

Q2 2019

Quarterly Report to Shareholders

Scotiabank reports second quarter results

TORONTO, May 28, 2019 – Scotiabank reported second quarter net income of \$2,259 million compared to \$2,177 million in the same period last year. Diluted earnings per share were \$1.73, compared to \$1.70 in the same period a year ago. Return on equity was 13.8% compared to 14.9% a year ago.

Adjusting for Acquisition and divestiture-related amounts⁽¹⁾, net income increased 3% to \$2,263 million and diluted earnings per share were \$1.70 compared to \$1.71 last year. Return on equity was 13.6% compared to 15.0% a year ago.

“The Bank continues to make steady progress in the execution of its strategy, completing previously announced acquisitions in Peru and the Dominican Republic and announcing the divestiture of El Salvador. Our sharper geographic focus, improved business mix and progress in digital banking position the Bank well for the future,” said Brian Porter, President and CEO of Scotiabank.

“We had strong operating results across our businesses. Earnings from the Personal and Commercial banking businesses were up 8% year-over-year while Global Banking and Markets rebounded strongly.”

“International Banking delivered strong results this quarter, with double-digit annual earnings growth. These results were driven by strong loan growth, particularly in the Pacific Alliance countries and the impact of acquisitions. Our competitive strength in these high-quality growth markets provides us with significant opportunities for customer-driven growth. Our merged Chilean operations are gaining market share while creating considerable synergies and value for our customers and shareholders.”

“Canadian Banking delivered solid results this quarter, driven by commercial lending and wealth management earnings growth, along with better expense management. The business continued its efforts to enhance the customer experience and advance digital adoption through the launch of two new platforms in the second quarter: Scotiabank Healthcare+Physician Banking and Scotiabank eHOME.”

“We also announced our intention to establish Global Wealth Management as a standalone business segment effective in fiscal 2020 to demonstrate its importance and our strategic commitment to expanding our global wealth management businesses.”

“The Bank reported a Common Equity Tier 1 capital ratio of 11.1% through strong internal capital generation, and prudent management of organic asset growth.”

“Overall, we delivered solid results across the Bank in the second quarter. We have made good progress towards strengthening our businesses and offering a superior customer experience. Looking ahead, we remain focused on delivering against our differentiated strategy and achieving consistent long-term growth.”



Live audio Web broadcast of the Bank's analysts' conference call. See page 72 for details.

(1) Refer to Non-GAAP Measures on page 4 for details.

Financial Highlights

	As at and for the three months ended			For the six months ended	
(Unaudited)	April 30 2019	January 31 2019	April 30 2018	April 30 2019	April 30 2018
Operating results (\$ millions)					
Net interest income	4,193	4,274	3,950	8,467	7,886
Non-interest income	3,610	3,330	3,108	6,940	6,260
Total revenue	7,803	7,604	7,058	15,407	14,146
Provision for credit losses	873	688	534	1,561	1,078
Non-interest expenses	4,046	4,171	3,726	8,217	7,224
Income tax expense	625	498	621	1,123	1,330
Net income	2,259	2,247	2,177	4,506	4,514
Net income attributable to common shareholders	2,125	2,107	2,042	4,232	4,291
Operating performance					
Basic earnings per share (\$)	1.74	1.72	1.70	3.46	3.58
Diluted earnings per share (\$)	1.73	1.71	1.70	3.44	3.56
Return on equity (%)	13.8	13.5	14.9	13.7	15.5
Productivity ratio (%)	51.8	54.9	52.8	53.3	51.1
Core banking margin (%) ⁽¹⁾	2.45	2.45	2.47	2.45	2.46
Financial position information (\$ millions)					
Cash and deposits with financial institutions	50,121	52,942	61,792		
Trading assets	117,140	106,956	99,655		
Loans	583,815	566,105	517,918		
Total assets	1,058,169	1,034,283	926,310		
Deposits	712,282	690,879	640,643		
Common equity	63,571	62,525	57,261		
Preferred shares and other equity instruments	3,884	3,884	4,234		
Assets under administration	549,775	521,931	471,831		
Assets under management	297,167	281,489	213,112		
Capital and liquidity measures					
Common Equity Tier 1 (CET1) capital ratio (%)	11.1	11.1	12.0		
Tier 1 capital ratio (%)	12.5	12.5	13.5		
Total capital ratio (%)	14.7	14.6	15.3		
Leverage ratio (%)	4.3	4.4	4.8		
CET1 risk-weighted assets (\$ millions) ⁽²⁾	415,212	408,565	375,901		
Liquidity coverage ratio (LCR) (%)	125	128	127		
Credit quality					
Net impaired loans (\$ millions)	3,695	3,607	3,381		
Allowance for credit losses (\$ millions) ⁽³⁾	5,376	5,199	5,017		
Net impaired loans as a % of loans and acceptances	0.61	0.61	0.63		
Provision for credit losses as a % of average net loans and acceptances (annualized) ⁽⁴⁾	0.61	0.47	0.42	0.54	0.42
Provision for credit losses on impaired loans as a % of average net loans and acceptances (annualized) ⁽⁴⁾	0.49	0.47	0.46	0.48	0.45
Net write-offs as a % of average net loans and acceptances (annualized)	0.50	0.50	0.45	0.50	0.46
Adjusted results⁽¹⁾					
Adjusted net income (\$ millions)	2,263	2,291	2,190	4,554	4,540
Adjusted diluted earnings per share (\$)	1.70	1.75	1.71	3.44	3.58
Adjusted return on equity (%)	13.6	13.7	15.0	13.7	15.6
Adjusted productivity ratio (%)	52.3	54.1	52.5	53.2	50.8
Adjusted provision for credit losses as a % of average net loans and acceptances (annualized) ⁽⁴⁾	0.51	0.47	0.42	0.49	0.42
Common share information					
Closing share price (\$) (TSX)	73.78	74.80	78.92		
Shares outstanding (millions)					
Average – Basic	1,224	1,226	1,198	1,225	1,199
Average – Diluted	1,252	1,255	1,203	1,253	1,215
End of period	1,222	1,226	1,199		
Dividends paid per share (\$)	0.87	0.85	0.82	1.72	1.61
Dividend yield (%) ⁽⁵⁾	4.8	4.8	4.2	4.8	4.0
Market capitalization (\$ millions) (TSX)	90,188	91,679	94,591		
Book value per common share (\$)	52.01	51.01	47.77		
Market value to book value multiple	1.4	1.5	1.7		
Price to earnings multiple (trailing 4 quarters)	10.9	11.1	11.4		
Other information					
Employees (full-time equivalent)	99,678	98,508	88,997		
Branches and offices	3,147	3,076	2,983		

(1) Refer to page 4 for a discussion of Non-GAAP measures.

(2) In accordance with OSFI's requirements, effective January 31, 2019, credit valuation adjustment (CVA) risk-weighted assets (RWA) have been fully phased-in. In the prior year, CVA RWA were calculated using scalars of 0.80, 0.83 and 0.86 to compute the CET1 capital ratio, Tier 1 capital ratio and Total capital ratio, respectively.

(3) Includes allowance for credit losses on all financial assets – loans, acceptances, off-balance sheet exposures, debt securities, and deposits with financial institutions.

(4) Includes provision for credit losses on certain financial assets – loans, acceptances and off-balance sheet exposures.

(5) Based on the average of the high and low common share prices for the period.

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, 2019. 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 2018 Annual Report. This MD&A is dated May 28, 2019.

Additional information relating to the Bank, including the Bank's 2018 Annual Report, is available on the Bank's website at www.scotiabank.com. As well, the Bank's 2018 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 often 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, 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 2018 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," "project," and similar expressions of future or conditional verbs, such as "will," "may," "should," "would" and "could."

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; 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; 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 in business areas in which we operate, including through internet and mobile banking and non-traditional competitors; exposure related to significant litigation and regulatory matters; the occurrence of natural and unnatural catastrophic events and claims resulting from such events; 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 2018 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 2018 Annual Report under the headings "Outlook", as updated by quarterly reports. The "Outlook" 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, including the Bank's Annual Information Form, 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 to assess its performance. Some of these measures are not calculated in accordance with Generally Accepted Accounting Principles (GAAP), which are based on International Financial Reporting Standards (IFRS), are not defined by GAAP and do not have standardized meanings that would ensure consistency and comparability among companies using these or similar measures. The Bank believes that certain non-GAAP measures are useful in assessing ongoing business performance and provide readers with a better understanding of how management assesses performance. These non-GAAP measures are used throughout this report and defined below.

Adjusted results and diluted earnings per share

The following tables present reconciliations of GAAP Reported financial results to non-GAAP Adjusted financial results. The financial results have been adjusted for the following:

Acquisition and divestiture-related amounts – Acquisition and divestiture-related amounts are defined as:

A) Acquisition-related costs

1. Integration costs – Includes costs that are incurred and relate to integrating the acquired operations and are recorded in the Canadian and International Banking operating segments. These costs will cease once integration is complete. The costs relate to the following acquisitions:
 - Jarislowsky, Fraser Limited, Canada (*closed Q3, 2018*)
 - BBVA, Chile (*closed Q3, 2018*)
 - Citibank consumer and small and medium enterprise operations, Colombia (*closed Q3, 2018*)
 - MD Financial Management, Canada (*closed Q4, 2018*)
 - Banco Dominicano del Progreso, Dominican Republic (*closed Q2, 2019*)
 - Banco Cencosud, Peru (*closed Q2, 2019*)
2. Day 1 provision for credit losses on acquired performing financial instruments, as required by IFRS 9 and are recorded in the Canadian and International Banking operating segments. The standard does not differentiate between originated and purchased performing loans and as such, requires the same accounting treatment for both. These credit losses are considered Acquisition-related costs in periods where applicable. These costs relate to Banco Cencosud, Peru and Banco Dominicano del Progreso, Dominican Republic for Q2, 2019.
3. Amortization of Acquisition-related intangible assets, excluding software. These costs relate to the six acquisitions above, as well as prior acquisitions and are recorded in the Canadian and International Banking operating segments.

B) Net gain on divestitures – relates to the gain on divestitures of Scotia Crecer AFP and Scotia Seguros in the Dominican Republic that closed in Q2, 2019, and the loss on the sale of the insurance and banking operations in El Salvador announced this period. These amounts are recorded in the Other segment.

Reconciliation of reported and adjusted results and diluted earnings per share

(\$ millions)	For the three months ended			For the six months ended	
	April 30 2019	January 31 2019	April 30 2018	April 30 2019	April 30 2018
Reported Results					
Net interest income	\$ 4,193	\$ 4,274	\$ 3,950	\$ 8,467	\$ 7,886
Non-interest income	3,610	3,330	3,108	6,940	6,260
Total revenue	7,803	7,604	7,058	15,407	14,146
Provision for credit losses	873	688	534	1,561	1,078
Non-interest expenses	4,046	4,171	3,726	8,217	7,224
Income before taxes	2,884	2,745	2,798	5,629	5,844
Income tax expense	625	498	621	1,123	1,330
Net income	\$ 2,259	\$ 2,247	\$ 2,177	\$ 4,506	\$ 4,514
Net income attributable to non-controlling interests in subsidiaries (NCI)	70	111	70	181	128
Net income attributable to equity holders	2,189	2,136	2,107	4,325	4,386
Net income attributable to common shareholders	2,125	2,107	2,042	4,232	4,291
Diluted earnings per share (in dollars)	\$ 1.73	\$ 1.71	\$ 1.70	\$ 3.44	\$ 3.56
Acquisition and divestiture-related amounts					
Day 1 provision for credit losses on acquired performing financial instruments ⁽¹⁾	\$ 151	\$ –	\$ –	\$ 151	\$ –
Integration costs ⁽²⁾	25	31	–	56	–
Amortization of Acquisition-related intangible assets, excluding software ⁽²⁾	28	30	18	58	36
Acquisition-related costs	204	61	18	265	36
Net gain on divestitures ⁽³⁾	(173)	–	–	(173)	–
Acquisition and divestiture-related amounts (Pre-tax)	31	61	18	92	36
Income tax expense/(benefit)	(27)	(17)	(5)	(44)	(10)
Acquisition and divestiture-related amounts (After tax)	4	44	13	48	26
Adjustment attributable to NCI	(45)	(5)	–	(50)	–
Acquisition and divestiture-related amounts (After tax and NCI)	\$ (41)	\$ 39	\$ 13	\$ (2)	\$ 26
Adjusted Results					
Net interest income	\$ 4,193	\$ 4,274	\$ 3,950	\$ 8,467	\$ 7,886
Non-interest income	3,437	3,330	3,108	6,767	6,260
Total revenue	7,630	7,604	7,058	15,234	14,146
Provision for credit losses	722	688	534	1,410	1,078
Non-interest expenses	3,993	4,110	3,708	8,103	7,188
Income before taxes	2,915	2,806	2,816	5,721	5,880
Income tax expense	652	515	626	1,167	1,340
Net income	\$ 2,263	\$ 2,291	\$ 2,190	\$ 4,554	\$ 4,540
Net income attributable to NCI	115	116	70	231	128
Net income attributable to equity holders	2,148	2,175	2,120	4,323	4,412
Net income attributable to common shareholders	\$ 2,084	\$ 2,146	\$ 2,055	\$ 4,230	\$ 4,317
Adjusted diluted earnings per share					
Adjusted net income attributable to common shareholders	\$ 2,084	\$ 2,146	\$ 2,055	\$ 4,230	\$ 4,317
Dilutive impact of share-based payment options and others	39	45	2	83	34
Adjusted net income attributable to common shareholders (diluted)	\$ 2,123	\$ 2,191	\$ 2,057	\$ 4,313	\$ 4,351
Weighted average number of basic common shares outstanding (millions)	1,224	1,226	1,198	1,225	1,199
Dilutive impact of share-based payment options and others (millions)	28	29	5	28	16
Adjusted weighted average number of diluted common shares outstanding (millions)	1,252	1,255	1,203	1,253	1,215
Adjusted diluted earnings per share (in dollars)	\$ 1.70	\$ 1.75	\$ 1.71	\$ 3.44	\$ 3.58
Impact of adjustments on diluted earnings per share (in dollars)	\$ (0.03)	\$ 0.04	\$ 0.01	\$ –	\$ 0.02

(1) Recorded in provision for credit losses.

(2) Recorded in non-interest expenses.

(3) Recorded in non-interest income.

Reconciliation of reported and adjusted results and diluted earnings per share by business line

Canadian Banking ⁽¹⁾	For the three months ended			For the six months ended	
	April 30 2019	January 31 2019	April 30 2018	April 30 2019	April 30 2018
<i>(\$ millions)</i>					
Reported Results					
Net interest income	\$ 1,990	\$ 2,036	\$ 1,906	\$ 4,026	\$ 3,845
Non-interest income	1,390	1,379	1,325	2,769	2,689
Total revenue	3,380	3,415	3,231	6,795	6,534
Provision for credit losses	252	233	205	485	415
Non-interest expenses	1,711	1,730	1,641	3,441	3,246
Income before taxes	1,417	1,452	1,385	2,869	2,873
Income tax expense	369	379	368	748	754
Net income	\$ 1,048	\$ 1,073	\$ 1,017	\$ 2,121	\$ 2,119
Net income attributable to non-controlling interests in subsidiaries (NCI)	–	–	–	–	–
Net income attributable to equity holders	\$ 1,048	\$ 1,073	\$ 1,017	\$ 2,121	\$ 2,119
Adjustments for Acquisition-related costs					
Day 1 provision for credit losses on acquired performing financial instruments ⁽²⁾	\$ –	\$ –	\$ –	\$ –	\$ –
Integration costs ⁽³⁾	6	7	–	13	–
Amortization of Acquisition-related intangible assets, excluding software ⁽³⁾	14	14	7	28	14
Acquisition-related costs (Pre-tax)	20	21	7	41	14
Income tax expense/(benefit)	(6)	(5)	(2)	(11)	(4)
Acquisition-related costs (After tax)	14	16	5	30	10
Adjustment attributable to NCI	–	–	–	–	–
Acquisition-related costs (After tax and NCI)	\$ 14	\$ 16	\$ 5	\$ 30	\$ 10
Adjusted Results					
Net interest income	\$ 1,990	\$ 2,036	\$ 1,906	\$ 4,026	\$ 3,845
Non-interest income	1,390	1,379	1,325	2,769	2,689
Total revenue	3,380	3,415	3,231	6,795	6,534
Provision for credit losses	252	233	205	485	415
Non-interest expenses	1,691	1,709	1,634	3,400	3,232
Income before taxes	1,437	1,473	1,392	2,910	2,887
Income tax expense	375	384	370	759	758
Net income	\$ 1,062	\$ 1,089	\$ 1,022	\$ 2,151	\$ 2,129
Net income attributable to NCI	–	–	–	–	–
Net income attributable to equity holders	\$ 1,062	\$ 1,089	\$ 1,022	\$ 2,151	\$ 2,129

(1) Refer to Business Segment Review on page 13.

(2) Recorded in provision for credit losses.

(3) Recorded in non-interest expenses.

International Banking ⁽¹⁾	For the three months ended			For the six months ended	
	April 30 2019	January 31 2019	April 30 2018	April 30 2019	April 30 2018
<i>(\$ millions)</i>					
Reported Results					
Net interest income	\$ 2,121	\$ 2,080	\$ 1,758	\$ 4,201	\$ 3,465
Non-interest income	1,235	1,251	984	2,486	1,981
Total revenue	3,356	3,331	2,742	6,687	5,446
Provision for credit losses	628	470	340	1,098	684
Non-interest expenses	1,710	1,742	1,438	3,452	2,880
Income before taxes	1,018	1,119	964	2,137	1,882
Income tax expense	249	226	219	475	412
Net income	\$ 769	\$ 893	\$ 745	\$ 1,662	\$ 1,470
Net income attributable to non-controlling interests in subsidiaries (NCI)	69	111	70	180	128
Net income attributable to equity holders	\$ 700	\$ 782	\$ 675	\$ 1,482	\$ 1,342
Adjustments for Acquisition-related costs					
Day 1 provision for credit losses on acquired performing financial instruments ⁽²⁾	\$ 151	\$ –	\$ –	\$ 151	\$ –
Integration costs ⁽³⁾	19	24	–	43	–
Amortization of Acquisition-related intangible assets, excluding software ⁽³⁾	14	16	11	30	22
Acquisition-related costs (Pre-tax)	184	40	11	224	22
Income tax expense/(benefit)	(53)	(12)	(3)	(65)	(6)
Acquisition-related costs (After tax)	131	28	8	159	16
Adjustment attributable to NCI	(44)	(5)	–	(49)	–
Acquisition-related costs (After tax and NCI)	\$ 87	\$ 23	\$ 8	\$ 110	\$ 16
Adjusted Results					
Net interest income	\$ 2,121	\$ 2,080	\$ 1,758	\$ 4,201	\$ 3,465
Non-interest income	1,235	1,251	984	2,486	1,981
Total revenue	3,356	3,331	2,742	6,687	5,446
Provision for credit losses	477	470	340	947	684
Non-interest expenses	1,677	1,702	1,427	3,379	2,858
Income before taxes	1,202	1,159	975	2,361	1,904
Income tax expense	302	238	222	540	418
Net income	\$ 900	\$ 921	\$ 753	\$ 1,821	\$ 1,486
Net income attributable to NCI	113	116	70	229	128
Net income attributable to equity holders	\$ 787	\$ 805	\$ 683	\$ 1,592	\$ 1,358

(1) Refer to Business Segment Review on page 16.

(2) Recorded in provision for credit losses.

(3) Recorded in non-interest expenses.

Other ⁽¹⁾	For the three months ended			For the six months ended	
	April 30 2019	January 31 2019	April 30 2018	April 30 2019	April 30 2018
<i>(\$ millions)</i>					
Reported Results					
Net interest income	\$ (268)	\$ (214)	\$ (76)	\$ (482)	\$ (176)
Non-interest income	184	(3)	6	181	(3)
Total revenue	(84)	(217)	(70)	(301)	(179)
Provision for credit losses	(1)	1	–	–	(1)
Non-interest expenses	31	54	82	85	(39)
Income before taxes	(114)	(272)	(152)	(386)	(139)
Income tax expense	(136)	(218)	(120)	(354)	(163)
Net income	\$ 22	\$ (54)	\$ (32)	\$ (32)	\$ 24
Net income attributable to non-controlling interests in subsidiaries (NCI)	1	–	–	1	–
Net income attributable to equity holders	\$ 21	\$ (54)	\$ (32)	\$ (33)	\$ 24
Adjustments for Net gain on divestitures⁽²⁾	\$ (173)	\$ –	\$ –	\$ (173)	\$ –
Income tax expense	32	–	–	32	–
Net gain on divestitures (After tax)	(141)	–	–	(141)	–
Adjustment attributable to NCI	(1)	–	–	(1)	–
Net gain on divestitures (After tax and NCI)	\$ (142)	\$ –	\$ –	\$ (142)	\$ –
Adjusted Results					
Net interest income	\$ (268)	\$ (214)	\$ (76)	\$ (482)	\$ (176)
Non-interest income	11	(3)	6	8	(3)
Total revenue	(257)	(217)	(70)	(474)	(179)
Provision for credit losses	(1)	1	–	–	(1)
Non-interest expenses	31	54	82	85	(39)
Income before taxes	(287)	(272)	(152)	(559)	(139)
Income tax expense	(168)	(218)	(120)	(386)	(163)
Net income	\$ (119)	\$ (54)	\$ (32)	\$ (173)	\$ 24
Net income attributable to NCI	2	–	–	2	–
Net income attributable to equity holders	\$ (121)	\$ (54)	\$ (32)	\$ (175)	\$ 24

(1) Refer to Business Segment Review on page 21.

