business functions, including, but not limited to, computer operations and cheque and bill payment processing.

($ millions)	Less than one month	One to three months	Three to six months	Six to nine months	Nine to twelve months	One to two years	Two to five years	Over five years	No specific maturity	Total
	As at October 31, 2022									
Assets										
Cash and deposits with financial institutions and precious metals	$ 57,217	$ 481	$ 171	$ 94	$ 89	$ 298	$ 464	$ 390	$ 7,234	$ 66,438
Trading assets	2,228	5,501	6,338	4,073	2,519	8,652	15,791	19,323	48,729	113,154
Securities purchased under resale agreements and securities borrowed	132,383	28,000	13,781	997	152	–	–	–	–	175,313
Derivative financial instruments	5,227	5,797	4,166	2,749	2,653	7,386	14,538	13,183	–	55,699
Investment securities – FVOCI	3,886	6,929	4,983	3,574	10,347	8,466	29,274	13,809	3,442	84,710
Investment securities – amortized cost	19	746	314	1,945	854	2,113	4,957	12,662	–	23,610
Investment securities – FVTPL	–	–	–	–	–	–	54	8	1,626	1,688
Loans	61,748	39,627	33,765	37,342	32,941	95,758	339,211	49,828	54,767	744,987
Residential mortgages	2,523	5,132	8,614	14,293	10,995	42,088	227,488	37,498	648[(1)]	349,279
Personal loans	3,909	2,023	3,287	3,415	3,138	13,008	24,271	6,610	39,770	99,431
Credit cards	–	–	–	–	–	–	–	–	14,518	14,518
Business and government	55,316	32,472	21,864	19,634	18,808	40,662	87,452	5,720	5,179[(2)]	287,107
Allowance for credit losses	–	–	–	–	–	–	–	–	(5,348)	(5,348)
Customers' liabilities under acceptances	15,418	3,812	191	55	18	–	–	–	–	19,494
Other assets	–	–	–	–	–	–	–	–	64,325	64,325
Total assets	$278,126	$90,893	$63,709	$50,829	$49,573	$122,673	$404,289	$109,203	$180,123	$1,349,418
Liabilities and equity										
Deposits	$ 97,418	$63,589	$67,249	$48,001	$53,602	$ 43,075	$ 83,647	$ 28,645	$430,955	$ 916,181
Personal	12,910	12,478	14,358	12,931	12,872	13,870	13,361	639	172,473	265,892
Non-personal	84,508	51,111	52,891	35,070	40,730	29,205	70,286	28,006	258,482	650,289
Financial instruments designated at fair value through profit or loss	337	658	727	900	1,189	5,989	2,190	10,431	–	22,421
Acceptances	15,449	3,812	191	55	18	–	–	–	–	19,525
Obligations related to securities sold short	539	1,507	890	1,817	2,404	3,959	5,437	7,426	16,470	40,449
Derivative financial instruments	3,386	4,968	4,876	3,032	3,181	8,721	17,231	20,505	–	65,900
Obligations related to securities sold under repurchase agreements and securities lent	128,128	8,596	2,153	72	–	76	–	–	–	139,025
Subordinated debentures	–	–	–	–	–	–	1,943	6,526	–	8,469
Other liabilities	3,914	1,342	2,331	1,713	695	7,526	5,404	7,150	32,624	62,699
Total equity	–	–	–	–	–	–	–	–	74,749	74,749
Total liabilities and equity	$249,171	$84,472	$78,417	$55,590	$61,089	$ 69,346	$115,852	$ 80,683	$554,798	$1,349,418
Off-balance sheet commitments										
Credit commitments[(3)]	$ 8,531	$ 9,272	$19,662	$23,795	$20,971	$ 35,498	$126,074	$ 23,164	$ –	$ 266,967
Financial guarantees[(4)]	–	–	–	–	–	–	–	–	41,977	41,977
Outsourcing obligations[(5)]	18	36	53	53	53	208	61	35	–	517

(1) Includes primarily impaired mortgages.
(2) Includes primarily overdrafts and impaired loans.
(3) Includes the undrawn component of committed credit and liquidity facilities.
(4) Includes outstanding balances of guarantees, standby letters of credit and commercial letters of credit which may expire undrawn.
(5) The Bank relies on outsourcing arrangements for certain support and/or business functions, including, but not limited to, computer operations and cheque and bill payment processing.

Credit ratings

Credit ratings are one of the factors that impact the Bank's access to capital markets and the terms on which it can conduct derivatives, hedging transactions and borrow funds. The credit ratings and outlook that the rating agencies assign to the Bank are based on their own views and methodologies.

The Bank continues to have strong credit ratings and its deposits and legacy senior debt are rated AA by DBRS Morningstar, Aa2 by Moody's, A+ by Standard and Poor's (S&P), and AA by Fitch. The Bank's bail-inable senior debt is rated AA (low) by DBRS Morningstar, A2 by Moody's, AA- by Fitch and A- by S&P. As of April 30, 2023, all rating agencies have a Stable outlook on the Bank. There were no changes made to the Bank's credit ratings or outlooks during the quarter.

Capital Management

The Bank continues to manage its capital in accordance with the capital management framework as described on pages 54 to 67 of the Bank's 2022 Annual Report.

Effective this quarter, the Bank has adopted the Revised Basel III reforms in accordance with OSFI's revised Capital Adequacy Requirements Guideline, Leverage Ratio Requirements Guideline, and Pillar 3 Disclosures Guideline for D-SIBs. OSFI's requirements are substantially aligned with the BCBS' Revised Basel III reforms with some differences, primarily in residential real estate and qualifying revolving retail exposures, and with respect to an acceleration of the phase-in period of the aggregate capital output floor to 72.5% by 2026.

In addition, in December 2022 OSFI announced that the Domestic Stability Buffer (DSB) will increase to 3.0% of total risk-weighted assets (RWA), effective February 1, 2023, and has increased the DSB's range from 0% to 4.0%. OSFI's minimum regulatory capital ratio requirements, including the domestic systemically important bank (D-SIB) 1.0% surcharge and its Domestic Stability Buffer are: 11.0%, 12.5% and 14.5% for Common Equity Tier 1 (CET1), Tier 1 and Total capital ratios, respectively.

As at April 30, 2023, the Bank's Leverage and TLAC Leverage ratios no longer benefited from OSFI's temporary exclusion of central bank reserves from its leverage exposures measure, a Leverage ratio impact of approximately 20 basis points.

Revised Basel III reforms

The final Basel III reforms implemented this quarter primarily impact the calculation of risk-weighted assets and include:

- a revised standardized approach for credit risk, with increased granularity of prescribed risk weights for credit cards, mortgages and business loans;
- revisions to the internal ratings-based approach for credit risk with new requirements for internally developed model parameters under the Advanced Internal Ratings-Based Approach (AIRB), including scope restrictions which limit certain asset classes to only the Foundation Internal Ratings-Based (FIRB) approach;
- a revised standardized approach for operational risk, which builds on the existing standardized approach including the recognition of an institution's operational risk loss experience;
- revisions to the measurement of the Leverage ratio and a Leverage ratio buffer, which will take the form of a Tier 1 capital buffer set at 50% of a D-SIB's 1.0% risk-weighted surcharge capital buffer; and
- an aggregate output floor, which will ensure that banks' RWAs generated by internal models are not lower than 72.5% of RWAs as calculated by the Basel III framework's standardized approaches. There is an international phase-in period for the 72.5% aggregate capital output floor from 2023 until 2028, beginning at 65% for Canadian banks this quarter.

Internationally, adoption of the revised Basel III reforms is varied across jurisdictions. Current expectations are that many jurisdictions will implement no earlier than 2025. In addition, the revised credit valuation adjustment framework (CVA) and Fundamental Review of the Trading Book (FRTB) market risk requirements will be effective for the Bank in Q1 2024.

Regulatory capital and total loss absorbing capacity ratios

The Bank's various regulatory capital and total loss absorbing capacity measures consist of the following:

T31 Regulatory capital and total loss absorbing capacity ratios

	As at		
($ millions)	**April 30 2023**	January 31 2023	October 31 2022
	Revised Basel III	Basel III	Basel III
Common Equity Tier 1 capital[1][2]	**$ 55,520**	$ 54,138	$ 53,081
Tier 1 capital[1][2]	**63,688**	62,317	61,262
Total regulatory capital[1][2]	**73,197**	71,867	70,710
Total loss absorbing capacity (TLAC)[3]	**127,815**	131,433	126,565
Risk-weighted assets[1][2][4]	**$ 451,063**	$ 471,528	$ 462,448
Capital ratios (%)[1][2]:			
Common Equity Tier 1 capital ratio	**12.3**	11.5	11.5
Tier 1 capital ratio	**14.1**	13.2	13.2
Total capital ratio	**16.2**	15.2	15.3
Total loss absorbing capacity ratio[3]	**28.3**	27.9	27.4
Leverage[5]:			
Leverage exposures	**$1,530,107**	$1,468,559	$1,445,619
Leverage ratio (%)	**4.2**	4.2	4.2
Total loss absorbing capacity leverage ratio (%)[3]	**8.4**	8.9	8.8

(1) Regulatory ratios and amounts reported as at Q2 2023 are under Revised Basel III requirements and are not directly comparable to ratios and amounts reported in prior quarters.
(2) Q2 2023 regulatory capital ratios are based on Revised Basel III requirements as determined in accordance with OSFI Guideline – Capital Adequacy Requirements (February 2023). Prior period regulatory capital ratios were prepared in accordance with OSFI Guideline – Capital Adequacy Requirements (November 2018).
(3) This measure has been disclosed in this document in accordance with OSFI Guideline – Total Loss Absorbing Capacity (September 2018).
(4) As at April 30, 2023, CET1, Tier 1, Total Capital and TLAC RWA include a Basel III floor adjustment of $8.2 billion (as at January 31, 2023 and October 31, 2022, the Bank did not have a regulatory capital floor add-on to risk-weighted assets for CET1, Tier 1, Total Capital and TLAC RWA).
(5) Q2 2023 leverage ratios are based on Revised Basel III requirements as determined in accordance with OSFI Guideline – Leverage Requirements (February 2023). Prior period leverage ratios were prepared in accordance with OSFI Guideline – Leverage Requirements (November 2018).

The Bank's CET1 capital ratio was 12.3% as at April 30, 2023, an increase of approximately 80 basis points from the prior quarter. The ratio benefited from the adoption of OSFI's revised Basel III requirements, internal capital generation, net share issuances from the Bank's Shareholder Dividend and Share Purchase Plan and gains from the revaluation of FVOCI securities.

The Bank's Tier 1 capital ratio was 14.1% as at April 30, 2023, an increase of approximately 90 basis points from the prior quarter, due primarily to the above noted impacts to the CET1 ratio.

The Bank's Total capital ratio was 16.2% as at April 30, 2023, an increase of approximately 100 basis points from the prior quarter, mainly due to the above noted impacts to the Tier 1 capital ratio.

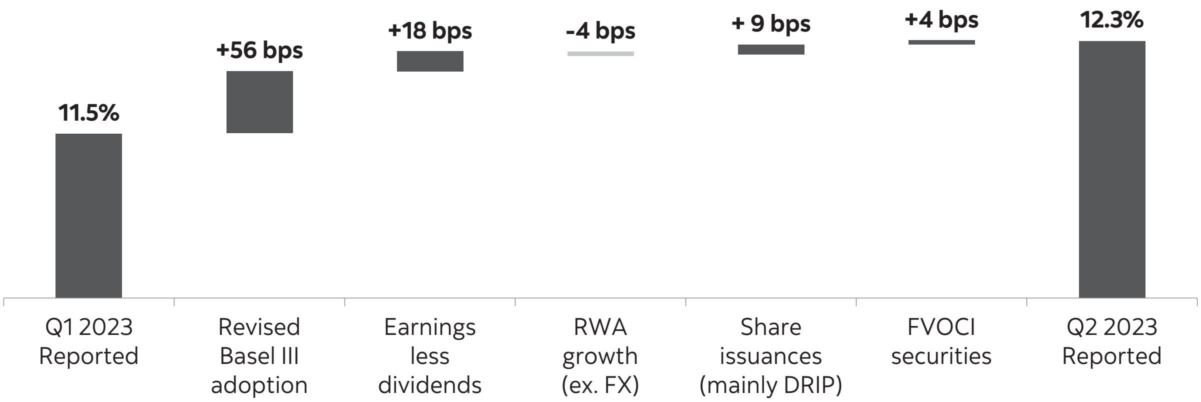
The Leverage ratio was 4.2% as at April 30, 2023 approximately in line with the prior quarter, as OSFI's reversal of its temporary exclusion of central bank reserves within its leverage exposures measure was partly offset by lower off balance sheet leverage exposures.

The TLAC ratio was 28.3% as at April 30, 2023, an increase of approximately 40 basis points from the prior quarter, mainly from the above noted impacts to the Total capital ratio.

The TLAC Leverage ratio was 8.4%, a decrease of approximately 50 basis points, due primarily to OSFI's reversal of its temporary exclusion of central bank reserves within its leverage exposure measure.

As at April 30, 2023, the CET1, Tier 1, Total capital, Leverage, TLAC and TLAC Leverage ratios were well above OSFI's minimum capital ratios.

Continuity of Common Equity Tier 1 ratio[(1)]



(1) This measure has been disclosed in this document in accordance with OSFI Guideline – Capital Adequacy Requirements (February 2023).

Changes in regulatory capital

The Bank's Common Equity Tier 1 capital was $55.5 billion, as at April 30, 2023, an increase of approximately $1.4 billion from the prior quarter, due primarily to internal capital generation of $802 million and higher net accumulated other comprehensive income of $633 million, net of changes from cashflow hedges and own credit risk, and net share issuances of $428 million mainly from the Shareholder Dividend and Share Purchase Plan, partly offset by higher regulatory capital deductions of $498 million.

Risk-weighted assets

CET1 risk-weighted assets (RWA) decreased during the quarter by $20.5 billion (or -4.3%) to $451.1 billion, due primarily to the adoption of OSFI's revised Basel III requirements, partly offset by growth in business lending, increased market risk RWA and the impacts from foreign currency translation.

Normal Course Issuer Bid

The Bank currently does not have an active normal course issuer bid and did not repurchase any common shares during the quarter ended April 30, 2023. The Bank's previous normal course issuer bid terminated on December 1, 2022. Under this program, the Bank repurchased and cancelled approximately 32.9 million common shares at a volume weighted average price of $87.28 per share for a total amount of $2,873 million. These repurchases were carried out prior to October 31, 2022.

Common dividend

The Board of Directors, at its meeting on May 23, 2023, approved a dividend of $1.06 per share, an increase of 3 cents. This quarterly dividend is payable to shareholders of record as of July 5, 2023, on July 27, 2023.

Shareholders of the Bank may elect to have their cash dividends reinvested in common shares of the Bank, in accordance with the Shareholder Dividend and Share Purchase Plan (the "Plan"). The Bank has determined that, in respect of the dividend declared on May 24, 2023, and to be paid on July 27, 2023, and until further announcement, the Bank will continue to issue the common shares from treasury with a discount of 2% to the average market price (as defined in the Plan). Prior to the dividend paid on April 26, 2023, common shares received by participants under the Plan were shares purchased from the open market at prevailing market prices.

Financial Instruments

Given the nature of the Bank's main business activities, financial instruments make up a substantial portion of the balance sheet and are integral to the Bank's business. There are various measures that reflect the level of risk associated with the Bank's portfolio of financial instruments. Further discussion of some of these risk measures is included in the Risk Management section. The methods of determining the fair value of financial instruments are detailed on page 166 of the Bank's 2022 Annual Report.

Management's judgment on valuation inputs is necessary when observable market data is not available, and in the selection of appropriate valuation models. Uncertainty in these estimates and judgments can affect fair value and financial results recorded. During the quarter, changes in the fair value of financial instruments reflect the current economic environment, industry and market conditions.

Many financial instruments are traded products such as derivatives, and are generally transacted under industry standard International Swaps and Derivatives Association (ISDA) master netting agreements with counterparties, which allow for a single net settlement of all transactions covered by that agreement in the event of a default or early termination of the transactions. ISDA agreements are frequently accompanied by an ISDA Credit Support Annex (CSA), the terms of which may vary according to each party's view of the other party's creditworthiness. CSAs can require one party to post initial margin at the onset of each transaction. CSAs also allow for variation margin to be called if total uncollateralized mark-to-market exposure exceeds an agreed upon threshold. Such variation margin provisions can be one-way (only one party will ever post collateral) or bi-lateral (either party may post depending upon which party is in-the-money). The CSA will also detail the types of collateral that are acceptable to each party, and the haircuts that will be applied against each collateral type. The terms of the ISDA master netting agreements and CSAs are taken into consideration in the calculation of counterparty credit risk exposure (see also page 84 of the Bank's 2022 Annual Report).

Total derivative notional amounts were $8,180 billion as at April 30, 2023, compared to $7,960 billion as at January 31, 2023 (October 31, 2022 – $7,597 billion). The quarterly increase was due primarily to the impact of foreign currency translation and the volume of interest rate contracts. The total notional amount of over-the-counter derivatives was $7,649 billion compared to $7,510 billion as at January 31, 2023 (October 31, 2022 – $7,290 billion), of which $5,697 billion was settled through central counterparties as at April 30, 2023 (January 31, 2023 – $5,625 billion; October 31, 2022 – $5,474 billion). The credit equivalent amount, after taking master netting arrangements into account, was $38.8 billion, compared to $38.0 billion at January 31, 2023. The increase was primarily attributable to the higher exposure of interest rate and other commodities contracts offset by a decrease in foreign exchange contracts.

Selected credit instruments

A complete discussion of selected credit instruments which markets regarded as higher risk during the financial crisis was provided on page 71 of the Bank's 2022 Annual Report. The Bank's net exposures have remained substantially unchanged from year end.

Off-Balance Sheet Arrangements

In the normal course of business, the Bank enters into contractual arrangements that are either consolidated or not required to be consolidated in its financial statements, but could have a current or future impact on the Bank's financial performance or financial condition. These arrangements can be classified into the following categories: structured entities, securitizations and guarantees and other commitments.

No material contractual obligations were entered into this quarter by the Bank with the structured entities that are not in the ordinary course of business. Processes for review and approval of these contractual arrangements are unchanged from last year. For a complete discussion of these types of arrangements, please refer to pages 67 to 70 of the Bank's 2022 Annual Report.

Structured entities

The Bank sponsors two Canadian multi-seller conduits that are not consolidated. These multi-seller conduits purchase high-quality financial assets and finance these assets through the issuance of highly rated commercial paper. Although the Bank has power over the relevant activities of the conduits, it has limited exposure to variability in returns, which results in the Bank not consolidating the two Canadian conduits.

A significant portion of the conduits' assets have been structured to receive credit enhancements from the sellers, including overcollateralization protection and cash reserve accounts. Each asset purchased by the conduits is supported by a backstop liquidity facility provided by the Bank in the form of a liquidity asset purchase agreement (LAPA). The primary purpose of the backstop liquidity facility is to provide an alternative source of financing in the event the conduits are unable to access the commercial paper market. Under the terms of the LAPA, in most cases, the Bank is not obliged to purchase defaulted assets.

The Bank's primary exposure to the Canadian-based conduits is the liquidity support provided, with total liquidity facilities of $6.7 billion as at April 30, 2023 (October 31, 2022 – $6.4 billion). As at April 30, 2023, total commercial paper outstanding for these conduits was $4.8 billion (October 31, 2022 – $3.8 billion). Funded assets purchased and held by these conduits as at April 30, 2023, as reflected at original cost, were $4.7 billion (October 31, 2022 – $3.8 billion). The fair value of these assets approximates original cost. There has been no significant change in the composition or risk profile of these conduits since October 31, 2022.

Securitizations

The Bank securitizes a portion of its Canadian personal and small business credit card receivables (receivables) through Trillium Credit Card Trust II (Trillium), a Bank-sponsored structured entity. Trillium issues senior and subordinated notes to investors. The proceeds of such issuances are used to purchase co-ownership interests in the receivables originated by the Bank. The sale of such co-ownership interests does not qualify for derecognition and therefore the receivables continue to be recognized on the Bank's Consolidated Statement of Financial Position. Recourse of the noteholders is limited to the purchased co-ownership interests. During the quarter, $1.5 billion receivables were securitized through Trillium (October 31, 2022 – nil). As at April 30, 2023, there were no outstanding Bank-held subordinated notes issued by Trillium.

Other off-balance sheet arrangements

Guarantees and other indirect commitments increased by 1.9% from October 31, 2022. The increase is due primarily to securities lending activities and undrawn commitments. Fees from guarantees and loan commitment arrangements recorded as credit fees in non-interest income were $145 million for the three months ended April 30, 2023, compared to $178 million in the previous quarter, and $162 million in the same period last year.

Regulatory Developments

The Bank continues to monitor and respond to global regulatory developments relating to a broad spectrum of topics, in order to ensure that control functions and business lines are responsive on a timely basis and business impacts, if any, are minimized. A high-level summary of some of the key regulatory developments that have the potential of impacting the Bank's operations is included in the Legal and compliance risk section in the Bank's 2022 Annual Report, as may be updated below.

Regulatory Initiatives Impacting Financial Services in Canada

On September 22, 2021, Bill 64, an Act to Modernize Legislative Provisions respecting the Protection of Personal Information (Quebec) received royal assent. The second series of amendments come into force on September 22, 2023, with the remainder coming into force in 2024. This law reforms the Act Respecting the Protection of Personal Information in the Private Sector (Quebec). It was modeled after the initial versions of the European Union's General Data Protection Regulation, and introduced key changes, including increased enforcement powers for the Commission d'accès à l'information, significant new monetary penalties for non-compliance, risk assessments for data transfers outside Quebec, mandatory breach notification and record keeping, and itemized express consent requirements. The Bank has established an enterprise-wide project under which it has engaged business stakeholders and key groups to consider the statute's application.

Bill C-27 (Consumer Privacy Protection Act, Personal Information and Data Protection Tribunal Act and Artificial Intelligence and Data Act) passed on second reading on April 24, 2023, and the Bill in its entirety has been referred to the Standing Committee on Industry and Technology. Bill C-27 is designed to modernize, and in certain respects reinforce, Canadian private sector privacy law by enhancing transparency and control over personal information held by businesses, and imposing new, potentially significant fines for non-compliance. It includes the Artificial Intelligence and Data Act (AIDA), the first law in Canada regulating the use of artificial intelligence systems. Its objective is to establish common requirements across Canada for the design, development and deployment of artificial intelligence systems that are consistent with national and international standards. Discussions with the industry (Canadian Bankers Association) is underway with regard to CBA recommendations to the Committee. The Bank is actively monitoring developments under this Bill.

On June 14, 2022, the House of Commons of Canada introduced Bill C-26, the Critical Cyber System Protection Act (CCSP), that will require, among other things, mandatory reporting of cyberattacks against systems of critical importance to Canadian interests. Parliament completed its second reading of Bill C-26 on March 27, 2023 and the Bill has been referred to the Standing Committee on Public Safety and National Security. The Bank continues to monitor developments under this Bill.

OSFI Guideline B-13: Technology and Cyber Risk Management

On July 13, 2022, the Office of the Superintendent of Financial Institutions (OSFI) issued Guideline B-13 – Technology and Cyber Risk Management. B-13 applies to all federally regulated financial institutions (FRFIs), which includes the Bank, and establishes expectations with the aim to support FRFIs in developing greater resilience to technology and cyber risks. B-13 is organized into three domains, each of which sets out key components for sound risk management: Governance and Risk Management, Technology Operations and Resilience, and Cyber Security. B-13 will become effective on January 1, 2024. The Bank has completed the gap assessment against this Guideline and is currently working on remediation plans to achieve compliance.