(2) Recorded in non-interest income.

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

International Banking business segment results are analyzed on a constant dollar basis, refer to page 17. 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 and constant dollar results for International Banking for prior periods.

(\$ millions)	For the three months ended			For the six months ended		
	January 31, 2019		April 30, 2018		April 30, 2018	
	Reported	Foreign exchange	Constant dollar	Reported	Foreign exchange	Constant dollar
<i>(Taxable equivalent basis)</i>						
Net interest income	\$ 2,080	\$ (30)	\$ 2,110	\$ 1,758	\$ (3)	\$ 1,761
Non-interest income	1,251	(28)	1,279	984	1	983
Total revenue	3,331	(58)	3,389	2,742	(2)	2,744
Provision for credit losses	470	(8)	478	340	4	336
Non-interest expenses	1,742	(21)	1,763	1,438	7	1,431
Income tax expense	226	(6)	232	219	(3)	222
Net income	\$ 893	\$ (23)	\$ 916	\$ 745	\$ (10)	\$ 755
Net income attributable to non-controlling interest in subsidiaries	\$ 111	\$ 1	\$ 110	\$ 70	\$ (1)	\$ 71
Net income attributable to equity holders of the Bank	\$ 782	\$ (24)	\$ 806	\$ 675	\$ (9)	\$ 684
Other measures						
Average assets (\$ billions)	\$ 197	\$ –	\$ 197	\$ 160	\$ (1)	\$ 161
Average liabilities (\$ billions)	\$ 154	\$ (2)	\$ 156	\$ 124	\$ (1)	\$ 125

The above table is computed on a basis that is different than the table "Impact of foreign currency translation" in Group Financial Performance on page 10.

Core banking assets

Core banking assets are average earning assets excluding bankers' acceptances and average trading assets within Global Banking and Markets.

Core banking margin

This ratio represents net interest income divided by core banking assets.

Return on equity

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

In the first quarter of 2019, in line with OSFI's increased Domestic Stability Buffer requirements, the Bank increased its attributed capital to the business line to approximately 10.0% of Basel III common equity capital requirements based on credit, market and operational risks and leverage inherent in each business segment. Previously, capital was attributed based on a methodology that approximated 9.5% of Basel III common equity capital requirements.

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. Prior period returns on equity for the business segments have not been restated.

Group Financial Performance

The Bank's reported net income this quarter was \$2,259 million compared to \$2,177 million in the same period last year, and \$2,247 million last quarter. Diluted earnings per share were \$1.73 compared to \$1.70 in the same period last year and \$1.71 last quarter. Return on equity was 13.8% compared to 14.9% last year and 13.5% last quarter.

This quarter's net income includes Acquisition and divestiture-related amounts of \$4 million after tax (\$31 million pre-tax), representing Acquisition-related costs of \$145 million after tax (\$204 million pre-tax) and a Net gain on divestitures of \$141 million after tax (\$173 million pre-tax). Adjusting for Acquisition and divestiture-related amounts, net income was \$2,263 million compared to \$2,190 million last year, up 3%. Adjusted diluted earnings per share was \$1.70, impacted 3 cents from Acquisition and divestiture-related amounts, and declined 1% compared to \$1.71 last year. Adjusted return on equity was 13.6% compared to 15.0% a year ago.

Adjusted net income was \$2,263 million this quarter compared to \$2,291 million last quarter. Adjusted diluted earnings per share was \$1.70 compared to \$1.75 last quarter, and Adjusted return on equity was 13.6% compared to 13.7% last quarter.

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 table "Constant dollar" in Non-GAAP Measures on page 8.

For the three months ended	Average exchange rate			% Change	
	April 30, 2019	January 31, 2019	April 30, 2018	April 30, 2019 vs. January 31, 2019	April 30, 2019 vs. April 30, 2018
U.S dollar/Canadian dollar	0.751	0.751	0.784	(0.0)%	(4.3)%
Mexican Peso/Canadian dollar	14.360	14.887	14.538	(3.5)%	(1.2)%
Peruvian Sol/Canadian dollar	2.485	2.522	2.543	(1.5)%	(2.3)%
Colombian Peso/Canadian dollar	2,354	2,396	2,216	(1.7)%	6.3%
Chilean Peso/Canadian dollar	499.097	509.759	471.236	(2.1)%	5.9%

For the six months ended	Average exchange rate		% Change
	April 30, 2019	April 30, 2018	April 30, 2019 vs. April 30, 2018
U.S dollar/Canadian dollar	0.751	0.788	(4.7)%
Mexican Peso/Canadian dollar	14.628	14.792	(1.1)%
Peruvian Sol/Canadian dollar	2.504	2.551	(1.8)%
Colombian Peso/Canadian dollar	2,375	2,277	4.3%
Chilean Peso/Canadian dollar	504.515	482.791	4.5%

Impact on net income ⁽¹⁾ (\$ millions except EPS)	For the three months ended		For the six months ended
	April 30, 2019 vs. April 30, 2018	April 30, 2019 vs. January 31, 2019	April 30, 2019 vs. April 30, 2018
Net interest income	\$ (5)	\$ 26	\$ 24
Non-interest income ⁽²⁾	–	14	21
Non-interest expenses	7	(26)	(17)
Other items (net of tax)	5	(12)	2
Net income	\$ 7	\$ 2	\$ 30
Earnings per share (diluted)	\$ 0.01	\$ –	\$ 0.02
Impact by business line (\$ millions)			
Canadian Banking	\$ 3	\$ –	\$ 5
International Banking ⁽²⁾	(4)	5	27
Global Banking and Markets	10	(3)	29
Other ⁽²⁾	(2)	–	(31)
Net income	\$ 7	\$ 2	\$ 30

(1) Includes the impact of all currencies.

(2) Includes the impact of foreign currency hedges.

Financial performance commentary

Net income

Q2 2019 vs Q2 2018

Net income was \$2,259 million compared to \$2,177 million, an increase of \$82 million or 4%. Adjusting for Acquisition and divestiture-related amounts, net income was \$2,263 million compared to \$2,190 million, up \$73 million or 3%. Higher net interest income and non-interest income were partly offset by higher non-interest expenses, provision for credit losses and income taxes.

Q2 2019 vs Q1 2019

Net income was \$2,259 million compared to \$2,247 million, an increase of \$12 million or 1%. Adjusting for Acquisition and divestiture-related amounts, net income was \$2,263 million compared to \$2,291 million, down 1%. Lower net interest income, higher provision for credit losses, and higher income taxes were partly offset by higher non-interest income and lower non-interest expenses.

Year-to-date Q2 2019 vs Year-to-date Q2 2018

Net income was \$4,506 million compared to \$4,514 million, a decrease of \$8 million. Adjusting for Acquisition and divestiture-related amounts, net income was \$4,554 million compared to \$4,540 million, an increase of \$14 million. Higher net interest income and non-interest income, as well as lower income taxes and the favourable impact of foreign currency translation were partly offset by higher non-interest expenses and higher provision for credit losses. The prior year's earnings included an accounting benefit from the remeasurement of an employee benefit liability from certain plan modifications ("benefits remeasurement") of \$150 million (\$203 million pre-tax).

Net interest income

Q2 2019 vs Q2 2018

Net interest income was \$4,193 million, an increase of \$243 million or 6%, mostly from the impact of acquisitions. Also contributing to the increase was growth in commercial and retail lending in International Banking, deposit growth in Canadian Banking, as well as higher corporate loans in Global Banking and Markets. These increases were offset by lower contribution from asset/liability management activities.

The core banking margin was down two basis points to 2.45%. Higher margins due to the change in business mix from the impact of acquisitions in International Banking and higher margins in Canadian Banking were more than offset by lower margins in Global Banking and Markets and lower spreads on asset/liability management activities.

Q2 2019 vs Q1 2019

Net interest income was \$4,193 million, a decrease of \$81 million or 2%. Volume growth in commercial and retail lending in International Banking primarily from the impact of acquisitions, deposit growth in Canadian Banking, corporate loan growth in Global Banking and Markets and the favourable impact of foreign currency translation were more than offset by the impact of three fewer days in the quarter.

The core banking margin was flat at 2.45%. Higher margins in International Banking and Canadian Banking were offset by lower margins in Global Banking and Markets and lower spreads on asset/liability management activities.

Year-to-date Q2 2019 vs Year-to-date Q2 2018

Net interest income was \$8,467 million, an increase of \$581 million or 7%, mainly from the impact of acquisitions. Also contributing to the increase was growth in commercial and retail lending in International Banking, improved deposit spreads and volume growth in Canadian Banking, as well as higher corporate loans in Global Banking and Markets and the favourable impact of foreign currency translation.

The core banking margin was 2.45%, down one basis point. The change in business mix from the impact of acquisitions in International Banking and higher margins in Canadian Banking were more than offset by lower margins in Global Banking and Markets and lower spreads on asset/liability management activities.

Non-interest income

Q2 2019 vs Q2 2018

Non-interest income was \$3,610 million, up \$502 million or 16%. Adjusting for the Net gain on divestitures of \$173 million, non-interest income increased \$329 million or 11%, with approximately three quarters of this growth driven by acquisitions. The growth was driven by higher banking revenues, wealth management and underwriting fees, and higher income from associated corporations. These were partly offset by the impact of the new revenue accounting standard that requires card expenses to be netted against card revenue, prospectively, and the benefit from an additional month of income from the Alignment of reporting periods of the Canadian insurance business and of the operations in Chile, with the Bank last year ("Alignment of reporting period").

Q2 2019 vs Q1 2019

Non-interest income was up \$280 million or 8%. Adjusting for the Net gain on divestitures, non-interest income grew by \$107 million or 3%. The growth was driven by higher wealth management fees, banking revenues, trading revenues, net gain on investment securities and income from associated corporations, as well as increased contributions from acquisitions. These were partly offset by lower insurance revenues as well as the impact of the Alignment of reporting period of Peru last quarter.

Year-to-date Q2 2019 vs Year-to-date Q2 2018

Non-interest income was \$6,940 million, up \$680 million or 11%. Adjusting for Net gain on divestitures, non-interest income increased \$507 million or 8%, mainly from acquisitions. The remaining growth was driven by higher banking revenues, higher income from associated corporations and the positive impact from foreign currency translation. These were partly offset by lower trading revenues, underwriting fees and lower gains on the sale of real estate, as well as the impact of the new accounting revenue standard that requires card expenses to be netted against card revenue.

Provision for credit losses

Q2 2019 vs Q2 2018

The provision for credit losses was \$873 million compared to \$534 million, an increase of \$339 million or 63%. Adjusting for the Day 1 provision on acquired performing loans, provision for credit losses was \$722 million, an increase of \$188 million or 35%.

Provision on impaired loans was \$700 million, up \$105 million due primarily to higher retail provisions in line with loan growth and the impact of acquisitions in International Banking during the past year, partially offset by lower commercial provisions. The provision for credit losses ratio on impaired loans was 49 basis points, an increase of three basis points.

Provision on performing loans was \$173 million compared to a reversal of \$61 million. Adjusting for the Day 1 provision on acquired performing loans, provision on performing loans was \$22 million, up \$83 million due primarily to the movement of hurricane-related provisions to provision on impaired loans last year, less favourable macro-economic inputs mainly in Canada and loan growth, partially offset by improving credit quality.

MANAGEMENT'S DISCUSSION & ANALYSIS

The provision for credit losses was 61 basis points compared to 42 basis points. Adjusting for the Day 1 provision on acquired performing loans, the provision for credit losses ratio increased nine basis points to 51 basis points.

Q2 2019 vs Q1 2019

The provision for credit losses was \$873 million compared to \$688 million. Adjusting for the Day 1 provision on acquired performing loans, provision for credit losses increased \$34 million or 5%.

Provision on impaired loans increased \$21 million, due primarily to higher retail provisions in Canadian Banking and commercial provisions in International Banking, partially offset by higher provision for a fraud-related commercial account in Canadian Banking last quarter. The provision for credit losses ratio on impaired loans was 49 basis points, an increase of two basis points. Provision on performing loans was \$173 million compared to \$9 million, up \$164 million. Adjusting for the Day 1 provision on acquired performing loans, provision for performing loans increased \$13 million, driven by loan growth across business lines and the impact of less favourable macro-economic inputs across jurisdictions, partially offset by improving credit quality. The provision for credit losses ratio increased 14 basis points to 61 basis points, and increased four basis points to 51 basis points on an adjusted basis.

Year-to-date Q2 2019 vs Year-to-date Q2 2018

The provision for credit losses was \$1,561 million, compared to \$1,078 million. Adjusting for the Day 1 provision on acquired performing loans, provision for credit losses increased \$332 million or 31%.

The provision on impaired loans was \$1,379 million, an increase of \$220 million relating primarily to retail portfolios in International Banking, mainly in Latin America, due to the impact of acquisitions during the past year, partially offset by lower commercial provisions. The provision for credit losses ratio on impaired loans was 48 basis points, an increase of three basis points.

Provision on performing loans was \$182 million, compared to a reversal of \$81 million. Adjusting for the Day 1 provision on acquired performing loans, provision for performing loans increased \$112 million due primarily to the movement of hurricane-related provisions to provision on impaired loans last year, less favourable macro-economic inputs mainly in Canada and loan growth, partially offset by improving credit quality. The provision for credit losses ratio increased 12 basis points to 54 basis points, and increased seven basis points to 49 basis points on an adjusted basis.

Non-interest expenses

Q2 2019 vs Q2 2018

Non-interest expenses were \$4,046 million, up \$320 million or 9%. Adjusting for Acquisition-related costs, non-interest expenses were up \$285 million or 8%. Higher non-interest expenses from the impact of acquisitions, partly offset by the impact of the new revenue accounting standard that requires card expenses to be netted against card revenues, contributed approximately 7% of the growth. The remaining increase was due to higher salaries and benefits related to regulatory and technology initiatives and higher depreciation and amortization. This was partly offset by lower performance-based compensation and lower professional fees.

The productivity ratio was 51.8% compared to 52.8%. Adjusting for Acquisition and divestiture-related amounts, the productivity ratio was 52.3% compared to 52.5%.

Q2 2019 vs Q1 2019

Non-interest expenses were down \$125 million or 3%. Adjusting for Acquisition-related costs, non-interest expenses were down \$117 million. This was due to lower share-based payments for employees that are eligible to retire which is expensed in the first quarter, lower performance-based compensation, lower business taxes and professional fees. This was partly offset by higher non-interest expenses related to the impact of acquisitions and the negative impact of foreign currency translation.

The productivity ratio was 51.8% compared to 54.9%. Adjusting for Acquisition and divestiture-related amounts, the productivity ratio was 52.3% compared to 54.1%.

Year-to-date Q2 2019 vs Year-to-date Q2 2018

Non-interest expenses increased \$993 million or 14%. Adjusting for Acquisition-related costs, non-interest expenses were up \$915 million or 13%. The prior year's benefits remeasurement, the impact of acquisitions and the impact of the new revenue accounting standard that requires card expenses to be netted against card revenues, contributed approximately 9% of the growth. The remaining 4% growth was due to investments in technology and regulatory initiatives, higher depreciation and amortization, and higher business and capital taxes. This was partly offset by lower performance-based compensation and professional fees.

The productivity ratio was 53.3% compared to 51.1%. Adjusting for Acquisition and divestiture-related amounts and the impact of prior year's benefits remeasurement, the productivity ratio was 53.2% compared to 52.2%.

Operating leverage on a reported basis was negative 4.8%. Adjusting for Acquisition and divestiture-related amounts, operating leverage was negative 5.0%. The benefits remeasurement negatively impacted operating leverage by 3.1%.

Taxes

Q2 2019 vs Q2 2018

The effective tax rate was 21.7%, lower than 22.2%, due primarily to higher tax-exempt income and lower taxes related to gains on dispositions of foreign subsidiaries this quarter.

Q2 2019 vs Q1 2019

The effective tax rate increased to 21.7% from 18.1%, due primarily to higher tax benefits in certain jurisdictions in the previous quarter, partially offset by lower taxes related to gains on dispositions of foreign subsidiaries in the current quarter.

Year-to-date Q2 2019 vs Year-to-date Q2 2018

The effective tax rate was 20.0%, down from 22.8%, due primarily to higher tax benefits in certain jurisdictions and lower taxes related to gains on dispositions of foreign subsidiaries in the current period.

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 ⁽¹⁾ (Unaudited) (\$ millions) (Taxable equivalent basis)	For the three months ended			For the six months ended	
	April 30 2019	January 31 2019	April 30 2018	April 30 2019	April 30 2018
Net interest income	\$ 1,990	\$ 2,036	\$ 1,906	\$ 4,026	\$ 3,845
Non-interest income ⁽²⁾⁽³⁾	1,390	1,379	1,325	2,769	2,689
Total revenue	3,380	3,415	3,231	6,795	6,534
Provision for credit losses	252	233	205	485	415
Non-interest expenses	1,711	1,730	1,641	3,441	3,246
Income tax expense	369	379	368	748	754
Net income	\$ 1,048	\$ 1,073	\$ 1,017	\$ 2,121	\$ 2,119
Net income attributable to non-controlling interest in subsidiaries	–	–	–	–	–
Net income attributable to equity holders of the Bank	\$ 1,048	\$ 1,073	\$ 1,017	\$ 2,121	\$ 2,119
Other financial data and measures					
Return on equity	18.4%	18.1%	22.7%	18.3%	23.5%
Net interest margin ⁽⁴⁾	2.46%	2.44%	2.43%	2.45%	2.42%
Provision for credit losses – performing (Stage 1 and 2)	\$ 19	\$ 4	\$ 1	\$ 23	\$ (9)
Provision for credit losses – impaired (Stage 3)	\$ 233	\$ 229	\$ 204	\$ 462	\$ 424
Provision for credit losses as a percentage of average net loans and acceptances (annualized)	0.30%	0.27%	0.25%	0.29%	0.25%
Provision for credit losses on impaired loans as a percentage of average net loans and acceptances (annualized)	0.28%	0.27%	0.25%	0.27%	0.26%
Net write-offs as a percentage of average net loans and acceptances (annualized)	0.28%	0.28%	0.26%	0.28%	0.26%
Assets under administration (\$ billions)	\$ 381	\$ 360	\$ 316	\$ 381	\$ 316
Assets under management (\$ billions)	\$ 239	\$ 225	\$ 157	\$ 239	\$ 157
Average assets (\$ billions)	\$ 358	\$ 356	\$ 339	\$ 357	\$ 337
Average liabilities (\$ billions)	\$ 281	\$ 274	\$ 249	\$ 278	\$ 249

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

(2) Includes income (on a taxable equivalent basis) from investments in associated corporations for the three months ended April 30, 2019 – \$18 (January 31, 2019 – \$13; April 30, 2018 – \$44) and for the six months ended April 30, 2019 – \$31 (April 30, 2018 – \$59).

(3) Includes one additional month of income relating to the Canadian insurance business of \$34 (after-tax \$25) in the second quarter of 2018.

(4) Net interest income (TEB) as percentage of average earning assets excluding bankers' acceptances.

Net income

Q2 2019 vs Q2 2018

Net income attributable to equity holders was \$1,048 million, an increase of \$31 million or 3%. Adjusting for Acquisition-related costs, net income was \$1,062 million, an increase of 4%, due primarily to higher revenue driven by solid loan growth, strong deposit growth and the impact of acquisitions. This was partly offset by higher non-interest expenses, higher provision for credit losses, the prior year benefit from an additional month of income from the Alignment of reporting period, and lower gains on sale of real estate.

Q2 2019 vs Q1 2019

Net income attributable to equity holders decreased \$25 million or 2%. Adjusting for Acquisition-related costs, net income declined 2% due primarily to lower net interest income driven by three fewer days in the quarter and higher provision for credit losses, partially offset by higher non-interest income and lower non-interest expenses.

Year-to-date Q2 2019 vs Year-to-date Q2 2018

Net income attributable to equity holders was \$2,121 million, in line with the prior year. Adjusting for Acquisition-related costs, net income was \$2,151 million, an increase of 1%, due primarily to higher revenue driven by solid volume growth and the impact of acquisitions. This was partly offset by higher non-interest expenses, higher provision for credit losses, the prior year gain on the reorganization of Interac and benefit from the Alignment of reporting period, and lower gains on sale of real estate.

MANAGEMENT'S DISCUSSION & ANALYSIS

Average assets

Q2 2019 vs Q2 2018

Average assets grew \$19 billion or 6% to \$358 billion. The growth included \$5 billion or 2% in residential mortgages, \$5 billion or 9% in business loans and acceptances, and \$2 billion or 3% in personal loans.

Q2 2019 vs Q1 2019

Average assets rose \$2 billion due primarily to growth in business loans and residential mortgages.

Year-to-date Q2 2019 vs Year-to-date Q2 2018

Average assets grew \$20 billion or 6% to \$357 billion. The growth included \$5 billion or 2% in residential mortgages, \$5 billion or 10% in business loans and acceptances, and \$2 billion or 3% in personal loans.

Average liabilities

Q2 2019 vs Q2 2018

Average liabilities increased \$32 billion or 13%, including strong growth of \$14 billion or 8% in personal deposits and \$11 billion or 15% in non-personal deposits.