OSFI Guideline B-10: Third Party Risk Management

On April 24, 2023, the Office of the Superintendent of Financial Institutions (OSFI) issued its final revised Guideline B-10: Third Party Risk Management (Guideline B-10), which sets out third party risk management expectations for federally regulated financial institutions (FRFIs), including the Bank. This revised guideline places an expectation on FRFIs to take a principled-based approach, with an emphasis on risk, to manage third party arrangements in a manner that is proportionate to the level of risk and criticality of each arrangement as well as the size, nature, scope, complexity of operations, and risk profile of the FRFI. The expectation is that third party arrangements commencing on or after May 1, 2024 will adhere to the revised Guideline B-10 and those entered into prior to this date will be updated at the earliest opportunity. The Bank has established a working group to consider the application of this newly released revised Guideline B-10.

The Commodity Futures Trading Commission (CFTC) Position Limit and Swap Reporting Rules

In October 2020, the CFTC approved final position limit rules for twenty-five commodity derivatives and their linked cash-settled futures, options on futures, and economically equivalent swaps. New position limits for futures, options on futures, and for economically equivalent swaps went into effect in January 2022 and January 2023, respectively. The Bank has developed and implemented controls intended to comply with the aforementioned CFTC rules on the January 1, 2023 effective date.

On January 31, 2022, the CFTC published No-Action Relief extending the Compliance Dates of the Swap Data Reporting Rule Amendments from May 2022 and May 2023 to December 5, 2022, and December 4, 2023, respectively. Certain swap reporting rule amendments went into effect in December 2022. The Bank is on track with the implementation for December 2023.

Disclosure of Climate-Related Matters

The Office of the Superintendent of Financial Institutions (OSFI) published its final Guideline B-15 – Climate Risk Management on March 7, 2023. The guideline articulates the supervisory expectations related to the management of climate-related risks by federally regulated financial institutions (FRFIs). The final guideline incorporates the key advocacy points that were submitted in response to the consultation. The Bank has established a governance structure and an enterprise-wide program on the implementation of the guideline.

OSFI has indicated that the guideline will be updated once the International Sustainability Standards Board (ISSB) publish their final climate and sustainability-related disclosure standards which are expected in June 2023.

OSFI has also identified climate risk among the nine key risks in their Annual Risk Outlook for Fiscal Year 2023-2024. OSFI is planning to develop a standardized climate scenario analysis exercise that all FRFIs will undertake in 2024. This scenario exercise will incorporate learnings from two ongoing joint projects with the Bank of Canada: one on transition risk and one on a single-peril physical risk (flooding). The Bank will participate in this exercise.

Interest rate benchmark reform

The global financial markets continue to transition away from US Dollar London Interbank Offered Rate (USD LIBOR) and other interbank offered rates (IBORs), including the Canadian Dollar Offered Rate (CDOR), to alternative risk-free rates.

As of June 30, 2023, USD LIBOR will cease to be published or become non-representative, although the Financial Conduct Authority (FCA) announced on April 3, 2023, that the one-month, three-month, and six-month tenors of USD LIBOR will be published on a 'synthetic' basis until September 30, 2024, to allow market participants to use such rates in legacy contracts.

The Bank has transitioned a significant portion of its USD LIBOR portfolio to alternative risk-free rates and continues its remediation effort to transition any outstanding contracts before June 30, 2023. For derivatives, the Bank has been participating in central clearing houses' conversion processes to transition its cleared portfolio and engaging with counterparties and customers to remediate bilateral, uncleared trades before June 30, 2023.

As previously announced by Refinitiv Benchmark Services (UK) Limited, one-month, two-month, and three-month CDOR tenors will continue to be published until June 28, 2024. The Canadian Alternative Reference Rate (CARR) committee has published a detailed transition roadmap with milestones to guide market participants to transition away from CDOR for all product types. The CARR has also confirmed its intention to move forward with the development of a forward-looking Term Canadian Overnight Repo Rate Average (CORRA), which is expected to become available by September 30, 2023. OSFI expects FRFIs to transition CDOR linked transactions to new reference rates before the cessation date.

The Bank's Transition Program has updated its project plans to align with the CDOR transition roadmap and milestones published by CARR and ensure alignment with OSFI's expectations for FRFIs. The details regarding the Bank's Transition Program for the interest rate benchmark reform are available in Note 4 of the 2022 Annual Report.

Canadian Federal Tax Measures

The 2023 Federal Budget released on March 28, 2023 included certain tax measures affecting the Bank. Of particular note were proposals to eliminate the deduction for dividends received on shares of Canadian corporations that are categorized as mark-to-market property for tax purposes; impose a 2% tax on the net value of share repurchases; and impose GST/HST on payment card clearing services with the potential to reassess prior years for GST/HST amounts owing.

The 2023 Federal Budget also reconfirms the Government of Canada's commitment to implement the Organisation for Economic Co-operation and Development's Pillar Two model rules, which will impose a 15% minimum tax on global operations.

The impact of these proposed measures has not been recognized in the Bank's financial results as at April 30, 2023 as they are not substantively enacted, which would only occur after the third legislative reading. If enacted, these proposed measures would result in increased tax expense for the Bank; however, their impact cannot be accurately assessed at this time due to uncertainties around the final rules and their application by the Canada Revenue Agency.

Housing

The Office of the Superintendent of Financial Institutions (OSFI) consultation on Guideline B-20 – Residential Mortgage Underwriting Practices and Procedures (Guideline B-20) closed in April 2023. The consultation seeks inputs into exploring complementary measures to mitigate risks to Federally Regulated Financial Institutions (FRFI's) from high consumer indebtedness. Specifically, OSFI proposed the review of existing debt serviceability measures and put forward some potential new options and tools to manage debt serviceability risk. The Bank responded through the Canadian Bankers Association and through a bilateral submission.

The Financial Consumer Agency of Canada (FCAC) published a draft Guideline on Existing Consumer Mortgage Loans in Exceptional Circumstances, with comments due by May 5, 2023. The guideline sets out FCAC's expectations for banks to support consumers who are vulnerable to mortgage delinquency because of exceptional circumstances, such as combined effects of high consumer indebtedness, rising rates, inflation and the pandemic. The guideline follows the FCAC's October 2022 industry communication regarding variable rate mortgage holders. The FCAC expects banks to be proactive in identifying potential concerns, to ensure consumers are well-informed and to minimize negative consequences for consumers. The draft guideline is referenced in the 2023 Federal Budget.

Off Platform Communications

On May 11, 2023, it was announced that Scotiabank entered into resolutions, including monetary penalties of US $22.5 million, with the U.S. Securities and Exchange Commission (SEC) (US $7.5 million), and the Commodity Futures Trading Commission (CFTC) (US $15 million), relating to electronic communications on unauthorized mobile devices and communications channels by certain personnel of the Bank's U.S. broker-dealer, U.S. swap dealer and U.S. futures commission merchant. This amount was previously fully provisioned. In addition, the Bank has agreed to retain a compliance consultant who will review, among other things, the Bank's policies and procedures, training, surveillance, technological solutions, and disciplinary framework related to communication channels and the preservation of electronic communications. Reports on these subjects will be provided to both the SEC and the CFTC. The resolutions also require the Bank to report – for a period of two years – to the SEC and CFTC any discipline imposed on personnel of the Bank's U.S. broker-dealer, U.S. swap dealer and U.S. futures commission merchant for violations of the Bank's policies and procedures concerning the preservation of electronic communications, including those found on personal devices.

Accounting Policies and Controls

Accounting policies and estimates

The condensed interim consolidated financial statements have been prepared in accordance with IAS 34 *Interim Financial Reporting*, using International Financial Reporting Standards (IFRS) as issued by the International Accounting Standards Board (IASB). The significant accounting policies used in the preparation of the condensed interim consolidated financial statements are consistent with those used in the Bank's audited consolidated financial statements for the year ended October 31, 2022, as described in Note 3 of the Bank's audited consolidated financial statements in the 2022 Annual Report.

Future accounting developments

There are no significant updates to the future accounting developments disclosed in Note 5 of the Bank's audited consolidated financial statements in the 2022 Annual Report.

Changes in internal control over financial reporting

There have been no changes in the Bank's internal control over financial reporting during the three months ended April 30, 2023, that have materially affected, or are reasonably likely to materially affect, the Bank's internal control over financial reporting.

Related party transactions

There were no changes to the Bank's procedures and policies for related party transactions from those outlined in the Bank's 2022 Annual Report. All transactions with related parties continued to be at market terms and conditions.

Share Data

T32 Shares and other instruments

April 30, 2023	**Amount ($ millions)**	**Dividends declared per share[(1)]**	**Number outstanding (000s)**	**Conversion feature**
Common Shares[(2)]	$ 19,160	$ 1.06	1,198,175	n/a
NVCC Preferred Shares[(3)]				
Preferred shares Series 40[(4)]	$ 300	$ 0.303125	12,000	Series 41
NVCC Additional Tier 1 Securities[(3)(6)]	**Amount ($ millions)**	**Distribution[(5)]**	**Yield *(%)***	**Number outstanding (000s)**
Subordinated Additional Tier 1 Capital Notes	US$ 1,250	US$ 19.8326	7.84586	1,250
Subordinated Additional Tier 1 Capital Notes	US$ 1,250	US$ 12.25	4.900	1,250
Limited Recourse Capital Notes Series 1	$ 1,250	$ 9.25	3.700	1,250
Limited Recourse Capital Notes Series 2	US$ 600	US$ 9.0625	3.625	600
Limited Recourse Capital Notes Series 3	$ 1,500	$ 17.5575	7.023	1,500
Limited Recourse Capital Notes Series 4	US$ 750	US$ 21.5625	8.625	750
NVCC Subordinated Debentures[(3)]			**Amount ($ millions)**	**Interest rate (%)**
Subordinated debentures due December 2025			US$ 1,250	4.500
Subordinated debentures due January 2029			$ 1,750	3.890
Subordinated debentures due July 2029			$ 1,500	2.836
Subordinated debentures due May 2032			$ 1,750	3.934
Subordinated debentures due December 2032			JPY 33,000	1.800
Subordinated debentures due May 2037			US$ 1,250	4.588
Other	**Amount ($ millions)**	**Distribution[(5)]**	**Yield *(%)***	**Number outstanding (000s)**
Scotiabank Trust Securities – Series 2006-1 issued by Scotiabank Capital Trust[(7)]	$ 750	$ 28.25	5.650	750
Options				**Number outstanding (000s)**
Outstanding options granted under the Stock Option Plans to purchase common shares[(2)]				11,797

(1) Dividends are paid quarterly, if and when declared. Represents dividends announced on May 24, 2023. The Board of Directors, at its meeting on May 23, 2023, approved a dividend payable on July 27, 2023 to shareholders of record as of July 5, 2023.
(2) As at May 12, 2023, the number of outstanding common shares and options were 1,198,175 thousand and 11,797 thousand, respectively.
(3) These securities contain Non-Viability Contingent Capital (NVCC) provisions necessary to qualify as regulatory capital under Basel III. Refer to Notes 21 and 24 of the consolidated financial statements in the Bank's 2022 Annual Report for further details. The maximum number of common shares issuable on conversion of NVCC subordinated debentures, NVCC Subordinated additional Tier 1 capital notes, including those issued to Scotiabank LRCN Trust as recourse assets in respect of NVCC Limited Recourse Capital Notes, and NVCC Preferred Shares as at April 30, 2023 would be 4,666 million common shares based on the floor price and excluding the impact of any accrued and unpaid interest and any declared but unpaid dividends.
(4) These preferred shares are entitled to non-cumulative preferential cash dividends payable quarterly. These preferred shares have conversion features. Refer to Note 24 of the Consolidated Financial Statements in the Bank's 2022 Annual Report for further details.
(5) Distributions per face amount of $1,000 or US$1,000 semi-annually or quarterly, as applicable.
(6) Quarterly distributions are recorded in each fiscal quarter, if and when paid.
(7) These securities have exchange features. Refer to Table 29 in the Bank's 2022 Annual Report for further details.

For further details on outstanding securities of the Bank, including convertibility features, refer to Notes 21, 24 and 26 of the Bank's consolidated financial statements in the 2022 Annual Report.

Glossary

Allowance for Credit Losses: An allowance set aside which, in management's opinion, is adequate to absorb credit-related losses on all financial assets and off-balance sheet exposures subject to impairment assessment. It includes allowances for performing financial assets and impaired financial assets.

Allowance for Credit Losses Ratio: The ratio of period end total allowance for credit losses (excluding debt securities and deposits with financial institutions) divided by gross loans and acceptances.

Allowance for Impaired Loans Ratio: The ratio of period end impaired allowance for credit losses (excluding debt securities and deposits with financial institutions) divided by gross loans and acceptances.

Allowance for Performing Loans Ratio: The ratio of period end performing allowance for credit losses (excluding debt securities and deposits with financial institutions) divided by gross loans and acceptances.

Allowance against Impaired Loans as a % of Gross Impaired Loans: The ratio of allowance against impaired loans to gross impaired loans.

Assets Under Administration (AUA): Assets administered by the Bank which are beneficially owned by clients and therefore not reported on the Bank's Consolidated Statement of Financial Position. Services provided for AUA are of an administrative nature, such as trusteeship, custodial, safekeeping, income collection and distribution, securities trade settlements, customer reporting, and other similar services.

Assets Under Management (AUM): Assets managed by the Bank on a discretionary basis and in respect of which the Bank earns investment management fees. AUM are beneficially owned by clients and are therefore not reported on the Bank's Consolidated Statement of Financial Position. Some AUM are also administered assets and are therefore included in assets under administration.

Bankers' Acceptances (BAs): Negotiable, short-term debt securities, guaranteed for a fee by the issuer's bank.

Basis Point: A unit of measure defined as one-hundredth of one per cent.

Book Value per Common Share: Common shareholders equity divided by the number of outstanding common shares at the end of the period.

Common Equity Tier 1 (CET1), Tier 1 and Total Capital Ratios: Under Revised Basel III, there are three primary regulatory capital ratios used to assess capital adequacy, CET1, Tier 1 and Total capital ratios, which are determined by dividing those capital components by their respective risk-weighted assets.

CET1 consists primarily of common shareholders' equity net of regulatory adjustments. These regulatory adjustments include goodwill, intangible assets net of deferred tax liabilities, deferred tax assets that rely on future profitability, defined-benefit pension fund net assets, shortfall of credit provision to expected losses and significant investments in common equity of other financial institutions.

Tier 1 includes CET1 and additional Tier 1 capital which consists primarily of qualifying non-cumulative preferred shares, non-cumulative subordinated additional Tier 1 capital notes and limited recourse capital notes. Tier 2 capital consists mainly of qualifying subordinated debentures and the eligible allowances for credit losses.

Total capital is comprised of CET1 capital, Tier 1 capital and Tier 2 capital.

Covered Bonds: Debt obligations of the Bank for which the payment of all amounts of interest and principal are unconditionally and irrevocably guaranteed by a limited partnership and secured by a pledge of the covered bond portfolio. The assets in the covered bond portfolio held by the limited partnership consist of first lien Canadian uninsured residential mortgages or first lien Canadian residential mortgages insured under CMHC Mortgage Insurance, respectively, and their related security interest.

Derivative Products: Financial contracts whose value is derived from an underlying price, interest rate, exchange rate or price index. Forwards, options and swaps are all derivative instruments.

Dividend Yield: Dividends per common share divided by the average of the high and low share price in the relevant period.

Effective Tax Rate: The effective tax rate is the overall tax rate paid by the Bank on its earned income. The effective tax rate is calculated by dividing the Bank's income tax expenses by the income before taxes.

Fair Value: The price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants in the principal, or in its absence, the most advantageous market to which the Bank has access at the measurement date.

Foreign Exchange Contracts: Commitments to buy or sell a specified amount of foreign currency on a set date and at a predetermined rate of exchange.

Forward Rate Agreement (FRA): A contract between two parties, whereby a designated interest rate, applied to a notional principal amount, is locked in for a specified period of time. The difference between the contracted rate and prevailing market rate is paid in cash on the settlement date. These agreements are used to protect against, or take advantage of, future interest rate movements.

Futures: Commitments to buy or sell designated amounts of commodities, securities or currencies on a specified date at a predetermined price. Futures are traded on recognized exchanges. Gains and losses on these contracts are settled daily, based on closing market prices.

Gross Impaired Loans as a % of Loans and Acceptances: The ratio of gross impaired loans, debt investments and off-balance sheet exposures expressed as a percentage of loans and acceptances.

Hedging: Protecting against price, interest rate or foreign exchange exposures by taking positions that are expected to react to market conditions in an offsetting manner.

Impaired Loans: Loans on which the Bank no longer has reasonable assurance as to the timely collection of interest and principal, or where a contractual payment is past due for a prescribed period or the customer is declared to be bankrupt.

Leverage Ratio: The ratio of Basel III Tier 1 capital to a leverage exposure measure which includes on-balance sheet assets and off-balance sheet commitments, derivatives and securities financing transactions, as defined within the OSFI Leverage Requirements Guideline.

Liquidity Coverage Ratio (LCR): The ratio of high quality liquid assets to stressed net cash outflows over a 30 calendar day time horizon, as defined within the OSFI Liquidity Adequacy Requirements Guideline.

Marked-To-Market: The valuation of certain financial instruments at fair value as of the Consolidated Statement of Financial Position date.

Market Value to Book Value Multiple: This financial valuation metric is calculated by dividing the current closing share price of the period by the book value per common share.

Net Impaired Loans as a % of Loans and Acceptances: The ratio of net impaired loans, debt investments and off-balance sheet exposures expressed as a percentage of loans and acceptances.

Net Interest Margin: Net interest margin is calculated as core net interest income for the business line divided by average core earning assets.

Net Stable Funding Ratio (NSFR): The ratio of available stable funding to required stable funding, as defined within the OSFI Liquidity Adequacy Requirements Guideline.

Net Write-offs as a % of Average Net Loans and Acceptances: The ratio of net write-offs expressed as a percentage of average net loans and acceptances.

Notional Principal Amounts: The contract or principal amounts used to determine payments for certain off-balance sheet instruments and derivatives, such as FRAs, interest rate swaps and cross-currency swaps. The amounts are termed "notional" because they are not usually exchanged themselves, serving only as the basis for calculating amounts that do change hands.

Off-Balance Sheet Instruments: These are indirect credit commitments, including undrawn commitments to extend credit and derivative instruments, which are not recorded on the Bank's balance sheet under IFRS.

Operating Leverage: This financial metric measures the rate of growth in total revenue less the rate of growth in non-interest expenses.

Options: Contracts between buyer and seller giving the buyer of the option the right, but not the obligation, to buy (call) or sell (put) a specified commodity, financial instrument or currency at a set price or rate on or before a specified future date.

OSFI: The Office of the Superintendent of Financial Institutions Canada, the regulator of Canadian banks.

Pacific Alliance: Comprises the countries of Chile, Colombia, Mexico and Peru.

Price to Earnings Multiple (Trailing 4 Quarters): Closing share price at period end divided by cumulative basic earnings per common share (EPS) of the past 4 quarters.

Productivity Ratio: Management uses the productivity ratio as a measure of the Bank's efficiency. This ratio represents non-interest expenses as a percentage of total revenue.

Provision for Credit Losses (PCL) as a % of Average Net Loans and Acceptances: The ratio of PCL on loans, acceptances and off-balance sheet exposures expressed as a percentage of average net loans and acceptances.

Provision for Credit Losses (PCL) on Impaired Loans as a % of Average Net Loans and Acceptances: PCL on impaired loans ratio under IFRS 9 is calculated using PCL on impaired loans, acceptances and off-balance sheet exposures as a percentage of average net loans and acceptances.

Repos: Repos is short for "obligations related to securities sold under repurchase agreements" – a short-term transaction where the Bank sells assets, normally government bonds, to a client and simultaneously agrees to repurchase them on a specified date and at a specified price. It is a form of short-term funding.

Return on Assets (ROA): Net income expressed as a percentage of total average assets.

Return on Equity (ROE): Net income attributable to common shareholders, expressed as a percentage of average common shareholders' equity. The Bank attributes capital to its business lines on a basis that approximates 10.5% of Basel III common equity capital requirements which includes credit, market and operational risks and leverage inherent in each business segment. Return on equity for the business segments is calculated as a ratio of net income attributable to common shareholders of the business segment and the capital attributed.

Return on Tangible Common Equity (ROTCE): Return on Tangible Common Equity is calculated by dividing the net income attributable to common shareholders, adjusted for the amortization of intangibles (excluding software), by average tangible common equity. Tangible common equity is defined as common shareholders' equity adjusted for goodwill and acquisition-related intangible assets (excluding software), net of deferred taxes.

Reverse Repos: Reverse repos is short for "securities purchased under resale agreements" – a short-term transaction where the Bank purchases assets, normally government bonds, from a client and simultaneously agrees to resell them on a specified date and at a specified price. It is a form of short-term collateralized lending.

Risk-Weighted Assets: Comprised of three broad categories including credit risk, market risk and operational risk, which are computed under the Revised Basel III Framework in accordance with OSFI Guideline – Capital Adequacy Requirements (February 2023). Risk-weighted assets for credit risk are calculated using modelled parameters, formulas and risk-weight requirements as specified by the Revised Basel III Framework. In addition, the Bank uses both internal models and standardized approaches to calculate market risk capital and standardized approaches for operational risk capital which are converted to risk-weighted assets.

Securitization: The process by which financial assets (typically loans) are transferred to a trust, which normally issues a series of different classes of asset-backed securities to investors to fund the purchase of loans.

Structured Entities: A structured entity is defined as an entity created to accomplish a narrow and well-defined objective. A structured entity may take the form of a corporation, trust, partnership or unincorporated entity. Structured entities are often created with legal arrangements that impose strict and sometimes permanent limits on the decision-making powers of their governing board, trustee or management over the operations of the entity.

Standby Letters of Credit and Letters of Guarantee: Written undertakings by the Bank, at the request of the customer, to provide assurance of payment to a third-party regarding the customer's obligations and liabilities to that third-party.

Structured Credit Instruments: A wide range of financial products which includes Collateralized Debt Obligations, Collateralized Loan Obligations, Structured Investment Vehicles, and Asset-Backed Securities. These instruments represent investments in pools of credit-related assets, whose values are primarily dependent on the performance of the underlying pools.

Swaps: Interest rate swaps are agreements to exchange streams of interest payments, typically one at a floating rate, the other at a fixed rate, over a specified period of time, based on notional principal amounts. Cross-currency swaps are agreements to exchange payments in different currencies over predetermined periods of time.

Taxable Equivalent Basis (TEB): The Bank analyzes net interest income, non-interest income, and total revenue on a taxable equivalent basis (TEB). This methodology grosses up tax-exempt income earned on certain securities reported in either net interest income or non-interest income to an equivalent before tax basis. A corresponding increase is made to the provision for income taxes; hence, there is no impact on net income. Management believes that this basis for measurement provides a uniform comparability of net interest income and non-interest income arising from both taxable and non-taxable sources and facilitates a consistent basis of measurement. While other banks also use TEB, their methodology may not be comparable to the Bank's methodology. For purposes of segmented reporting, a segment's revenue and provision for income taxes are grossed up by the taxable equivalent amount. The elimination of the TEB gross up is recorded in the Other segment.

Total Annual Shareholder Return (TSR): Total annual shareholder return is calculated as the overall appreciation in share price, plus any dividends paid during the year; this sum is then divided by the share price at the beginning of the year to arrive at the TSR. Total annual shareholder return assumes reinvestment of quarterly dividends.

Total Loss Absorbing Capacity (TLAC): The aggregate of NVCC Tier 1 capital, NVCC Tier 2 capital, and other TLAC instruments that are subject to conversion in whole or in part into common shares under the CDIC Act and meet all of the eligibility criteria under the OSFI guideline – Total Loss Absorbing Capacity (September 2018).

Other TLAC Instruments include prescribed shares and liabilities that are subject to conversion into common shares pursuant to the CDIC Act and which meet all of the eligibility criteria set out in the Total Loss Absorbing Capacity (TLAC) Guidelines.

Value At Risk (VaR): An estimate of the potential loss that might result from holding a position for a specified period of time, with a given level of statistical confidence.

Yield Curve: A graph showing the term structure of interest rates, plotting the yields of similar quality bonds by term to maturity.

Basel III Glossary

Credit Risk Parameters

Exposure at Default (EAD): Generally represents the expected gross exposure – outstanding amount for on-balance sheet exposure and loan equivalent amount for off-balance sheet exposure at default.

Probability of Default (PD): Measures the likelihood that a borrower will default within a one-year time horizon, expressed as a percentage.

Loss Given Default (LGD): Measures the severity of loss on a facility in the event of a borrower's default, expressed as a percentage of exposure at default.

Exposure Types

Non-retail

Corporate: Defined as a debt obligation of a corporation, partnership, or proprietorship.

Bank: Defined as a debt obligation of a bank or bank equivalent (including certain public sector entities (PSEs) treated as bank equivalent exposures).

Sovereign: Defined as a debt obligation of a sovereign, central bank, certain multi development banks and certain PSEs treated as sovereign.

Securitization: On-balance sheet investments in asset-backed securities, mortgage-backed securities, collateralized loan obligations and collateralized debt obligations, off-balance sheet liquidity lines to the Bank's own sponsored and third-party conduits and credit enhancements.

Retail

Residential Mortgage: Loans to individuals against residential property (four units or less).

Secured Lines Of Credit: Revolving personal lines of credit secured by residential real estate.

Qualifying Revolving Retail Exposures: Credit cards and unsecured lines of credit for individuals.

Other Retail: All other personal loans.

Exposure Sub-types

Drawn: Outstanding amounts for loans, leases, acceptances, deposits with banks and FVOCI debt securities.

Undrawn: Unutilized portion of authorized committed credit lines.

Other Exposures

Repo-Style Transactions: Reverse repurchase agreements (reverse repos) and repurchase agreements (repos), securities lending and borrowing.

OTC Derivatives: Over-the-counter derivatives contracts refers to financial instruments which are traded through a dealer network rather than through an exchange.

Other Off-balance Sheet: Direct credit substitutes, such as standby letters of credit and guarantees, trade letters of credit, and performance letters of credit and guarantees.

Exchange-Traded Derivative Contracts: Exchange-traded derivative contracts are derivative contracts (e.g., futures contracts and options) that are transacted on an organized futures exchange. These include futures contracts (both long and short positions), purchased options and written options.

Qualifying Central Counterparty (QCCP): A licensed central counterparty is considered "qualifying" when it is compliant with the International Organization of Securities Commissions (IOSCO) standards and is able to assist clearing member banks in properly capitalizing for CCP exposures.

Asset Value Correlation Multiplier (AVC): Basel III has increased the risk-weights on exposures to certain Financial Institutions (FIs) relative to the non-financial corporate sector by introducing an AVC. The correlation factor in the risk-weight formula is multiplied by this AVC factor of 1.25 for all exposures to regulated FIs whose total assets are greater than or equal to US $100 billion and all exposures to unregulated FIs.

Specific Wrong-Way Risk (WWR): Specific Wrong-Way Risk arises when the exposure to a particular counterparty is positively correlated with the probability of default of the counterparty due to the nature of the transactions with the counterparty.

Basel III Regulatory Capital Floor: Since the introduction of Basel II in 2008, OSFI has prescribed a minimum regulatory capital floor for institutions that use the advanced internal ratings-based approach for credit risk. Effective Q2 2023, the capital floor add-on is determined under the Revised Basel III Framework by comparing RWA generated for IRB and standardized portfolios to RWA calculated under a standardized approach at the required capital floor calibration. A shortfall to the capital floor RWA requirement is added to the Bank's RWA.

Condensed Interim Consolidated Financial Statements (unaudited)

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Consolidated Statement of Financial Position

(Unaudited) ($ millions)	Note	As at April 30 2023	As at January 31 2023	As at October 31 2022
Assets				
Cash and deposits with financial institutions	5	**$ 63,893**	$ 81,386	$ 65,895
Precious metals		**1,191**	725	543
Trading assets				
Securities		**105,560**	106,735	103,547
Loans		**6,910**	7,642	7,811
Other		**2,225**	1,969	1,796
		114,695	116,346	113,154
Securities purchased under resale agreements and securities borrowed		**184,684**	178,690	175,313
Derivative financial instruments		**44,725**	44,820	55,699
Investment securities	6	**116,595**	111,004	110,008
Loans				
Residential mortgages	7	**353,560**	353,527	349,279
Personal loans	7	**102,178**	101,041	99,431
Credit cards	7	**16,053**	15,494	14,518
Business and government	7	**298,013**	290,608	287,107
		769,804	760,670	750,335
Allowance for credit losses	7(c)	**5,736**	5,513	5,348
		764,068	755,157	744,987
Other				
Customers' liability under acceptances, net of allowance		**21,901**	21,872	19,494
Property and equipment		**5,646**	5,699	5,700
Investments in associates	9	**2,708**	2,684	2,633
Goodwill and other intangible assets		**17,396**	17,170	16,833
Deferred tax assets		**2,193**	2,508	1,903
Other assets		**33,503**	36,377	37,256
		83,347	86,310	83,819
Total assets		**$1,373,198**	$1,374,438	$1,349,418
Liabilities				
Deposits				
Personal	10	**$ 283,651**	$ 274,879	$ 265,892
Business and government	10	**611,376**	621,740	597,617
Financial institutions	10	**50,511**	53,268	52,672
		945,538	949,887	916,181
Financial instruments designated at fair value through profit or loss	18(b)	**26,935**	26,583	22,421
Other				
Acceptances		**21,951**	21,912	19,525
Obligations related to securities sold short		**41,310**	43,439	40,449
Derivative financial instruments		**50,562**	52,746	65,900
Obligations related to securities sold under repurchase agreements and securities lent		**132,631**	132,206	139,025
Subordinated debentures	11	**8,784**	8,713	8,469
Other liabilities		**66,737**	63,201	62,699
		321,975	322,217	336,067
Total liabilities		**1,294,448**	1,298,687	1,274,669
Equity				
Common equity				
Common shares	11	**19,160**	18,732	18,707
Retained earnings		**54,967**	54,165	53,761
Accumulated other comprehensive income (loss)		**(4,906)**	(6,640)	(7,166)
Other reserves		**(144)**	(145)	(152)
Total common equity		**69,077**	66,112	65,150
Preferred shares and other equity instruments		**8,075**	8,075	8,075
Total equity attributable to equity holders of the Bank		**77,152**	74,187	73,225
Non-controlling interests in subsidiaries		**1,598**	1,564	1,524
Total equity		**78,750**	75,751	74,749
Total liabilities and equity		**$1,373,198**	$1,374,438	$1,349,418

The accompanying notes are an integral part of these condensed interim consolidated financial statements.

Consolidated Statement of Income

		For the three months ended			For the six months ended	
(Unaudited) ($ millions)	Note	**April 30 2023**	January 31 2023	April 30 2022	**April 30 2023**	April 30 2022
Revenue						
Interest income[(1)]						
Loans		**$ 11,076**	$10,619	$ 6,418	**$ 21,695**	$12,412
Securities		**1,645**	1,458	500	**3,103**	858
Securities purchased under resale agreements and securities borrowed		**368**	336	71	**704**	118
Deposits with financial institutions		**781**	743	103	**1,524**	167
	16	**13,870**	13,156	7,092	**27,026**	13,555
Interest expense						
Deposits		**8,652**	7,834	2,024	**16,486**	3,597
Subordinated debentures		**110**	105	55	**215**	100
Other		**642**	648	540	**1,290**	1,041
	16	**9,404**	8,587	2,619	**17,991**	4,738
Net interest income		**4,466**	4,569	4,473	**9,035**	8,817
Non-interest income						
Card revenues		**190**	201	207	**391**	397
Banking services fees		**462**	469	430	**931**	867
Credit fees		**447**	466	397	**913**	798
Mutual funds		**527**	532	575	**1,059**	1,203
Brokerage fees		**269**	279	287	**548**	585
Investment management and trust		**256**	253	254	**509**	510
Underwriting and advisory fees		**154**	102	137	**256**	309
Non-trading foreign exchange		**227**	232	216	**459**	441
Trading revenues		**389**	634	453	**1,023**	1,062
Net gain on sale of investment securities		**56**	44	1	**100**	3
Net income from investments in associated corporations		**64**	16	84	**80**	175
Insurance underwriting income, net of claims		**123**	112	105	**235**	206
Other fees and commissions		**282**	186	145	**468**	301
Other		**17**	(115)	178	**(98)**	317
		3,463	3,411	3,469	**6,874**	7,174
Total revenue		**7,929**	7,980	7,942	**15,909**	15,991
Provision for credit losses		**709**	638	219	**1,347**	441
		7,220	7,342	7,723	**14,562**	15,550
Non-interest expenses						
Salaries and employee benefits		**2,425**	2,340	2,175	**4,765**	4,455
Premises and technology		**657**	640	590	**1,297**	1,176
Depreciation and amortization		**412**	406	381	**818**	756
Communications		**101**	94	93	**195**	183
Advertising and business development		**139**	136	108	**275**	217
Professional		**187**	175	195	**362**	387
Business and capital taxes		**158**	161	132	**319**	272
Other		**497**	512	485	**1,009**	936
		4,576	4,464	4,159	**9,040**	8,382
Income before taxes		**2,644**	2,878	3,564	**5,522**	7,168
Income tax expense	19	**485**	1,106	817	**1,591**	1,681
Net income		**$ 2,159**	$ 1,772	$ 2,747	**$ 3,931**	$ 5,487
Net income attributable to non-controlling interests in subsidiaries		**26**	40	78	**66**	166
Net income attributable to equity holders of the Bank		**$ 2,133**	$ 1,732	$ 2,669	**$ 3,865**	$ 5,321
Preferred shareholders and other equity instrument holders		**104**	101	74	**205**	118
Common shareholders		**$ 2,029**	$ 1,631	$ 2,595	**$ 3,660**	$ 5,203
Earnings per common share *(in dollars)*						
Basic	17	**$ 1.70**	$ 1.37	$ 2.16	**$ 3.07**	$ 4.32
Diluted	17	**1.69**	1.36	2.16	**3.04**	4.30
Dividends paid per common share *(in dollars)*		**1.03**	1.03	1.00	**2.06**	2.00

(1) Includes interest income on financial assets measured at amortized cost and FVOCI, calculated using the effective interest method, of $13,384 for the three months ended April 30, 2023 (January 31, 2023 – $12,710; April 30, 2022 – $6,915) and for the six months ended April 30, 2023 – $26,094 (April 30, 2022 – $13,246).

The accompanying notes are an integral part of these condensed interim consolidated financial statements.

Consolidated Statement of Comprehensive Income

	For the three months ended			For the six months ended	
(Unaudited) ($ millions)	**April 30 2023**	January 31 2023	April 30 2022	**April 30 2023**	April 30 2022
Net income	**$ 2,159**	$ 1,772	$ 2,747	**$ 3,931**	$ 5,487
Other comprehensive income (loss)					
Items that will be reclassified subsequently to net income					
Net change in unrealized foreign currency translation gains (losses):					
Net unrealized foreign currency translation gains (losses)	**1,073**	543	74	**1,616**	1,574
Net gains (losses) on hedges of net investments in foreign operations	**(556)**	16	(190)	**(540)**	(749)
Income tax expense (benefit):					
Net unrealized foreign currency translation gains (losses)	**–**	8	(4)	**8**	8
Net gains (losses) on hedges of net investments in foreign operations	**(157)**	(6)	(50)	**(163)**	(197)
	674	557	(62)	**1,231**	1,014
Net change in fair value due to change in debt instruments measured at fair value through other comprehensive income:					
Net gains (losses) in fair value	**352**	1,234	(1,794)	**1,586**	(2,115)
Reclassification of net (gains) losses to net income	**(89)**	(791)	1,154	**(880)**	1,271
Income tax expense (benefit):					
Net gains (losses) in fair value	**114**	288	(465)	**402**	(545)
Reclassification of net (gains) losses to net income	**(52)**	(178)	320	**(230)**	355
	201	333	(495)	**534**	(654)
Net change in gains (losses) on derivative instruments designated as cash flow hedges:					
Net gains (losses) on derivative instruments designated as cash flow hedges	**1,425**	3,476	(5,692)	**4,901**	(6,668)
Reclassification of net (gains) losses to net income	**(1,573)**	(2,756)	2,528	**(4,329)**	3,197
Income tax expense (benefit):					
Net gains (losses) on derivative instruments designated as cash flow hedges	**414**	983	(1,532)	**1,397**	(1,783)
Reclassification of net (gains) losses to net income	**(462)**	(798)	699	**(1,260)**	870
	(100)	535	(2,331)	**435**	(2,558)
Other comprehensive income (loss) from investments in associates	**1**	(13)	17	**(12)**	21
Items that will not be reclassified subsequently to net income					
Net change in remeasurement of employee benefit plan asset and liability:					
Actuarial gains (losses) on employee benefit plans	**(225)**	(219)	1,055	**(444)**	1,203
Income tax expense (benefit)	**(63)**	(69)	279	**(132)**	348
	(162)	(150)	776	**(312)**	855
Net change in fair value due to change in equity instruments designated at fair value through other comprehensive income:					
Net gains (losses) in fair value	**(48)**	101	35	**53**	229
Income tax expense (benefit)	**(15)**	10	(9)	**(5)**	59
	(33)	91	44	**58**	170
Net change in fair value due to change in own credit risk on financial liabilities designated under the fair value option:					
Change in fair value due to change in own credit risk on financial liabilities designated under the fair value option	**1,661**	(1,090)	787	**571**	1,018
Income tax expense (benefit)	**461**	(284)	206	**177**	267
	1,200	(806)	581	**394**	751
Other comprehensive income (loss) from investments in associates	**–**	2	1	**2**	2
Other comprehensive income (loss)	**1,781**	549	(1,469)	**2,330**	(399)
Comprehensive income	**$ 3,940**	$ 2,321	$ 1,278	**$ 6,261**	$ 5,088
Comprehensive income (loss) attributable to non-controlling interests	**73**	63	56	**136**	205
Comprehensive income attributable to equity holders of the Bank	**3,867**	2,258	1,222	**6,125**	4,883
Preferred shareholders and other equity instrument holders	**104**	101	74	**205**	118
Common shareholders	**$ 3,763**	$ 2,157	$ 1,148	**$ 5,920**	$ 4,765

The accompanying notes are an integral part of these condensed interim consolidated financial statements.

Consolidated Statement of Changes in Equity

(Unaudited) ($ millions)	Common shares	Retained earnings[1]	Accumulated other comprehensive income (loss): Foreign currency translation	Debt instruments FVOCI	Equity instruments FVOCI	Cash flow hedges	Other[2]	Other reserves	Total common equity	Preferred shares and other equity instruments	Total attributable to equity holders	Non-controlling interests in subsidiaries	Total
Balance as at October 31, 2022	**$18,707**	**$53,761**	**$(2,478)**	**$(1,482)**	**$216**	**$(4,786)**	**$1,364**	**$(152)**	**$65,150**	**$8,075**	**$73,225**	**$1,524**	**$74,749**
Net income	**–**	**3,660**	**–**	**–**	**–**	**–**	**–**	**–**	**3,660**	**205**	**3,865**	**66**	**3,931**
Other comprehensive income (loss)	**–**	**–**	**1,156**	**534**	**43**	**439**	**88**	**–**	**2,260**	**–**	**2,260**	**70**	**2,330**
Total comprehensive income	**$ –**	**$ 3,660**	**$ 1,156**	**$ 534**	**$ 43**	**$ 439**	**$ 88**	**$ –**	**$ 5,920**	**$ 205**	**$ 6,125**	**$ 136**	**$ 6,261**
Shares issued	**453**	**–**	**–**	**–**	**–**	**–**	**–**	**(3)**	**450**	**–**	**450**	**–**	**450**
Shares repurchased/redeemed	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**
Dividends and distributions paid to equity holders	**–**	**(2,455)**	**–**	**–**	**–**	**–**	**–**	**–**	**(2,455)**	**(205)**	**(2,660)**	**(61)**	**(2,721)**
Share-based payments[3]	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**11**	**11**	**–**	**11**	**–**	**11**
Other	**–**	**1**	**–**	**–**	**–**	**–**	**–**	**–**	**1**	**–**	**1**	**(1)**	**–**
Balance as at April 30, 2023	**$19,160**	**$54,967**	**$(1,322)**	**$ (948)**	**$259**	**$(4,347)**	**$1,452**	**$(144)**	**$69,077**	**$8,075**	**$77,152**	**$1,598**	**$78,750**
Balance as at October 31, 2021	$18,507	$51,354	$(4,709)	$ (270)	$291	$ (214)	$ (431)	$ 222	$64,750	$6,052	$70,802	$2,090	$72,892
Net income	–	5,203	–	–	–	–	–	–	5,203	118	5,321	166	5,487
Other comprehensive income (loss)	–	–	940	(654)	190	(2,540)	1,626	–	(438)	–	(438)	39	(399)
Total comprehensive income	$ –	$ 5,203	$ 940	$ (654)	$190	$(2,540)	$1,626	$ –	$ 4,765	$ 118	$ 4,883	$ 205	$ 5,088
Shares issued	694	–	–	–	–	–	–	(17)	677	–	677	–	677
Shares repurchased/redeemed	(402)	(1,934)	–	–	–	–	–	–	(2,336)	(500)	(2,836)	–	(2,836)
Dividends and distributions paid to equity holders	–	(2,402)	–	–	–	–	–	–	(2,402)	(118)	(2,520)	(76)	(2,596)
Share-based payments[3]	–	–	–	–	–	–	–	8	8	–	8	–	8
Other	–	(12)	(174)	–	(39)	(50)	–	(354)[4]	(629)	–	(629)	(637)[4]	(1,266)
Balance as at April 30, 2022	$18,799	$52,209	$(3,943)	$ (924)	$442	$(2,804)	$1,195	$(141)	$64,833	$5,552	$70,385	$1,582	$71,967

(1) Includes undistributed retained earnings of $69 (April 30, 2022 – $62) related to a foreign associated corporation, which is subject to local regulatory restriction.
(2) Includes Share from associates, Employee benefits and Own credit risk.
(3) Represents amounts on account of share-based payments (refer to Note 13).
(4) Includes changes to non-controlling interests arising from business combinations and related transactions (refer to Note 36 of the consolidated financial statements, in the 2022 Annual Report to Shareholders).

The accompanying notes are an integral part of these condensed interim consolidated financial statements.

Consolidated Statement of Cash Flows

(Unaudited) ($ millions)	For the three months ended		For the six months ended	
Sources (uses) of cash flows	**April 30 2023**	April 30 2022	**April 30 2023**	April 30 2022
Cash flows from operating activities				
Net income	**$ 2,159**	$ 2,747	**$ 3,931**	$ 5,487
Adjustment for:				
Net interest income	**(4,466)**	(4,473)	**(9,035)**	(8,817)
Depreciation and amortization	**412**	381	**818**	756
Provision for credit losses	**709**	219	**1,347**	441
Equity-settled share-based payment expense	**2**	2	**11**	8
Net gain on sale of investment securities	**(56)**	(1)	**(100)**	(3)
Net income from investments in associated corporations	**(64)**	(84)	**(80)**	(175)
Income tax expense	**485**	817	**1,591**	1,681
Changes in operating assets and liabilities:				
Trading assets	**2,938**	19,095	**(279)**	14,598
Securities purchased under resale agreements and securities borrowed	**(2,895)**	(16,739)	**(6,580)**	(19,514)
Loans	**(2,906)**	(24,271)	**(8,961)**	(49,092)
Deposits	**(14,032)**	26,137	**21,550**	72,635
Obligations related to securities sold short	**(2,594)**	(1,280)	**392**	3,563
Obligations related to securities sold under repurchase agreements and securities lent	**(2,209)**	10,007	**(9,186)**	7,555
Net derivative financial instruments	**(517)**	(2,047)	**968**	(4,010)
Other, net	**5,228**	(4,938)	**(2,974)**	(2,786)
Dividends received	**332**	289	**656**	573
Interest received	**13,599**	6,657	**26,217**	13,210
Interest paid	**(8,257)**	(2,330)	**(15,511)**	(4,507)
Income tax paid	**(571)**	(914)	**(1,124)**	(2,372)
Net cash from/(used in) operating activities	**(12,703)**	9,274	**3,651**	29,231
Cash flows from investing activities				
Interest-bearing deposits with financial institutions	**19,859**	13,432	**933**	3,203
Purchase of investment securities	**(29,700)**	(35,179)	**(48,262)**	(57,757)
Proceeds from sale and maturity of investment securities	**25,928**	14,748	**44,663**	31,657
Acquisition/divestiture of subsidiaries, associated corporations or business units, net of cash acquired	**–**	(652)	**–**	(652)
Property and equipment, net of disposals	**(16)**	(153)	**(72)**	(198)
Other, net	**(302)**	(153)	**(564)**	(380)
Net cash from/(used in) investing activities	**15,769**	(7,957)	**(3,302)**	(24,127)
Cash flows from financing activities				
Proceeds from issue of subordinated debentures	**–**	3,356	**337**	3,356
Redemption of subordinated debentures	**(2)**	(1,250)	**(2)**	(1,250)
Redemption of preferred shares	**–**	–	**–**	(500)
Proceeds from common shares issued	**428**	21	**453**	125
Common shares purchased for cancellation	**–**	(1,250)	**–**	(2,336)
Cash dividends and distributions paid	**(1,331)**	(1,269)	**(2,660)**	(2,520)
Distributions to non-controlling interests	**(38)**	(59)	**(61)**	(76)
Payment of lease liabilities	**(85)**	(81)	**(170)**	(170)
Other, net	**(1,147)**	(706)	**(256)**	(930)
Net cash from/(used in) financing activities	**(2,175)**	(1,238)	**(2,359)**	(4,301)
Effect of exchange rate changes on cash and cash equivalents	**100**	1	**237**	147
Net change in cash and cash equivalents	**991**	80	**(1,773)**	950
Cash and cash equivalents at beginning of period[(1)]	**8,301**	10,563	**11,065**	9,693
Cash and cash equivalents at end of period[(1)]	**$ 9,292**	$ 10,643	**$ 9,292**	$ 10,643

(1) Represents cash and non-interest-bearing deposits with financial institutions (refer to Note 5).

The accompanying notes are an integral part of these condensed interim consolidated financial statements.

Notes to the Condensed Interim Consolidated Financial Statements (Unaudited)

1. Reporting entity

The Bank of Nova Scotia (the Bank) is a chartered bank under the Bank Act (Canada) (the Bank Act). The Bank is a Schedule I bank under the Bank Act and is regulated by the Office of the Superintendent of Financial Institutions (OSFI). The Bank is a global financial services provider offering a diverse range of products and services, including personal, commercial, corporate and investment banking. The head office of the Bank is located at 1709 Hollis Street, Halifax, Nova Scotia, Canada and its executive offices are at 40 Temperance Street, Toronto, Canada. The common shares of the Bank are listed on the Toronto Stock Exchange and the New York Stock Exchange.

2. Basis of preparation

Statement of compliance

These condensed interim consolidated financial statements of the Bank have been prepared in accordance with International Financial Reporting Standards (IFRS) as issued by the International Accounting Standards Board (IASB) and accounting requirements of OSFI in accordance with Section 308 of the Bank Act. Section 308 states that except as otherwise specified by OSFI, the financial statements are to be prepared in accordance with IFRS.

These condensed interim consolidated financial statements were prepared in accordance with International Accounting Standard 34, *Interim Financial Reporting* (IAS 34) and do not include all of the information required for full annual financial statements. These condensed interim consolidated financial statements should be read in conjunction with the Bank's annual audited consolidated financial statements for the year ended October 31, 2022.

The condensed interim consolidated financial statements for the quarter ended April 30, 2023 have been approved by the Board of Directors for issue on May 24, 2023.