Q2 2019 vs Q1 2019

Average liabilities increased \$7 billion or 2%, including growth of \$4 billion or 2% in personal deposits and \$2 billion or 2% in non-personal deposits.

Year-to-date Q2 2019 vs Year-to-date Q2 2018

Average liabilities increased \$29 billion or 12%, including strong growth of \$13 billion or 8% in personal deposits and \$10 billion or 14% in non-personal deposits.

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

Q2 2019 vs Q2 2018

AUA of \$381 billion increased \$65 billion or 21%, driven primarily by the impact of the prior year acquisitions and market appreciation. AUM of \$239 billion increased \$82 billion or 52% driven by the impact of prior year acquisitions and market appreciation.

Q2 2019 vs Q1 2019

AUA increased \$21 billion or 6% and AUM increased \$14 billion or 6% due primarily to market appreciation and net sales.

Net interest income

Q2 2019 vs Q2 2018

Net interest income of \$1,990 million increased \$84 million or 4%, largely reflecting volume growth in deposits, commercial loans and credit cards. The margin improved three basis points to 2.46%, driven primarily by deposit growth.

Q2 2019 vs Q1 2019

Net interest income declined \$46 million or 2%, due primarily to three fewer days in the quarter. The margin improved two basis points to 2.46%, driven primarily by deposit growth.

Year-to-date Q2 2019 vs Year-to-date Q2 2018

Net interest income of \$4,026 million increased \$181 million or 5%, reflecting improved spreads and volume growth in deposits, commercial loans and credit cards. The margin improved three basis points to 2.45%, driven primarily by the impact of prior interest rate increases by the Bank of Canada and deposit growth.

Non-interest income

Q2 2019 vs Q2 2018

Non-interest income of \$1,390 million increased \$65 million or 5%. Higher fee income from banking, wealth management, acquisitions and higher credit fees were partly offset by reduced net card revenue due to the impact of the new revenue accounting standard, the prior year benefit from the Alignment of reporting period, lower gains on sale of real estate and lower income from investment in associated corporations.

Q2 2019 vs Q1 2019

Non-interest income increased \$11 million due mainly to higher wealth management and banking fees, as well as higher income from investment in associated corporations.

Year-to-date Q2 2019 vs Year-to-date Q2 2018

Non-interest income of \$2,769 million increased \$80 million or 3%. Higher banking, wealth management and credit fee income, including the impact of acquisitions, were partially offset by reduced net card revenue due to the impact of the new revenue accounting standard, the prior year gain on the reorganization of Interac, and benefit from the Alignment of reporting period, and lower gains on sale of real estate.

Provision for credit losses

Q2 2019 vs Q2 2018

The provision for credit losses was \$252 million, compared to \$205 million, up 23%. Provision on impaired loans was \$233 million compared to \$204 million, up 14% due primarily to higher retail provisions. The provision for credit losses ratio on impaired loans was 28 basis points, an increase of three basis points. Provision on performing loans increased \$18 million to \$19 million due primarily to higher retail provisions driven by loan growth and the impact of less favourable macro-economic inputs, partially offset by lower commercial provisions due to improving credit quality. The provision for credit losses ratio was 30 basis points, an increase of five basis points.

Q2 2019 vs Q1 2019

The provision for credit losses was \$252 million, compared to \$233 million, up 8%. Provision on impaired loans was \$233 million, up 2% due primarily to higher retail provisions partially offset by lower commercial provisions as the prior quarter included provision for a fraud-related commercial account. The provision for credit losses ratio on impaired loans was 28 basis points, an increase of one basis point. Provision on performing loans increased \$15 million to \$19 million due primarily to higher retail provisions driven by loan growth and lower commercial provisions. The provision for credit losses ratio was 30 basis points, an increase of three basis points.

Year-to-date Q2 2019 vs Year-to-date Q2 2018

The provision for credit losses was \$485 million, compared to \$415 million. Provision on impaired loans was \$462 million, up 9% due primarily to higher commercial provisions which included provision for a fraud-related commercial account and higher retail provisions. The provision for credit losses ratio on impaired loans was 27 basis points, an increase of 1 basis point. Provision on performing loans increased \$32 million to \$23 million driven by less favourable macro-economic inputs, partially offset by improving credit quality in the retail portfolio. The provision for credit losses ratio was 29 basis points, an increase of four basis points.

Non-interest expenses

Q2 2019 vs Q2 2018

Non-interest expenses were \$1,711 million, up \$70 million or 4%. Adjusting for Acquisition-related costs, expenses were \$1,691 million, up 3% largely relating to the prior year acquisitions. Higher expenses in regulatory initiatives were offset by the benefits realized from cost-reduction initiatives and the impact of the new revenue accounting standard.

Q2 2019 vs Q1 2019

Non-interest expenses decreased \$19 million or 1%. Adjusting for Acquisition-related costs, expenses were down 1% relating to three fewer days in the quarter.

Year-to-date Q2 2019 vs Year-to-date Q2 2018

Non-interest expenses were \$3,441 million, up \$195 million or 6%. Adjusting for Acquisition-related costs, expenses grew to \$3,400 million, or 5% relating to the prior year acquisitions. Higher expenses in digital, technology and regulatory initiatives were partly offset by benefits realized from cost-reduction initiatives, and the impact of the new revenue accounting standard.

Taxes

The effective tax rate of 26.0% decreased slightly from 26.6% in the prior year and was in line with 26.1% in the prior quarter.

Year-to-date Q2 2019 vs Year-to-date Q2 2018

The effective tax rate of 26.1% was in line with the previous year of 26.3%.

International Banking⁽¹⁾

<i>(Unaudited) (\$ millions)</i> <i>(Taxable equivalent basis)</i>	For the three months ended			For the six months ended	
	April 30 2019	January 31 2019	April 30 2018	April 30 2019	April 30 2018
Net interest income	\$ 2,121	\$ 2,080	\$ 1,758	\$ 4,201	\$ 3,465
Non-interest income ⁽²⁾⁽³⁾	1,235	1,251	984	2,486	1,981
Total revenue	3,356	3,331	2,742	6,687	5,446
Provision for credit losses ⁽⁵⁾	628	470	340	1,098	684
Non-interest expenses	1,710	1,742	1,438	3,452	2,880
Income tax expense	249	226	219	475	412
Net income	\$ 769	\$ 893	\$ 745	\$ 1,662	\$ 1,470
Net income attributable to non-controlling interest in subsidiaries	\$ 69	\$ 111	\$ 70	\$ 180	\$ 128
Net income attributable to equity holders of the Bank	\$ 700	\$ 782	\$ 675	\$ 1,482	\$ 1,342
Other financial data and measures					
Return on equity	13.1%	14.5%	16.3%	13.8%	16.4%
Net interest margin ⁽⁴⁾	4.58%	4.52%	4.74%	4.55%	4.70%
Provision for credit losses – performing (Stage 1 and 2) ⁽⁵⁾	\$ 156	\$ 19	\$ (48)	\$ 175	\$ (50)
Provision for credit losses – impaired (Stage 3)	\$ 472	\$ 451	\$ 388	\$ 923	\$ 734
Provision for credit losses as a percentage of average net loans and acceptances (annualized)	1.71%	1.28%	1.22%	1.50%	1.24%
Provision for credit losses on impaired loans as a percentage of average net loans and acceptances (annualized)	1.29%	1.23%	1.38%	1.26%	1.31%
Net write-offs as a percentage of average net loans and acceptances (annualized)	1.26%	1.34%	1.26%	1.30%	1.32%
Average assets (\$ billions)	\$ 203	\$ 197	\$ 160	\$ 200	\$ 157
Average liabilities (\$ billions)	\$ 156	\$ 154	\$ 124	\$ 155	\$ 120

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

(2) Includes income (on a taxable equivalent basis) from investments in associated corporations for the three months ended April 30, 2019 – \$210 (January 31, 2019 – \$161; April 30, 2018 – \$156) and for the six months ended April 30, 2019 – \$371 (April 30, 2018 – \$289).

(3) Includes one additional month of earnings relating to Peru of \$58 (After tax and NCI \$41). The second quarter of 2018 includes one additional month of earnings related to Chile of \$36 (After tax \$26).

(4) Net interest income (TEB) as percentage of average earning assets excluding bankers' acceptances.

(5) Includes Day 1 provision for credit losses on acquired performing loans for the three and six months ended April 30, 2019 - \$151 (April 30, 2018 – nil).

Net income**Q2 2019 vs Q2 2018**

Net income attributable to equity holders of \$700 million was up \$25 million, or 4%. Adjusting for Acquisition and divestiture-related costs, net income increased to \$787 million, up 15%. This growth was largely driven by higher net interest income due to strong loan growth in the Pacific Alliance countries, the impact of acquisitions, and higher non-interest income, including a higher contribution from associated corporations. This was partly offset by increased non-interest expenses and provision for credit losses, the benefit of Alignment of the reporting period of Chile with the Bank ("Alignment of reporting period") last year, and higher income taxes.

Q2 2019 vs Q1 2019

Net income attributable to equity holders decreased by \$82 million or 11%. Adjusting for Acquisition and divestiture-related costs, net income decreased by \$18 million or 2% largely driven by higher income taxes and last quarter's benefit of Alignment of reporting period of Peru with the Bank, partly offset by revenue growth and lower non-interest expenses.

Year-to-date Q2 2019 vs Year-to-date Q2 2018

Net income attributable to equity holders of \$1,482 million was up \$140 million or 10%. Adjusting for Acquisition-related costs, net income increased to \$1,592 million, up 17%. This growth was largely driven by higher net interest income due to strong loan growth in the Pacific Alliance countries, the impact of acquisitions, and higher non-interest income, including a higher contribution from associated corporations, partly offset by increased 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 that excludes the impact of foreign currency translation, which is a non-GAAP financial measure (refer to Non-GAAP Measures). The Bank believes that reporting in constant dollar is useful for readers in assessing ongoing business performance. Ratios are on a reported basis.

International Banking ⁽¹⁾ (Unaudited) (\$ millions) (Taxable equivalent basis)	For the three months ended			For the six months ended	
	April 30 2019	January 31 2019	April 30 2018	April 30 2019	April 30 2018
Constant dollars					
Net interest income	\$ 2,121	\$ 2,110	\$ 1,761	\$ 4,201	\$ 3,489
Non-interest income ⁽²⁾⁽³⁾	1,235	1,279	983	2,486	1,979
Total revenue	3,356	3,389	2,744	6,687	5,468
Provision for credit losses ⁽⁴⁾	628	478	336	1,098	680
Non-interest expenses	1,710	1,763	1,431	3,452	2,879
Income tax expense	249	232	222	475	419
Net income on constant dollar basis	\$ 769	\$ 916	\$ 755	\$ 1,662	\$ 1,490
Net income attributable to non-controlling interest in subsidiaries on a constant dollar basis	\$ 69	\$ 110	\$ 71	\$ 180	\$ 129
Net income attributable to equity holders of the Bank on a constant dollar basis	\$ 700	\$ 806	\$ 684	\$ 1,482	\$ 1,361
Other financial data and measures					
Average assets (\$ billions)	\$ 203	\$ 197	\$ 161	\$ 200	\$ 159
Average liabilities (\$ billions)	\$ 156	\$ 156	\$ 125	\$ 155	\$ 122

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

(2) Includes income (on a taxable equivalent basis) from investments in associated corporations for the three months ended April 30, 2019 – \$210 (January 31, 2019 – \$166; April 30, 2018 – \$161) and for the six months ended April 30, 2019 – \$371 (April 30, 2018 – \$302).

(3) Includes one additional month of earnings relating to Peru of \$58 (after tax and NCI \$41) in the first quarter of 2019. Includes one additional month of earnings relating to Chile of \$36 (after tax and NCI \$26) in the second quarter of 2018.

(4) Includes Day 1 provision for credit losses on acquired performing loans for the three and six months ended April 30, 2019 – \$151 (April 30, 2018 – nil)

Net income

Q2 2019 vs Q2 2018

Net income attributable to equity holders of \$700 million was up \$16 million or 2%. Adjusting for Acquisition and divestiture-related costs, net income increased to \$787 million, up 14%. This growth was largely driven by higher net interest income due to strong loan growth in the Pacific Alliance countries, the impact of acquisitions, and higher non-interest income, including a larger contribution from associated corporations. This was partly offset by increased non-interest expenses and provision for credit losses, the benefit of Alignment of the reporting period of Chile with the Bank last year, and higher income taxes.

Q2 2019 vs Q1 2019

Net income attributable to equity holders decreased by \$106 million or 13%. Adjusting for Acquisition and divestiture-related costs, net income decreased by \$42 million or 5% due to last quarter's benefit of the Alignment of reporting period of Peru with the Bank. Revenue growth and lower expenses were offset by lower tax benefits.

Year-to-date Q2 2019 vs Year-to-date Q2 2018

Net income attributable to equity holders of \$1,482 million was up \$121 million or 9%. Adjusting for Acquisition and divestiture-related costs, net income increased to \$1,592 million, or 16%. This growth was largely driven by higher net interest income due to strong loan growth in the Pacific Alliance countries, the impact of acquisitions, and higher non-interest income, including a higher contribution from associated corporations, partly offset by increased non-interest expenses and provision for credit losses.

Average assets

Q2 2019 vs Q2 2018

Average assets of \$203 billion grew \$42 billion or 26%, driven by strong loan growth of 29%, primarily in the Pacific Alliance countries, partly due to acquisitions. Retail and commercial loan growth were 31% and 27%.

Q2 2019 vs Q1 2019

Average assets increased 3%, driven by good loan growth in the Pacific Alliance and acquisitions in Peru and Dominican Republic. Commercial and retail loan growth were 3% and 2%, respectively.

Year-to-date Q2 2019 vs Year-to-date Q2 2018

Average assets of \$200 billion increased \$41 billion or 26%, driven by strong 29% loan growth, primarily in the Pacific Alliance, partly due to acquisitions. Retail and commercial loan growth were 31% and 27%, respectively.

Average liabilities

Q2 2019 vs Q2 2018

Average liabilities of \$156 billion increased \$31 billion with deposit growth of 16%, primarily in the Pacific Alliance, due in part to acquisitions.

MANAGEMENT'S DISCUSSION & ANALYSIS

Q2 2019 vs Q1 2019

Average liabilities were flat. Retail deposit growth of 3% was offset by a 2% decline in non-personal deposits.

Year-to-date Q2 2019 vs Year-to-date Q2 2018

Average liabilities of \$155 billion increased \$33 billion with deposit growth of 18%, primarily in Pacific Alliance, partly due to acquisitions. Retail deposit growth was 16% and non-personal deposit growth was 19%.

Net interest income

Q2 2019 vs Q2 2018

Net interest income was \$2,121 million, up 20% driven by strong retail and commercial loan growth, of which approximately three-quarters was due to the impact of acquisitions. Net interest margin decreased 16 basis points to 4.58% due to the business mix impact of acquisitions and higher deposit rates in some Latin American countries.

Q2 2019 vs Q1 2019

Net interest income increased \$11 million driven by good retail and commercial loan growth in the Pacific Alliance countries. Net interest margin increased by 6 bps driven by the business mix impact of acquisitions.

Year-to-date Q2 2019 vs Year-to-date Q2 2018

Net interest income was \$4,201 million, up 20% driven by strong retail and commercial loan growth in the Pacific Alliance countries, of which approximately two-thirds was due to the impact of acquisitions. The net interest margin decreased 15 basis points to 4.55% driven mainly by the business mix impact of acquisitions.

Non-interest income

Q2 2019 vs Q2 2018

Non-interest income was \$1,235 million, up \$252 million or 26% of which almost half was due to the impact of acquisitions. The remaining increase was driven by higher banking and credit card fees, contribution from associated corporations and trading revenues.

Q2 2019 vs Q1 2019

Non-interest income decreased \$44 million or 3% due to the impact of the Alignment of reporting period of Peru with the Bank last quarter. Higher banking, wealth and credit card fees and a higher contribution from associated corporations, were partly offset by lower trading revenues and lower gains from financial instruments.

Year-to-date Q2 2019 vs Year-to-date Q2 2018

Non-interest income was \$2,486 million, up \$507 million or 26% of which approximately one-third was due to the impact of acquisitions. The remaining increase was driven by higher banking and credit card fees, contribution from associated corporations, and gain from the sale of foreclosed assets.

Provision for credit losses

Q2 2019 vs Q2 2018

The provision for credit losses was \$628 million, compared to \$336 million, up \$292 million or 87%. Adjusting for the Day 1 provision on acquired performing loans, the provision for credit losses increased \$141 million, up 42%. Provision on impaired loans increased \$86 million due primarily to higher provisions in the retail portfolio driven by loan growth and acquisitions, partially offset by lower provisions in the commercial portfolio. The provision for credit losses ratio on impaired loans was 129 basis points, a decrease of nine basis points. Provision on performing loans was \$156 million. Adjusting for the Day 1 provision on acquired performing loans, provision on performing loans increased \$55 million, due primarily to the movement of hurricane-related provisions to provision on impaired loans last year and loan growth, partially offset by improving credit quality. The adjusted provision for credit losses ratio was 130 basis points, an increase of eight basis points.

Q2 2019 vs Q1 2019

The provision for credit losses was \$628 million, compared to \$478 million. Adjusting for the Day 1 provision on acquired loans, the provision for credit losses decreased by \$1 million. Provision on impaired loans was up \$13 million, as the prior quarter included higher recoveries in the commercial portfolio. The provision for credit losses ratio on impaired loans was 129 basis points, an increase of six basis points. Provision on performing loans was \$156 million. Adjusting for the Day 1 provision on acquired performing loans, provision on performing loans decreased by \$14 million due to improving credit quality in retail and commercial portfolios, partly offset by the impact of less favourable macro-economic inputs across certain jurisdictions. The adjusted provision for credit losses ratio was 130 basis points, an increase of two basis points.

Year-to-date Q2 2019 vs Year-to-date Q2 2018

The provision for credit losses was \$1,098 million, compared to \$680 million. Adjusting for the Day 1 provision on acquired performing loans, the provision for credit losses increased \$267 million driven by higher retail provisions in line with asset growth and the impact of acquisitions during the past year, and higher commercial provisions. The provision for credit losses ratio on impaired loans was 126 basis points, a decrease of five basis points. Provision on performing loans was \$175 million. Adjusting for the Day 1 provision on acquired performing loans, provision on performing loans increased by \$77 million, due primarily to the movement of hurricane-related provisions to provision on impaired loans and higher releases for credit quality last year. The adjusted provision for credit losses ratio was 129 basis points, an increase of five basis points.

Non-interest expenses

Q2 2019 vs Q2 2018

Non-interest expenses increased \$279 million or 19% to \$1,710 million, of which more than three quarters was driven by acquisitions. The remaining increase was due to business volume growth, higher regulatory costs, and the impact of inflation.

Q2 2019 vs Q1 2019

Non-interest expenses decreased \$53 million or 3% due mostly to seasonally higher expenses last quarter, partly offset by the impact of acquisitions.

Year-to-date Q2 2019 vs Year-to-date Q2 2018

Non-interest expenses increased \$573 million or 20% to \$3,452 million, of which approximately three quarters was driven by acquisitions. The remaining increase was due to business volume growth, higher regulatory costs, and the impact of inflation.

Taxes

The effective tax rate was 24.5% up from 22.7% last year and 20.2% last quarter, due primarily to lower tax benefits in Mexico this quarter.

Year-to-date Q2 2019 vs Year-to-date Q2 2018

The effective tax rate was 22.2%, compared to 21.9%.

Global Banking and Markets

<i>(Unaudited) (\$ millions)</i> <i>(Taxable equivalent basis)</i>	For the three months ended			For the six months ended	
	April 30 2019	January 31 2019	April 30 2018	April 30 2019	April 30 2018
Net interest income	\$ 350	\$ 372	\$ 362	\$ 722	\$ 752
Non-interest income	801	703	793	1,504	1,593
Total revenue	1,151	1,075	1,155	2,226	2,345
Provision for credit losses	(6)	(16)	(11)	(22)	(20)
Non-interest expenses	594	645	565	1,239	1,137
Income tax expense	143	111	154	254	327
Net income	\$ 420	\$ 335	\$ 447	\$ 755	\$ 901
Net income attributable to non-controlling interest in subsidiaries	\$ –	\$ –	\$ –	\$ –	\$ –
Net income attributable to equity holders of the Bank	\$ 420	\$ 335	\$ 447	\$ 755	\$ 901
Other financial data and measures					
Return on equity	15.2%	11.5%	16.9%	13.3%	16.5%
Net interest margin ⁽¹⁾	1.70%	1.80%	1.80%	1.75%	1.90%
Provision for credit losses – performing (Stage 1 and 2)	\$ (2)	\$ (15)	\$ (14)	\$ (17)	\$ (22)
Provision for credit losses – impaired (Stage 3)	\$ (4)	\$ (1)	\$ 3	\$ (5)	\$ 2
Provision for credit losses as a percentage of average net loans and acceptances (annualized)	(0.02)%	(0.07)%	(0.05)%	(0.05)%	(0.05)%
Provision for credit losses on impaired loans as a percentage of average net loans and acceptances (annualized)	(0.02)%	(0.01)%	0.02%	(0.01)%	(0.05)%
Net write-offs as a percentage of average net loans and acceptances	0.09 %	– %	0.08%	0.04 %	0.07 %
Average assets (<i>\$ billions</i>)	\$ 361	\$ 364	\$ 321	\$ 363	\$ 327
Average liabilities (<i>\$ billions</i>)	\$ 295	\$ 297	\$ 269	\$ 296	\$ 272

(1) Net interest income (TEB) as percentage of average earning assets excluding bankers' acceptances.