Basis of measurement

The condensed interim consolidated financial statements have been prepared on the historical cost basis except for the following material items that are measured at fair value in the Consolidated Statement of Financial Position:

- Financial assets and liabilities measured at fair value through profit or loss
- Financial assets and liabilities designated at fair value through profit or loss
- Derivative financial instruments
- Equity instruments designated at fair value through other comprehensive income
- Debt instruments measured at fair value through other comprehensive income

Functional and presentation currency

These condensed interim consolidated financial statements are presented in Canadian dollars, which is the Bank's functional currency. All financial information presented in Canadian dollars has been rounded to the nearest million unless otherwise stated.

Use of estimates and judgments

The preparation of financial statements, in conformity with IFRS, requires management to make estimates, apply judgments and make assumptions that affect the reported amount of assets and liabilities at the date of the condensed interim consolidated financial statements, and income and expenses during the reporting period. Estimates made by management are based on historical experience and other assumptions that are believed to be reasonable. Key areas where management has made difficult, complex or subjective judgments, often as a result of matters that are inherently uncertain, include those relating to the allowance for credit losses, the fair value of financial instruments (including derivatives), corporate income taxes, employee benefits, the fair value of all identifiable assets and liabilities as a result of business combinations, impairment of non-financial assets and derecognition of financial assets and liabilities. While management makes its best estimates and assumptions, actual results could differ from these estimates and assumptions.

3. Significant accounting policies

These condensed interim consolidated financial statements should be read in conjunction with the Bank's audited consolidated financial statements for the year ended October 31, 2022.

The significant accounting policies used in the preparation of the condensed interim consolidated financial statements are consistent with those used in the Bank's audited consolidated financial statements for the year ended October 31, 2022 as described in Note 3 of the Bank's audited consolidated financial statements in the 2022 Annual Report.

4. Future accounting developments

There are no significant updates to the future accounting developments disclosed in Note 5 of the Bank's audited consolidated financial statements in the 2022 Annual Report.

5. Cash and deposits with financial institutions

	As at		
($ millions)	**April 30 2023**	January 31 2023	October 31 2022
Cash and non-interest-bearing deposits with financial institutions	**$ 9,292**	$ 8,301	$ 11,065
Interest-bearing deposits with financial institutions	**54,601**	73,085	54,830
Total	**$ 63,893[(1)]**	$ 81,386[(1)]	$ 65,895[(1)]

(1) Net of allowances of $6 (January 31, 2023 – $5; October 31, 2022 – $4).

The Bank is required to maintain balances with central banks, other regulatory authorities and certain counterparties and these amounted to $6,041 million (January 31, 2023 – $5,604 million; October 31, 2022 – $5,958 million) and are included above.

6. Investment securities

The following table presents the carrying amounts of the Bank's investment securities per measurement category.

	As at		
($ millions)	**April 30 2023**	January 31 2023	October 31 2022
Debt investment securities measured at FVOCI	**$ 83,920**	$ 82,431	$ 81,271
Debt investment securities measured at amortized cost	**28,277**	24,195	23,610
Equity investment securities designated at FVOCI	**2,639**	2,679	3,439
Equity investment securities measured at FVTPL	**1,697**	1,636	1,626
Debt investment securities measured at FVTPL	**62**	63	62
Total investment securities	**$ 116,595**	$ 111,004	$ 110,008

(a) Debt investment securities measured at fair value through other comprehensive income (FVOCI)

As at April 30, 2023 ($ millions)	**Cost**	**Gross unrealized gains**	**Gross unrealized losses**	**Fair value**
Canadian federal government issued or guaranteed debt	**$ 9,520**	**$ 8**	**$ 239**	**$ 9,289**
Canadian provincial and municipal debt	**7,914**	**29**	**292**	**7,651**
U.S. treasury and other U.S. agency debt	**34,925**	**54**	**1,522**	**33,457**
Other foreign government debt	**32,142**	**100**	**789**	**31,453**
Other debt	**2,131**	**4**	**65**	**2,070**
Total	**$ 86,632**	**$ 195**	**$ 2,907**	**$ 83,920**

As at January 31, 2023 ($ millions)	Cost	Gross unrealized gains	Gross unrealized losses	Fair value
Canadian federal government issued or guaranteed debt	$ 10,122	$ 6	$ 266	$ 9,862
Canadian provincial and municipal debt	6,728	16	319	6,425
U.S. treasury and other U.S. agency debt	36,609	75	1,849	34,835
Other foreign government debt	30,141	72	924	29,289
Other debt	2,084	6	70	2,020
Total	$ 85,684	$ 175	$ 3,428	$ 82,431

(b) Debt investment securities measured at amortized cost

	As at					
	April 30, 2023		January 31, 2023		October 31, 2022	
($ millions)	**Fair value**	**Carrying value[(1)]**	Fair value	Carrying value[(1)]	Fair value	Carrying value[(1)]
Canadian federal and provincial government issued or guaranteed debt	**$ 9,229**	**$ 9,455**	$ 8,719	$ 8,987	$ 8,684	$ 9,024
U.S. treasury and other U.S. agency debt	**16,357**	**17,141**	12,874	13,600	12,212	13,042
Other foreign government debt	**1,595**	**1,598**	1,493	1,497	1,459	1,470
Corporate debt	**89**	**83**	120	111	88	74
Total	**$ 27,270**	**$ 28,277**	$ 23,206	$ 24,195	$ 22,443	$ 23,610

(1) Balances are net of allowances which are $1, and includes the impact of fair value hedge adjustments.

(c) Equity investment securities designated at fair value through other comprehensive income (FVOCI)

As at April 30, 2023 ($ millions)	**Cost**	**Gross unrealized gains**	**Gross unrealized losses**	**Fair value**
Common shares	**$ 2,321**	**$ 480**	**$ 162**	**$ 2,639**
Total	**$ 2,321**	**$ 480**	**$ 162**	**$ 2,639**

As at January 31, 2023 ($ millions)	Cost	Gross unrealized gains	Gross unrealized losses	Fair value
Common shares	$ 2,313	$ 508	$ 142	$ 2,679
Total	$ 2,313	$ 508	$ 142	$ 2,679

Dividend income earned on equity securities designated at FVOCI of $42 million for the three months ended April 30, 2023 (January 31, 2023 – $33 million; April 30, 2022 – $42 million) and for the six months ended April 30, 2023 – $75 million (April 30, 2022 – $80 million) has been recognized in interest income.

During the three months ended April 30, 2023, the Bank has disposed of certain equity securities designated at FVOCI with a fair value of $20 million (January 31, 2023 – $788 million; April 30, 2022 – $196 million) and for the six months ended April 30, 2023 – $808 million (April 30, 2022 – $577 million). This has resulted in a realized loss of $3 million in the three months ended April 30, 2023 (January 31, 2023 – realized loss of $64 million; April 30, 2022 – realized gain of $43 million) and for the six months ended a realized loss of $67 million (April 30, 2022 – realized gain of $79 million).

7. Loans, impaired loans and allowance for credit losses

(a) Loans at amortized cost

	As at		
	April 30, 2023		
($ millions)	**Gross carrying amount**	**Allowance for credit losses**	**Net carrying amount**
Residential mortgages	**$ 353,560**	**$ 981**	**$ 352,579**
Personal loans	**102,178**	**2,267**	**99,911**
Credit cards	**16,053**	**1,135**	**14,918**
Business and government	**298,013**	**1,353**	**296,660**
Total	**$ 769,804**	**$ 5,736**	**$ 764,068**

	As at					
	January 31, 2023			October 31, 2022		
($ millions)	Gross carrying amount	Allowance for credit losses	Net carrying amount	Gross carrying amount	Allowance for credit losses	Net carrying amount
Residential mortgages	$ 353,527	$ 938	$ 352,589	$ 349,279	$ 899	$ 348,380
Personal loans	101,041	2,204	98,837	99,431	2,137	97,294
Credit cards	15,494	1,100	14,394	14,518	1,083	13,435
Business and government	290,608	1,271	289,337	287,107	1,229	285,878
Total	$ 760,670	$ 5,513	$ 755,157	$ 750,335	$ 5,348	$ 744,987

(b) Impaired loans(1)

	As at		
	April 30, 2023		
($ millions)	**Gross impaired loans**	**Allowance for credit losses**	**Net carrying amount**
Residential mortgages	**$ 1,659**	**$ 455**	**$ 1,204**
Personal loans	**1,040**	**608**	**432**
Credit cards	**–**	**–**	**–**
Business and government	**2,606**	**688**	**1,918**
Total	**$ 5,305**	**$ 1,751**	**$ 3,554**
By geography:			
Canada	**$ 1,293**	**$ 459**	**$ 834**
United States	**–**	**–**	**–**
Mexico	**1,115**	**320**	**795**
Peru	**736**	**375**	**361**
Chile	**990**	**254**	**736**
Colombia	**305**	**80**	**225**
Other international	**866**	**263**	**603**
Total	**$ 5,305**	**$ 1,751**	**$ 3,554**

	As at					
	January 31, 2023			October 31, 2022		
($ millions)	Gross impaired loans	Allowance for credit losses	Net carrying amount	Gross impaired loans	Allowance for credit losses	Net carrying amount
Residential mortgages	$ 1,539	$ 428	$ 1,111	$ 1,386	$ 406	$ 980
Personal loans	968	563	405	848	551	297
Credit cards	–	–	–	–	–	–
Business and government	2,597	663	1,934	2,552	678	1,874
Total	$ 5,104	$ 1,654	$ 3,450	$ 4,786	$ 1,635	$ 3,151
By geography:						
Canada	$ 1,212	$ 434	$ 778	$ 1,054	$ 440	$ 614
United States	–	–	–	–	–	–
Mexico	1,034	295	739	1,020	294	726
Peru	720	351	369	761	352	409
Chile	953	243	710	740	202	538
Colombia	306	72	234	301	67	234
Other international	879	259	620	910	280	630
Total	$ 5,104	$ 1,654	$ 3,450	$ 4,786	$ 1,635	$ 3,151

(1) Interest income recognized on impaired loans during the three months ended April 30, 2023 was $14 (January 31, 2023 – $12; October 31, 2022 – $11).

(c) Allowance for credit losses

(i) Key inputs and assumptions

The Bank's allowance for credit losses is measured using a three-stage approach based on the extent of credit deterioration since origination. The calculation of the Bank's allowance for credit losses is an output of complex models with a number of underlying assumptions regarding the choice of variable inputs and their interdependencies. Some of the key drivers include the following:

- Changes in risk ratings of the borrower or instrument reflecting changes in their credit quality;
- Changes in the volumes of transactions;
- Changes in the forward-looking macroeconomic environment reflected in the variables used in the models such as GDP growth, unemployment rates, commodity prices, interest rates, and house price indices, which are most closely related with credit losses in the relevant portfolio;
- Changes in macroeconomic scenarios and the probability weights assigned to each scenario; and
- Borrower migration between the three stages.

The Bank determines its allowance for credit losses using four probability-weighted forward-looking scenarios (base case, optimistic, pessimistic and very pessimistic).

The Bank considers both internal and external sources of information and data to achieve unbiased projections and forecasts in determining the allowance for credit losses. The Bank prepares the scenarios using forecasts generated by Scotiabank Economics (SE). The forecasts are generated using models whose outputs are modified by SE as necessary to formulate a 'base case' view of the most probable future direction of economic developments. The development of the base case and alternative scenarios is overseen by a governance committee that consists of internal stakeholders from across the Bank. The final base case and alternative scenarios reflect significant review and oversight, and incorporate judgment both in the determination of the scenarios' forecasts and the probability weights that are assigned to them.

(ii) Key macroeconomic variables

The inputs and models used for calculating expected credit losses may not always capture all characteristics of the market at the date of the financial statements. Qualitative adjustments or overlays may be made for certain portfolios or geographies as temporary adjustments in circumstances where, in the Bank's view, the inputs, assumptions, and/or modelling techniques do not capture all relevant risk factors, including the emergence of economic or geopolitical events up to the date of financial statements.

The Bank has applied expert credit judgement in the determination of the allowance for credit losses to capture, as described above, all relevant risk factors up to the end of the reporting period. The Bank considered both quantitative and qualitative information in the assessment of significant increase in credit risk.

The Bank's models are calibrated to consider past performance and macroeconomic forward-looking variables as inputs. The Bank has generated a forward-looking base case scenario and three alternate forward-looking scenarios (one optimistic and two pessimistic) as key inputs into the expected credit loss provisioning models.

The base case scenario shows stronger inflation pressures in both Canada and the U.S. compared to last quarter, which brings monetary policy rates to higher than forecasted levels. Rising interest rates, combined with the negative impact from the banking sector turmoil in the U.S. (and Europe to a lesser extent), are leading to a technical recession in Canada and the U.S., with their real GDP declining mildly in both the second and third quarter of this year. Despite this modest recession, GDP will still grow in 2023 in both economies – albeit at a slower pace than in the previous year – given a good starting point.

The optimistic scenario features somewhat stronger economic activity relative to the base case. The pessimistic scenario is now based on the recent banking sector turmoil in the U.S. and Europe and features deteriorating private sector financial conditions and confidence (unlike a stagflation shock in the previous quarter). These are reducing economic activity and inflation worldwide from the base case scenario, requiring central banks to reduce their monetary policy rates to mitigate the decline in economic activity and prevent inflation from falling below targeted ranges. Lastly, the very pessimistic (stagflation) scenario features further supply chain disruptions also leading to a protracted period of financial market uncertainty. This results in higher inflation rates, requiring central banks to raise their policy rate to higher levels than in the base case in order to bring inflation under control, which is dampening economic activity.

The following tables show certain key macroeconomic variables used to calculate the modelled estimate for the allowance for credit losses. Further changes in these variables up to the date of the financial statements is incorporated through expert credit judgment. For the base case, optimistic and pessimistic scenarios, the projections are provided for the next 12 months and for the remaining forecast period, which represents a medium-term view.

	Base Case Scenario		Alternative Scenario - Optimistic		Alternative Scenario - Pessimistic		Alternative Scenario - Very Pessimistic	
As at April 30, 2023	Next 12 Months	Remaining Forecast Period	Next 12 Months	Remaining Forecast Period	Next 12 Months	Remaining Forecast Period	Next 12 Months	Remaining Forecast Period
Canada								
Real GDP growth, y/y % change	**0.3**	**2.6**	**1.2**	**4.0**	**-2.5**	**3.3**	**-3.7**	**3.5**
Consumer price index, y/y %	**3.4**	**1.8**	**3.5**	**2.4**	**2.4**	**1.5**	**6.3**	**2.0**
Unemployment rate, average %	**5.6**	**5.8**	**5.2**	**4.2**	**7.2**	**6.4**	**8.4**	**6.6**
Bank of Canada overnight rate target, average %	**4.4**	**2.5**	**4.5**	**3.4**	**3.2**	**1.1**	**5.3**	**3.0**
HPI - Housing Price Index, y/y % change	**-16.9**	**-0.2**	**-16.3**	**1.2**	**-20.0**	**0.6**	**-20.3**	**-0.2**
USD/CAD exchange rate, average	**1.31**	**1.24**	**1.31**	**1.24**	**1.44**	**1.27**	**1.46**	**1.28**
U.S.								
Real GDP growth, y/y % change	**0.6**	**1.9**	**1.1**	**2.7**	**-2.4**	**2.7**	**-3.2**	**2.8**
Consumer price index, y/y %	**4.5**	**2.4**	**4.8**	**2.8**	**3.2**	**1.9**	**7.6**	**2.6**
Target federal funds rate, upper limit, average %	**5.1**	**2.8**	**5.4**	**3.7**	**4.0**	**0.9**	**6.0**	**3.3**
Unemployment rate, average %	**3.8**	**4.6**	**3.7**	**4.2**	**5.4**	**5.2**	**6.3**	**5.3**
Mexico								
Real GDP growth, y/y % change	**0.7**	**2.3**	**1.2**	**3.1**	**-1.2**	**2.8**	**-2.9**	**3.1**
Unemployment rate, average %	**3.8**	**3.9**	**3.7**	**3.2**	**4.7**	**4.1**	**6.2**	**4.7**
Chile								
Real GDP growth, y/y % change	**-0.2**	**2.9**	**1.1**	**4.1**	**-2.4**	**3.5**	**-3.7**	**3.8**
Unemployment rate, average %	**8.7**	**7.2**	**8.3**	**6.3**	**9.9**	**7.4**	**11.2**	**7.7**
Peru								
Real GDP growth, y/y % change	**2.2**	**2.6**	**2.9**	**4.0**	**0.9**	**3.1**	**-0.4**	**3.3**
Unemployment rate, average %	**7.4**	**7.1**	**7.1**	**5.3**	**8.7**	**7.4**	**9.3**	**7.9**
Colombia								
Real GDP growth, y/y % change	**1.7**	**2.9**	**3.5**	**3.9**	**0.5**	**3.3**	**-0.8**	**3.6**
Unemployment rate, average %	**11.2**	**10.2**	**10.3**	**8.2**	**13.2**	**10.7**	**14.0**	**11.3**
Caribbean								
Real GDP growth, y/y % change	**3.8**	**3.9**	**4.3**	**4.7**	**2.5**	**4.3**	**1.2**	**4.6**
Global								
WTI oil price, average USD/bbl	**79**	**69**	**84**	**86**	**68**	**66**	**65**	**65**
Copper price, average USD/lb	**3.60**	**4.80**	**3.72**	**5.36**	**3.35**	**4.69**	**3.30**	**4.66**
Global GDP, y/y % change	**2.67**	**2.42**	**3.59**	**3.42**	**0.02**	**3.08**	**-0.71**	**3.22**

As at January 31, 2023	Base Case Scenario		Alternative Scenario - Optimistic		Alternative Scenario - Pessimistic		Alternative Scenario - Very Pessimistic	
	Next 12 Months	Remaining Forecast Period	Next 12 Months	Remaining Forecast Period	Next 12 Months	Remaining Forecast Period	Next 12 Months	Remaining Forecast Period
Canada								
Real GDP growth, y/y % change	0.8	2.3	1.7	3.6	-2.2	3.1	-3.2	3.1
Consumer price index, y/y %	4.1	1.8	4.3	2.3	6.3	2.0	7.0	2.0
Unemployment rate, average %	5.8	6.1	5.4	4.5	7.8	6.5	8.6	6.8
Bank of Canada overnight rate target, average %	4.2	2.5	4.5	3.7	4.8	2.8	5.1	3.0
HPI - Housing Price Index, y/y % change	-13.1	0.2	-12.6	1.7	-15.8	0.2	-16.7	0.2
USD/CAD exchange rate, average	1.33	1.24	1.32	1.24	1.33	1.25	1.33	1.25
U.S.								
Real GDP growth, y/y % change	0.6	1.9	1.3	2.7	-2.3	2.7	-3.2	2.8
Consumer price index, y/y %	5.0	2.3	5.2	2.6	7.3	2.4	8.1	2.5
Target federal funds rate, upper limit, average %	4.9	2.8	5.2	4.0	5.6	3.1	5.8	3.3
Unemployment rate, average %	4.2	4.8	4.0	4.4	6.0	5.2	6.7	5.4
Mexico								
Real GDP growth, y/y % change	0.8	2.2	1.5	3.1	-1.8	2.9	-2.7	3.0
Unemployment rate, average %	3.9	3.8	3.7	3.1	5.6	4.3	6.3	4.6
Chile								
Real GDP growth, y/y % change	-1.7	2.5	-0.7	3.6	-4.4	3.3	-5.3	3.4
Unemployment rate, average %	9.1	7.3	8.8	6.7	10.9	7.6	11.6	7.8
Peru								
Real GDP growth, y/y % change	2.4	2.3	2.7	3.7	-0.6	3.1	-1.5	3.2
Unemployment rate, average %	7.4	7.3	7.2	5.8	9.4	7.8	10.6	8.3
Colombia								
Real GDP growth, y/y % change	2.0	2.7	4.5	4.2	-1.0	3.4	-1.9	3.6
Unemployment rate, average %	10.7	10.3	9.4	7.0	12.7	10.7	14.3	11.5
Caribbean								
Real GDP growth, y/y % change	3.7	3.9	4.3	4.8	1.0	4.6	0.1	4.7
Global								
WTI oil price, average USD/bbl	94	69	99	81	108	71	80	65
Copper price, average USD/lb	3.50	4.51	3.61	5.02	3.71	4.54	3.21	4.38
Global GDP, y/y % change	2.07	2.52	2.80	3.47	-0.47	3.23	-1.31	3.32

As at October 31, 2022	Base Case Scenario		Alternative Scenario - Optimistic		Alternative Scenario - Pessimistic		Alternative Scenario - Very Pessimistic	
	Next 12 Months	Remaining Forecast Period	Next 12 Months	Remaining Forecast Period	Next 12 Months	Remaining Forecast Period	Next 12 Months	Remaining Forecast Period
Canada								
Real GDP growth, y/y % change	1.2	2.1	2.4	3.1	-4.8	3.7	-5.9	2.6
Consumer price index, y/y %	4.9	2.1	5.2	2.6	9.3	2.3	12.5	9.5
Unemployment rate, average %	5.7	6.0	5.1	4.7	9.7	6.9	10.2	8.6
Bank of Canada overnight rate target, average %	3.8	2.7	4.2	4.1	5.1	3.2	5.1	3.7
HPI - Housing Price Index, y/y % change	-12.3	-0.3	-9.7	1.6	-17.6	-0.3	-20.0	-1.3
USD/CAD exchange rate, average	1.27	1.24	1.26	1.23	1.28	1.24	1.28	1.25
U.S.								
Real GDP growth, y/y % change	0.6	2.1	1.3	3.0	-5.1	3.7	-6.5	3.3
Consumer price index, y/y %	5.4	2.4	5.8	2.8	10.0	2.6	13.2	10.1
Target federal funds rate, upper limit, average %	3.5	2.7	4.7	4.5	4.8	3.3	4.8	3.7
Unemployment rate, average %	4.3	5.0	4.2	4.6	7.9	5.7	8.3	6.7
Mexico								
Real GDP growth, y/y % change	1.4	2.6	1.9	3.5	-4.0	4.0	-5.1	2.5
Unemployment rate, average %	3.8	3.9	3.7	3.2	7.2	4.8	7.6	6.4
Chile								
Real GDP growth, y/y % change	-2.0	2.4	-0.8	3.6	-7.3	3.9	-8.4	2.9
Unemployment rate, average %	8.6	7.6	8.0	6.5	12.2	8.3	12.9	9.0
Peru								
Real GDP growth, y/y % change	2.5	2.7	3.7	3.8	-1.0	4.1	-3.3	3.5
Unemployment rate, average %	7.0	6.9	6.0	4.7	10.3	7.6	11.4	9.2
Colombia								
Real GDP growth, y/y % change	3.9	2.6	6.5	3.6	0.4	4.0	-2.0	3.4
Unemployment rate, average %	10.7	9.9	9.0	6.7	14.0	10.7	15.1	12.3
Caribbean								
Real GDP growth, y/y % change	4.4	4.0	5.0	4.9	0.5	5.2	-1.0	3.8
Global								
WTI oil price, average USD/bbl	89	79	95	96	116	83	125	116
Copper price, average USD/lb	3.25	3.49	3.39	3.95	3.66	3.54	3.78	3.78
Global GDP, y/y % change	2.02	2.83	2.96	3.83	-3.05	4.23	-4.14	3.79

(iii) Sensitivity

Relative to the base case scenario, the weighting of these multiple scenarios increased the reported allowance for credit losses for financial assets in Stage 1 and Stage 2 to $4,164 million (January 31, 2023 – $3,998 million; October 31, 2022 – $3,847 million) from $4,035 million (January 31, 2023 – $3,901 million; October 31, 2022 – $3,609 million).

If the Bank was to only use the very pessimistic scenario for the measurement of allowance for credit losses for such assets, the allowance for credit losses on performing financial instruments would be $498 million (January 31, 2023 – $538 million; October 31, 2022 – $1,096 million) higher than the reported allowance for credit losses as at April 30, 2023, excluding the consideration of changes in qualitative overlays or expert credit judgement. Actual results will differ as this does not consider the migration of exposures or incorporate changes that would occur in the portfolio due to risk mitigation actions and other factors.