Net income**Q2 2019 vs Q2 2018**

Net income attributable to equity holders was \$420 million, a decrease of \$27 million or 6%. Lower net interest income, higher non-interest expenses, and lower recovery of provision for credit losses were partially offset by higher non-interest income, the favourable impact of foreign currency translation, and lower income taxes.

Q2 2019 vs Q1 2019

Net income attributable to equity holders increased by \$85 million or 25%. This was due mainly to higher non-interest income and lower non-interest expenses, partly offset by lower net interest income, lower recovery of provision for credit losses, and higher income taxes.

Year-to-date Q2 2019 vs Year-to-date Q2 2018

Net income attributable to equity holders decreased by \$146 million or 16%. This was due mainly to lower non-interest income, higher non-interest expenses, and lower net interest income, partly offset by lower income taxes.

Average assets**Q2 2019 vs Q2 2018**

Average assets were \$361 billion, an increase of \$40 billion or 13%. This was primarily driven by growth in securities purchased under resale agreements, business and government loans, trading securities, as well as the impact of foreign currency translation.

Q2 2019 vs Q1 2019

Average assets decreased \$3 billion or 1% compared to the prior quarter due to lower deposits with banks and derivative-related assets.

MANAGEMENT'S DISCUSSION & ANALYSIS

Year-to-date Q2 2019 vs Year-to-date Q2 2018

Average assets were \$363 billion, an increase of \$36 billion or 11% due to growth in securities purchased under resale agreements, business and government loans, as well as the impact of foreign currency translation.

Average liabilities

Q2 2019 vs Q2 2018

Average liabilities of \$295 billion were higher by \$26 billion or 10% due to higher securities sold under repurchase agreements and deposits, as well as the impact of foreign currency translation.

Q2 2019 vs Q1 2019

Average liabilities decreased \$2 billion or 1% due mainly to lower derivative-related liabilities.

Year-to-date Q2 2019 vs Year-to-date Q2 2018

Average liabilities were \$296 billion, an increase of \$24 billion or 9% due to higher securities sold under repurchase agreements and deposits, as well as the impact of foreign currency translation.

Net interest income

Q2 2019 vs Q2 2018

Net interest income of \$350 million was down \$12 million or 3%. This was due mainly to lower deposit margins partly offset by higher loan volumes. Lending margins were comparable to last year. The net interest margin decreased 10 basis points to 1.70%.

Q2 2019 vs Q1 2019

Net interest income decreased by \$22 million or 6%. This was due to decreased deposit margins, partly offset by higher lending margins in US and Europe. The net interest margin was lower by 10 basis points from the prior quarter.

Year-to-date Q2 2019 vs Year-to-date Q2 2018

Net interest income was down by \$30 million or 4%. This was due to decreased lending margins in most of the regions and lower deposit margins. The net interest margin was down by 15 basis points to 1.75%.

Non-interest income

Q2 2019 vs Q2 2018

Non-interest income was \$801 million, an increase of \$8 million or 1% from prior year. This was due to higher fixed income trading revenues, underwriting and credit fees, partly offset by lower equity trading revenues and investment banking advisory fees.

Q2 2019 vs Q1 2019

Non-interest income was up \$98 million or 14%. This was due mainly to higher underwriting fees and fixed income trading revenues.

Year-to-date Q2 2019 vs Year-to-date Q2 2018

Non-interest income was down \$89 million or 6% driven primarily by lower trading-related revenue in the global equities business, lower underwriting and advisory fees, partly offset by higher trading related revenue in the global fixed income business and higher credit fees.

Provision for credit losses

Q2 2019 vs Q2 2018

The provision for credit losses increased \$5 million due mainly to lower release of provision on performing loans primarily due to the impact of less favourable macro-economic inputs across jurisdictions. The provision for credit losses ratio was negative two basis points, an increase of three basis points.

Q2 2019 vs Q1 2019

The provision for credit losses was a net reversal of \$6 million, compared to net reversal of \$16 million last quarter. Provision on impaired loans had a net reversal of \$5 million due primarily to reversal of provisions on the European and US portfolios. The provision for credit losses ratio on impaired loans was negative two basis points, a decrease of one basis point. Provision on performing loans was a net reversal of \$1 million due primarily to improving credit quality in the energy sector partially offset by new provisions required to support volume growth. The provision for credit losses ratio was negative two basis points, an increase of five basis points.

Year-to-date Q2 2019 vs Year-to-date Q2 2018

The provision for credit losses decreased \$2 million as impaired loan provision reversals in Europe and US were partially offset by lower release of provision on performing loans due primarily to less favourable macro-economic inputs across jurisdictions. The provision for credit losses ratio was negative five basis points, remains unchanged.

Non-interest expenses

Q2 2019 vs Q2 2018

Non-interest expenses of \$594 million increased \$29 million or 5%. This was due to higher regulatory and technology costs, and the unfavourable impact of foreign currency translation, partly offset by lower performance-based compensation.

Q2 2019 vs Q1 2019

Non-interest expenses decreased \$51 million or 8%. This was driven mainly by lower share-based compensation for employees that are eligible to retire which is expensed in the first quarter, and lower performance-based compensation.

Year-to-date Q2 2019 vs Year-to-date Q2 2018

Non-interest expenses increased \$102 million or 9% driven by higher regulatory and technology costs, higher share-based compensation, and the negative impact of foreign currency translation. This was partly offset by lower performance-based compensation.

Taxes

The effective tax rate for the quarter was 25.5% in line with 25.7% in the prior year, and increased from 25.0% in the prior quarter. This was due mainly to higher taxes in certain foreign jurisdictions.

Year-to-date Q2 2019 vs Year-to-date Q2 2018

The effective tax rate was 25.2%, compared to 26.6%. The lower tax rate was due mainly to lower taxes in certain foreign jurisdictions. Last year included write-down of certain deferred tax assets as a result of U.S. tax reform.

Other ⁽¹⁾⁽²⁾ (Unaudited) (\$ millions) (Taxable equivalent basis)	For the three months ended			For the six months ended	
	April 30 2019	January 31 2019	April 30 2018	April 30 2019	April 30 2018
Business segment income					
Net interest income ⁽³⁾	\$ (268)	\$ (214)	\$ (76)	\$ (482)	\$ (176)
Non-interest income ⁽³⁾⁽⁴⁾	184	(3)	6	181	(3)
Total revenue	(84)	(217)	(70)	(301)	(179)
Provision for credit losses	(1)	1	–	–	(1)
Non-interest expenses	31	54	82	85	(39)
Income tax expense ⁽³⁾	(136)	(218)	(120)	(354)	(163)
Net income	\$ 22	\$ (54)	\$ (32)	\$ (32)	\$ 24
Net income attributable to non-controlling interest in subsidiaries	\$ 1	\$ –	\$ –	\$ 1	\$ –
Net income attributable to equity holders	\$ 21	\$ (54)	\$ (32)	\$ (33)	\$ 24
Other measures					
Average assets (\$ billions)	\$ 117	\$ 116	\$ 121	\$ 116	\$ 117
Average liabilities (\$ billions)	\$ 238	\$ 239	\$ 237	\$ 238	\$ 235

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

(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, non-interest income and provision for income taxes and differences in the actual amount of costs incurred and charged to the operating segments.

(3) 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, 2019 – \$41 (January 31, 2019 – \$34; April 30, 2018 – \$27) and for six months ended April 30, 2019 – \$75 (April 30, 2018 – \$53) to arrive at the amounts reported in the Consolidated Statement of Income.

(4) Income (on a taxable equivalent basis) from investments in 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, 2019 – \$(58) (January 31, 2019 – \$(45); April 30, 2018 – \$(46)) and for the six months ended April 30, 2019 – \$(103) (April 30, 2018 – \$(84)).

The Other segment includes Group Treasury, smaller operating segments, Net gain on divestitures and other corporate items which are not allocated to a business line.

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 investments in 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 2019 vs Q2 2018

Net income attributable to equity holders was \$21 million. Adjusting for the Net gain on divestitures of \$142 million (\$173 million pre-tax), there was a net loss of \$121 million, compared to \$32 million in the same period last year. This was due mainly to lower contributions from asset/liability management activities, partly offset by higher gains on sale of investment securities, lower non-interest expenses and lower taxes.

Q2 2019 vs Q1 2019

Net income attributable to equity holders was \$21 million. Adjusting for the Net gain on divestitures, there was a net loss of \$121 million, compared to \$54 million. This was primarily due to lower contributions from asset / liability management activities and higher income taxes, partly offset by higher gains on sale of investment securities and lower non-interest expenses.

Year-to-date Q2 2019 vs Year-to-date Q2 2018

Net loss attributable to equity holders was \$33 million. Adjusting for the Net gain on divestitures, the net loss was \$175 million, compared to net income of \$24 million. The prior year had lower expenses primarily related to the benefits remeasurement of \$150 million (\$203 million pre-tax). The current period also reflects lower contributions from asset/ liability management activities.

Geographic Highlights

(Unaudited)	For the three months ended			For the six months ended	
	April 30 2019 ⁽¹⁾	January 31 2019 ⁽¹⁾	April 30 2018 ⁽¹⁾	April 30 2019 ⁽¹⁾	April 30 2018 ⁽¹⁾
Geographic segment income (loss) (\$ millions)					
Canada	\$ 1,022	\$ 1,058	\$ 1,142	\$ 2,080	\$ 2,456
United States	225	176	151	401	308
Mexico	140	182	160	322	325
Peru	140	211	156	351	320
Chile	126	117	99	243	199
Colombia	31	35	25	66	44
Caribbean and Central America	298	194	176	492	342
Other international	207	163	198	370	392
Net income (loss) attributable to equity holders of the Bank	\$ 2,189	\$ 2,136	\$ 2,107	\$ 4,325	\$ 4,386
Average assets (\$ billions)					
Canada	\$ 595	\$ 590	\$ 559	\$ 592	\$ 560
United States	147	147	126	147	121
Mexico	37	35	33	36	32
Peru	27	26	24	26	24
Chile	52	50	28	51	27
Colombia	14	13	12	14	12
Caribbean and Central America	42	41	40	42	40
Other international	125	131	119	128	122
Total	\$ 1,039	\$ 1,033	\$ 941	\$ 1,036	\$ 938

(1) Adjusting for the impact of Acquisition and divestiture-related amounts, Net income attributable to equity holders of the Bank for the three months ended April 30, 2019 was \$2,148 (January 31, 2019 – \$2,175; April 30, 2018 – \$2,120); consisting of Canada \$1,036 (January 31, 2019 – \$1,084; April 30, 2018 – \$1,147); Chile \$140 (January 31, 2019 – \$134; April 30, 2018 – \$104); Colombia \$32 (January 31, 2019 – \$39; April 30, 2018 – \$28); Peru \$184 (January 31, 2019 – \$212; April 30, 2018 – \$157); Caribbean and Central America \$186 (January 31, 2019 – \$193; April 30, 2018 – \$176) and for the six months ended April 30, 2019 was \$4,323 (April 30, 2018 – \$4,412).

Quarterly Financial Highlights

(Unaudited) (\$ millions)	For the three months ended							
	April 30 2019 ⁽¹⁾	January 31 2019 ⁽¹⁾	October 31 2018	July 31 2018	April 30 2018	January 31 2018	October 31 2017	July 31 2017
Reported results								
Net interest income	\$ 4,193	\$ 4,274	\$ 4,220	\$ 4,085	\$ 3,950	\$ 3,936	\$ 3,831	\$ 3,833
Non-interest income	3,610	3,330	3,228	3,096	3,108	3,152	2,981	3,061
Total revenue	\$ 7,803	\$ 7,604	\$ 7,448	\$ 7,181	\$ 7,058	\$ 7,088	\$ 6,812	\$ 6,894
Provision for credit losses	873	688	590	943	534	544	536	573
Non-interest expenses	4,046	4,171	4,064	3,770	3,726	3,498	3,668	3,672
Income tax expense	625	498	523	529	621	709	538	546
Net income	\$ 2,259	\$ 2,247	\$ 2,271	\$ 1,939	\$ 2,177	\$ 2,337	\$ 2,070	\$ 2,103
Basic earnings per share (\$)	1.74	1.72	1.72	1.60	1.70	1.88	1.66	1.68
Diluted earnings per share (\$)	1.73	1.71	1.71	1.55	1.70	1.86	1.64	1.66
Core banking margin (%)(2)	2.45	2.45	2.47	2.46	2.47	2.46	2.44	2.46
Effective tax rate (%)	21.7	18.1	18.7	21.5	22.2	23.3	20.6	20.6
Adjusted results⁽²⁾:								
Adjusted net income	\$ 2,263	\$ 2,291	\$ 2,345	\$ 2,259	\$ 2,190	\$ 2,350	\$ 2,084	\$ 2,117
Adjusted diluted earnings per share	\$ 1.70	\$ 1.75	\$ 1.77	\$ 1.76	\$ 1.71	\$ 1.87	\$ 1.65	\$ 1.68

(1) The amounts for the period ended April 30, 2019 and January 31, 2019 have been prepared in accordance with IFRS 15; prior period amounts have not been restated (refer to Notes 3 and 4 in the condensed interim consolidated financial statements).

(2) Refer to page 4 for a discussion of Non-GAAP Measures.

Trending analysis

Net income

The Bank reported strong net income over the past eight quarters. The earnings in the current quarter were impacted by Acquisition and divestiture-related amounts of \$4 million (\$31 million pre-tax), and third quarter of 2018 was reduced by Acquisition and divestiture-related amounts of \$320 million (\$453 million pre-tax).

The first quarter of 2018 included an accounting benefit of \$150 million (\$203 million pre-tax) from the remeasurement of an employee benefit liability from certain plan modifications.

Net interest income

Net interest income decreased slightly in the current period due to the impact of three fewer days in the quarter as well as lower contributions from asset/liability management activities. The net interest income increased through the period, driven by steady growth in retail and commercial loans across all three business lines, as well as the impact of acquisitions. Net interest margin has remained relatively stable over the period. The margin was 2.45% this quarter.

Non-interest income

Non-interest income has increased over the past few quarters, partly driven by acquisitions, the net gain on divestitures in the current quarter, and the Alignment of reporting period of a number of units within the Bank. Gains on sale of real estate and the sale of investment securities have moderated since 2017. The sale of the HollisWealth business in the fourth quarter of 2017 resulted in a gain that quarter and also contributed to lower wealth management fees in that period.

Provision for credit losses

Effective November 1, 2017, the Bank has adopted IFRS 9. Prior period amounts have not been restated and therefore, the provision for credit losses and related ratios are not directly comparable.

The provision for credit losses was \$873 million in this quarter. Adjusting for the Day 1 provision on acquired performing loans, the provision for credit losses was \$722 million this quarter. The provision for credit losses ratio was 61 basis points, an increase of 14 basis points from the prior quarter. Adjusting for the Day 1 provision on acquired performing loans, the provision for credit losses ratio was 51 basis points this quarter. The adjusted provision for credit losses ratio has increased over the past year, reflecting the change in business mix due to recent acquisitions and the impact of less favourable macro-economic indicators. Asset quality has remained strong despite increased lending activity.

Non-interest expenses

Non-interest expenses moderated this quarter but have generally trended upwards over the period, mostly to support business growth, the ongoing impact of acquisitions and the Bank's investments in technology, regulatory and strategic initiatives. The first quarter of 2018 included a benefits remeasurement of \$203 million, reducing that quarter's expenses.

Income taxes

The effective tax rate was 21.7% this quarter, due primarily to higher tax rates in certain foreign jurisdictions, partly offset by higher tax benefits in certain jurisdictions. The effective tax rate averaged 21.0% over the period, with a range of 18.1% to 23.3%. Effective tax rates in other quarters were impacted by different levels of income earned in foreign tax jurisdictions, as well as the variability of tax-exempt dividend income.

Financial Position

The Bank's total assets as at April 30, 2019 were \$1,058 billion, up \$60 billion or 6% from October 31, 2018. Adjusting for the impact of foreign currency translation, total assets were up \$46 billion. This increase was primarily in loans, trading securities and securities purchased under resale agreements and securities borrowed, partially offset by a decrease in cash and deposits with financial institutions.

Cash and deposits with financial institutions decreased \$12 billion and derivative instrument assets decreased \$6 billion, while trading securities increased by \$18 billion and securities purchased under resale agreements and securities borrowed increased by \$22 billion.

Investment securities increased \$7 billion from October 31, 2018 due primarily to higher holdings of U.S. government debt and corporate debt. As at April 30, 2019, the net unrealized gain on debt securities measured at fair value through other comprehensive income of \$344 million decreased to a net unrealized loss of \$61 million, after the impact of qualifying hedges.

Loans increased \$32 billion from October 31, 2018. Residential mortgages increased \$7 billion due to growth in Canada and Latin America. Personal loans and credit cards were up \$3 billion mainly in Latin America. Business and government loans increased \$22 billion due primarily to growth in Latin America, the U.S. and Canada.

Other assets increased \$3 billion due mainly to higher cash margin requirements.

Total liabilities were \$988 billion as at April 30, 2019, up \$57 billion or 6% from October 31, 2018. Adjusting for the impact of foreign currency translation, total liabilities were up \$44 billion.

Total deposits increased \$36 billion. Personal deposits grew by \$10 billion primarily in Canada. Business and government deposits grew by \$22 billion mainly in the U.S. and Latin America. Deposits from financial institutions increased \$4 billion.

Obligations related to securities sold under repurchase agreements and securities lent increased by \$23 billion which was in line with higher securities purchased under resale agreements and securities borrowed. Financial instruments designated at fair value through profit or loss increased \$3 billion. Derivative instrument liabilities decreased \$5 billion which was in line with the decrease in derivative instrument assets. Other liabilities increased \$4 billion due primarily to other liabilities of subsidiaries.

Total shareholders' equity increased \$2,567 million from October 31, 2018. This increase was driven mainly by current year earnings of \$4,506 million and an increase in other comprehensive income of \$934 million due mainly to an increase in unrealized foreign currency translation gains on the Bank's investments in its foreign operations. Partly offsetting were dividends paid of \$2,197 million, the repurchase and cancellation of approximately 7 million common shares of \$523 million and the redemption of preferred shares of \$300 million.

Risk Management

The Bank's risk management policies, practices and emerging risks have not substantially changed from those outlined in the Bank's 2018 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 2018 Annual Report.

Credit risk

Allowance for credit losses

The total allowance for credit losses as at April 30, 2019 was \$5,376 million. The allowance for credit losses on loans was \$5,295 million, up \$184 million from the prior quarter, due primarily to the impact of Day 1 provision for credit losses on acquired performing loans. The allowance on impaired loans decreased to \$1,669 million from \$1,680 million as at January 31, 2019, due primarily to write-offs net of recoveries during the quarter. The allowance against performing loans was higher at \$3,626 million compared to \$3,431 million as at January 31, 2019, due primarily to the impact of Day 1 provision for credit losses on acquired performing loans.

Impaired loans

Total gross impaired loans as at April 30, 2019 were \$5,364 million, up from \$5,287 million as at January 31, 2019, due largely to new formations in the retail portfolio in International Banking.

Net impaired loans in Canadian Banking were \$707 million as at April 30, 2019, an increase of \$16 million from January 31, 2019 mainly due to new formations in the commercial portfolio. International Banking's net impaired loans were \$2,743 million as at April 30, 2019, an increase of \$81 million from January 31, 2019 mainly due to new formations in the retail portfolios. In Global Banking and Markets, net impaired loans were \$245 million as at April 30, 2019, a decrease of \$8 million from January 31, 2019 due largely to resolutions during the quarter. Net impaired loans as a percentage of loans and acceptances were 0.61% as at April 30, 2019, unchanged from 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, 2019, these loans amounted to \$376 billion or 63% of the Bank's total loans and acceptances outstanding (January 31, 2019 – \$372 billion or 63%; October 31, 2018 – \$366 billion or 64%). Of these, \$282 billion or 75% are real estate secured loans (January 31, 2019 – \$279 billion or 75%; October 31, 2018 – \$274 billion or 75%). The tables below provide more details by portfolios.

Insured and uninsured mortgages and home equity lines of credit

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

(\$ millions)	As at April 30, 2019											
	Residential mortgages						Home equity lines of credit					
	Insured ⁽¹⁾		Uninsured		Total		Insured ⁽¹⁾		Uninsured		Total	
	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%
Canada: ⁽²⁾												
Atlantic provinces	\$ 5,882	2.7%	\$ 5,292	2.5%	\$ 11,174	5.2%	\$ –	–%	\$ 1,159	5.5%	\$ 1,159	5.5%
Quebec	7,577	3.5	8,426	3.9	16,003	7.4	–	–	972	4.6	972	4.6
Ontario	40,913	18.9	69,311	31.9	110,224	50.8	–	–	11,295	53.6	11,295	53.6
Manitoba & Saskatchewan	5,496	2.5	3,981	1.8	9,477	4.3	1	–	766	3.6	767	3.6
Alberta	18,075	8.3	12,571	5.8	30,646	14.1	1	–	2,957	14.1	2,958	14.1
British Columbia & Territories	13,342	6.1	26,273	12.1	39,615	18.2	–	–	3,918	18.6	3,918	18.6
Canada ⁽³⁾	\$ 91,285	42%	\$ 125,854	58%	\$ 217,139	100%	\$ 2	–%	\$ 21,067	100%	\$ 21,069	100%
International	–	–	43,447	100	43,447	100	–	–	–	–	–	–
Total	\$ 91,285	35%	\$ 169,301	65%	\$ 260,586	100%	\$ 2	–%	\$ 21,067	100%	\$ 21,069	100%
	As at January 31, 2019											
Canada ⁽³⁾	\$ 91,689	42.4%	\$ 124,418	57.6%	\$ 216,107	100%	\$ 2	–%	\$ 20,754	100%	\$ 20,756	100%
International	–	–	42,542	100	42,542	100	–	–	–	–	–	–
Total	\$ 91,689	35.4%	\$ 166,960	64.6%	\$ 258,649	100%	\$ 2	–%	\$ 20,754	100%	\$ 20,756	100%
	As at October 31, 2018											
Canada ⁽³⁾	\$ 92,185	43.3%	\$ 120,898	56.7%	\$ 213,083	100%	\$ 2	–%	\$ 20,926	100%	\$ 20,928	100%
International	–	–	40,274	100	40,274	100	–	–	–	–	–	–
Total	\$ 92,185	36.4%	\$ 161,172	63.6%	\$ 253,357	100%	\$ 2	–%	\$ 20,926	100%	\$ 20,928	100%

(1) 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.

(2) The province represents the location of the property in Canada.

(3) Includes multi-residential dwellings (4+ units) of \$3,123 (January 31, 2019 – \$3,070; October 31, 2018 – \$2,899) of which \$2,302 are insured (January 31, 2019 – \$2,240; October 31, 2018 – \$2,029).

Amortization period ranges for residential mortgages

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

	As at April 30, 2019					
	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	34.4%	38.8%	25.9%	0.8%	0.1%	100%
International	66.3%	18.4%	13.5%	1.7%	0.1%	100%
As at January 31, 2019						
Canada	34.1%	38.3%	26.9%	0.6%	0.1%	100%
International	64.3%	18.8%	13.6%	3.2%	0.1%	100%
As at October 31, 2018						
Canada	33.9%	38.0%	27.1%	0.9%	0.1%	100%
International	65.1%	18.9%	13.2%	2.7%	0.1%	100%

Loan to value ratios

The Canadian residential mortgage portfolio is 58% uninsured (January 31, 2019 – 58%; October 31, 2018 – 57%). The average loan-to-value (LTV) ratio of the uninsured portfolio is 55% (January 31, 2019 – 55%; October 31, 2018 – 54%).

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.

	Uninsured LTV ratios	
	For the three months ended April 30, 2019	
	Residential mortgages	Home equity lines of credit ⁽¹⁾
	LTV%	LTV%
Canada: ⁽²⁾		
Atlantic provinces	66.1%	57.4%
Quebec	63.8	67.6
Ontario	64.5	60.7
Manitoba & Saskatchewan	68.4	59.9
Alberta	66.8	71.8
British Columbia & Territories	63.2	61.0
Canada ⁽²⁾	64.5%	61.9%
International	72.0%	n/a%
For the three months ended January 31, 2019		
Canada ⁽²⁾	63.8%	62.7%
International	69.0%	n/a
For the three months ended October 31, 2018		
Canada ⁽²⁾	63.5%	62.1%
International	69.2%	n/a

(1) Includes only home equity lines of credit (HELOC) under Scotia Total Equity Plan. 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.

(2) 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

The Bank stresses its mortgage book to determine the impact of a variety of combinations of home price declines, unemployment increases and rising interest rates. It benchmarks the scenarios against experience in various historical downturns to confirm that they are sufficiently robust tests of the portfolio. In stress, there are moderate increases in credit losses and negative impacts on capital ratios but within a level the Bank considers manageable. In practice, the portfolio is robust to such scenarios due to the low LTV of the book, the high proportion of insured exposures and the diversified composition of the portfolio.

European exposures

The Bank believes that its European exposures are manageable, are sized appropriately relative to the credit worthiness of the counterparties (90% of the exposures are to investment grade counterparties based on a combination of internal and external ratings), and are modest relative to the capital levels of the Bank. The Bank's European exposures are classified 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.

MANAGEMENT'S DISCUSSION & ANALYSIS

The Bank's exposure to sovereigns was \$7.3 billion as at April 30, 2019 (January 31, 2019 – \$8.0 billion; October 31, 2018 – \$8.5 billion), \$3.6 billion to banks (January 31, 2019 – \$4.7 billion; October 31, 2018 – \$5.8 billion) and \$16.9 billion to corporates (January 31, 2019 – \$14.7 billion; October 31, 2018 – \$15.8 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 \$0.8 billion as at April 30, 2019 (January 31, 2019 – \$0.7 billion; October 31, 2018 – \$0.7 billion).

The Bank's current European exposure is provided below:

							As at		
April 30, 2019							January 31 2019	October 31 2018	
(\$ millions)	Loans and loan equivalents ⁽¹⁾	Deposits with financial institutions	Securities ⁽²⁾	SFT and derivatives ⁽³⁾	Funded total	Undrawn commitments ⁽⁴⁾	Total	Total	Total
Greece	\$ 114	\$ –	\$ –	\$ –	\$ 114	\$ –	\$ 114	\$ 143	\$ 146
Ireland	857	707	(2)	164	1,726	712	2,438	1,805	2,612
Italy	11	1	(24)	2	(10)	125	115	112	148
Portugal	–	–	–	6	6	–	6	–	2
Spain	934	4	–	95	1,033	181	1,214	1,220	1,701
Total GIIPS	\$ 1,916	\$ 712	\$ (26)	\$ 267	\$ 2,869	\$ 1,018	\$ 3,887	\$ 3,280	\$ 4,609
U.K.	\$ 7,132	\$ 3,452	\$ 160	\$ 2,058	\$ 12,802	\$ 6,148	\$ 18,950	\$ 20,441	\$ 20,003
Germany	1,515	496	1,322	57	3,390	1,389	4,779	4,118	4,285
France	1,045	199	474	55	1,773	1,678	3,451	3,406	4,199
Netherlands	828	100	409	62	1,399	1,639	3,038	2,623	2,525
Switzerland	710	17	7	183	917	894	1,811	1,701	1,492
Other	2,023	168	2,142	344	4,677	3,161	7,838	7,175	7,988
Total Non-GIIPS	\$ 13,253	\$ 4,432	\$ 4,514	\$ 2,759	\$ 24,958	\$ 14,909	\$ 39,867	\$ 39,464	\$ 40,492
Total Europe	\$ 15,169	\$ 5,144	\$ 4,488	\$ 3,026	\$ 27,827	\$ 15,927	\$ 43,754	\$ 42,744	\$ 45,101

(1) Individual allowances for impaired loans are \$5. 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 \$3,906 as at April 30, 2019 (January 31, 2019 – \$4,209; October 31, 2018 – \$3,867).

(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 \$1,484 and collateral held against SFT was \$20,551.

(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.

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.

Risk factor (\$ millions)	Average for the three months ended		
	April 30 2019	January 31 2019	April 30 2018
Credit spread plus interest rate	\$ 9.6	\$ 11.3	\$ 14.4
Credit spread	6.9	6.8	8.9
Interest rate	6.8	8.4	11.9
Equities	3.3	4.0	2.5
Foreign exchange	3.6	2.3	3.7
Commodities	2.1	2.0	1.6
Debt specific	4.3	4.4	3.3
Diversification effect	(11.6)	(11.4)	(10.8)
Total VaR	\$ 11.3	\$ 12.6	\$ 14.7
Total Stressed VaR	\$ 33.7	\$ 45.3	\$ 40.7

In the second quarter of 2019, the average one-day Total VaR decreased to \$11.3 million from \$12.6 million in the previous quarter, primarily driven by reduced exposures to yields and credit spreads.

The average one-day Total Stressed VaR decreased during the quarter to \$33.7 million from \$45.3 million in the previous quarter, primarily due to lower yields. Stressed VaR is calculated using market volatility from a one-year period identified as stressful given the risk profile of the trading portfolio. The current period is the 2008/2009 credit crisis.

There was 1 trading loss day in the second quarter, compared to no trading loss days the previous 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's preferences (e.g. mortgage prepayment rates).

Non-trading interest rate sensitivity

The following table shows the pro-forma after tax impact on the Bank's net interest income over the next twelve months and economic value of shareholders' equity of an immediate and sustained 100 basis points increase and decrease in interest rate across major currencies as defined by the Bank. 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.

(\$ millions)	As at						January 31, 2019		April 30, 2018	
	April 30, 2019			Economic value			Net income	Economic value	Net income	Economic value
	Net income			Economic value						
	Canadian dollar	Other currencies	Total	Canadian dollar	Other currencies	Total				
+100 bps	\$ (122)	\$ 11	\$ (111)	\$ (410)	\$ (958)	\$ (1,368)	\$ 66	\$ (363)	\$ (71)	\$ (1,097)
-100 bps	119	(12)	107	240	839	1,079	(68)	140	70	991

During the second quarter of 2019, both interest rate sensitivities remained well within the Bank's approved 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.

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

As at April 30, 2019	Market risk measure				Primary risk sensitivity of non-trading risk
(\$ millions)	Consolidated Statement of Financial Position	Trading risk	Non-trading risk	Not subject to market risk	
Precious metals	\$ 3,543	\$ 3,543	\$ –	\$ –	n/a
Trading assets	117,140	116,550	590	–	Interest rate, FX
Financial instruments designated at fair value through profit or loss	14	–	14	–	Interest rate
Derivative financial instruments	31,358	27,950	3,408	–	Interest rate, FX, equity
Investment securities	85,146	–	85,146	–	Interest rate, FX, equity
Loans	583,815	–	583,815	–	Interest rate, FX
Assets not subject to market risk ⁽¹⁾	237,153	–	–	237,153	n/a
Total assets	\$ 1,058,169	\$ 148,043	\$ 672,973	\$ 237,153	
Deposits	\$ 712,282	\$ –	\$ 677,827	\$ 34,455	Interest rate, FX, equity
Financial instruments designated at fair value through profit or loss	10,919	–	10,919	–	Interest rate, equity
Obligations related to securities sold short	29,957	29,957	–	–	n/a
Derivative financial instruments	33,176	28,462	4,714	–	Interest rate, FX, equity
Trading liabilities ⁽²⁾	5,161	5,161	–	–	n/a
Pension and other benefit liabilities	2,539	–	2,539	–	Interest rate, credit spread, equity
Liabilities not subject to market risk ⁽³⁾	193,888	–	–	193,888	n/a
Total liabilities	\$ 987,922	\$ 63,580	\$ 695,999	\$ 228,343	

(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, 2018

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	\$ 3,191	\$ 3,191	\$ –	\$ –	n/a
Trading assets	100,262	99,650	612	–	Interest rate, FX
Financial instruments designated at fair value through profit or loss	12	–	12	–	Interest rate
Derivative financial instruments	37,558	33,937	3,621	–	Interest rate, FX, equity
Investment securities	78,396	–	78,396	–	Interest rate, FX, equity
Loans	551,834	–	551,834	–	Interest rate, FX
Assets not subject to market risk ⁽¹⁾	227,240	–	–	227,240	n/a
Total assets	\$ 998,493	\$ 136,778	\$ 634,475	\$ 227,240	
Deposits	\$ 676,534	\$ –	\$ 641,791	\$ 34,743	Interest rate, FX, equity
Financial instruments designated at fair value through profit or loss	8,188	–	8,188	–	Interest rate, equity
Obligations related to securities sold short	32,087	32,087	–	–	n/a
Derivative financial instruments	37,967	32,300	5,667	–	Interest rate, FX, equity
Trading liabilities ⁽²⁾	5,019	5,019	–	–	n/a
Pension and other benefit liabilities	1,727	–	1,727	–	Interest rate, credit spread, equity
Liabilities not subject to market risk ⁽³⁾	169,291	–	–	169,291	n/a
Total liabilities	\$ 930,813	\$ 69,406	\$ 657,373	\$ 204,034	

(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 20 to the Condensed Interim Consolidated Financial Statements and in Note 37 of the Audited Consolidated Financial Statements in the Bank's 2018 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 for liquidity management.

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 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. Liquid assets do not include liquidity which may be obtained from central bank facilities.

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, which are primarily held by Global Banking and Markets; and collateral received for 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, 2019, unencumbered liquid assets were \$211 billion (October 31, 2018 – \$202 billion). Securities including National Housing Act (NHA) mortgage-backed securities, comprised 79% of liquid assets (October 31, 2018 – 71%). Other unencumbered liquid assets, comprising cash and deposits with central banks, deposits with financial institutions, precious metals and call and short loans were 21% (October 31, 2018 – 29%). The increase in total liquid assets was mainly attributable to growth in the securities portfolio, which was partially offset by a decrease in cash and deposits with central banks 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, 2019. 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:

(\$ millions)	As at April 30, 2019						
	Bank-owned liquid assets	Securities received as collateral from securities financing and derivative transactions	Total liquid assets	Encumbered liquid assets		Unencumbered liquid assets	
				Pledged as collateral	Other ⁽¹⁾	Available as collateral	Other
Cash and deposits with central banks	\$ 40,854	\$ –	\$ 40,854	\$ –	\$ 9,514	\$ 31,340	\$ –
Deposits with financial institutions	9,267	–	9,267	–	57	9,210	–
Precious metals	3,543	–	3,543	–	73	3,470	–
Securities:							
Canadian government obligations	43,393	12,287	55,680	32,564	–	23,116	–
Foreign government obligations	74,142	78,086	152,228	84,608	–	67,620	–
Other securities	65,691	72,886	138,577	97,261	–	41,316	–
Loans:							
NHA mortgage-backed securities ⁽²⁾	37,284	–	37,284	2,754	–	34,530	–
Call and short loans	632	–	632	–	–	632	–
Total	\$ 274,806	\$ 163,259	\$ 438,065	\$ 217,187	\$ 9,644	\$ 211,234	\$ –

(\$ millions)	As at October 31, 2018						
	Bank-owned liquid assets	Securities received as collateral from securities financing and derivative transactions	Total liquid assets	Encumbered liquid assets		Unencumbered liquid assets	
				Pledged as collateral	Other ⁽¹⁾	Available as collateral	Other
Cash and deposits with central banks	\$ 48,352	\$ –	\$ 48,352	\$ –	\$ 7,906	\$ 40,446	\$ –
Deposits with financial institutions	13,917	–	13,917	–	73	13,844	–
Precious metals	3,191	–	3,191	–	70	3,121	–
Securities:							
Canadian government obligations	45,260	11,050	56,310	29,464	–	26,846	–
Foreign government obligations	60,553	63,816	124,369	68,531	–	55,838	–
Other securities	54,786	66,704	121,490	92,280	–	29,210	–
Loans:							
NHA mortgage-backed securities ⁽²⁾	34,636	–	34,636	2,605	–	32,031	–
Call and short loans	1,047	–	1,047	–	–	1,047	–
Total	\$ 261,742	\$ 141,570	\$ 403,312	\$ 192,880	\$ 8,049	\$ 202,383	\$ –

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

(2) These mortgage-backed securities, which are available-for-sale, are reported as residential mortgage loans on the balance sheet.

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

(\$ millions)	As at	
	April 30 2019	October 31 2018
The Bank of Nova Scotia (Parent)	\$ 160,143	\$ 152,728
Bank domestic subsidiaries	11,531	15,344
Bank foreign subsidiaries	39,560	34,311
Total	\$ 211,234	\$ 202,383

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 (81%) 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:

(\$ millions)	As at April 30, 2019						
	Bank-owned assets	Securities received as collateral from securities financing and derivative transactions	Total assets	Encumbered assets		Unencumbered assets	
				Pledged as collateral	Other ⁽¹⁾	Available as collateral ⁽²⁾	Other ⁽³⁾
Cash and deposits with central banks	\$ 40,854	\$ –	\$ 40,854	\$ –	\$ 9,514	\$ 31,340	\$ –
Deposits with financial institutions	9,267	–	9,267	–	57	9,210	–
Precious metals	3,543	–	3,543	–	73	3,470	–
Liquid securities:							
Canadian government obligations	43,393	12,287	55,680	32,564	–	23,116	–
Foreign government obligations	74,142	78,086	152,228	84,608	–	67,620	–
Other liquid securities	65,691	72,886	138,577	97,261	–	41,316	–
Other securities	5,059	6,718	11,777	4,715	–	–	7,062
Loans classified as liquid assets:							
NHA mortgage-backed securities	37,284	–	37,284	2,754	–	34,530	–
Call and short loans	632	–	632	–	–	632	–
Other loans	559,003	–	559,003	10,606	57,609	13,771	477,017
Other financial assets ⁽⁴⁾	176,485	(112,314)	64,171	4,635	–	–	59,536
Non-financial assets	42,816	–	42,816	–	–	–	42,816
Total	\$ 1,058,169	\$ 57,663	\$ 1,115,832	\$ 237,143	\$ 67,253	\$ 225,005	\$ 586,431

(\$ millions)	As at October 31, 2018						
	Bank-owned assets	Securities received as collateral from securities financing and derivative transactions	Total assets	Encumbered assets		Unencumbered assets	
				Pledged as collateral	Other ⁽¹⁾	Available as collateral ⁽²⁾	Other ⁽³⁾
Cash and deposits with central banks	\$ 48,352	\$ –	\$ 48,352	\$ –	\$ 7,906	\$ 40,446	\$ –
Deposits with financial institutions	13,917	–	13,917	–	73	13,844	–
Precious metals	3,191	–	3,191	–	70	3,121	–
Liquid securities:							
Canadian government obligations	45,260	11,050	56,310	29,464	–	26,846	–
Foreign government obligations	60,553	63,816	124,369	68,531	–	55,838	–
Other liquid securities	54,786	66,704	121,490	92,280	–	29,210	–
Other securities	3,283	5,400	8,683	4,978	–	–	3,705
Loans classified as liquid assets:							
NHA mortgage-backed securities	34,636	–	34,636	2,605	–	32,031	–
Call and short loans	1,047	–	1,047	–	–	1,047	–
Other loans	530,485	–	530,485	8,430	59,460	12,864	449,731
Other financial assets ⁽⁴⁾	163,209	(92,624)	70,585	2,619	–	–	67,966
Non-financial assets	39,774	–	39,774	–	–	–	39,774
Total	\$ 998,493	\$ 54,346	\$ 1,052,839	\$ 208,907	\$ 67,509	\$ 215,247	\$ 561,176

(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 of April 30, 2019, total encumbered assets of the Bank were \$304 billion (October 31, 2018 – \$276 billion). Of the remaining \$811 billion (October 31, 2018 – \$776 billion) of unencumbered assets, \$225 billion (October 31, 2018 – \$215 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, 2019, 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 \$16 million or \$170 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 Office of the Superintendent of Financial Institutions (OSFI) Liquidity Adequacy Requirements (LAR) Guideline. 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, 2019, based on the average daily positions in the quarter.

	Total unweighted value (Average) ⁽²⁾	Total weighted value (Average) ⁽³⁾
For the quarter ended April 30, 2019 (\$ millions)⁽¹⁾		
High-quality liquid assets		
Total high-quality liquid assets (HQLA)	*	\$ 158,383
Cash outflows		
Retail deposits and deposits from small business customers, of which:	\$ 181,477	\$ 13,029
Stable deposits	75,709	2,452
Less stable deposits	105,768	10,577
Unsecured wholesale funding, of which:	179,175	87,517
Operational deposits (all counterparties) and deposits in networks of cooperative banks	61,386	14,532
Non-operational deposits (all counterparties)	93,121	48,317
Unsecured debt	24,668	24,668
Secured wholesale funding	*	42,184
Additional requirements, of which:	210,103	43,028
Outflows related to derivative exposures and other collateral requirements	27,220	17,034
Outflows related to loss of funding on debt products	4,019	4,019
Credit and liquidity facilities	178,864	21,975
Other contractual funding obligations	1,227	1,188
Other contingent funding obligations ⁽⁴⁾	485,910	8,019
Total cash outflows	*	\$ 194,965
Cash inflows		
Secured lending (e.g. reverse repos)	\$ 142,823	\$ 29,979
Inflows from fully performing exposures	25,871	17,118
Other cash inflows	20,902	20,902
Total cash inflows	\$ 189,596	\$ 67,999
		Total adjusted value ⁽⁵⁾
Total HQLA	*	\$ 158,383
Total net cash outflows	*	\$ 126,966
Liquidity coverage ratio (%)	*	125%
For the quarter ended January 31, 2019 (\$ millions)		
Total HQLA	*	\$ 157,625
Total net cash outflows	*	\$ 123,387
Liquidity coverage ratio (%)	*	128%

* Disclosure is not required under regulatory guideline.

(1) Based on the average of daily positions of the 61 business days in the quarter.

(2) Unweighted values represent outstanding balances maturing or callable within the next 30 days.

(3) Weighted values represent balances calculated after the application of HQLA haircuts or inflow and outflow rates, as prescribed by the OSFI LAR guidelines.

(4) Total unweighted values include 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.

(5) 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, central bank reserves available to the Bank in times of stress and securities with a 0% risk weight, as defined under OSFI Capital Adequacy guidelines.

The decrease in the Bank's average LCR for the quarter ended April 30, 2019 versus the average of the previous quarter was attributable to normal business activities. The Bank's significant operating currencies are Canadian and U.S. dollars. The Bank monitors its significant currency exposures in accordance with its liquidity risk management framework and risk appetite.