Under the current probability-weighted scenarios, if all performing financial assets were in Stage 1, reflecting a 12 month expected loss period, the allowance for credit losses would be $500 million (January 31, 2023 – $541 million; October 31, 2022 – $521 million) lower than the reported allowance for credit losses on performing financial assets.

(iv) Allowance for credit losses

Allowance for credit losses

($ millions)	Balance as at November 1, 2022	Provision for credit losses	Net write-offs	Other, including foreign currency adjustment	**Balance as at April 30, 2023**
Residential mortgages	$ 899	$ 55	$ (30)	$ 57	**$ 981**
Personal loans	2,137	578	(528)	80	**2,267**
Credit cards	1,083	403	(401)	50	**1,135**
Business and government	1,368	311	(156)	9	**1,532**
	$ 5,487	$ 1,347	$ (1,115)	$196	**$ 5,915**
Presented as:					
Allowance for credit losses on loans	$ 5,348				**$ 5,736**
Allowance for credit losses on acceptances(1)	31				**50**
Allowance for credit losses on off-balance sheet exposures(2)	108				**129**

(1) Allowance for credit losses on acceptances are recorded against the financial asset in the Consolidated Statement of Financial Position.
(2) Allowance for credit losses on off-balance sheet exposures is recorded in other liabilities in the Consolidated Statement of Financial Position.

($ millions)	Balance as at November 1, 2021	Provision for credit losses	Net write-offs	Other, including foreign currency adjustment	Balance as at April 30, 2022
Residential mortgages	$ 802	$ 32	$ (23)	$ 23	$ 834
Personal loans	2,341	235	(451)	46	2,171
Credit cards	1,211	159	(277)	14	1,107
Business and government	1,374	15	(128)	(3)	1,258
	$ 5,728	$ 441	$ (879)	$ 80	$ 5,370
Presented as:					
Allowance for credit losses on loans	$ 5,626				$ 5,294
Allowance for credit losses on acceptances(1)	37				27
Allowance for credit losses on off-balance sheet exposures(2)	65				49

(1) Allowance for credit losses on acceptances are recorded against the financial asset in the Consolidated Statement of Financial Position.
(2) Allowance for credit losses on off-balance sheet exposures is recorded in other liabilities in the Consolidated Statement of Financial Position.

Allowance for credit losses on loans	**As at April 30, 2023**			
($ millions)	**Stage 1**	**Stage 2**	**Stage 3**	**Total**
Residential mortgages	**$ 220**	**$ 306**	**$ 455**	**$ 981**
Personal loans	**677**	**982**	**608**	**2,267**
Credit cards	**425**	**710**	**–**	**1,135**
Business and government	**375**	**290**	**688**	**1,353**
Total(1)	**$ 1,697**	**$ 2,288**	**$ 1,751**	**$ 5,736**

(1) Excludes allowance for credit losses of $195 for other financial assets including acceptances, investment securities, deposits with banks, off-balance sheet credit risks and reverse repos.

	As at October 31, 2022			
($ millions)	Stage 1	Stage 2	Stage 3	Total
Residential mortgages	$ 197	$ 296	$ 406	$ 899
Personal loans	665	921	551	2,137
Credit cards	436	647	–	1,083
Business and government	255	296	678	1,229
Total(1)	$ 1,553	$ 2,160	$ 1,635	$ 5,348

(1) Excludes allowance for credit losses of $151 for other financial assets including acceptances, investment securities, deposits with banks, off-balance sheet credit risks and reverse repos.

	As at April 30, 2022			
($ millions)	Stage 1	Stage 2	Stage 3	Total
Residential mortgages	$ 168	$ 273	$ 393	$ 834
Personal loans	655	950	566	2,171
Credit cards	419	688	–	1,107
Business and government	202	335	645	1,182
Total[(1)]	$ 1,444	$ 2,246	$ 1,604	$ 5,294

(1) Excludes allowance for credit losses of $81 for other financial assets including acceptances, investment securities, deposits with banks, off-balance sheet credit risks and reverse repos.

The following table presents the changes to the allowance for credit losses on loans.

	As at and for the three months ended							
	April 30, 2023				April 30, 2022			
($ millions)	**Stage 1**	**Stage 2**	**Stage 3**	**Total**	Stage 1	Stage 2	Stage 3	Total
Retail loans:								
Residential mortgages								
Balance at beginning of period	**$ 209**	**$ 301**	**$ 428**	**$ 938**	$ 161	$ 279	$ 395	$ 835
Provision for credit losses								
Remeasurement(1)	**(42)**	**8**	**57**	**23**	(15)	7	9	1
Newly originated or purchased financial assets	**7**	**–**	**–**	**7**	10	–	–	10
Derecognition of financial assets and maturities	**(2)**	**(4)**	**–**	**(6)**	(1)	(4)	–	(5)
Changes in models and methodologies	**–**	**–**	**–**	**–**	–	–	–	–
Transfer to (from):								
Stage 1	**47**	**(34)**	**(13)**	**–**	14	(12)	(2)	–
Stage 2	**(8)**	**39**	**(31)**	**–**	(2)	9	(7)	–
Stage 3	**–**	**(13)**	**13**	**–**	–	(3)	3	–
Gross write-offs	**–**	**–**	**(21)**	**(21)**	–	–	(16)	(16)
Recoveries	**–**	**–**	**6**	**6**	–	–	7	7
Foreign exchange and other movements	**9**	**9**	**16**	**34**	1	(3)	4	2
Balance at end of period	**$ 220**	**$ 306**	**$ 455**	**$ 981**	$ 168	$ 273	$ 393	$ 834
Personal loans								
Balance at beginning of period	**$ 673**	**$ 968**	**$ 563**	**$ 2,204**	$ 655	$ 1,020	$ 574	$ 2,249
Provision for credit losses								
Remeasurement(1)	**(191)**	**224**	**238**	**271**	(162)	94	161	93
Newly originated or purchased financial assets	**94**	**–**	**–**	**94**	75	–	–	75
Derecognition of financial assets and maturities	**(21)**	**(42)**	**–**	**(63)**	(17)	(27)	–	(44)
Changes in models and methodologies	**–**	**–**	**–**	**–**	–	–	–	–
Transfer to (from):								
Stage 1	**162**	**(158)**	**(4)**	**–**	127	(125)	(2)	–
Stage 2	**(50)**	**72**	**(22)**	**–**	(26)	39	(13)	–
Stage 3	**(2)**	**(98)**	**100**	**–**	(1)	(49)	50	–
Gross write-offs	**–**	**–**	**(335)**	**(335)**	–	–	(275)	(275)
Recoveries	**–**	**–**	**57**	**57**	–	–	64	64
Foreign exchange and other movements	**12**	**16**	**11**	**39**	4	(2)	7	9
Balance at end of period	**$ 677**	**$ 982**	**$ 608**	**$ 2,267**	$ 655	$ 950	$ 566	$ 2,171
Credit cards								
Balance at beginning of period	**$ 436**	**$ 664**	**$ –**	**$ 1,100**	$ 399	$ 766	$ –	$ 1,165
Provision for credit losses								
Remeasurement(1)	**(81)**	**150**	**134**	**203**	(37)	3	106	72
Newly originated or purchased financial assets	**44**	**–**	**–**	**44**	32	–	–	32
Derecognition of financial assets and maturities	**(17)**	**(18)**	**–**	**(35)**	(10)	(8)	–	(18)
Changes in models and methodologies	**–**	**–**	**–**	**–**	–	–	–	–
Transfer to (from):								
Stage 1	**68**	**(68)**	**–**	**–**	52	(52)	–	–
Stage 2	**(34)**	**34**	**–**	**–**	(13)	13	–	–
Stage 3	**–**	**(63)**	**63**	**–**	–	(33)	33	–
Gross write-offs	**–**	**–**	**(269)**	**(269)**	–	–	(186)	(186)
Recoveries	**–**	**–**	**72**	**72**	–	–	48	48
Foreign exchange and other movements	**9**	**11**	**–**	**20**	(4)	(1)	(1)	(6)
Balance at end of period	**$ 425**	**$ 710**	**$ –**	**$ 1,135**	$ 419	$ 688	$ –	$ 1,107
Total retail loans								
Balance at beginning of period	**$ 1,318**	**$ 1,933**	**$ 991**	**$ 4,242**	$ 1,215	$ 2,065	$ 969	$ 4,249
Provision for credit losses								
Remeasurement(1)	**(314)**	**382**	**429**	**497**	(214)	104	276	166
Newly originated or purchased financial assets	**145**	**–**	**–**	**145**	117	–	–	117
Derecognition of financial assets and maturities	**(40)**	**(64)**	**–**	**(104)**	(28)	(39)	–	(67)
Changes in models and methodologies	**–**	**–**	**–**	**–**	–	–	–	–
Transfer to (from):								
Stage 1	**277**	**(260)**	**(17)**	**–**	193	(189)	(4)	–
Stage 2	**(92)**	**145**	**(53)**	**–**	(41)	61	(20)	–
Stage 3	**(2)**	**(174)**	**176**	**–**	(1)	(85)	86	–
Gross write-offs	**–**	**–**	**(625)**	**(625)**	–	–	(477)	(477)
Recoveries	**–**	**–**	**135**	**135**	–	–	119	119
Foreign exchange and other movements	**30**	**36**	**27**	**93**	1	(6)	10	5
Balance at end of period	**$ 1,322**	**$ 1,998**	**$ 1,063**	**$ 4,383**	$ 1,242	$ 1,911	$ 959	$ 4,112
Non-retail loans:								
Business and government								
Balance at beginning of period	**$ 380**	**$ 312**	**$ 679**	**$ 1,371**	$ 233	$ 411	$ 654	$ 1,298
Provision for credit losses								
Remeasurement(1)	**46**	**18**	**99**	**163**	(23)	(9)	72	40
Newly originated or purchased financial assets	**94**	**–**	**–**	**94**	65	–	–	65
Derecognition of financial assets and maturities	**(81)**	**(7)**	**(9)**	**(97)**	(55)	(36)	(7)	(98)
Changes in models and methodologies	**–**	**–**	**–**	**–**	(1)	2	–	1
Transfer to (from):								
Stage 1	**20**	**(20)**	**–**	**–**	19	(19)	–	–
Stage 2	**(9)**	**14**	**(5)**	**–**	(4)	4	–	–
Stage 3	**–**	**(1)**	**1**	**–**	–	(3)	3	–
Gross write-offs	**–**	**–**	**(71)**	**(71)**	–	–	(73)	(73)
Recoveries	**–**	**–**	**9**	**9**	–	–	9	9
Foreign exchange and other movements	**6**	**6**	**1**	**13**	–	2	(13)	(11)
Balance at end of period including off-balance sheet exposures	**$ 456**	**$ 322**	**$ 704**	**$ 1,482**	$ 234	$ 352	$ 645	$ 1,231
Less: Allowance for credit losses on off-balance sheet exposures(2)	**(81)**	**(32)**	**(16)**	**(129)**	(32)	(17)	–	(49)
Balance at end of period	**$ 375**	**$ 290**	**$ 688**	**$ 1,353**	$ 202	$ 335	$ 645	$ 1,182

	As at and for the six months ended							
	April 30, 2023				April 30, 2022			
($ millions)	**Stage 1**	**Stage 2**	**Stage 3**	**Total**	Stage 1	Stage 2	Stage 3	Total
Retail loans:								
Residential mortgages								
Balance at beginning of period	**$ 197**	**$ 296**	**$ 406**	**$ 899**	$ 152	$ 276	$ 374	$ 802
Provision for credit losses								
Remeasurement[(1)]	**(73)**	**17**	**106**	**50**	(34)	18	38	22
Newly originated or purchased financial assets	**16**	**–**	**–**	**16**	20	–	–	20
Derecognition of financial assets and maturities	**(4)**	**(7)**	**–**	**(11)**	(3)	(7)	–	(10)
Changes in models and methodologies	**–**	**–**	**–**	**–**	–	–	–	–
Transfer to (from):								
Stage 1	**84**	**(63)**	**(21)**	**–**	33	(29)	(4)	–
Stage 2	**(15)**	**70**	**(55)**	**–**	(4)	16	(12)	–
Stage 3	**–**	**(26)**	**26**	**–**	–	(6)	6	–
Gross write-offs	**–**	**–**	**(43)**	**(43)**	–	–	(37)	(37)
Recoveries	**–**	**–**	**13**	**13**	–	–	14	14
Foreign exchange and other movements	**15**	**19**	**23**	**57**	4	5	14	23
Balance at end of period	**$ 220**	**$ 306**	**$ 455**	**$ 981**	$ 168	$ 273	$ 393	$ 834
Personal loans								
Balance at beginning of period	**$ 665**	**$ 921**	**$ 551**	**$ 2,137**	$ 644	$ 1,071	$ 626	$ 2,341
Provision for credit losses								
Remeasurement[(1)]	**(372)**	**466**	**421**	**515**	(318)	189	305	176
Newly originated or purchased financial assets	**184**	**–**	**–**	**184**	150	–	–	150
Derecognition of financial assets and maturities	**(42)**	**(79)**	**–**	**(121)**	(35)	(56)	–	(91)
Changes in models and methodologies	**–**	**–**	**–**	**–**	–	–	–	–
Transfer to (from):								
Stage 1	**319**	**(312)**	**(7)**	**–**	257	(252)	(5)	–
Stage 2	**(96)**	**135**	**(39)**	**–**	(56)	83	(27)	–
Stage 3	**(4)**	**(182)**	**186**	**–**	(2)	(99)	101	–
Gross write-offs	**–**	**–**	**(642)**	**(642)**	–	–	(582)	(582)
Recoveries	**–**	**–**	**114**	**114**	–	–	131	131
Foreign exchange and other movements	**23**	**33**	**24**	**80**	15	14	17	46
Balance at end of period	**$ 677**	**$ 982**	**$ 608**	**$ 2,267**	$ 655	$ 950	$ 566	$ 2,171
Credit cards								
Balance at beginning of period	**$ 436**	**$ 647**	**$ –**	**$ 1,083**	$ 352	$ 859	$ –	$ 1,211
Provision for credit losses								
Remeasurement[(1)]	**(155)**	**261**	**274**	**380**	(89)	8	215	134
Newly originated or purchased financial assets	**91**	**–**	**–**	**91**	60	–	–	60
Derecognition of financial assets and maturities	**(34)**	**(34)**	**–**	**(68)**	(20)	(15)	–	(35)
Changes in models and methodologies	**–**	**–**	**–**	**–**	–	–	–	–
Transfer to (from):								
Stage 1	**135**	**(135)**	**–**	**–**	139	(139)	–	–
Stage 2	**(69)**	**69**	**–**	**–**	(26)	26	–	–
Stage 3	**–**	**(123)**	**123**	**–**	–	(61)	61	–
Gross write-offs	**–**	**–**	**(510)**	**(510)**	–	–	(378)	(378)
Recoveries	**–**	**–**	**109**	**109**	–	–	101	101
Foreign exchange and other movements	**21**	**25**	**4**	**50**	3	10	1	14
Balance at end of period	**$ 425**	**$ 710**	**$ –**	**$ 1,135**	$ 419	$ 688	$ –	$ 1,107
Total retail loans								
Balance at beginning of period	**$ 1,298**	**$ 1,864**	**$ 957**	**$ 4,119**	$ 1,148	$ 2,206	$ 1,000	$ 4,354
Provision for credit losses								
Remeasurement[(1)]	**(600)**	**744**	**801**	**945**	(441)	215	558	332
Newly originated or purchased financial assets	**291**	**–**	**–**	**291**	230	–	–	230
Derecognition of financial assets and maturities	**(80)**	**(120)**	**–**	**(200)**	(58)	(78)	–	(136)
Changes in models and methodologies	**–**	**–**	**–**	**–**	–	–	–	–
Transfer to (from):								
Stage 1	**538**	**(510)**	**(28)**	**–**	429	(420)	(9)	–
Stage 2	**(180)**	**274**	**(94)**	**–**	(86)	125	(39)	–
Stage 3	**(4)**	**(331)**	**335**	**–**	(2)	(166)	168	–
Gross write-offs	**–**	**–**	**(1,195)**	**(1,195)**	–	–	(997)	(997)
Recoveries	**–**	**–**	**236**	**236**	–	–	246	246
Foreign exchange and other movements	**59**	**77**	**51**	**187**	22	29	32	83
Balance at end of period	**$ 1,322**	**$ 1,998**	**$ 1,063**	**$ 4,383**	$ 1,242	$ 1,911	$ 959	$ 4,112
Non-retail loans:								
Business and government								
Balance at beginning of period	**$ 322**	**$ 320**	**$ 695**	**$ 1,337**	$ 212	$ 470	$ 655	$ 1,337
Provision for credit losses								
Remeasurement[(1)]	**66**	**29**	**184**	**279**	(53)	(23)	148	72
Newly originated or purchased financial assets	**191**	**–**	**–**	**191**	121	–	–	121
Derecognition of financial assets and maturities	**(154)**	**(15)**	**(12)**	**(181)**	(96)	(56)	(18)	(170)
Changes in models and methodologies	**–**	**–**	**–**	**–**	(1)	2	–	1
Transfer to (from):								
Stage 1	**42**	**(42)**	**–**	**–**	61	(61)	–	–
Stage 2	**(17)**	**22**	**(5)**	**–**	(12)	12	–	–
Stage 3	**–**	**(2)**	**2**	**–**	–	(3)	3	–
Gross write-offs	**–**	**–**	**(177)**	**(177)**	–	–	(146)	(146)
Recoveries	**–**	**–**	**21**	**21**	–	–	18	18
Foreign exchange and other movements	**6**	**10**	**(4)**	**12**	2	11	(15)	(2)
Balance at end of period including off-balance sheet exposures	**$ 456**	**$ 322**	**$ 704**	**$ 1,482**	$ 234	$ 352	$ 645	$ 1,231
Less: Allowance for credit losses on off-balance sheet exposures[(2)]	**(81)**	**(32)**	**(16)**	**(129)**	(32)	(17)	–	(49)
Balance at end of period	**$ 375**	**$ 290**	**$ 688**	**$ 1,353**	$ 202	$ 335	$ 645	$ 1,182

(1) Includes credit risk changes as a result of significant increases in credit risk, changes in credit risk that did not result in a transfer between stages, changes in model inputs and assumptions and changes due to drawdowns of undrawn commitments.

(2) Allowance for credit losses on off-balance sheet exposures is recorded in other liabilities in the Consolidated Statement of Financial Position.

(d) Carrying value of exposures by risk rating

Residential mortgages	**As at April 30, 2023**				As at October 31, 2022			
Category of PD grades *($ millions)*	**Stage 1**	**Stage 2**	**Stage 3[(1)]**	**Total**	Stage 1	Stage 2	Stage 3[(1)]	Total
Very low	**$ 206,190**	**$ 622**	**$ –**	**$ 206,812**	$ 208,526	$ 635	$ –	$ 209,161
Low	**94,930**	**926**	**–**	**95,856**	90,745	1,172	–	91,917
Medium	**20,345**	**1,144**	**–**	**21,489**	18,399	1,032	–	19,431
High	**3,453**	**3,080**	**–**	**6,533**	2,759	2,680	–	5,439
Very high	**66**	**1,931**	**–**	**1,997**	53	1,429	–	1,482
Loans not graded[(2)]	**18,100**	**1,114**	**–**	**19,214**	19,276	1,187	–	20,463
Default	**–**	**–**	**1,659**	**1,659**	–	–	1,386	1,386
Total	**$ 343,084**	**$ 8,817**	**$ 1,659**	**$ 353,560**	$ 339,758	$ 8,135	$ 1,386	$ 349,279
Allowance for credit losses	**220**	**306**	**455**	**981**	197	296	406	899
Carrying value	**$ 342,864**	**$ 8,511**	**$ 1,204**	**$ 352,579**	$ 339,561	$ 7,839	$ 980	$ 348,380

(1) Stage 3 includes purchased or originated credit-impaired loans.
(2) Portfolios where the customer account level 'Probability of Default' has not been determined have been included in the 'Loans not graded' category.

Personal loans	**As at April 30, 2023**				As at October 31, 2022			
Category of PD grades *($ millions)*	**Stage 1**	**Stage 2**	**Stage 3[(1)]**	**Total**	Stage 1	Stage 2	Stage 3[(1)]	Total
Very low	**$ 29,705**	**$ 156**	**$ –**	**$ 29,861**	$ 30,098	$ 285	$ –	$ 30,383
Low	**28,036**	**530**	**–**	**28,566**	27,284	685	–	27,969
Medium	**9,200**	**555**	**–**	**9,755**	8,789	1,464	–	10,253
High	**7,936**	**3,052**	**–**	**10,988**	7,059	2,275	–	9,334
Very high	**100**	**1,870**	**–**	**1,970**	81	1,655	–	1,736
Loans not graded[(2)]	**18,349**	**1,649**	**–**	**19,998**	17,371	1,537	–	18,908
Default	**–**	**–**	**1,040**	**1,040**	–	–	848	848
Total	**$ 93,326**	**$ 7,812**	**$ 1,040**	**$ 102,178**	$ 90,682	$ 7,901	$ 848	$ 99,431
Allowance for credit losses	**677**	**982**	**608**	**2,267**	665	921	551	2,137
Carrying value	**$ 92,649**	**$ 6,830**	**$ 432**	**$ 99,911**	$ 90,017	$ 6,980	$ 297	$ 97,294

(1) Stage 3 includes purchased or originated credit-impaired loans.
(2) Portfolios where the customer account level 'Probability of Default' has not been determined have been included in the 'Loans not graded' category.

Credit cards	**As at April 30, 2023**				As at October 31, 2022			
Category of PD grades *($ millions)*	**Stage 1**	**Stage 2**	**Stage 3**	**Total**	Stage 1	Stage 2	Stage 3	Total
Very low	**$ 1,786**	**$ 43**	**$ –**	**$ 1,829**	$ 1,813	$ 47	$ –	$ 1,860
Low	**3,137**	**68**	**–**	**3,205**	2,756	159	–	2,915
Medium	**3,913**	**91**	**–**	**4,004**	3,434	190	–	3,624
High	**3,332**	**1,094**	**–**	**4,426**	3,042	998	–	4,040
Very high	**35**	**810**	**–**	**845**	36	587	–	623
Loans not graded[(1)]	**1,229**	**515**	**–**	**1,744**	997	459	–	1,456
Default	**–**	**–**	**–**	**–**	–	–	–	–
Total	**$ 13,432**	**$ 2,621**	**$ –**	**$ 16,053**	$ 12,078	$ 2,440	$ –	$ 14,518
Allowance for credit losses	**425**	**710**	**–**	**1,135**	436	647	–	1,083
Carrying value	**$ 13,007**	**$ 1,911**	**$ –**	**$ 14,918**	$ 11,642	$ 1,793	$ –	$ 13,435

(1) Portfolios where the customer account level 'Probability of Default' has not been determined have been included in the 'Loans not graded' category.

Undrawn loan commitments – Retail	**As at April 30, 2023**				As at October 31, 2022			
Category of PD grades *($ millions)*	**Stage 1**	**Stage 2**	**Stage 3**	**Total**	Stage 1	Stage 2	Stage 3	Total
Very low	**$ 103,483**	**$ 4**	**$ –**	**$ 103,487**	$ 98,973	$ 6	$ –	$ 98,979
Low	**19,483**	**1**	**–**	**19,484**	19,196	9	–	19,205
Medium	**7,894**	**14**	**–**	**7,908**	7,880	44	–	7,924
High	**3,634**	**393**	**–**	**4,027**	3,700	307	–	4,007
Very high	**33**	**351**	**–**	**384**	34	354	–	388
Loans not graded[(1)]	**8,804**	**1,650**	**–**	**10,454**	8,316	1,667	–	9,983
Default	**–**	**–**	**–**	**–**	–	–	–	–
Carrying value	**$ 143,331**	**$ 2,413**	**$ –**	**$ 145,744**	$ 138,099	$ 2,387	$ –	$ 140,486

(1) Portfolios where the customer account level 'Probability of Default' has not been determined have been included in the 'Loans not graded' category.