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 \$304 billion as at April 30, 2019 (October 31, 2018 – \$289 billion). The increase since October 31, 2018 was primarily driven by personal deposit growth, issuance of subordinated debentures, internal capital generation and the impact of foreign exchange. A portion of commercial deposits, particularly those of an operating or relationship nature, would be considered part of the Bank's core funding. Furthermore, core funding is augmented by longer-term wholesale debt issuances (original maturity over 1 year) of \$155 billion (October 31, 2018 – \$157 billion). Longer-term wholesale debt issuances include medium-term 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 a 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.

MANAGEMENT'S DISCUSSION & ANALYSIS

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 funding strategy deployed by wholesale funding centres and the management of associated risks, such as geographic and currency risk, is 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 and market capacity as well as an objective of maintaining a diversified mix of funding sources. 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 securitization programs (such as Canada Mortgage Bonds), uninsured residential mortgages through the Bank's Covered Bond Program, unsecured personal lines of credit through the Halifax Receivables Trust program, retail credit card receivables through the Trillium Credit Card Trust II program and retail indirect auto loan receivables through the Securitized Term Auto Receivables Trust program. While the Bank includes CMHC securitization programs in its view of wholesale debt issuance, this source of funding does not entail the run-off risk that can be experienced in funding raised from capital markets.

Outside of Canada, short-term wholesale debt is 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 the securitization of retail credit card receivables through the Trillium Credit Card Trust II program. The Bank's Covered Bond Program is listed with the U.K. Listing Authority, and the Bank may issue under the program in Europe, 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 and Singapore Medium Term Note Programme. The Bank's European Medium Term Note Programme is listed with the U.K. Listing Authority, Swiss Stock Exchange and the Tokyo Pro-Bond Market. The Bank's Singapore Medium Term Note Programme is listed with the Singapore Exchange and the Taiwan Exchange.

On September 23, 2018, the Bank Recapitalization (Bail-in) Conversion Regulations and the Bank Recapitalization (Bail-in) Issuance Regulations came into force. In general, any issuance of senior debt with an initial or amended term to maturity greater than 400 days, that is unsecured or partially secured and has been assigned a CUSIP or ISIN or similar identification number is subject, in whole or in part, to conversion into the Bank's common shares. Please refer to the "Regulatory Developments" section.

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⁽¹⁾

As at April 30, 2019										
(\$ 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⁾	\$ 2,833	\$ 359	\$ 261	\$ 528	\$ 416	\$ 4,397	\$ 47	\$ 119	\$ 32	\$ 4,595
Bearer notes, commercial paper and certificate of deposits	11,983	17,990	22,980	14,468	7,007	74,428	2,366	961	96	77,851
Asset-backed commercial paper ⁽³⁾	1,900	3,924	502	–	–	6,326	–	–	–	6,326
Senior notes ⁽⁴⁾⁽⁵⁾	1,189	5,690	5,299	5,144	2,546	19,868	18,227	28,403	14,195	80,693
Bail-inable notes ⁽⁵⁾	–	–	–	–	–	–	1,368	3,177	174	4,719
Asset-backed securities	–	516	2	2	1,311	1,831	3,914	1,319	244	7,308
Covered bonds	–	–	2,010	567	1,874	4,451	5,321	16,116	2,410	28,298
Mortgage securitization ⁽⁶⁾	–	567	509	601	771	2,448	2,817	12,723	5,097	23,085
Subordinated debt ⁽⁷⁾	–	–	–	–	–	–	82	157	9,406	9,645
Total wholesale funding sources	\$ 17,905	\$ 29,046	\$ 31,563	\$ 21,310	\$ 13,925	\$ 113,749	\$ 34,142	\$ 62,975	\$ 31,654	\$ 242,520
Of Which:										
Unsecured funding	\$ 16,005	\$ 24,039	\$ 28,540	\$ 20,140	\$ 9,969	\$ 98,693	\$ 22,090	\$ 32,817	\$ 23,903	\$ 177,503
Secured funding	1,900	5,007	3,023	1,170	3,956	15,056	12,052	30,158	7,751	65,017
As at October 31, 2018										
(\$ 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⁾	\$ 1,720	\$ 196	\$ 211	\$ 212	\$ 116	\$ 2,455	\$ 29	\$ 145	\$ 32	\$ 2,661
Bearer notes, commercial paper and certificate of deposits	8,807	14,201	21,517	15,961	7,580	68,066	5,487	666	56	74,275
Asset-backed commercial paper ⁽³⁾	2,088	4,697	165	–	–	6,950	–	–	–	6,950
Senior notes ⁽⁴⁾⁽⁵⁾	180	2,714	4,070	6,214	5,168	18,346	15,179	36,765	14,298	84,588
Bail-inable notes ⁽⁵⁾	–	–	–	–	–	–	–	–	–	–
Asset-backed securities	6	15	47	500	–	568	2,714	1,944	304	5,530
Covered bonds	–	2,910	1,491	–	1,975	6,376	4,312	16,779	1,772	29,239
Mortgage securitization ⁽⁶⁾	–	765	316	567	508	2,156	2,388	12,966	4,646	22,156
Subordinated debt ⁽⁷⁾	–	–	–	–	–	–	–	237	7,539	7,776
Total wholesale funding sources	\$ 12,801	\$ 25,498	\$ 27,817	\$ 23,454	\$ 15,347	\$ 104,917	\$ 30,109	\$ 69,502	\$ 28,647	\$ 233,175
Of Which:										
Unsecured funding	\$ 10,707	\$ 17,111	\$ 25,798	\$ 22,387	\$ 12,864	\$ 88,867	\$ 20,695	\$ 37,813	\$ 21,925	\$ 169,300
Secured funding	2,094	8,387	2,019	1,067	2,483	16,050	9,414	31,689	6,722	63,875

(1) Wholesale funding sources exclude repo transactions 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 \$211 billion as at April 30, 2019 (October 31, 2018 – \$202 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, 2019, 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.

As at April 30, 2019										
(\$ 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	\$ 40,105	\$ 947	\$ 331	\$ 161	\$ 157	\$ 367	\$ 710	\$ 598	\$ 10,288	\$ 53,664
Trading assets	5,103	4,897	2,911	3,375	4,110	7,779	17,544	16,930	54,491	117,140
Financial instruments designated at fair value through profit or loss	–	–	14	–	–	–	–	–	–	14
Securities purchased under resale agreements and securities borrowed	93,890	23,711	7,052	1,021	416	–	–	–	–	126,090
Derivative financial instruments	2,481	2,394	767	2,503	1,391	5,307	5,371	11,144	–	31,358
Investment securities – FVOCI	3,840	5,478	5,550	5,473	2,994	7,931	17,516	10,378	1,499	60,659
Investment securities – amortized cost	618	1,010	1,615	916	1,499	6,221	5,966	6,087	–	23,932
Investment securities – FVTPL	–	–	–	–	–	–	–	–	555	555
Loans	36,657	31,578	32,823	30,251	32,496	94,903	220,257	44,866	59,984	583,815
Residential mortgages	4,313	7,460	12,542	11,740	12,924	51,552	125,932	31,851	2,272 ⁽¹⁾	260,586
Personal loans	4,060	2,841	3,762	3,458	3,314	12,580	23,585	5,622	38,652	97,874
Credit cards	–	–	–	–	–	–	–	–	17,730	17,730
Business and government	28,284	21,277	16,519	15,053	16,258	30,771	70,740	7,393	6,625 ⁽²⁾	212,920
Allowance for credit losses	–	–	–	–	–	–	–	–	(5,295)	(5,295)
Customers' liabilities under acceptances	11,086	1,416	169	60	92	–	–	–	–	12,823
Other assets	–	–	–	–	–	–	–	–	48,119	48,119
Total assets⁽³⁾	\$ 193,780	\$ 71,431	\$ 51,232	\$ 43,760	\$ 43,155	\$ 122,508	\$ 267,364	\$ 90,003	\$ 174,936	\$ 1,058,169
Liabilities and equity										
Deposits	\$ 72,683	\$ 58,854	\$ 57,028	\$ 42,131	\$ 30,353	\$ 52,552	\$ 76,346	\$ 18,821	\$ 303,514	\$ 712,282
Personal	10,234	8,597	13,288	12,662	12,329	15,319	13,029	41	139,434	224,933
Non-personal	62,449	50,257	43,740	29,469	18,024	37,233	63,317	18,780	164,080	487,349
Financial instruments designated at fair value through profit or loss	7	318	506	641	430	4,085	1,781	3,151	–	10,919
Acceptances	11,096	1,416	169	60	92	–	–	–	–	12,833
Obligations related to securities sold short	337	579	1,038	1,201	670	3,644	6,808	7,722	7,958	29,957
Derivative financial instruments	1,863	2,967	1,505	3,093	1,567	5,418	6,644	10,119	–	33,176
Obligations related to securities sold under repurchase agreements and securities lent	119,688	2,992	1,618	33	–	–	–	–	–	124,331
Subordinated debentures	–	–	–	–	–	–	–	7,554	–	7,554
Other liabilities	956	1,750	1,516	1,433	1,448	3,044	7,123	6,255	33,345	56,870
Total equity	–	–	–	–	–	–	–	–	70,247	70,247
Total liabilities and equity⁽³⁾	\$ 206,630	\$ 68,876	\$ 63,380	\$ 48,592	\$ 34,560	\$ 68,743	\$ 98,702	\$ 53,622	\$ 415,064	\$ 1,058,169
Off-balance sheet commitments										
Operating leases	\$ 37	\$ 74	\$ 110	\$ 107	\$ 104	\$ 381	\$ 835	\$ 930	\$ –	\$ 2,578
Credit commitments ⁽⁴⁾	3,151	10,244	15,930	13,720	12,559	30,308	112,719	11,388	–	210,019
Financial guarantees ⁽⁵⁾	–	–	–	–	–	–	–	–	37,008	37,008
Outsourcing obligations	18	36	53	52	52	192	127	–	1	531

(1) Includes primarily impaired mortgages.

(2) Includes primarily overdrafts and impaired loans.

(3) Includes \$1 billion of assets and \$1 billion of liabilities related to the Banco Dominicano del Progreso Dominican Republic acquisition. Maturity profiles for these items have been estimated.

(4) Includes the undrawn component of committed credit and liquidity facilities.

(5) Includes outstanding balances of guarantees, standby letters of credit and commercial letters of credit which may expire undrawn.

As at October 31, 2018

(\$ 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	\$ 54,254	\$ 920	\$ 284	\$ 101	\$ 117	\$ 326	\$ 726	\$ 223	\$ 8,509	\$ 65,460
Trading assets	4,792	5,311	3,326	5,463	2,309	7,934	12,765	18,130	40,232	100,262
Financial instruments designated at fair value through profit or loss	–	–	–	–	12	–	–	–	–	12
Securities purchased under resale agreements and securities borrowed	74,522	21,223	5,743	673	337	549	539	432	–	104,018
Derivative financial instruments	3,178	5,517	2,024	2,327	1,446	6,447	6,071	10,548	–	37,558
Investment securities – FVOCI	3,925	6,436	5,852	3,284	3,243	13,139	15,206	4,758	1,305	57,148
Investment securities – amortized cost	452	1,429	1,160	1,501	1,500	4,302	9,465	934	–	20,743
Investment securities – FVTPL	–	–	–	–	–	–	–	–	505	505
Loans	40,463	27,581	28,920	27,246	28,064	93,191	214,017	34,985	57,367	551,834
Residential mortgages	11,496	4,697	8,774	12,014	12,781	53,629	126,934	21,366	1,666 ⁽¹⁾	253,357
Personal loans	4,204	2,701	3,528	3,431	3,558	11,712	23,338	5,468	38,079	96,019
Credit cards	–	–	–	–	–	–	–	–	–	16,485
Business and government	24,763	20,183	16,618	11,801	11,725	27,850	63,745	8,151	6,202 ⁽²⁾	191,038
Allowance for credit losses	–	–	–	–	–	–	–	–	(5,065)	(5,065)
Customers' liabilities under acceptances	13,829	2,082	338	50	30	–	–	–	–	16,329
Other assets	–	–	–	–	–	–	–	–	44,624	44,624
Total assets	\$ 195,415	\$ 70,499	\$ 47,647	\$ 40,645	\$ 37,058	\$ 125,888	\$ 258,789	\$ 70,010	\$ 152,542	\$ 998,493
Liabilities and equity										
Deposits	\$ 56,965	\$ 53,331	\$ 48,661	\$ 39,716	\$ 32,753	\$ 45,262	\$ 78,295	\$ 18,313	\$ 303,238	\$ 676,534
Personal	8,797	9,415	12,536	9,563	10,241	13,472	11,953	261	138,307	214,545
Non-personal	48,168	43,916	36,125	30,153	22,512	31,790	66,342	18,052	164,931	461,989
Financial instruments designated at fair value through profit or loss	22	77	360	410	523	3,090	1,646	1,969	91	8,188
Acceptances	13,838	2,082	338	50	30	–	–	–	–	16,338
Obligations related to securities sold short	910	972	870	305	1,013	3,896	8,685	7,388	8,048	32,087
Derivative financial instruments	2,520	4,288	1,613	2,716	1,583	6,773	7,699	10,775	–	37,967
Obligations related to securities sold under repurchase agreements and securities lent	96,157	3,466	1,634	–	–	–	–	–	–	101,257
Subordinated debentures	–	–	–	–	–	–	–	5,698	–	5,698
Other liabilities	2,720	592	1,302	422	757	1,784	6,167	5,978	33,022	52,744
Total equity	–	–	–	–	–	–	–	–	67,680	67,680
Total liabilities and equity	\$ 173,132	\$ 64,808	\$ 54,778	\$ 43,619	\$ 36,659	\$ 60,805	\$ 102,492	\$ 50,121	\$ 412,079	\$ 998,493
Off-balance sheet commitments										
Operating leases	\$ 36	\$ 72	\$ 106	\$ 104	\$ 102	\$ 378	\$ 818	\$ 880	–	\$ 2,496
Credit commitments ⁽³⁾	4,232	5,588	13,438	15,182	22,619	23,906	105,988	6,486	–	197,439
Financial guarantees ⁽⁴⁾	–	–	–	–	–	–	–	–	36,423	36,423
Outsourcing obligations	18	36	52	52	52	207	311	–	1	729

(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.

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, Aa2 by Moody's, AA- by Fitch and A+ by Standard and Poor's (S&P). The Bank's new bail-inable senior debt is rated AA (low) by DBRS, A2 by Moody's, AA- by Fitch and A- by S&P. All four credit rating agencies have a stable outlook on the Bank.

Capital Management

We continue to manage our capital in accordance with the capital management framework as described on pages 55 to 67 of the Bank's 2018 Annual Report.

Domestic Stability Buffer

In December 2018, OSFI announced a 25 basis point increase to the Domestic Stability Buffer to 1.75% of total risk-weighted assets, effective April 30, 2019. OSFI's minimum regulatory capital ratio requirements, including the Domestic Systemically Important Banks (D-SIB) 1% surcharge and the Domestic Stability Buffer of 1.75%, are 9.75%, 11.25% and 13.25% for Common Equity Tier 1, Tier 1 and Total capital ratios, respectively.

In addition, we continue to monitor and prepare for new regulatory capital developments to ensure compliance with these requirements. There were no new OSFI requirements this quarter.

Capital ratios

The Bank's various regulatory capital measures consist of the following:

(\$ millions)	As at		
	April 30 2019	January 31 2019	October 31 2018
Common Equity Tier 1 capital	\$ 46,193	\$ 45,344	\$ 44,443
Tier 1 capital	51,709	50,869	50,187
Total regulatory capital	60,855	59,796	57,364
CET1 risk-weighted assets ⁽¹⁾⁽²⁾	\$ 415,212	\$ 408,565	\$ 400,507
Tier 1 risk-weighted assets ⁽¹⁾⁽²⁾	415,212	408,565	400,680
Total risk-weighted assets ⁽¹⁾⁽²⁾	415,212	408,565	400,853
Capital ratios (%):			
Common Equity Tier 1 capital ratio	11.1	11.1	11.1
Tier 1 capital ratio	12.5	12.5	12.5
Total capital ratio	14.7	14.6	14.3
Leverage:			
Leverage exposures	\$ 1,204,111	\$ 1,167,691	\$ 1,119,099
Leverage ratio (%)	4.3	4.4	4.5

(1) In accordance with OSFI's requirements, effective January 31, 2019, CVA risk-weighted assets have been fully phased-in. In the prior year, CVA RWA were calculated using scalars of 0.80, 0.83 and 0.86 to compute CET1, Tier 1 and Total capital ratios, respectively.

(2) As at April 30, 2019, January 31, 2019 and October 31, 2018, the Bank did not have a regulatory capital floor add-on for CET1, Tier 1 and Total capital RWA.

The Bank's Common Equity Tier 1 capital ratio was 11.1% at April 30, 2019, in line with the prior quarter, primarily due to strong internal capital generation which was offset by organic growth in risk-weighted assets, the net impact from the Bank's acquisitions and divestitures which closed during the quarter, share buybacks under the Bank's Normal Course Issuer Bid and the impact from employee pension and post-retirement benefits on accumulated other comprehensive income.

In addition, the Bank's Tier 1 capital ratio remained in line at 12.5% and the Total Capital ratio increased by approximately 10 basis points to 14.7%, primarily due to the above impacts to the Common Equity Tier 1 (CET1) ratio.

The Bank's Leverage ratio declined by approximately 10 bps this quarter due to growth in the Bank's consolidated assets, which included the impact from acquisitions.

As at April 30, 2019, the CET1, Tier 1, Total capital and Leverage ratios were well above OSFI's minimum capital ratios.

Changes in regulatory capital

The Bank's Common Equity Tier 1 capital was \$46.2 billion, as at April 30, 2019, an increase of approximately \$0.8 billion during the quarter, primarily due to internal capital generation of \$1.1 billion, including the impact from acquisitions and divestitures, and higher accumulated other comprehensive income of \$0.2 billion, excluding the impact from cash flow hedges, partly offset by share buybacks net of share issuances of \$0.2 billion, and increases to regulatory capital deductions of \$0.2 billion.

Risk-weighted assets

CET1 risk-weighted assets (RWA) increased by \$6.6 billion or 1.6% during the quarter to \$415.2 billion, due primarily to organic growth in RWA, the impact from foreign currency translation, and the acquisitions which closed during the quarter.

Normal Course Issuer Bid

On May 28, 2019, the Bank announced its intention to seek TSX approval for a normal course issuer bid (the "2019 NCIB") pursuant to which it may repurchase for cancellation up to 24 million of the Bank's common shares. Purchases under the 2019 NCIB may commence on June 4, 2019 and terminate upon earlier of: (i) the Bank purchasing the maximum number of common shares under the 2019 NCIB, (ii) the Bank providing a notice of termination, or (iii) June 3, 2020. On a quarterly basis, the Bank will notify OSFI prior to making purchases.

On May 29, 2018, the Bank announced that OSFI and the Toronto Stock Exchange (TSX) approved a normal course issuer bid (the "2018 NCIB") pursuant to which it may repurchase for cancellation up to 24 million of the Bank's common shares. This 2018 NCIB will terminate on June 3, 2019.

During the six months ended April 30, 2019, the Bank repurchased and cancelled approximately 7.25 million common shares as part of the 2018 NCIB at a volume weighted average price of \$72.19 per share for a total amount of \$523 million. Under the 2018 NCIB, the Bank has cumulatively repurchased and cancelled approximately 13.23 million common shares at an average price of \$73.84 per share.

Common dividend

The Board of Directors, at its meeting on May 27, 2019, approved a dividend of 87 cents per share. This quarterly dividend is payable to shareholders of record as of July 2, 2019 on July 29, 2019.

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 on page 23. The methods of determining the fair value of financial instruments are detailed on page 169 of the Bank's 2018 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 generally arose from normal economic, 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 85 of the Bank's 2018 Annual Report).

Total derivative notional amounts were \$5,466 billion as at April 30, 2019, compared to \$5,446 billion as at January 31, 2019 (October 31, 2018 – \$5,334 billion). The quarterly increase was primarily due to foreign currency translation partially offset by lower volumes of interest rate contracts. The total notional amount of over-the-counter derivatives was \$5,247 billion compared to \$5,179 billion as at January 31, 2019 (October 31, 2018 – \$5,097 billion), of which \$3,582 billion was settled through central counterparties as at April 30, 2019 (January 31, 2019 – \$3,808 billion; October 31, 2018 – \$3,523 billion). The credit equivalent amount, after taking master netting arrangements into account, was \$28.1 billion, compared to \$27.7 billion at January 31, 2019. The increase was primarily attributable to the impact of foreign currency translation and higher equity contracts offset by lower currency 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 2018 Annual Report. The Bank's net exposures have substantially remained 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. The Bank securitizes a portion of its unsecured personal lines of credit, credit card and auto loan receivables through consolidated structured entities, namely, Halifax Receivables Trust, Trillium Credit Card Trust II and Securitized Term Auto Receivables Trusts. During the quarter the Bank did not enter into any new securitization arrangements but securitized the following receivables in February 2019:

- \$1,792 million of its Canadian credit card receivables (receivables) were securitized on a revolving basis through Trillium Credit Card Trust II (Trillium), a Bank-sponsored consolidated structured entity. Trillium issued Series 2019-1 and Series 2019-2 Class A senior notes and Class B and Class C subordinated notes to third-party investors. The proceeds of such issuances were used to purchase a co-ownership interest in the receivables originated by the Bank. Recourse of the noteholders is limited to the purchased co-ownership interest. The sale of such co-ownership interest did not qualify for derecognition, and therefore the receivables continue to be recognized on the Consolidated Statement of Financial Position.
- \$896 million of its Canadian auto loan receivables were securitized through Securitized Term Auto Receivables Trust 2019-1 (START 2019-1), a Bank-sponsored consolidated structured entity. START 2019-1 issued multiple series of Class A notes to third-party investors and issued Class A-1 and subordinated notes to the Bank. The proceeds of such issuances are used to purchase a discrete pool of retail indirect auto loan receivables from the Bank on a fully serviced basis. Recourse of the noteholders is limited to the securitized loan receivables. The sale of such receivables did not qualify for derecognition and therefore the receivables continue to be recognized on the Consolidated Statement of Financial Position. The Class A-1 notes and subordinated notes issued by START 2019-1 and held by the Bank of \$84 million are eliminated upon consolidation.

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 69 of the Bank's 2018 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 \$4.3 billion as at April 30, 2019 (October 31, 2018 – \$4.0 billion). As at April 30, 2019, total commercial paper outstanding for these conduits was \$3.1 billion (October 31, 2018 – \$3.2 billion). Funded assets purchased and held by these conduits as at April 30, 2019, as reflected at original cost, were \$3.1 billion (October 31, 2018 – \$3.2 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, 2018.

Other off-balance sheet arrangements

Guarantees and other indirect commitments increased by 4% from October 31, 2018. The increase is due to higher volumes in undrawn loan commitments. Fees from guarantees and loan commitment arrangements recorded as credit fees in non-interest income – banking were \$143 million for the three months ended April 30, 2019, compared to \$150 million in the previous quarter.

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 and business units are responsive on a timely basis and business impacts, if any, are minimized.

Total Loss Absorbing Capacity (TLAC)

On April 18, 2018, OSFI issued guidelines on Total Loss Absorbing Capacity (TLAC), which apply to Canada's Domestic Systemically Important Banks as part of the Federal Government's bail-in regime. The standards address the sufficiency of a systemically important bank's loss absorbing capacity in supporting its recapitalization in the event of its failure. OSFI requires systemically important banks to maintain a minimum of 21.5% plus the domestic stability buffer of TLAC eligible instruments relative to their RWAs and 6.75% relative to their leverage exposures. The Bank is required to comply with the minimum TLAC requirements by November 1, 2021 and began disclosing its TLAC ratios as of the first quarter of 2019.

United Kingdom and European Regulatory Reform

The UK gave formal notice of intention to withdraw from the EU on March 29, 2017. Negotiation of the terms of withdrawal are ongoing and the final date for the UK to leave the EU has recently been extended until October 31, 2019. Withdrawal may be earlier if the UK Parliament ratifies the agreement that has already been negotiated with the EU or if an amended agreement is negotiated and ratified by both the EU and the UK. Political agreement has been reached on a transition period, which would extend until at least December 31, 2020, providing additional time in which to ensure readiness, subject to the overall withdrawal agreement being concluded and ratified. If this occurs, then all EU legislation will continue to apply in the UK during transition.

There remains a possibility that the UK will leave the EU on or before October 31, 2019 without having a withdrawal agreement in place (a so-called "hard" Brexit).

The UK's exit from the EU may result in significant changes in law(s), which may impact the Bank's business, financial condition and/or results of operations and could adversely impact the Bank's cost of funding in Europe. The Bank continually monitors developments to prepare for changes that have the potential to impact its operations in the UK and elsewhere in Europe and is developing and revising its contingency plans accordingly.

Regulatory Initiatives Impacting Financial Services in Canada

In October 2018, in connection with its previously tabled budget, the government of Canada introduced legislation: amending the Bank Act to strengthen the financial consumer protection framework, with enhancements in the areas of corporate governance, responsible business conduct, disclosure and customer redress; amending the Financial Consumer Agency of Canada Act to strengthen the mandate and powers of the Financial Consumer Agency of Canada; and enacting the Pay Equity Act to redress systemic gender-based discrimination by requiring federal public and private sector employers to establish and maintain a pay equity plan within set time frames. Implementing regulations are still required, regarding earlier amendments to the Bank Act, which would allow banks to undertake broader financial technology activities. These initiatives are being assessed to analyze their impact and develop appropriate implementation plans. Provincial consumer protection initiatives are also being monitored to assess their possible implications from a financial services perspective.

Basel Committee on Banking Supervision – Finalized Basel III reforms

In December 2017, the Group of Governors and Heads of Supervision (GHOS), the oversight body of the Basel Committee on Banking Supervision (BCBS), announced that they have agreed on an output floor of 72.5% and have finalized the remaining Basel III reforms.

The final Basel III reform package includes: a revised standardized approach for credit risk; revisions to the internal ratings-based approach for credit risk; revisions to the credit valuation adjustment (CVA) framework, including the removal of the internally modelled approach and the introduction of a revised standardized approach; a revised standardized approach for operational risk, which will replace the existing standardized approaches and the advanced measurement approaches; revisions to the measurement of the leverage ratio and a leverage ratio buffer for global systemically important banks (G-SIBs), which will take the form of a Tier 1 capital buffer set at 50% of a G-SIB's risk-weighted capital buffer; and an aggregate output floor, which will ensure that banks' risk-weighted assets (RWAs) generated by internal models are no lower than 72.5% of RWAs as calculated by the Basel III framework's standardized approaches. Banks will also be required to disclose their RWAs based on these standardized approaches. Implementation of the new Basel III standards will be required in 2022. This includes the Fundamental Review of the Trading Book (FRTB) rules, which represents a delay from 2020. There is a phase-in period for the 72.5% output floor from January 1, 2022 until January 2027.

In July 2018, OSFI issued a discussion paper seeking views from interested stakeholders on its proposed policy direction and its timelines for implementation of the final Basel III reforms in Canada. OSFI supports the changes proposed within the final Basel III reforms and intends to implement them domestically, while also considering the adjustments required to recognize the unique characteristics of the Canadian market, improving risk sensitivity and providing the right incentives, while promoting the safety and soundness of deposit taking institutions in consideration of level playing field and competitiveness issues. As part of these adjustments, OSFI is considering eliminating the BCBS' transitional provisions for the output floor, setting the output floor at 72.5% commencing the first quarter of 2022. Responses to the questions raised within the discussion paper were due to OSFI by October 19, 2018. The Bank will continue to monitor and prepare for developments impacting regulatory capital requirements.

Regulatory Capital Pillar 3 Disclosure Requirements

In February 2018, the Basel Committee on Banking Supervision (BCBS) issued an update to its Pillar 3 disclosure requirements framework, as the third phase of the Committee's disclosure project, which builds on the first and second phases, published by the Committee in January 2015 and March 2017, respectively. The third phase is primarily to address changes in disclosure requirements from the Basel III reforms finalized in December 2017, as well as other disclosure requirements related to asset encumbrance, capital distribution constraints, and the scope of disclosure requirements across resolution groups.

Commencing October 31, 2018, the Bank's supplementary regulatory capital disclosures meet OSFI's April 2017 disclosure guideline for the Committee's first phase of the revised Pillar 3 disclosure requirements. OSFI's disclosure guidelines for the implementation of the second and third phases of the Committee disclosure project are awaited.

Regulatory Developments Relating to Liquidity

The Net Stable Funding Ratio (NSFR) is aimed at reducing structural funding risk by requiring banks to fund their activities with sufficiently stable sources of funding. The NSFR becomes a minimum standard in OSFI's liquidity framework in January 2020 with public disclosure required by the first quarter of 2021.

Reforms to interest rate benchmarks

LIBOR is the most widely referenced interest benchmark rate across the globe for derivatives, bonds, loans and other floating rate instruments; however, there is a regulator-led push to transition the market from LIBOR to alternative risk-free, or nearly risk-free, rates that are based on actual overnight transactions. The UK's Financial Conduct Authority announced in 2017 that it will no longer persuade or compel panel banks to make the submissions required to calculate LIBOR. As a result, UK and US regulators have warned the industry they will need to be prepared for LIBOR to be discontinued at the end of 2021. Derivatives, floating rate notes and other financial contracts whose terms extend beyond 2021, and that refer to LIBOR as the reference rate, will be impacted. The Bank is evaluating its exposure to LIBOR, as well as the impact of the transition on systems and processes.

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, 2018 as described in Note 3 of the Bank's 2018 annual consolidated financial statements, except for changes to the accounting for revenue from contracts with customers as a result of adopting IFRS 15, *Revenue from Contracts with Customers* discussed in Note 3 and 4 of the condensed interim consolidated financial statements.

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 2018 Annual Report, other than the following:

IFRS 16 – Leases

In January 2016, the IASB issued IFRS 16 *Leases* ("IFRS 16"), which will replace IAS 17, *Leases* ("IAS 17"), requiring a lessee to recognize an asset for the right to use the leased item and a liability for the present value of its future lease payments. IFRS 16 will result in all operating leases being recorded on the Bank's balance sheet as a right-of-use ("ROU") asset with a corresponding lease liability. The Bank will also recognize amortization expense on the ROU asset and interest expense on the lease liability in the statement of income. IFRS 16 substantially carries forward the lessor accounting requirements in IAS 17.

IFRS 16 is effective for the Bank on November 1, 2019. The Bank plans to adopt IFRS16 by adjusting the Consolidated Statement of Financial Position on the date of adoption with no restatement of comparative periods.

The most significant impact to the Bank will be related to property leases that are currently classified as operating leases being recorded on the balance sheet. The Bank has made good progress in line with its project plan and is in the process of assessing its lease portfolio and modifying its processes, controls and lease accounting systems. The Bank continues to assess the decisions required in the key areas of judgment such as lease term and use of appropriate discount rates. The quantitative impact upon adoption will be finalized by the end of this fiscal year.

IFRS 17 – Insurance Contracts

The Bank is required to adopt IFRS 17 *Insurance Contracts* ("IFRS 17") on November 1, 2021. The standard will impact the Bank's Canadian and International insurance businesses. The standard impacts the recognition and measurement of insurance contracts.

The IASB is proposing some amendments to IFRS 17, including a proposal to defer the effective date, by one year, to annual periods on or after January 1, 2022. The Bank will continue to monitor developments related to the standard and provide further updates as final decisions are published by the IASB.

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, 2019, 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 2018 Annual Report. All transactions with related parties continued to be at market terms and conditions.

Economic Outlook

The global economy is slowing following a period of robust expansion. Global growth is nevertheless expected to remain solid, though risks to the outlook generally tilt to the downside owing in large part to US trade policy. Though Canadian growth is now expected to be slower than thought earlier this year, the economy remains on good footing as a result of a sharp rebound in equity markets since last fall and a rebound in the price of Canadian oil. There is now solid evidence that Canada has moved beyond the soft patch experienced late in 2018 and earlier this year as economic indicators in Canada and in the US are generally positive and employment reports continue to suggest very strong demand for workers, leading to solid increases in labour income. Economic growth in Canadian is expected to hover slightly below its potential growth of 1.7% this year. Underlying measures of inflation are expected to remain around the 2% level targeted by the Bank of Canada. To keep inflation around this target, we expect the Bank of Canada to gradually resume its withdrawal of monetary stimulus later this year, though at a more subdued pace than anticipated earlier, while keeping its policy rates well below their neutral level.

Following two quarters of exceptional growth driven by the early-2018 fiscal stimulus package, US growth is slowing to a more sustainable pace. Growth is expected to decelerate into 2019 and average 2.4% for the year, reflecting the diminishing impact from the 2018 tax reforms and spending package. The Federal Reserve is expected to raise its policy rate by another 25 basis points at the end of the calendar year and leave rates at that level beyond that.

Growth of around 1.5% is anticipated in 2019 in Mexico, following the 2.0% expected for 2018. Markets currently have a sanguine view on the Mexican economy but that could change should policy developments disappoint. Growth prospects are much more solid in other Pacific Alliance Countries. The Colombian and Peruvian outlooks are stronger in 2019 than in 2018 and expected to grow by 3.4% and 4%, respectively, owing to a range of economic and political factors. In Chile, though growth will moderate from the rapid pace set last year, its economy is expected to advance 3.2% in 2019, well above the forecast growth rates in Canada and the United States.

Share Data

	Amount (\$ millions)	Dividends declared per share ⁽¹⁾	Number outstanding (000s)	Conversion feature
<i>As at April 30, 2019</i>				
Common shares⁽²⁾	\$ 18,284	\$ 0.87	1,222,388	n/a
Preferred shares				
Preferred shares Series 30 ⁽³⁾	154	0.113750	6,143	Series 31
Preferred shares Series 31 ⁽³⁾	111	0.165296	4,457	Series 30
Preferred shares Series 32 ⁽³⁾	279	0.128938	11,162	Series 33
Preferred shares Series 33 ⁽³⁾	130	0.186488	5,184	Series 32
Preferred shares Series 34 ⁽³⁾⁽⁴⁾	350	0.343750	14,000	Series 35
Preferred shares Series 36 ⁽³⁾⁽⁴⁾	500	0.343750	20,000	Series 37
Preferred shares Series 38 ⁽³⁾⁽⁴⁾	500	0.303125	20,000	Series 39
Preferred shares Series 40 ⁽³⁾⁽⁴⁾	300	0.303125	12,000	Series 41
Additional Tier 1 securities				
	Amount (\$ millions)	Distribution	Yield (%)	Number outstanding (000s)
Scotiabank Trust Securities – Series 2006-1 issued by Scotiabank Capital Trust ⁽⁵⁾	\$ 750	\$ 28.25	5.650	750
Scotiabank Tier 1 Securities – Series 2009-1 issued by Scotiabank Tier 1 Trust ⁽⁵⁾	650	39.01	7.802	650
Subordinated additional Tier 1 capital securities (NVCC) ⁽⁴⁾⁽⁶⁾	US\$ 1,250	US\$ 23.25	4.650	1,250
NVCC Subordinated debentures⁽⁴⁾				
			Amount (\$ millions)	Interest rate (%)
Subordinated debentures due March 2027			\$ 1,250	2.58
Subordinated debentures due December 2025			750	3.37
Subordinated debentures due December 2025			US\$ 1,250	4.50
Subordinated debentures due January 2029			1,750	3.89
Options				
Outstanding options granted under the Stock Option Plans to purchase common shares ⁽²⁾				Number outstanding (000s)
				13,070

(1) Dividends on common shares are paid quarterly, if and when declared. Dividends declared as at May 28, 2019. The Board of Directors, at its meeting on May 27, 2019, approved a dividend of 87 cents per share payable to shareholders of record as of July 2, 2019 on July 29, 2019.

(2) As at May 17, 2019, the number of outstanding common shares and options were 1,222,247 thousand and 12,833 thousand, respectively.

(3) 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 2018 Annual Report for further details.

(4) These securities contain Non-Viability Contingent Capital (NVCC) provisions necessary to qualify as regulatory capital under Basel III. The Bank's 2018 Annual Report describes the conditions under which the conversion occurs and the conversion mechanics of NVCC Subordinated Debentures (Note 21), NVCC Subordinated additional Tier 1 capital securities (Note 24) and NVCC Preferred Shares (Note 24). The maximum number of common shares issuable on conversion of NVCC subordinated debentures, NVCC subordinated additional Tier 1 capital securities, and NVCC preferred shares as at April 30, 2019 would be 2,376 million common shares based on the floor price and excluding the impact of any accrued and unpaid interest and any declared but unpaid dividends.

(5) These securities have exchange features. Refer to Table 27 in the Bank's 2018 Annual Report for further details.

(6) Semi-annual distributions are recorded in the second and fourth fiscal quarters, if and when paid.

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 2018 Annual Report.

Condensed Interim Consolidated Financial Statements (unaudited)

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Consolidated Statement of Financial Position

(Unaudited) (\$ millions)	Note	As at		
		April 30 2019	January 31 2019	October 31 2018
Assets				
Cash and deposits with financial institutions	6	\$ 50,121	\$ 52,942	\$ 62,269
Precious metals		3,543	3,622	3,191
Trading assets				
Securities		103,125	93,047	85,474
Loans		13,104	13,161	14,334
Other		911	748	454
		117,140	106,956	100,262
Financial instruments designated at fair value through profit or loss	20(b)	14	14	12
Securities purchased under resale agreements and securities borrowed		126,090	127,959	104,018
Derivative financial instruments		31,358	32,161	37,558
Investment securities	7	85,146	77,986	78,396
Loans				
Residential mortgages	8	260,586	258,649	253,357
Personal loans	8	97,874	96,650	96,019
Credit cards	8	17,730	17,124	16,485
Business and government	8	212,920	198,793	191,038
		589,110	571,216	556,899
Allowance for credit losses	8(c)	5,295	5,111	5,065
		583,815	566,105	551,834
Other				
Customers' liability under acceptances, net of allowance		12,823	18,737	16,329
Property and equipment		2,722	2,680	2,684
Investments in associates	10	5,303	5,184	4,850
Goodwill and other intangible assets		17,825	17,864	17,719
Deferred tax assets		2,069	2,047	1,938
Other assets		20,200	20,026	17,433
		60,942	66,538	60,953
Total assets		\$ 1,058,169	\$ 1,034,283	\$ 998,493
Liabilities				
Deposits				
Personal	11	\$ 224,933	\$ 221,921	\$ 214,545
Business and government	11	443,707	434,749	422,002
Financial institutions	11	43,642	34,209	39,987
		712,282	690,879	676,534
Financial instruments designated at fair value through profit or loss	20(b)	10,919	9,907	8,188
Other				
Acceptances		12,833	18,746	16,338
Obligations related to securities sold short		29,957	31,621	32,087
Derivative financial instruments		33,176	35,970	37,967
Obligations related to securities sold under repurchase agreements and securities lent		124,331	116,527	101,257
Subordinated debentures	12	7,554	7,492	5,698
Other liabilities		56,870	53,975	52,744
		264,721	264,331	246,091
Total liabilities		987,922	965,117	930,813
Equity				
Common equity				
Common shares	12	18,284	18,296	18,234
Retained earnings		43,056	42,236	41,414
Accumulated other comprehensive income (loss)		1,836	1,587	992
Other reserves		395	406	404
Total common equity		63,571	62,525	61,044
Preferred shares and other equity instruments	12	3,884	3,884	4,184
Total equity attributable to equity holders of the Bank		67,455	66,409	65,228
Non-controlling interests in subsidiaries		2,792	2,757	2,452
Total equity		70,247	69,166	67,680
Total liabilities and equity		\$ 1,058,169	\$ 1,034,283	\$ 998,493

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

Consolidated Statement of Income

(Unaudited) (\$ millions)	Note	For the three months ended			For the six months ended	
		April 30 2019 ⁽¹⁾	January 31 2019 ⁽¹⁾	April 30 2018	April 30 2019 ⁽¹⁾	April 30 2018
Revenue						
Interest income⁽²⁾						
Loans		\$ 7,164	\$ 7,091	\$ 5,979	\$ 14,255	\$ 11,782
Securities		567	516	438	1,083	837
Securities purchased under resale agreements and securities borrowed		140	130	101	270	199
Deposits with financial institutions		230	254	217	484	398
	17	8,101	7,991	6,735	16,092	13,216
Interest expense						
Deposits		3,485	3,335	2,490	6,820	4,746
Subordinated debentures		73	61	52	134	104
Other		350	321	243	671	480
	17	3,908	3,717	2,785	7,625	5,330
Net interest income		4,193	4,274	3,950	8,467	7,886
Non-interest income						
Card revenues		248	244	261	492	534
Banking services fees		461	433	405	894	828
Credit fees		322	324	286	646	571
Mutual funds		454	447	412	901	850
Brokerage fees		217	216	216	433	446
Investment management and trust		271	257	169	528	332
Underwriting and other advisory		149	92	118	241	266
Non-trading foreign exchange		175	160	158	335	306
Trading revenues	18	386	329	358	715	745
Net gain on sale of investment securities		86	22	66	108	101
Net income from investments in associated corporations		170	129	154	299	264
Insurance underwriting income, net of claims		169	184	190	353	359
Other fees and commissions		245	252	203	497	407
Other		257	241	112	498	251
		3,610	3,330	3,108	6,940	6,260
Total revenue		7,803	7,604	7,058	15,407	14,146
Provision for credit losses		873	688	534	1,561	1,078
		6,930	6,916	6,524	13,846	13,068
Non-interest expenses						
Salaries and employee benefits		2,026	2,164	1,902	4,190	3,604
Premises and technology		702	696	636	1,398	1,245
Depreciation and amortization		258	248	204	506	403
Communications		119	109	113	228	218
Advertising and business development		150	139	140	289	269
Professional		203	218	210	421	396
Business and capital taxes		122	137	111	259	234
Other		466	460	410	926	855
		4,046	4,171	3,726	8,217	7,224
Income before taxes		2,884	2,745	2,798	5,629	5,844
Income tax expense	21	625	498	621	1,123	1,330
Net income		\$ 2,259	\$ 2,247	\$ 2,177	\$ 4,506	\$ 4,514
Net income attributable to non-controlling interests in subsidiaries		70	111	70	181	128
Net income attributable to equity holders of the Bank		\$ 2,189	\$ 2,136	\$ 2,107	\$ 4,325	\$ 4,386
Preferred shareholders and other equity instrument holders		64	29	65	93	95
Common shareholders		\$ 2,125	\$ 2,107	\$ 2,042	\$ 4,232	\$ 4,291
Earnings per common share (in dollars)						
Basic	19	\$ 1.74	\$ 1.72	\$ 1.70	\$ 3.46	\$ 3.58
Diluted	19	1.73	1.71	1.70	3.44	3.56
Dividends paid per common share (in dollars)		0.87	0.85	0.82	1.72	1.61

(1) The amounts for the period ended April 30, 2019 and January 31, 2019 have been prepared in accordance with IFRS 15; prior period amounts have not been restated (refer to Notes 3 and 4).