Total retail loans	**As at April 30, 2023**				As at October 31, 2022			
Category of PD grades *($ millions)*	**Stage 1**	**Stage 2**	**Stage 3(1)**	**Total**	Stage 1	Stage 2	Stage 3(1)	Total
Very low	**$ 341,164**	**$ 825**	**$ –**	**$ 341,989**	$ 339,410	$ 973	$ –	$ 340,383
Low	**145,586**	**1,525**	**–**	**147,111**	139,981	2,025	–	142,006
Medium	**41,352**	**1,804**	**–**	**43,156**	38,502	2,730	–	41,232
High	**18,355**	**7,619**	**–**	**25,974**	16,560	6,260	–	22,820
Very high	**234**	**4,962**	**–**	**5,196**	204	4,025	–	4,229
Loans not graded(2)	**46,482**	**4,928**	**–**	**51,410**	45,960	4,850	–	50,810
Default	**–**	**–**	**2,699**	**2,699**	–	–	2,234	2,234
Total	**$ 593,173**	**$ 21,663**	**$ 2,699**	**$ 617,535**	$ 580,617	$ 20,863	$ 2,234	$ 603,714
Allowance for credit losses	**1,322**	**1,998**	**1,063**	**4,383**	1,298	1,864	957	4,119
Carrying value	**$ 591,851**	**$ 19,665**	**$ 1,636**	**$ 613,152**	$ 579,319	$ 18,999	$ 1,277	$ 599,595

(1) Stage 3 includes purchased or originated credit-impaired loans.
(2) Portfolios where the customer account level 'Probability of Default' has not been determined have been included in the 'Loans not graded' category.

Business and government loans	**As at April 30, 2023**				As at October 31, 2022			
Grade *($ millions)*	**Stage 1**	**Stage 2**	**Stage 3(1)**	**Total**	Stage 1	Stage 2	Stage 3(1)	Total
Investment grade	**$ 167,429**	**$ 1,143**	**$ –**	**$ 168,572**	$ 162,696	$ 1,775	$ –	$ 164,471
Non-investment grade	**114,038**	**7,755**	**–**	**121,793**	105,251	9,563	–	114,814
Watch list	**32**	**2,580**	**–**	**2,612**	22	2,890	–	2,912
Loans not graded(2)	**2,415**	**15**	**–**	**2,430**	2,346	12	–	2,358
Default	**–**	**–**	**2,606**	**2,606**	–	–	2,552	2,552
Total	**$ 283,914**	**$ 11,493**	**$ 2,606**	**$ 298,013**	$ 270,315	$ 14,240	$ 2,552	$ 287,107
Allowance for credit losses	**375**	**290**	**688**	**1,353**	255	296	678	1,229
Carrying value	**$ 283,539**	**$ 11,203**	**$ 1,918**	**$ 296,660**	$ 270,060	$ 13,944	$ 1,874	$ 285,878

(1) Stage 3 includes purchased or originated credit-impaired loans.
(2) Portfolios where the customer account level 'Probability of Default' has not been determined have been included in the 'Loans not graded' category.

Undrawn loan commitments – Business and government	**As at April 30, 2023**				As at October 31, 2022			
Grade *($ millions)*	**Stage 1**	**Stage 2**	**Stage 3(1)**	**Total**	Stage 1	Stage 2	Stage 3(1)	Total
Investment grade	**$ 230,214**	**$ 1,872**	**$ –**	**$ 232,086**	$ 222,734	$ 1,502	$ –	$ 224,236
Non-investment grade	**62,418**	**4,161**	**–**	**66,579**	62,827	4,534	–	67,361
Watch list	**4**	**719**	**–**	**723**	4	604	–	608
Loans not graded(2)	**4,836**	**–**	**–**	**4,836**	4,573	–	–	4,573
Default	**–**	**–**	**145**	**145**	–	–	139	139
Total	**$ 297,472**	**$ 6,752**	**$ 145**	**$ 304,369**	$ 290,138	$ 6,640	$ 139	$ 296,917
Allowance for credit losses	**81**	**32**	**16**	**129**	67	24	17	108
Carrying value	**$ 297,391**	**$ 6,720**	**$ 129**	**$ 304,240**	$ 290,071	$ 6,616	$ 122	$ 296,809

(1) Stage 3 includes purchased or originated credit-impaired loans.
(2) Portfolios where the customer account level 'Probability of Default' has not been determined have been included in the 'Loans not graded' category.

Total non-retail loans	**As at April 30, 2023**				As at October 31, 2022			
Grade *($ millions)*	**Stage 1**	**Stage 2**	**Stage 3(1)**	**Total**	Stage 1	Stage 2	Stage 3(1)	Total
Investment grade	**$ 397,643**	**$ 3,015**	**$ –**	**$ 400,658**	$ 385,430	$ 3,277	$ –	$ 388,707
Non-investment grade	**176,456**	**11,916**	**–**	**188,372**	168,078	14,097	–	182,175
Watch list	**36**	**3,299**	**–**	**3,335**	26	3,494	–	3,520
Loans not graded(2)	**7,251**	**15**	**–**	**7,266**	6,919	12	–	6,931
Default	**–**	**–**	**2,751**	**2,751**	–	–	2,691	2,691
Total	**$ 581,386**	**$ 18,245**	**$ 2,751**	**$ 602,382**	$ 560,453	$ 20,880	$ 2,691	$ 584,024
Allowance for credit losses	**456**	**322**	**704**	**1,482**	322	320	695	1,337
Carrying value	**$ 580,930**	**$ 17,923**	**$ 2,047**	**$ 600,900**	$ 560,131	$ 20,560	$ 1,996	$ 582,687

(1) Stage 3 includes purchased or originated credit-impaired loans.
(2) Portfolios where the customer account level 'Probability of Default' has not been determined have been included in the 'Loans not graded' category.

(e) Loans past due but not impaired(1)

A loan is considered past due when a counterparty has not made a payment by the contractual due date. The following table presents the carrying value of loans that are contractually past due but not classified as impaired because they are either less than 90 days past due or fully secured and collection efforts are reasonably expected to result in repayment, or restoring it to a current status in accordance with the Bank's policy.

	As at April 30, 2023(2)			
($ millions)	**31-60 days**	**61-90 days**	**91 days and greater(3)**	**Total**
Residential mortgages	**$ 1,173**	**$ 567**	**$ –**	**$ 1,740**
Personal loans	**556**	**306**	**–**	**862**
Credit cards	**228**	**155**	**312**	**695**
Business and government	**134**	**64**	**–**	**198**
Total	**$ 2,091**	**$ 1,092**	**$ 312**	**$ 3,495**

	As at January 31, 2023(2)			
($ millions)	31-60 days	61-90 days	91 days and greater(3)	Total
Residential mortgages	$ 1,034	$ 509	$ –	$ 1,543
Personal loans	525	300	–	825
Credit cards	192	129	270	591
Business and government	121	64	–	185
Total	$ 1,872	$ 1,002	$ 270	$ 3,144

	As at October 31, 2022(2)			
($ millions)	31-60 days	61-90 days	91 days and greater(3)	Total
Residential mortgages	$ 1,015	$ 482	$ –	$ 1,497
Personal loans	505	254	–	759
Credit cards	173	113	249	535
Business and government	122	47	–	169
Total	$ 1,815	$ 896	$ 249	$ 2,960

(1) Loans past due 30 days or less are not presented in this analysis as they are not administratively considered past due.
(2) For loans where payment deferrals were granted, deferred payments are not considered past due and such loans are not aged further during the deferral period. Regular ageing of the loans resumes, after the end of the deferral period.
(3) All loans that are over 90 days past due are considered impaired with the exception of credit card receivables which are considered impaired when 180 days past due.

(f) Purchased credit-impaired loans

Certain financial assets including loans are credit-impaired on initial recognition. The following table provides details of such assets:

	As at		
($ millions)	**April 30 2023**	January 31 2023	October 31 2022
Unpaid principal balance(1)	**$ 305**	$ 311	$ 309
Credit related fair value adjustments	**(79)**	(74)	(70)
Carrying value	**226**	237	239
Stage 3 allowance	**(2)**	(2)	(2)
Carrying value net related allowance	**$ 224**	$ 235	$ 237

(1) Represents principal amount owed net of write-offs.

8. Derecognition of financial assets

Securitization of residential mortgage loans

The Bank securitizes fully insured residential mortgage loans, Bank originated and others, through the creation of mortgage-backed securities (MBS) under the National Housing Act (NHA) MBS program, sponsored by Canada Mortgage and Housing Corporation (CMHC). MBS created under the program are sold to Canada Housing Trust (the Trust), a government sponsored entity under the Canada Mortgage Bond (CMB) program. The Trust issues securities to third-party investors. The CMHC also purchased insured mortgage pools from the Bank under the Insured Mortgage Purchase Program (IMPP).

The sale of mortgages under the above programs do not meet the derecognition requirements, where the Bank retains the pre-payment and interest rate risks associated with the mortgages, which represent substantially all the risks and rewards associated with the transferred assets.

The transferred mortgages continue to be recognized on the Consolidated Statement of Financial Position as residential mortgage loans. Cash proceeds from the transfer are treated as secured borrowings and included in Deposits – Business and government on the Consolidated Statement of Financial Position.

The following table provides the carrying amount of transferred assets that do not qualify for derecognition and the associated liabilities:

	As at		
($ millions)	**April 30 2023[(1)]**	January 31 2023[(1)]	October 31 2022[(1)]
Assets			
Carrying value of residential mortgage loans	**$ 14,970**	$ 14,898	$ 15,032
Other related assets[(2)]	**9,594**	9,458	9,854
Liabilities			
Carrying value of associated liabilities	**$ 22,780**	$ 22,892	$ 24,173

(1) The fair value of the transferred assets is $22,753 (January 31, 2023 – $22,833; October 31, 2022 – $23,379) and the fair value of the associated liabilities is $22,153 (January 31, 2023 – $22,207; October 31, 2022 – $23,254) for a net position of $600 (January 31, 2023 – $626; October 31, 2022 – $125).
(2) These include cash held in trust and trust permitted investment assets, including repurchase style transactions of mortgage-backed securities, acquired as part of the principal reinvestment account that the Bank is required to maintain in order to participate in the programs.

Securitization of personal lines of credit, credit cards and auto loans

The Bank securitizes a portion of its credit card and auto loan receivables through consolidated structured entities. These receivables continue to be recognized on the Consolidated Statement of Financial Position as personal loans and credit card loans. During the quarter, $1,462 million (January 31, 2023 – nil; October 31, 2022 – nil) of the Bank's Canadian credit card receivables were securitized, on a revolving basis through Trillium Credit Card Trust II (Trillium), a Bank-sponsored consolidated structured entity. As at April 30, 2023, US $1,087 million ($1,473 million Canadian dollar equivalent) Class A senior notes and Class B and Class C subordinated notes were outstanding in respect of Series 2023-1 and 2023-2 and included in Deposits – Business and government on the Consolidated Statement of Financial Position. As at April 30, 2023, assets pledged in relation to these notes were credit card receivables, denominated in Canadian dollars, of $1,620 million (January 31, 2023 – nil; October 31, 2022 – nil).

Securities sold under repurchase agreements and securities lent

The Bank enters into transactions, such as repurchase agreements and securities lending agreements, where the Bank transfers assets under agreements to repurchase them on a future date and retains all the substantial risks and rewards associated with the assets. The transferred securities remain on the Consolidated Statement of Financial Position.

The following table provides the carrying amount of the transferred assets and the associated liabilities:

	As at		
($ millions)	**April 30 2023[(1)]**	January 31 2023[(1)]	October 31 2022[(1)]
Carrying value of securities associated with:			
Repurchase agreements[(2)]	**$ 114,423**	$ 111,534	$ 122,552
Securities lending agreements	**59,028**	60,896	52,178
Total	**173,451**	172,430	174,730
Carrying value of associated liabilities[(3)]	**$ 132,631**	$ 132,206	$ 139,025

(1) The fair value of transferred assets is $173,451 (January 31, 2023 – $172,430; October 31, 2022 – $174,730) and the fair value of the associated liabilities is $132,631 (January 31, 2023 – $132,206; October 31, 2022 – $139,025) for a net position of $40,820 (January 31, 2023 – $40,224; October 31, 2022 – $35,705).
(2) Does not include over-collateralization of assets pledged.
(3) Liabilities for securities lending arrangements only include amounts related to cash collateral received. In most cases, securities are received as collateral.

Continuing involvement in transferred financial assets that qualify for derecognition

Loans issued by the Bank under the Canada Emergency Business Account (CEBA) program are derecognized from the Consolidated Statement of Financial Position as the program meets the pass-through criteria for derecognition of financial assets under IFRS 9.

As at April 30, 2023, the Bank has derecognized $3.7 billion CEBA loans (January 31, 2023 – $3.8 billion; October 31, 2022 – $3.9 billion). The Bank retains a continuing involvement in these derecognized loans through its servicing of these loans on behalf of Export Development Canada. The appropriate level of administration fees for servicing the loans has been recognized.

9. Investments in associates

The Bank had significant investments in the following associates:

					As at		
					April 30 2023	January 31 2023	October 31 2022
($ millions)	Country of incorporation	Nature of business	Ownership percentage	Date of financial statements[(1)]	**Carrying value**	Carrying value	Carrying value
Canadian Tire Financial Services business (CTFS)[(2)]	Canada	Financial Services	20.00%	March 31, 2023	**$ 558**	$ 565	$ 579
Bank of Xi'an Co. Ltd.[(3)]	China	Banking	18.11%	March 31, 2023	**1,099**	1,077	1,007
Maduro & Curiel's Bank N.V.[(4)]	Curacao	Banking	48.10%	March 31, 2023	**459**	437	438

(1) Represents the date of the most recent financial statements made available to the Bank by the associates' management.
(2) Canadian Tire has an option to sell to the Bank up to an additional 29% equity interest until the end of the 10th anniversary (October 1, 2024) at the then fair value, that can be settled, at the Bank's discretion, by issuance of common shares or cash. After October 1, 2024 for a period of six months, the Bank has the option to sell its equity interest back to Canadian Tire at the then fair value.
(3) Based on the quoted price on the Shanghai Stock Exchange, the Bank's Investment in Bank of Xi'an Co. Ltd. was $570 (January 31, 2023 – $556; October 31, 2022 – $489). The market value of the investment has remained below the carrying amount. The Bank performed an impairment test as at April 30, 2023 using a value in use (VIU), discounted cash flow model. The Bank concluded that there is no impairment as at April 30, 2023.
(4) The local regulator requires financial institutions to set aside reserves for general banking risks. These reserves are not required under IFRS, and represent undistributed retained earnings related to a foreign associated corporation, which are subject to local regulatory restrictions. As of April 30, 2023, these reserves amounted to $69 (January 31, 2023 – $66; October 31, 2022 – $67).

10. Deposits

	As at						
	April 30, 2023					January 31 2023	October 31 2022
	Payable on demand[(1)]						
($ millions)	**Interest-bearing**	**Non-interest-bearing**	**Payable after notice[(2)]**	**Payable on a fixed date[(3)]**	**Total**	Total	Total
Personal	**$ 5,718**	**$ 10,714**	**$ 151,589**	**$ 115,630**	**$ 283,651**	$ 274,879	$ 265,892
Business and government	**151,563**	**34,183**	**43,404**	**382,226**	**611,376**	621,740	597,617
Financial institutions	**13,129**	**1,362**	**1,823**	**34,197**	**50,511**	53,268	52,672
	$ 170,410	**$ 46,259**	**$ 196,816[(4)]**	**$ 532,053**	**$ 945,538**	$ 949,887	$ 916,181
Recorded in:							
Canada	**$ 121,628**	**$ 26,252**	**$ 162,927**	**$ 362,330**	**$ 673,137**	$ 670,629	$ 642,977
United States	**38,469**	**66**	**206**	**56,597**	**95,338**	104,270	104,984
United Kingdom	**–**	**–**	**398**	**24,922**	**25,320**	25,359	24,243
Mexico	**–**	**7,196**	**11,244**	**19,241**	**37,681**	34,125	31,841
Peru	**5,167**	**168**	**5,103**	**5,711**	**16,149**	15,920	16,439
Chile	**1,266**	**5,260**	**174**	**18,764**	**25,464**	25,130	22,105
Colombia	**23**	**444**	**3,950**	**4,132**	**8,549**	9,020	8,211
Other International	**3,857**	**6,873**	**12,814**	**40,356**	**63,900**	65,434	65,381
Total[(5)]	**$ 170,410**	**$ 46,259**	**$ 196,816**	**$ 532,053**	**$ 945,538**	$ 949,887	$ 916,181

(1) Deposits payable on demand include all deposits for which we do not have the right to notice of withdrawal, generally chequing accounts.
(2) Deposits payable after notice include all deposits for which we require notice of withdrawal, generally savings accounts.
(3) All deposits that mature on a specified date, generally term deposits, guaranteed investments certificates and similar instruments.
(4) Includes $134 (January 31, 2023 – $138; October 31, 2022 – $156) of non-interest-bearing deposits.
(5) Deposits denominated in U.S. dollars amount to $326,922 (January 31, 2023 – $335,247; October 31, 2022 – $326,041), deposits denominated in Chilean pesos amount to $21,593 (January 31, 2023 – $21,103; October 31, 2022 – $18,740), deposits denominated in Mexican pesos amount to $34,709 (January 31, 2023 – $31,034; October 31, 2022 – $29,269) and deposits denominated in other foreign currencies amount to $115,466 (January 31, 2023 – $115,591; October 31, 2022 – $106,817).

The following table presents the maturity schedule for term deposits in Canada greater than $100,000[(1)].

($ millions)	Within three months	Three to six months	Six to twelve months	One to five years	Over five years	Total
As at April 30, 2023	**$ 64,875**	**$ 37,468**	**$ 73,025**	**$ 123,485**	**$ 18,795**	**$ 317,648**
As at January 31, 2023	$ 67,485	$ 34,684	$ 68,819	$ 122,864	$ 18,049	$ 311,901
As at October 31, 2022	$ 53,656	$ 36,035	$ 62,891	$ 110,015	$ 21,440	$ 284,037

(1) The majority of foreign term deposits are in excess of $100,000.

11. Capital and financing transactions

Common shares

	For the three months ended			
	April 30, 2023		April 30, 2022	
($ millions)	**Number of shares**	**Amount**	Number of shares	Amount
Outstanding at beginning of period	**1,191,751,567**	**$ 18,732**	1,204,394,204	$ 18,421
Issued in relation to share-based payments, net	**21,931**	**2**	286,079	21
Issued in relation to the acquisition of a subsidiary or associated corporation	**–**	**–**	7,000,000	569
Issued in relation to the Shareholder Dividend and Share Purchase Plan[(1)]	**6,401,014**	**426**	–	–
Repurchased for cancellation under the Normal Course Issuer Bid[(2)]	**–**	**–**	(13,882,300)	(212)
Outstanding at end of period	**1,198,174,512**	**$ 19,160**	1,197,797,983	$ 18,799

	For the six months ended			
	April 30, 2023		April 30, 2022	
($ millions)	**Number of shares**	**Amount**	Number of shares	Amount
Outstanding at beginning of period	**1,191,375,095**	**$ 18,707**	1,215,337,523	$ 18,507
Issued in relation to share-based payments, net	**398,403**	**27**	1,780,360	125
Issued in relation to the acquisition of a subsidiary or associated corporation	**–**	**–**	7,000,000	569
Issued in relation to the Shareholder Dividend and Share Purchase Plan[(1)]	**6,401,014**	**426**	–	–
Repurchased for cancellation under the Normal Course Issuer Bid[(2)]	**–**	**–**	(26,319,900)	(402)
Outstanding at end of period	**1,198,174,512**	**$ 19,160**	1,197,797,983	$ 18,799

(1) Commencing with the dividend declared on February 28, 2023 and paid on April 26, 2023, the Bank issued to participants of the Shareholder Dividend and Share Purchase Plan (the "Plan"), common shares from treasury with a discount of 2% to the average market price (as defined in the Plan). Prior to the dividend paid on April 26, 2023, common shares received by participants under the Plan were shares purchased from the open market at prevailing market prices.
(2) The Bank currently does not have an active normal course issuer bid and did not repurchase any common shares during the quarter ended April 30, 2023. The Bank's previous normal course issuer bid terminated on December 1, 2022.

Subordinated debentures

On December 20, 2022, the Bank issued JPY 33 billion 1.800% Fixed Rate Resetting Subordinated Debentures due December 20, 2032 (Non-Viability Contingent Capital (NVCC)). The debentures are subject to optional redemption by the Bank on December 20, 2027. Interest is payable semi-annually at a rate of 1.800% per annum from and including the issue date to, but excluding, December 20, 2027, and thereafter to, but excluding, December 20, 2032, at the reference Japanese Government Bond rate plus 1.681%. The debentures contain NVCC provisions necessary to qualify as Tier 2 regulatory capital under Basel III.

12. Capital management

The Bank's regulatory capital, total loss absorbing capacity and leverage measures were as follows:

	As at		
($ millions)	**April 30 2023**	January 31 2023	October 31 2022
	Revised Basel III	Basel III	Basel III
Capital[1][2]			
Common Equity Tier 1 capital	**$ 55,520**	$ 54,138	$ 53,081
Net Tier 1 capital	**63,688**	62,317	61,262
Total regulatory capital	**73,197**	71,867	70,710
Total loss absorbing capacity[3]	**127,815**	131,433	126,565
Risk-weighted assets/exposures used in calculation of capital ratios			
Risk-weighted assets[1][2][4]	**$ 451,063**	$ 471,528	$ 462,448
Leverage exposures[5]	**1,530,107**	1,468,559	1,445,619
Regulatory ratios[1][2]			
Common Equity Tier 1 capital ratio	**12.3%**	11.5%	11.5%
Tier 1 capital ratio	**14.1%**	13.2%	13.2%
Total capital ratio	**16.2%**	15.2%	15.3%
Total loss absorbing capacity ratio[3]	**28.3%**	27.9%	27.4%
Leverage ratio[5]	**4.2%**	4.2%	4.2%
Total loss absorbing capacity leverage ratio[3]	**8.4%**	8.9%	8.8%

(1) Regulatory ratios and amounts reported as at Q2 2023 are under Revised Basel III requirements and are not directly comparable to ratios and amounts reported in prior quarters.
(2) Q2 2023 regulatory capital ratios are based on Revised Basel III requirements as determined in accordance with OSFI Guideline – Capital Adequacy Requirements (February 2023). Prior period regulatory capital ratios were prepared in accordance with OSFI Guideline – Capital Adequacy Requirements (November 2018).
(3) This measure has been disclosed in this document in accordance with OSFI Guideline – Total Loss Absorbing Capacity (September 2018).
(4) As at April 30, 2023, CET1, Tier 1, Total Capital and TLAC RWA include a Basel III floor adjustment of $8.2 billion (as at January 31, 2023 and October 31, 2022, the Bank did not have a regulatory capital floor add-on for CET1, Tier 1, Total Capital and TLAC RWA).
(5) Q2 2023 leverage ratios are based on Revised Basel III requirements as determined in accordance with OSFI Guideline - Leverage Requirements (February 2023). Prior period leverage ratios were prepared in accordance with OSFI Guideline – Leverage Requirements (November 2018).

The Bank substantially exceeded the OSFI minimum regulatory capital and TLAC ratios as at April 30, 2023, including the Domestic Stability Buffer requirement. In addition, the Bank substantially exceeded OSFI minimum leverage and TLAC leverage ratios as at April 30, 2023.

13. Share-based payments

During the first quarter, the Bank granted 2,478,138 options with an exercise price of $68.58 per option and a weighted average fair value of $6.81 to select employees, under the terms of the Employee Stock Option Plan. These stock options vest 50% at the end of the third year and 50% at the end of the fourth year. Options granted prior to December 2014 vest evenly over a four-year period.

The Bank recorded an increase to equity – other reserves of $2 million and $11 million for the three months and six months ended April 30, 2023 (April 30, 2022 – $2 million and $8 million), respectively, as a result of equity-classified share-based payment expense.

14. Employee benefits

Employee benefits include pensions, other post-retirement benefits, and post-employment benefits. The following table summarizes the expenses for the Bank's principal plans[1].

	For the three months ended					
	Pension plans			Other benefit plans		
($ millions)	**April 30 2023**	January 31 2023	April 30 2022	**April 30 2023**	January 31 2023	April 30 2022
Defined benefit service cost	**$ 55**	$ 55	$ 78	**$ 5**	$ 5	$ 6
Interest on net defined benefit (asset) liability	**(8)**	(9)	(2)	**16**	16	11
Other	**3**	3	4	**–**	2	(5)
Defined benefit expense	**$ 50**	$ 49	$ 80	**$ 21**	$ 23	$ 12
Defined contribution expense	**$ 40**	$ 37	$ 31	**$ –**	$ –	$ –
Increase (decrease) in other comprehensive income related to employee benefits[2]	**$ (222)**	$ (170)	$ 936	**$ (3)**	$ (49)	$ 119

	For the six months ended			
	Pension plans		Other benefit plans	
($ millions)	**April 30 2023**	April 30 2022	**April 30 2023**	April 30 2022
Defined benefit service cost	**$ 110**	$ 157	**$ 10**	$ 11
Interest on net defined benefit (asset) liability	**(17)**	(3)	**32**	23
Other	**6**	8	**2**	(7)
Defined benefit expense	**$ 99**	$ 162	**$ 44**	$ 27
Defined contribution expense	**$ 77**	$ 61	**$ –**	$ –
Increase (decrease) in other comprehensive income related to employee benefits[2]	**$ (392)**	$ 1,045	**$ (52)**	$ 158

(1) Other plans operated by certain subsidiaries of the Bank are not considered material and are not included in this note.
(2) Changes in discount rates and return on plan assets are reviewed and updated on a quarterly basis. In the absence of legislated changes, all other assumptions are updated annually.

15. Operating segments

Scotiabank is a diversified financial services institution that provides a wide range of financial products and services to retail, commercial and corporate customers around the world. The Bank's businesses are grouped into four business lines: Canadian Banking, International Banking, Global Wealth Management and Global Banking and Markets. Other smaller business segments are included in the Other segment. The results of these business segments are based upon the internal financial reporting systems of the Bank. The accounting policies used in these segments are generally consistent with those followed in the preparation of the consolidated financial statements as disclosed in Note 3 of the Bank's audited consolidated financial statements in the 2022 Annual Report. Notable accounting measurement differences are:

- tax normalization adjustments related to the gross-up of income from associated corporations. This adjustment normalizes the effective tax rate in the divisions to better present the contribution of the associated companies to the divisional results.
- the grossing up of tax-exempt net interest income and non-interest income to an equivalent before-tax basis for those affected segments. This change in measurement enables comparison of net interest income and non-interest income arising from taxable and tax-exempt sources.

	For the three months ended April 30, 2023					
($ millions)	**Canadian Banking(1)**	**International Banking(1)**	**Global Wealth Management(1)**	**Global Banking and Markets(1)**	**Other(2)**	**Total**
Net interest income(3)	**$ 2,340**	**$ 2,007**	**$ 209**	**$ 384**	**$ (474)**	**$ 4,466**
Non-interest income(4)(5)	**794**	**745**	**1,091**	**968**	**(135)**	**3,463**
Total revenues	**3,134**	**2,752**	**1,300**	**1,352**	**(609)**	**7,929**
Provision for credit losses	**218**	**436**	**2**	**53**	**–**	**709**
Non-interest expenses	**1,457**	**1,479**	**818**	**752**	**70**	**4,576**
Provision for income taxes	**399**	**172**	**124**	**146**	**(356)**	**485**
Net income	**$ 1,060**	**$ 665**	**$ 356**	**$ 401**	**$ (323)**	**$ 2,159**
Net income attributable to non-controlling interests in subsidiaries	**$ –**	**$ 23**	**$ 3**	**$ –**	**$ –**	**$ 26**
Net income attributable to equity holders of the Bank	**$ 1,060**	**$ 642**	**$ 353**	**$ 401**	**$ (323)**	**$ 2,133**
Average assets *($ billions)*	**$ 451**	**$ 239**	**$ 34**	**$ 488**	**$ 178**	**$ 1,390**
Average liabilities *($ billions)*	**$ 367**	**$ 181**	**$ 41**	**$ 446**	**$ 278**	**$ 1,313**

(1) Business line revenues and provision for income taxes are reported on a tax equivalent basis.
(2) Includes all other smaller operating segments and corporate adjustments, such as the elimination of the tax-exempt income gross-up reported in net interest income and non-interest income and provision for income taxes of $119 to arrive at the amounts reported in the Consolidated Statement of Income, differences in the actual amount of costs incurred and charged to the operating segments.
(3) Interest income is reported net of interest expense as management relies primarily on net interest income as a performance measure.
(4) Card revenues and Banking services fees are mainly earned in Canadian and International Banking. Mutual fund, Brokerage fees and Investment management and trust fees are primarily earned in Global Wealth Management. Underwriting and other advisory fees are predominantly earned in Global Banking and Markets.
(5) Includes income (on a taxable equivalent basis) from associated corporations for Canadian Banking – $25, International Banking – $69, Global Wealth Management – $5, and Other – $(35).

	For the three months ended January 31, 2023					
($ millions)	Canadian Banking(1)	International Banking(1)	Global Wealth Management(1)	Global Banking and Markets(1)	Other(2)	Total
Net interest income(3)	$ 2,386	$ 1,899	$ 213	$ 454	$ (383)	$ 4,569
Non-interest income(4)(5)	778	802	1,110	1,049	(328)	3,411
Total revenues	3,164	2,701	1,323	1,503	(711)	7,980
Provision for credit losses	218	404	1	15	–	638
Non-interest expenses	1,449	1,436	802	773	4	4,464
Provision for income taxes	410	169	133	196	198	1,106
Net income	$ 1,087	$ 692	$ 387	$ 519	$ (913)	$ 1,772
Net income attributable to non-controlling interests in subsidiaries	$ –	$ 38	$ 2	$ –	$ –	$ 40
Net income attributable to equity holders of the Bank	$ 1,087	$ 654	$ 385	$ 519	$ (913)	$ 1,732
Average assets *($ billions)*	$ 450	$ 228	$ 34	$ 481	$ 187	$ 1,380
Average liabilities *($ billions)*	$ 357	$ 169	$ 42	$ 455	$ 282	$ 1,305

(1) Business line revenues and provision for income taxes are reported on a tax equivalent basis.
(2) Includes all other smaller operating segments and corporate adjustments, such as the elimination of the tax-exempt income gross-up reported in net interest income and non-interest income and provision for income taxes of $120 to arrive at the amounts reported in the Consolidated Statement of Income, differences in the actual amount of costs incurred and charged to the operating segments.
(3) Interest income is reported net of interest expense as management relies primarily on net interest income as a performance measure.
(4) Card revenues and Banking services fees are mainly earned in Canadian and International Banking. Mutual fund, Brokerage fees and Investment management and trust fees are primarily earned in Global Wealth Management. Underwriting and other advisory fees are predominantly earned in Global Banking and Markets.
(5) Includes income (on a taxable equivalent basis) from associated corporations for Canadian Banking – $15, International Banking – $63, Global Wealth Management – $3, and Other – $(65).

For the three months ended April 30, 2022

($ millions)	Canadian Banking(1)	International Banking(1)	Global Wealth Management(1)	Global Banking and Markets(1)	Other(2)	Total
Net interest income(3)	$ 2,144	$ 1,687	$ 184	$ 360	$ 98	$ 4,473
Non-interest income(4)(5)	759	720	1,174	902	(86)	3,469
Total revenues	2,903	2,407	1,358	1,262	12	7,942
Provision for credit losses	(12)	276	1	(46)	–	219
Non-interest expenses	1,324	1,268	803	653	111	4,159
Provision for income taxes	412	182	145	167	(89)	817
Net income	$ 1,179	$ 681	$ 409	$ 488	$ (10)	$ 2,747
Net income attributable to non-controlling interests in subsidiaries	$ –	$ 76	$ 2	$ –	$ –	$ 78
Net income attributable to equity holders of the Bank	$ 1,179	$ 605	$ 407	$ 488	$ (10)	$ 2,669
Average assets *($ billions)*	$ 423	$ 204	$ 32	$ 431	$ 174	$ 1,264
Average liabilities *($ billions)*	$ 326	$ 149	$ 48	$ 400	$ 269	$ 1,192

(1) Business line revenues and provision for income taxes are reported on a tax equivalent basis.
(2) Includes all other smaller operating segments and corporate adjustments, such as the elimination of the tax-exempt income gross-up reported in net interest income and non-interest income and provision for income taxes of $92 to arrive at the amounts reported in the Consolidated Statement of Income, differences in the actual amount of costs incurred and charged to the operating segments.
(3) Interest income is reported net of interest expense as management relies primarily on net interest income as a performance measure.
(4) Card revenues and Banking services fees are mainly earned in Canadian and International Banking. Mutual fund, Brokerage fees and Investment management and trust fees are primarily earned in Global Wealth Management. Underwriting and other advisory fees are predominantly earned in Global Banking and Markets.
(5) Includes income (on a taxable equivalent basis) from associated corporations for Canadian Banking – $18, International Banking – $77, Global Wealth Management – $5, and Other – $(16).

For the six months ended April 30, 2023

($ millions)	**Canadian Banking(1)**	**International Banking(1)**	**Global Wealth Management(1)**	**Global Banking and Markets(1)**	**Other(2)**	**Total**
Net interest income(3)	**$ 4,726**	**$ 3,906**	**$ 422**	**$ 838**	**$ (857)**	**$ 9,035**
Non-interest income(4)(5)	**1,572**	**1,547**	**2,201**	**2,017**	**(463)**	**6,874**
Total revenues	**6,298**	**5,453**	**2,623**	**2,855**	**(1,320)**	**15,909**
Provision for credit losses	**436**	**840**	**3**	**68**	**–**	**1,347**
Non-interest expenses	**2,906**	**2,915**	**1,620**	**1,525**	**74**	**9,040**
Provision for income taxes	**809**	**341**	**257**	**342**	**(158)**	**1,591**
Net income	**$ 2,147**	**$ 1,357**	**$ 743**	**$ 920**	**$ (1,236)**	**$ 3,931**
Net income attributable to non-controlling interests in subsidiaries	**$ –**	**$ 61**	**$ 5**	**$ –**	**$ –**	**$ 66**
Net income attributable to equity holders of the Bank	**$ 2,147**	**$ 1,296**	**$ 738**	**$ 920**	**$ (1,236)**	**$ 3,865**
Average assets *($ billions)*	**$ 450**	**$ 233**	**$ 34**	**$ 484**	**$ 185**	**$ 1,386**
Average liabilities *($ billions)*	**$ 362**	**$ 175**	**$ 42**	**$ 450**	**$ 280**	**$ 1,309**

(1) Business line revenues and provision for income taxes are reported on a tax equivalent basis.
(2) Includes all other smaller operating segments and corporate adjustments, such as the elimination of the tax-exempt income gross-up reported in net interest income and non-interest income and provision for income taxes of $239 to arrive at the amounts reported in the Consolidated Statement of Income, differences in the actual amount of costs incurred and charged to the operating segments.
(3) Interest income is reported net of interest expense as management relies primarily on net interest income as a performance measure.
(4) Card revenues and Banking services fees are mainly earned in Canadian and International Banking. Mutual fund, Brokerage fees and Investment management and trust fees are primarily earned in Global Wealth Management. Underwriting and other advisory fees are predominantly earned in Global Banking and Markets.
(5) Includes income (on a taxable equivalent basis) from associated corporations for Canadian Banking – $40, International Banking – $132, Global Wealth Management – $8, and Other – $(100).

For the six months ended April 30, 2022

($ millions)	Canadian Banking(1)	International Banking(1)	Global Wealth Management(1)	Global Banking and Markets(1)	Other(2)	Total
Net interest income(3)	$ 4,277	$ 3,335	$ 358	$ 733	$ 114	$ 8,817
Non-interest income(4)(5)	1,500	1,469	2,422	1,933	(150)	7,174
Total revenues	5,777	4,804	2,780	2,666	(36)	15,991
Provision for credit losses	(47)	550	–	(62)	–	441
Non-interest expenses	2,606	2,553	1,665	1,323	235	8,382
Provision for income taxes	838	390	291	356	(194)	1,681
Net income	$ 2,380	$ 1,311	$ 824	$ 1,049	$ (77)	$ 5,487
Net income attributable to non-controlling interests in subsidiaries	$ –	$ 161	$ 5	$ –	$ –	$ 166
Net income attributable to equity holders of the Bank	$ 2,380	$ 1,150	$ 819	$ 1,049	$ (77)	$ 5,321
Average assets *($ billions)*	$ 417	$ 200	$ 32	$ 438	$ 164	$ 1,251
Average liabilities *($ billions)*	$ 323	$ 146	$ 48	$ 403	$ 258	$ 1,178

(1) Business line revenues and provision for income taxes are reported on a tax equivalent basis.
(2) Includes all other smaller operating segments and corporate adjustments, such as the elimination of the tax-exempt income gross-up reported in net interest income and non-interest income and provision for income taxes of $184 to arrive at the amounts reported in the Consolidated Statement of Income, differences in the actual amount of costs incurred and charged to the operating segments.
(3) Interest income is reported net of interest expense as management relies primarily on net interest income as a performance measure.
(4) Card revenues and Banking services fees are mainly earned in Canadian and International Banking. Mutual fund, Brokerage fees and Investment management and trust fees are primarily earned in Global Wealth Management. Underwriting and other advisory fees are predominantly earned in Global Banking and Markets.
(5) Includes income (on a taxable equivalent basis) from associated corporations for Canadian Banking – $26, International Banking – $145, Global Wealth Management – $6, and Other – $(2).

16. Interest income and expense

	For the three months ended						For the six months ended			
	April 30, 2023		January 31, 2023		April 30, 2022		**April 30, 2023**		April 30, 2022	
($ millions)	**Interest income**	**Interest expense**	Interest income	Interest expense	Interest income	Interest expense	**Interest income**	**Interest expense**	Interest income	Interest expense
Measured at amortized cost(1)	**$ 12,463**	**$ 9,357**	$ 11,897	$ 8,545	$ 6,654	$ 2,581	**$ 24,360**	**$ 17,902**	$ 12,804	$ 4,650
Measured at FVOCI(1)	**921**	**–**	813	–	261	–	**1,734**	**–**	442	–
	13,384	**9,357**	12,710	8,545	6,915	2,581	**26,094**	**17,902**	13,246	4,650
Other	**486(2)**	**47(3)**	446(2)	42(3)	177(2)	38(3)	**932(2)**	**89(3)**	309(2)	88(3)
Total	**$ 13,870**	**$ 9,404**	$ 13,156	$ 8,587	$ 7,092	$ 2,619	**$ 27,026**	**$ 17,991**	$ 13,555	$ 4,738

(1) The interest income/expense on financial assets/liabilities are calculated using the effective interest method.
(2) Includes dividend income on equity securities.
(3) Includes interest on lease liabilities for the three months ended April 30, 2023 – $29 (January 31, 2023 – $26; April 30, 2022 – $26) and for the six months ended April 30, 2023 – $55 (April 30, 2022 – $53).

17. Earnings per share

	For the three months ended			For the six months ended	
($ millions)	**April 30 2023**	January 31 2023	April 30 2022	**April 30 2023**	April 30 2022
Basic earnings per common share					
Net income attributable to common shareholders	**$ 2,029**	$ 1,631	$ 2,595	**$ 3,660**	$ 5,203
Weighted average number of common shares outstanding *(millions)*	**1,192**	1,192	1,199	**1,192**	1,205
Basic earnings per common share(1) *(in dollars)*	**$ 1.70**	$ 1.37	$ 2.16	**$ 3.07**	$ 4.32
Diluted earnings per common share					
Net income attributable to common shareholders	**$ 2,029**	$ 1,631	$ 2,595	**$ 3,660**	$ 5,203
Dilutive impact of share-based payment options and others(2)	**(11)**	(4)	–	**(15)**	67
Net income attributable to common shareholders (diluted)	**$ 2,018**	$ 1,627	$ 2,595	**$ 3,645**	$ 5,270
Weighted average number of common shares outstanding *(millions)*	**1,192**	1,192	1,199	**1,192**	1,205
Dilutive impact of share-based payment options and others(2) *(millions)*	**5**	7	2	**7**	20
Weighted average number of diluted common shares outstanding *(millions)*	**1,197**	1,199	1,201	**1,199**	1,225
Diluted earnings per common share(1) *(in dollars)*	**$ 1.69**	$ 1.36	$ 2.16	**$ 3.04**	$ 4.30

(1) Earnings per share calculations are based on full dollar and share amounts.
(2) Certain options as well as acquisition-related put/call options that the Bank may settle at its own discretion by issuing common shares were not included in the calculation of diluted earnings per share as they were anti-dilutive.

18. Financial instruments

(a) Risk management

The Bank's principal business activities result in a balance sheet that consists primarily of financial instruments. In addition, the Bank uses derivative financial instruments for both trading and hedging purposes. The principal financial risks that arise from transacting financial instruments include credit risk, liquidity risk and market risk. The Bank's framework to monitor, evaluate and manage these risks is consistent with that in place as at October 31, 2022.

(i) Credit risk

Credit risk is the risk of loss resulting from the failure of a borrower or counterparty to honour its financial or contractual obligations to the Bank.

Credit risk exposures disclosed below are presented based on the Basel framework utilized by the Bank. The Bank uses the Internal Ratings-Based approach (IRB) for all material Canadian, U.S. and European portfolios, and for a significant portion of the international corporate and commercial portfolios. The remaining portfolios, including other international portfolios, are treated under the standardized approach. Under the IRB approach, the Bank uses internal risk parameter estimates, based on historical experience.

Under the standardized approach, credit risk is estimated using the risk weights as prescribed by the Basel framework, either based on credit assessments by external rating agencies or based on the counterparty type for non-retail exposures and product type for retail exposures.

Exposure at default[(1)(2)]

	As at				
	April 30, 2023			January 31 2023	October 31 2022
	Revised Basel III			Basel III	Basel III
($ millions)	**IRB**	**Standardized**	**Total**	Total	Total
By exposure sub-type					
Non-retail					
Drawn[(3)(4)]	**$ 472,619**	**$ 73,605**	**$ 546,224**	$ 553,504	$ 534,978
Undrawn commitments	**99,457**	**7,220**	**106,677**	132,184	132,195
Other exposures[(5)]	**108,718**	**6,135**	**114,853**	131,983	130,471
Total non-retail	**$ 680,794**	**$ 86,960**	**$ 767,754**	$ 817,671	$ 797,644
Retail[(6)]					
Drawn	**$ 291,925**	**$ 114,270**	**$ 406,195**	$ 400,268	$ 392,143
Undrawn commitments and other exposures	**96,283**	**8,893**	**105,176**	59,193	57,913
Total retail	**$ 388,208**	**$ 123,163**	**$ 511,371**	$ 459,461	$ 450,056
Total	**$ 1,069,002**	**$ 210,123**	**$ 1,279,125**	$ 1,277,132	$ 1,247,700

(1) Regulatory amounts reported as at Q2 2023 are under Revised Basel III requirements and are not directly comparable to amounts reported in prior quarters.
(2) After credit risk mitigation and excludes equity securities and other assets.
(3) Non-retail drawn exposures include government guaranteed and privately insured mortgages and retail loans.
(4) Non-retail drawn includes loans, bankers' acceptances, deposits with financial institutions and FVOCI debt securities.
(5) Includes off-balance sheet lending instruments such as letters of credit, letters of guarantee, securitizations, over-the-counter derivatives and repo-style transactions net of related collateral.
(6) Retail includes residential mortgages, credit cards, lines of credit, other personal loans and small business treated as other regulatory retail.

Credit quality of non-retail exposures

The Bank's non-retail portfolio is well diversified by industry. A significant portion of the authorized corporate and commercial lending portfolio was internally assessed at a grade that would generally equate to an investment grade rating by external rating agencies. There has not been a significant change in concentrations of credit risk since October 31, 2022.

Credit quality of retail exposures

The Bank's retail portfolios consist of a number of relatively small loans to a large number of borrowers. The portfolios are distributed across Canada and a wide range of countries. As such, the portfolios inherently have a high degree of diversification. In addition, as of April 30, 2023, 27% (January 31, 2023 – 27%; October 31, 2022 – 28%) of the Canadian residential mortgage portfolio is insured. The average loan-to-value ratio of the uninsured portion of the Canadian residential mortgage portfolio is 53% (January 31, 2023 – 52%; October 31, 2022 – 49%).

Retail standardized portfolio

The retail standardized portfolio of $123 billion as at April 30, 2023 (January 31, 2023 – $117 billion; October 31, 2022 – $111 billion) was comprised of residential mortgages, personal loans, credit cards and lines of credit to individuals, mainly in Latin America and the Caribbean. Of the total retail standardized exposures, $65 billion (January 31, 2023 – $67 billion; October 31, 2022 – $63 billion) was represented by mortgages and loans secured by residential real estate, mostly with a loan-to-value ratio of below 80%.

(ii) Liquidity risk

Liquidity risk is the risk that the Bank is unable to meet its financial obligations in a timely manner at reasonable prices. The Bank's liquidity risk is subject to extensive risk management controls and is managed within the framework of policies and limits approved by the Board. The Board receives reports on risk exposures and performance against approved limits. The Asset/Liability Committee (ALCO) provides senior management oversight of liquidity risk.

The key elements of the Bank's liquidity risk management framework include:

- liquidity risk measurement and management limits, including limits on maximum net cash outflow by currency over specified short-term horizons;
- prudent diversification of its wholesale funding activities by using a number of different funding programs to access the global financial markets and manage its maturity profile, as appropriate;
- large holdings of liquid assets to support its operations, which can generally be sold or pledged to meet the Bank's obligations;
- liquidity stress testing, including Bank-specific, global-systemic, and combination systemic/specific scenarios; and
- liquidity contingency planning.

The Bank's foreign operations have liquidity management frameworks that are similar to the Bank's framework. Local deposits are managed from a liquidity risk perspective based on the local management frameworks and regulatory requirements.

(iii) Market risk

Market risk arises from changes in market prices and rates (including interest rates, credit spreads, equity prices, foreign exchange rates and commodity prices), the correlations among them, and their levels of volatility.

Interest rate risk

Interest rate risk is the risk of loss due to the following: changes in the level, slope and curvature of the yield curve; the volatility of interest rates and changes in customers' preferences (e.g. mortgage prepayment rates).

Non-trading foreign currency risk

Foreign currency risk is the risk of loss due to changes in spot and forward rates.

As at April 30, 2023, a one per cent increase (decrease) in the Canadian dollar against all currencies in which the Bank operates decreases (increases) the Bank's before-tax annual earnings by approximately $71 million (January 31, 2023 – $59 million; April 30, 2022 – $39 million) in the absence of hedging activity, due primarily from exposure to U.S. dollars.

A similar change in the Canadian dollar as at April 30, 2023, would increase (decrease) the unrealized foreign currency translation losses in the accumulated other comprehensive income section of shareholders' equity by approximately $325 million (January 31, 2023 – $316 million; April 30, 2022 – $331 million), net of hedging.

Non-trading equity risk

Equity risk is the risk of loss due to adverse movements in equity prices. The Bank is exposed to equity risk through its investment equity portfolios. The fair value of investment equity securities is shown in Note 6.

Trading portfolio risk management

The table below shows the Bank's VaR by risk factor along with Stressed VaR:

	For the three months ended			As at		
	April 30, 2023[1]			April 30	January 31	April 30
($ millions)	**Average**	**High**	**Low**	**2023**	2023	2022
Credit spread plus interest rate	**$ 15.7**	**$ 24.1**	**$ 9.9**	**$ 19.1**	$ 10.8	$ 10.2
Credit spread	**9.5**	**16.3**	**5.0**	**7.4**	6.1	5.5
Interest rate	**14.0**	**21.9**	**9.3**	**17.4**	11.4	9.6
Equities	**4.6**	**7.8**	**3.6**	**4.3**	4.7	5.1
Foreign exchange	**3.7**	**8.1**	**1.4**	**4.2**	4.9	1.8
Commodities	**6.3**	**8.1**	**4.2**	**4.6**	6.5	5.6
Debt specific	**3.7**	**4.8**	**3.0**	**3.2**	3.0	2.0
Diversification effect	**(16.6)**	**–**	**–**	**(13.5)**	(17.2)	(12.0)
Total VaR	**$ 17.4**	**$ 25.2**	**$ 12.3**	**$ 21.9**	$ 12.7	$ 12.7
Total Stressed VaR	**$ 54.9**	**$ 87.3**	**$ 38.9**	**$ 47.5**	$ 40.7	$ 25.7

(1) Effective Q1 2023, the 2019/2020 COVID period was used to generate the Stressed VaR. In the prior periods, the Stressed VaR was calculated using the 2008/2009 credit crisis period.

(b) Financial instruments designated at fair value through profit or loss

In accordance with its risk management strategy, the Bank has elected to designate certain senior note liabilities at fair value through profit or loss to reduce an accounting mismatch between fair value changes in these instruments and fair value changes in related derivatives, and where a hybrid financial liability contains one or more embedded derivatives that are not closely related to the host contract. Changes in fair value of financial liabilities arising from the Bank's own credit risk are recognized in other comprehensive income, without subsequent reclassification to net income.

The cumulative fair value adjustment due to own credit risk is determined at a point in time by comparing the present value of expected future cash flows over the term of these liabilities discounted at the Bank's effective funding rate, and the present value of expected future cash flows discounted at a benchmark rate.

The following table presents the fair value of liabilities designated at fair value through profit or loss and their changes in fair value.

	Fair value			Change in fair value			Cumulative change in fair value[1]		
	As at			For the three months ended			As at		
($ millions)	**April 30 2023**	January 31 2023	April 30 2022	**April 30 2023**	January 31 2023	April 30 2022	**April 30 2023**	January 31 2023	April 30 2022
Liabilities									
Senior note liabilities[2]	**$ 26,935**	$ 26,583	$ 21,927	**$ 2,104**	$ (3,524)	$ 3,913	**$ 6,473**	$ 4,369	$ 4,108

(1) The cumulative change in fair value is measured from the instruments' date of initial recognition.
(2) Changes in fair value attributable to changes in the Bank's own credit risk are recorded in other comprehensive income. Other changes in fair value are recorded in non-interest income – trading revenues. The offsetting fair value changes from associated derivatives is also recorded in non-interest income – trading revenues.

The following table presents the changes in fair value attributable to changes in the Bank's own credit risk for financial liabilities designated at fair value through profit or loss as well as their contractual maturity and carrying amounts.

	Senior note liabilities				
($ millions)	Contractual maturity amount	Carrying value	Difference between carrying value and contractual maturity amount	Change in fair value for the three month period attributable to change in own credit risk recorded in other comprehensive income	Cumulative change in fair value due to change in own credit risk[1]
As at April 30, 2023	**$ 33,408**	**$ 26,935**	**$ 6,473**	**$ 1,661**	**$ 1,800**
As at January 31, 2023	$ 30,952	$ 26,583	$ 4,369	$ (1,090)	$ 139
As at April 30, 2022	$ 26,035	$ 21,927	$ 4,108	$ 787	$ 289

(1) The cumulative change in fair value is measured from the instruments' date of initial recognition.

(c) Financial instruments – fair value

Fair value of financial instruments

The calculation of fair value is based on market conditions at a specific point in time and therefore may not be reflective of future fair values. The Bank has controls and processes in place to ensure that the valuation of financial instruments is appropriately determined.

Refer to Note 7 of the Bank's audited consolidated financial statements in the 2022 Annual Report for the valuation techniques used to fair value its significant financial assets and liabilities.

The following table sets out the fair values of financial instruments of the Bank and excludes non-financial assets, such as property and equipment, investments in associates, precious metals, goodwill and other intangible assets.

	As at					
	April 30, 2023		January 31, 2023		October 31, 2022	
($ millions)	**Total fair value**	**Total carrying value**	Total fair value	Total carrying value	Total fair value	Total carrying value
Assets:						
Cash and deposits with financial institutions	**$ 63,893**	**$ 63,893**	$ 81,386	$ 81,386	$ 65,895	$ 65,895
Trading assets	**114,695**	**114,695**	116,346	116,346	113,154	113,154
Securities purchased under resale agreements and securities borrowed	**184,684**	**184,684**	178,690	178,690	175,313	175,313
Derivative financial instruments	**44,725**	**44,725**	44,820	44,820	55,699	55,699
Investment securities – FVOCI and FVTPL	**88,318**	**88,318**	86,809	86,809	86,398	86,398
Investment securities – amortized cost	**27,270**	**28,277**	23,206	24,195	22,443	23,610
Loans	**749,544**	**764,068**	739,659	755,157	729,149	744,987
Customers' liability under acceptances	**21,901**	**21,901**	21,872	21,872	19,494	19,494
Other financial assets	**24,918**	**24,918**	25,049	25,049	27,394	27,394
Liabilities:						
Deposits	**936,437**	**945,538**	940,543	949,887	904,033	916,181
Financial instruments designated at fair value through profit or loss	**26,935**	**26,935**	26,583	26,583	22,421	22,421
Acceptances	**21,951**	**21,951**	21,912	21,912	19,525	19,525
Obligations related to securities sold short	**41,310**	**41,310**	43,439	43,439	40,449	40,449
Derivative financial instruments	**50,562**	**50,562**	52,746	52,746	65,900	65,900
Obligations related to securities sold under repurchase agreements and securities lent	**132,631**	**132,631**	132,206	132,206	139,025	139,025
Subordinated debentures	**8,574**	**8,784**	8,524	8,713	8,038	8,469
Other financial liabilities	**50,182**	**51,486**	47,862	48,697	45,723	46,682

(d) Fair value hierarchy

The best evidence of fair value for a financial instrument is the quoted price in an active market. Unadjusted quoted market prices for identical instruments represent a Level 1 valuation. Where possible, valuations are based on quoted prices or observable inputs obtained from active markets.

Quoted prices are not always available for over-the-counter transactions, as well as transactions in inactive or illiquid markets. In these instances, internal models that maximize the use of observable inputs are used to estimate fair value. The chosen valuation technique incorporates all the factors that market participants would take into account in pricing a transaction. When all significant inputs to models are observable, the valuation is classified as Level 2. Financial instruments traded in a less active market are valued using indicative market prices or other valuation techniques. Fair value estimates do not consider forced or liquidation sales.

Where financial instruments trade in inactive markets, illiquid markets or when using models where observable parameters do not exist, greater management judgment is required for valuation purposes. Valuations that require the significant use of unobservable inputs are classified as Level 3.

The following table outlines the fair value hierarchy and instruments carried at fair value on a recurring basis.

	As at							
	April 30, 2023				January 31, 2023			
($ millions)	**Level 1**	**Level 2**	**Level 3**	**Total**	Level 1	Level 2	Level 3	Total
Instruments carried at fair value on a recurring basis:								
Assets:								
Precious metals[(1)]	**$ –**	**$ 1,191**	**$ –**	**$ 1,191**	$ –	$ 725	$ –	$ 725
Trading assets								
Loans	**–**	**6,905**	**5**	**6,910**	–	7,641	1	7,642
Canadian federal government and government guaranteed debt	**15,145**	**2,944**	**–**	**18,089**	11,541	4,407	–	15,948
Canadian provincial and municipal debt	**4,673**	**4,470**	**–**	**9,143**	4,497	4,798	–	9,295
U.S. treasury and other U.S. agencies' debt	**11,911**	**536**	**–**	**12,447**	11,488	–	–	11,488
Other foreign governments' debt	**15**	**9,295**	**–**	**9,310**	187	8,676	–	8,863
Corporate and other debt	**2,513**	**8,117**	**–**	**10,630**	2,643	7,992	6	10,641
Equity securities	**45,852**	**88**	**1**	**45,941**	50,362	110	28	50,500
Other	**–**	**2,225**	**–**	**2,225**	–	1,969	–	1,969
	$ 80,109	**$ 34,580**	**$ 6**	**$ 114,695**	$ 80,718	$ 35,593	$ 35	$ 116,346
Investment securities[(2)]								
Canadian federal government and government guaranteed debt	**$ 4,569**	**$ 4,720**	**$ –**	**$ 9,289**	$ 5,008	$ 4,854	$ –	$ 9,862
Canadian provincial and municipal debt	**3,729**	**3,922**	**–**	**7,651**	2,480	3,945	–	6,425
U.S. treasury and other U.S. agencies' debt	**31,318**	**2,139**	**–**	**33,457**	32,223	2,612	–	34,835
Other foreign governments' debt	**3,352**	**28,117**	**–**	**31,469**	3,153	26,155	–	29,308
Corporate and other debt	**–**	**2,061**	**55**	**2,116**	–	2,011	53	2,064
Equity securities	**2,383**	**219**	**1,734**	**4,336**	2,442	217	1,656	4,315
	$ 45,351	**$ 41,178**	**$ 1,789**	**$ 88,318**	$ 45,306	$ 39,794	$ 1,709	$ 86,809
Derivative financial instruments								
Interest rate contracts	**$ –**	**$ 13,478**	**$ –**	**$ 13,478**	$ –	$ 13,698	$ 12	$ 13,710
Foreign exchange and gold contracts	**–**	**25,792**	**–**	**25,792**	–	25,406	–	25,406
Equity contracts	**38**	**2,451**	**32**	**2,521**	62	2,309	25	2,396
Credit contracts	**–**	**481**	**3**	**484**	–	517	4	521
Commodity contracts	**–**	**2,435**	**15**	**2,450**	–	2,774	13	2,787
	$ 38	**$ 44,637**	**$ 50**	**$ 44,725**	$ 62	$ 44,704	$ 54	$ 44,820
Liabilities:								
Deposits	**$ –**	**$ 116**	**$ –**	**$ 116**	$ –	$ 104	$ –	$ 104
Financial liabilities designated at fair value through profit or loss	**–**	**26,935**	**–**	**26,935**	–	26,583	–	26,583
Obligations related to securities sold short	**35,613**	**5,696**	**1**	**41,310**	38,104	5,329	6	43,439
Derivative financial instruments								
Interest rate contracts	**–**	**19,520**	**–**	**19,520**	–	19,865	12	19,877
Foreign exchange and gold contracts	**–**	**25,813**	**–**	**25,813**	–	28,000	–	28,000
Equity contracts	**185**	**2,578**	**22**	**2,785**	152	2,834	22	3,008
Credit contracts	**–**	**24**	**1**	**25**	–	20	2	22
Commodity contracts	**–**	**2,415**	**4**	**2,419**	–	1,833	6	1,839
	$ 185	**$ 50,350**	**$ 27**	**$ 50,562**	$ 152	$ 52,552	$ 42	$ 52,746

(1) The fair value of precious metals is determined based on quoted market prices and forward spot prices, where applicable, less the cost to sell.
(2) Excludes debt investment securities measured at amortized cost of $28,277 (January 31, 2023 – $24,195).

	As at October 31, 2022			
($ millions)	Level 1	Level 2	Level 3	Total
Instruments carried at fair value on a recurring basis:				
Assets:				
Precious metals[(1)]	$ –	$ 543	$ –	$ 543
Trading assets				
Loans	–	7,811	–	7,811
Canadian federal government and government guaranteed debt	10,139	4,595	–	14,734
Canadian provincial and municipal debt	4,299	5,978	–	10,277
U.S. treasury and other U.S. agencies' debt	11,957	–	–	11,957
Other foreign governments' debt	15	8,287	–	8,302
Corporate and other debt	2,367	8,976	1	11,344
Equity securities	46,698	224	11	46,933
Other	–	1,796	–	1,796
	$ 75,475	$ 37,667	$ 12	$ 113,154
Investment securities[(2)]				
Canadian federal government and government guaranteed debt	$ 4,947	$ 6,055	$ –	$ 11,002
Canadian provincial and municipal debt	2,029	3,400	–	5,429
U.S. treasury and other U.S. agencies' debt	32,412	2,824	–	35,236
Other foreign governments' debt	3,217	24,487	–	27,704
Corporate and other debt	40	1,874	48	1,962
Equity securities	3,210	215	1,640	5,065
	$ 45,855	$ 38,855	$ 1,688	$ 86,398
Derivative financial instruments				
Interest rate contracts	$ –	$ 15,193	$ 17	$ 15,210
Foreign exchange and gold contracts	–	32,223	–	32,223
Equity contracts	332	2,209	20	2,561
Credit contracts	–	780	–	780
Commodity contracts	–	4,912	13	4,925
	$ 332	$ 55,317	$ 50	$ 55,699
Liabilities:				
Deposits	$ –	$ 15	$ –	$ 15
Financial liabilities designated at fair value through profit or loss	–	22,421	–	22,421
Obligations related to securities sold short	35,059	5,387	3	40,449
Derivative financial instruments				
Interest rate contracts	–	22,842	12	22,854
Foreign exchange and gold contracts	–	35,634	–	35,634
Equity contracts	636	3,063	21	3,720
Credit contracts	–	25	–	25
Commodity contracts	–	3,660	7	3,667
	$ 636	$ 65,224	$ 40	$ 65,900

(1) The fair value of precious metals is determined based on quoted market prices and forward spot prices, where applicable, less the cost to sell.
(2) Excludes debt investment securities measured at amortized cost of $23,610.

Level 3 instrument fair value changes

Financial instruments categorized as Level 3 as at April 30, 2023, in the fair value hierarchy comprise certain trading loans, structured corporate bonds, equity securities, complex derivatives and obligations related to securities sold short.

The following table summarizes the changes in Level 3 instruments carried at fair value for the three months ended April 30, 2023.

All positive balances represent assets and negative balances represent liabilities. Consequently, positive amounts indicate purchases of assets or settlements of liabilities and negative amounts indicate sales of assets or issuances of liabilities.

($ millions)	As at April 30, 2023 Fair value, beginning of the quarter	Gains/ (losses) recorded in income	Gains/ (losses) recorded in OCI	Purchases/ Issuances	Sales/ Settlements	Transfers into/out of Level 3	**Fair value, end of the quarter**	Changes in unrealized gains/(losses) recorded in income for instruments still held[(1)]
Trading assets								
Loans	$ 1	$ –	$ –	$ 5	$ –	$ (1)	**$ 5**	$ –
Corporate and other debt	6	–	–	–	–	(6)	**–**	–
Equity securities	28	–	–	1	(28)	–	**1**	–
	35	–	–	6	(28)	(7)	**6**	–
Investment securities								
Corporate and other debt	53	1	1	–	–	–	**55**	1
Equity securities	1,656	44	1	54	(19)	(2)	**1,734**	44
	1,709	45	2	54	(19)	(2)	**1,789**	45
Derivative financial instruments – assets								
Interest rate contracts	12	–	–	–	(3)	(9)	**–**	–
Equity contracts	25	(3)	–	2	(1)	9	**32**	(3)[(2)]
Credit contracts	4	(1)	–	–	–	–	**3**	(1)
Commodity contracts	13	2	–	–	–	–	**15**	2
Derivative financial instruments – liabilities								
Interest rate contracts	(12)	–	–	–	3	9	**–**	–
Equity contracts	(22)	(3)	–	(4)	3	4	**(22)**	(3)[(2)]
Credit contracts	(2)	1	–	–	–	–	**(1)**	1
Commodity contracts	(6)	2	–	–	–	–	**(4)**	2
	12	(2)	–	(2)	2	13	**23**	(2)
Obligations related to securities sold short	(6)	–	–	–	–	5	**(1)**	–
Total	$ 1,750	$ 43	$ 2	$ 58	$ (45)	$ 9	**$ 1,817**	$ 43

(1) These amounts represent the gains and losses from fair value changes of Level 3 instruments still held at the end of the period that are recorded in the Consolidated Statement of Income.
(2) Certain unrealized gains and losses on derivative assets and liabilities are largely offset by mark-to-market changes on other instruments included in trading revenues in the Consolidated Statement of Income, since these instruments act as an economic hedge to certain derivative assets and liabilities.

The following tables summarize the changes in Level 3 instruments carried at fair value for the three months ended January 31, 2023 and October 31, 2022.

($ millions)	As at January 31, 2023 Fair value, beginning of the quarter	Gains/ (losses) recorded in income[(1)]	Gains/ (losses) recorded in OCI	Purchases/ Issuances	Sales/ Settlements	Transfers into/ out of Level 3	Fair value, end of the quarter
Trading assets	$ 12	$ –	$ –	$ –	$ (5)	$ 28	$ 35
Investment securities	1,688	10	10	47	(49)	3	1,709
Derivative financial instruments	10	2	–	(4)	(3)	7	12
Obligations related to securities sold short	(3)	–	–	–	2	(5)	(6)

(1) Gains or losses for items in Level 3 may be offset with losses or gains on related hedges in Level 1 or Level 2.

	As at October 31, 2022						
($ millions)	Fair value, beginning of the quarter	Gains/ (losses) recorded in income[(1)]	Gains/ (losses) recorded in OCI	Purchases/ Issuances	Sales/ Settlements	Transfers into/ out of Level 3	Fair value, end of the quarter
Trading assets	$ 43	$ (1)	$ –	$ –	$ (1)	$ (29)	$ 12
Investment securities	1,735	74	–	56	(62)	(115)	1,688
Derivative financial instruments	25	(18)	–	3	–	–	10
Financial liabilities designated at fair value through profit or loss	(12)	–	–	–	12	–	–
Obligations related to securities sold short	(3)	–	–	(2)	3	(1)	(3)

(1) Gains or losses for items in Level 3 may be offset with losses or gains on related hedges in Level 1 or Level 2.

Significant transfers

Significant transfers can occur between the fair value hierarchy levels when additional or new information regarding valuation inputs and their refinement and observability become available. The Bank recognizes transfers between levels of the fair value hierarchy at the end of the reporting period during which the change has occurred.

The following significant transfers made between Level 1 and 2, were based on whether the fair value was determined using quoted market prices from an active market.

During the three months ended April 30, 2023:

- Trading assets of $1,143 million, investment securities of $612 million and obligations related to securities sold short of $67 million were transferred out of Level 2 into Level 1.
- Trading assets of $1,546 million, investment securities of $505 million and obligations related to securities sold short of $312 million were transferred out of Level 1 into Level 2.

During the three months ended January 31, 2023:

- Trading assets of $909 million, investment securities of $459 million and obligations related to securities sold short of $247 million were transferred out of Level 2 into Level 1.
- Trading assets of $496 million, investment securities of $512 million and obligations related to securities sold short of $136 million were transferred out of Level 1 into Level 2.

During the three months ended October 31, 2022:

- Trading assets of $9,837 million, investment securities of $6,265 million and obligations related to securities sold short of $3,966 million were transferred out of Level 2 into Level 1.
- Trading assets of $798 million, investment securities of $235 million and obligations related to securities sold short of $89 million were transferred out of Level 1 into Level 2.

There were no significant transfers into and out of Level 3 during the three months ended April 30, 2023 and January 31, 2023.

During the three months ended October 31, 2022, Investments in other foreign governments' debt of $120 million were transferred out of Level 3 into Level 2. Transfers were a result of the change in the observability of the price used for valuing the securities.

Level 3 sensitivity

The Bank applies judgment in determining unobservable inputs used to calculate the fair value of Level 3 instruments.

Refer to Note 7 of the Bank's audited consolidated financial statements for the year ended October 31, 2022 for a description of the significant unobservable inputs for Level 3 instruments and the potential effect that a change in each unobservable input may have on the fair value measurement. There have been no significant changes to the Level 3 sensitivities during the quarter.

19. Corporate income taxes

Tax Assessments

The Bank received reassessments totaling $1,515 million of tax and interest as a result of the Canada Revenue Agency (CRA) denying the tax deductibility of certain Canadian dividends received during the 2011-2017 taxation years. The circumstances of the dividends subject to these reassessments are similar to those prospectively addressed by tax rules introduced in 2015 and 2018. The Bank has filed a Notice of Appeal with the Tax Court of Canada against the federal reassessment in respect of its 2011 taxation year. In addition, a subsidiary of the Bank received reassessments on the same matter in respect of its 2018 taxation year totaling $1.7 million of tax and interest.

A subsidiary of the Bank received withholding tax assessments from the CRA in respect of certain of its securities lending transactions for its 2014-2018 taxation years totaling $551 million of tax, penalties and interest. The subsidiary has filed a Notice of Appeal with the Tax Court of Canada against the federal assessment in respect of its 2014-2017 taxation years.

In respect of both matters, the Bank is confident that its tax filing position was appropriate and in accordance with the relevant provisions of the Income Tax Act (Canada) and intends to vigorously defend its position.

Canadian Federal Tax Measures

On December 15, 2022, certain Canadian federal tax measures impacting the Bank were enacted into law including the Canada Recovery Dividend (CRD), a one-time 15% tax on taxable income in excess of $1 billion, as well as an increase of 1.5% to the federal corporate income tax rate on taxable income above $100 million.

The impact of these enacted tax measures was recognized in the Bank's financial results for the quarter ended January 31, 2023. The Bank recognized income tax expense of $579 million in the Consolidated Statement of Income for the present value of the total CRD payable of approximately $640 million. The difference will accrete as interest expense over the remaining four-year period. The increase in the Canadian statutory tax rate resulted in a benefit of $39 million related to the 2022 taxation year, recorded in Q1 2023. This included the revaluation of the Bank's deferred tax assets and liabilities. Of this amount, $13 million was recognized in the Consolidated Statement of Income and the remainder in Other Comprehensive Income.

Direct Deposit Service

Shareholders may have dividends deposited directly into accounts held at financial institutions which are members of the Canadian Payments Association. To arrange direct deposit service, please write to the transfer agent.

Dividend and Share Purchase Plan

Scotiabank's Shareholder Dividend and Share Purchase Plan allows common and preferred shareholders to purchase additional common shares by reinvesting their cash dividend without incurring brokerage or administrative fees.

As well, eligible shareholders may invest up to $20,000 each fiscal year to purchase additional common shares of the Bank. All administrative costs of the plan are paid by the Bank.

For more information on participation in the plan, please contact the transfer agent.

Dividend Dates for 2023

Record and payment dates for common and preferred shares, subject to approval by the Board of Directors.

Record Date	Payment Date
January 4, 2023	January 27, 2023
April 4, 2023	April 26, 2023
July 5, 2023	July 27, 2023
October 3, 2023	October 27, 2023

Website

For information relating to Scotiabank and its services, visit us at our website: www.scotiabank.com.

Conference Call and Web Broadcast

The quarterly results conference call will take place on May 24, 2023, at 7:15 am ET and is expected to last approximately one hour. Interested parties are invited to access the call live, in listen-only mode, by telephone at 416-641-6104 or toll-free, at 1-800-952-5114 using ID 8016393# (please call shortly before 7:15 am ET). In addition, an audio webcast, with accompanying slide presentation, may be accessed via the Investor Relations page at www.scotiabank.com/ca/en/about/investors-shareholders.html.

Following discussion of the results by Scotiabank executives, there will be a question and answer session. A telephone replay of the conference call will be available from May 24, 2023, to June 30, 2023, by calling 905-694-9451 or 1-800-408-3053 (North America toll-free) and entering the access code 1127377#.

Contact Information

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Shareholders:

For enquiries related to changes in share registration or address, dividend information, lost share certificates, estate transfers, or to advise of duplicate mailings, please contact the Bank's transfer agent:

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Scotiabank®

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