(2) Includes interest income on financial assets measured at amortized cost and FVOCI, calculated using the effective interest method, of \$8,019 for the three months ended April 30, 2019 (January 31, 2019 – \$7,923; April 30, 2018 – \$6,683) and for the six months ended April 30, 2019 – \$15,942 (April 30, 2018 – \$13,120).

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

Consolidated Statement of Comprehensive Income

(Unaudited) (\$ millions)	For the three months ended			For the six months ended	
	April 30 2019	January 31 2019	April 30 2018	April 30 2019	April 30 2018
Net income	\$ 2,259	\$ 2,247	\$ 2,177	\$ 4,506	\$ 4,514
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)	628	805	1,813	1,433	303
Net gains (losses) on hedges of net investments in foreign operations	(350)	(184)	(694)	(534)	(24)
Income tax expense (benefit):					
Net unrealized foreign currency translation gains (losses)	5	7	10	12	1
Net gains (losses) on hedges of net investments in foreign operations	(92)	(48)	(183)	(140)	(4)
	365	662	1,292	1,027	282
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	247	443	(111)	690	(416)
Reclassification of net (gains) losses to net income	(196)	(371)	17	(567)	194
Income tax expense (benefit):					
Net gains (losses) in fair value	51	125	(30)	176	(100)
Reclassification of net (gains) losses to net income	(39)	(110)	(2)	(149)	48
	39	57	(62)	96	(170)
Net change in gains (losses) on derivative instruments designated as cash flow hedges:					
Net gains (losses) on derivative instruments designated as cash flow hedges	(136)	721	277	585	478
Reclassification of net (gains) losses to net income	127	(374)	(374)	(247)	(669)
Income tax expense (benefit):					
Net gains (losses) on derivative instruments designated as cash flow hedges	(37)	191	73	154	128
Reclassification of net (gains) losses to net income	34	(101)	(99)	(67)	(178)
	(6)	257	(71)	251	(141)
Other comprehensive income (loss) from investments in associates	38	19	30	57	43
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	(236)	(460)	19	(696)	103
Income tax expense (benefit)	(54)	(119)	7	(173)	32
	(182)	(341)	12	(523)	71
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	19	31	(29)	50	70
Income tax expense (benefit)	4	8	(1)	12	14
	15	23	(28)	38	56
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	(43)	30	(7)	(13)	(14)
Income tax expense (benefit)	(12)	8	(2)	(4)	(4)
	(31)	22	(5)	(9)	(10)
Other comprehensive income (loss) from investments in associates	-	(3)	(3)	(3)	(7)
Other comprehensive income (loss)	238	696	1,165	934	124
Comprehensive income (loss)	\$ 2,497	\$ 2,943	\$ 3,342	\$ 5,440	\$ 4,638
Comprehensive income (loss) attributable to non-controlling interests	59	212	147	271	204
Comprehensive income (loss) attributable to equity holders of the Bank	2,438	2,731	3,195	5,169	4,434
Preferred shareholders and other equity instrument holders	64	29	65	93	95
Common shareholders	\$ 2,374	\$ 2,702	\$ 3,130	\$ 5,076	\$ 4,339

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

Consolidated Statement of Changes in Equity

	Accumulated other comprehensive income (loss)											Total
	Common shares	Retained earnings ⁽¹⁾	Foreign currency translation	Available-for-sale securities	Debt instruments FVOCI	Equity instruments FVOCI	Cash flow hedges	Other reserves	Total common equity	Preferred shares and other equity instruments	Total attributable to equity holders	
<i>(Unaudited) (\$ millions)</i>												
Balance as at October 31, 2018	\$ 18,234	\$ 41,414	\$ 1,441	\$ -	\$ (68)	\$ (126)	\$ (121)	\$ (134)	\$ 404	\$ 61,044	\$ 4,184	\$ 2,452
Cumulative effect of adopting IFRS 15 ⁽³⁾	-	(58)	-	-	-	-	-	-	-	(58)	-	(58)
Balance as at November 1, 2018	\$ 18,234	\$ 41,356	\$ 1,441	\$ -	\$ (68)	\$ (126)	\$ (121)	\$ (134)	\$ 404	\$ 60,986	\$ 4,184	\$ 2,452
Net income	-	4,232	-	-	-	-	-	-	-	4,232	93	181
Other comprehensive income (loss)	-	-	942	-	96	31	259	(484)	-	844	-	90
Total comprehensive income	\$ -	\$ 4,232	\$ 942	\$ -	\$ 96	\$ 31	\$ 259	\$ (484)	\$ -	\$ 5,076	\$ 93	\$ 271
Shares issued	158	-	-	-	-	-	-	-	(24)	134	-	-
Shares repurchased/redeemed	(108)	(415)	-	-	-	-	-	-	-	(523)	(300)	-
Dividends and distributions paid to equity holders	-	(2,104)	-	-	-	-	-	-	-	(2,104)	(93)	(92)
Share-based payments ⁽⁴⁾	-	-	-	-	-	-	-	-	5	5	-	5
Other	-	(13)	-	-	-	-	-	-	10	(3)	-	161 ⁽⁵⁾
Balance as at April 30, 2019	\$ 18,284	\$ 43,056	\$ 2,383	\$ -	\$ 28	\$ (95)	\$ 138	\$ (618)	\$ 395	\$ 63,571	\$ 3,884	\$ 2,792
Balance as at October 31, 2017	\$ 15,644	\$ 38,117	\$ 1,861	\$ (46)	\$ -	\$ -	\$ 235	\$ (473)	\$ 116	\$ 55,454	\$ 4,579	\$ 1,592
Cumulative effect of adopting IFRS 9	-	(564)	-	46	184	(179)	-	-	-	(513)	-	(97)
Balance as at November 1, 2017	\$ 15,644	\$ 37,553	\$ 1,861	\$ -	\$ 184	\$ (179)	\$ 235	\$ (473)	\$ 116	\$ 54,941	\$ 4,579	\$ 1,495
Net income	-	4,291	-	-	-	-	-	-	-	4,291	95	128
Other comprehensive income (loss)	-	-	216	-	(170)	53	(141)	90	-	48	-	76
Total comprehensive income	\$ -	\$ 4,291	\$ 216	\$ -	\$ (170)	\$ 53	\$ (141)	\$ 90	\$ -	\$ 4,339	\$ 95	\$ 204
Shares issued	96	-	-	-	-	-	-	-	(13)	83	-	-
Shares repurchased/redeemed	(29)	(149)	-	-	-	-	-	-	-	(178)	(345)	-
Dividends and distributions paid to equity holders	-	(1,931)	-	-	-	-	-	-	-	(1,931)	(95)	(57)
Share-based payments ⁽⁴⁾	-	-	-	-	-	-	-	-	5	5	-	5
Other	-	2	-	-	-	-	-	-	-	2	-	(2)
Balance as at April 30, 2018	\$ 15,711	\$ 39,766	\$ 2,077	\$ -	\$ 14	\$ (126)	\$ 94	\$ (383)	\$ 108	\$ 57,261	\$ 4,234	\$ 1,640

(1) Includes undistributed retained earnings of \$63 (April 30, 2018 – \$60) 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) Refer to Note 4 for a summary of the adjustments on initial application of IFRS 15.

(4) Represents amounts on account of share-based payments (refer to Note 14).

(5) Includes changes to non-controlling interests arising from business combinations and related transactions.

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

Consolidated Statement of Cash Flows

<i>(Unaudited) (\$ millions)</i>	For the three months ended		For the six months ended	
	April 30 2019	April 30 2018	April 30 2019	April 30 2018
<i>Sources (uses) of cash flows</i>				
Cash flows from operating activities				
Net income	\$ 2,259	\$ 2,177	\$ 4,506	\$ 4,514
Adjustment for:				
Net interest income	(4,193)	(3,950)	(8,467)	(7,886)
Depreciation and amortization	258	204	506	403
Provision for credit losses	873	534	1,561	1,078
Equity-settled share-based payment expense	1	1	5	5
Net gain on sale of investment securities	(86)	(66)	(108)	(101)
Net gain on divestitures	(141)	–	(141)	–
Net income from investments in associated corporations	(170)	(154)	(299)	(264)
Income tax expense	625	621	1,123	1,330
Changes in operating assets and liabilities:				
Trading assets	(9,230)	8,264	(15,432)	(51)
Securities purchased under resale agreements and securities borrowed	3,451	6,871	(20,545)	11,364
Loans	(14,261)	(8,628)	(24,839)	(15,006)
Deposits	15,086	(5,660)	27,406	16,845
Obligations related to securities sold short	(1,874)	(4,376)	(2,519)	(2,105)
Obligations related to securities sold under repurchase agreements and securities lent	6,096	(2,983)	21,271	(5,014)
Net derivative financial instruments	(2,343)	(3,261)	1,856	(239)
Other, net	2,557	8,775	(2,063)	(1,069)
Dividends received	123	78	218	159
Interest received	7,772	6,494	15,815	13,010
Interest paid	(3,572)	(2,585)	(7,275)	(5,326)
Income tax paid	(675)	(568)	(1,632)	(1,181)
Net cash from/(used in) operating activities	2,556	1,788	(9,053)	10,466
Cash flows from investing activities				
Interest-bearing deposits with financial institutions	3,696	(2,969)	14,149	(2,534)
Purchase of investment securities	(27,119)	(19,152)	(44,812)	(45,702)
Proceeds from sale and maturity of investment securities	21,368	21,435	40,375	40,159
Acquisition/sale of subsidiaries, associated corporations or business units, net of cash acquired	(36)	–	(36)	–
Property and equipment, net of disposals	(87)	(91)	(104)	(115)
Other, net	200	(301)	(14)	(416)
Net cash from/(used in) investing activities	(1,978)	(1,078)	9,558	(8,608)
Cash flows from financing activities				
Proceeds from issue of subordinated debentures	–	–	1,750	–
Redemption/repayment of subordinated debentures	(14)	(121)	(14)	(233)
Redemption of preferred shares	–	(345)	(300)	(345)
Proceeds from common shares issued	48	34	158	96
Common shares purchased for cancellation	(289)	–	(523)	(178)
Cash dividends and distributions paid	(1,127)	(1,047)	(2,197)	(2,026)
Distributions to non-controlling interests	(61)	(32)	(92)	(57)
Other, net	578	134	1,158	401
Net cash from/(used in) financing activities	(865)	(1,377)	(60)	(2,342)
Effect of exchange rate changes on cash and cash equivalents	148	221	218	45
Net change in cash and cash equivalents	(139)	(446)	663	(439)
Cash and cash equivalents at beginning of period ⁽¹⁾	9,799	7,832	8,997	7,825
Cash and cash equivalents at end of period ⁽¹⁾	\$ 9,660	\$ 7,386	\$ 9,660	\$ 7,386

(1) Represents cash and non-interest-bearing deposits with financial institutions (refer to Note 6).

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 Scotia Plaza, 44 King Street West, 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, 2018.

The condensed interim consolidated financial statements for the quarter ended April 30, 2019 have been approved by the Board of Directors for issue on May 28, 2019.

Certain comparative amounts have been restated to conform with the basis of presentation in the current period.

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, 2018.

The significant accounting policies used in the preparation of these condensed interim consolidated financial statements are consistent with those used in the Bank's audited consolidated financial statements for the year ended October 31, 2018, as described in Note 3 of the Bank's consolidated financial statements in the 2018 Annual Report, except for changes to the accounting for revenue from contracts with customers as a result of adopting IFRS 15, *Revenue from Contracts with Customers* (IFRS 15). The significant accounting policies below have been updated for those items scoped in line with IFRS 15.

Card revenues include interchange fees, annual fees and other card related fees. Interchange fees are recognized in connection with the customer's purchase of goods and services and are calculated as a percentage of the transaction amount as established by the payment network. Interchange fees are recognized on the transaction date. The Bank presents interchange fees net of network association costs incurred and reward costs for associated cards where the customer has the option to redeem points for statement credits or the Bank is acting as an agent. Annual fees are recognized in income over 12 months. Other card fees are transaction-based and are recognized on the transaction date.

Banking services fees consist of fees earned on personal, business and government deposit activities. Personal deposit-related fees consist of account maintenance and various transaction-based services. Business and government deposit-related fees consist of commercial deposit and treasury management services and other cash management services. These fees are recognized on the transaction date or over time as services are provided to the customer.

Mutual funds fees include management and administration fees which are earned in our wealth management business. These fees are calculated as a percentage of the fund's net asset value and recognized as the service is provided. From time to time, the Bank may also recognize performance fees from some funds. These fees are only recognized to the extent that it is highly probable that a significant reversal of revenue will not occur.

Brokerage fees relate to fees earned for providing full-service and discount brokerage services to clients. These fees are contractually agreed and can be asset-based or linked to individual transactions. Such fees are recognized as the service is provided to clients or on the trade date.

Investment management and trust fees include administration, trust services and other investment services provided to clients. These fees are contractually agreed and can be linked to portfolio values or individual transactions. Such fees are recognized as the service is provided to clients to the extent that it is highly probable that a significant reversal of revenue will not occur.

Underwriting and other advisory fees relate to fees earned for services provided to clients in relation to placement of debt and equities. Such fees also include services to clients for mergers, acquisitions, financial restructurings and other corporate finance activities. These fees are recognized when the service has been performed and/or contractual milestones are completed. Performance and completion fees are variable consideration and generally contingent on the successful completion of a transaction.

Other fees and commissions include commissions earned on the sale of third party insurance products to the Bank's customers. Such fees and commissions are recognized when the performance obligation is completed.

4. Transition to IFRS 15

On November 1, 2018, the Bank adopted IFRS 15, *Revenue from Contracts with Customers*, which specifies how and when revenue is recognized, but does not impact income recognition related to financial instruments in scope of IFRS 9. The new standard replaces the previous standard IAS 18 *Revenue* and provides a single, principles-based five-step model to be applied to all contracts with customers and to determine whether the performance obligation is to provide the service itself (i.e., act as a principal) or to arrange another party to provide the service (i.e., act as an agent).

The Bank adopted IFRS 15 using the modified retrospective approach and accordingly, comparative periods have not been restated. The Bank recorded a cumulative-effect adjustment to decrease opening retained earnings on November 1, 2018 of \$58 million (net of tax). This adjustment relates to certain costs that are no longer eligible for deferral under the new standard and the remeasurement of certain liabilities at fulfilment cost. For the six months ended April 30, 2019, the impact of IFRS 15 was a decrease in non-interest income and non-interest expenses of approximately \$105 million (January 31, 2019 – \$55 million), representing certain loyalty rewards previously recorded in non-interest expenses and now being recorded as a reduction to non-interest income.

5. 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 2018 Annual Report, other than the following:

IFRS 16 – Leases

In January 2016, the IASB issued IFRS 16 *Leases* ("IFRS 16"), which will replace IAS 17 *Leases* (IAS 17), requiring a lessee to recognize an asset for the right to use the leased item and a liability for the present value of its future lease payments. IFRS 16 will result in all operating leases being recorded on the Bank's balance sheet as a right-of-use ("ROU") asset with a corresponding lease liability. The Bank will also recognize amortization expense on the ROU asset and interest expense on the lease liability in the statement of income. IFRS 16 substantially carries forward the lessor accounting requirements in IAS 17.

IFRS 16 is effective for the Bank on November 1, 2019. The Bank plans to adopt IFRS 16 by adjusting the Consolidated Statement of Financial Position on the date of adoption with no restatement of comparative periods.

IFRS 17 – Insurance Contracts

The Bank is required to adopt IFRS 17 *Insurance Contracts* ("IFRS 17") on November 1, 2021. The standard will impact the Bank's Canadian and international insurance businesses. The standard impacts the recognition and measurement of insurance contracts.

The IASB is proposing some amendments to IFRS 17, including a proposal to defer the effective date, by one year, to annual periods on or after January 1, 2022. The Bank will continue to monitor developments related to the standard and provide further updates as final decisions are published by the IASB.

6. Cash and deposits with financial institutions

(\$ millions)	As at		
	April 30 2019	January 31 2019	October 31 2018
Cash and non-interest-bearing deposits with financial institutions	\$ 9,660	\$ 9,799	\$ 8,997
Interest-bearing deposits with financial institutions	40,461	43,143	53,272
Total	\$ 50,121 ⁽¹⁾	\$ 52,942 ⁽¹⁾	\$ 62,269 ⁽¹⁾

(1) Net of impairment allowances of \$4 (January 31, 2019 – \$5; October 31, 2018 – \$3).

The Bank is required to maintain balances with central banks, other regulatory authorities and certain counterparties and these amounted to \$9,755 million (January 31, 2019 – \$9,286 million; October 31, 2018 – \$8,886 million) and are included above.

7. Investment securities

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

(\$ millions)	April 30 2019	As at	
		January 31 2019	October 31 2018
Debt investment securities measured at FVOCI	\$ 59,159	\$ 55,530	\$ 55,843
Debt investment securities measured at amortized cost	23,932	20,651	20,743
Equity investment securities designated at FVOCI	1,500	1,253	1,305
Equity investment securities measured at FVTPL	555	552	505
Total investment securities	\$ 85,146	\$ 77,986	\$ 78,396

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

As at April 30, 2019 (\$ millions)	Cost	Gross unrealized gains	Gross unrealized losses	Fair value
Canadian federal government issued or guaranteed debt	\$ 8,774	\$ 147	\$ 6	\$ 8,915
Canadian provincial and municipal debt	2,995	20	11	3,004
U.S. treasury and other U.S. agency debt	22,546	196	37	22,705
Other foreign government debt	18,806	72	32	18,846
Other debt	5,694	16	21	5,689
Total	\$ 58,815	\$ 451	\$ 107	\$ 59,159

As at January 31, 2019 (\$ millions)	Cost	Gross unrealized gains	Gross unrealized losses	Fair value
Canadian federal government issued or guaranteed debt	\$ 7,733	\$ 109	\$ 10	\$ 7,832
Canadian provincial and municipal debt	3,546	7	25	3,528
U.S. treasury and other U.S. agency debt	20,609	146	64	20,691
Other foreign government debt	19,684	54	50	19,688
Other debt	3,800	14	23	3,791
Total	\$ 55,372	\$ 330	\$ 172	\$ 55,530

As at October 31, 2018 (\$ millions)	Cost	Gross unrealized gains	Gross unrealized losses	Fair value
Canadian federal government issued or guaranteed debt	\$ 8,903	\$ 38	\$ 50	\$ 8,891
Canadian provincial and municipal debt	4,403	3	54	4,352
U.S. treasury and other U.S. agency debt	19,298	6	163	19,141
Other foreign government debt	20,022	49	81	19,990
Other debt	3,503	6	40	3,469
Total	\$ 56,129	\$ 102	\$ 388	\$ 55,843

(b) Debt investment securities measured at amortized cost

(\$ millions)	April 30, 2019		January 31, 2019		October 31, 2018	
	Fair value	Carrying value ⁽¹⁾	Fair value	Carrying value ⁽¹⁾	Fair value	Carrying value ⁽¹⁾
Canadian federal and provincial government issued or guaranteed debt	\$ 5,806	\$ 5,859	\$ 5,927	\$ 6,011	\$ 6,530	\$ 6,681
U.S. treasury and other U.S. agency debt	4,002	4,074	4,165	4,256	4,321	4,462
Other foreign government debt	2,990	3,006	2,893	2,915	3,086	3,131
Corporate debt	11,022	10,993	7,474	7,469	6,379	6,469
Total	\$ 23,820	\$ 23,932	\$ 20,459	\$ 20,651	\$ 20,316	\$ 20,743

(1) Balances are net of impairment allowances of nil (January 31, 2019 – nil; October 31, 2018 – \$1).

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

The Bank has designated certain instruments, shown in the following table, as equity securities FVOCI, as these investments are expected to be held for the long-term for strategic purposes.

<i>As at April 30, 2019 (\$ millions)</i>	Cost	Gross unrealized gains	Gross unrealized losses	Fair value
Preferred equity instruments	\$ 145	\$ 2	\$ 48	\$ 99
Common shares	1,243	172	14	1,401
Total	\$ 1,388	\$ 174	\$ 62	\$ 1,500

<i>As at January 31, 2019 (\$ millions)</i>	Cost	Gross unrealized gains	Gross unrealized losses	Fair value
Preferred equity instruments	\$ 267	\$ –	\$ 85	\$ 182
Common shares	941	146	16	1,071
Total	\$ 1,208	\$ 146	\$ 101	\$ 1,253

<i>As at October 31, 2018 (\$ millions)</i>	Cost	Gross unrealized gains	Gross unrealized losses	Fair value
Preferred equity instruments	\$ 334	\$ –	\$ 54	\$ 280
Common shares	937	126	38	1,025
Total	\$ 1,271	\$ 126	\$ 92	\$ 1,305

8. Loans, impaired loans and allowance for credit losses**(a) Loans at amortized cost**

<i>(\$ millions)</i>	As at		
	April 30, 2019		
	Gross carrying amount	Allowance for credit losses	Net carrying amount
Residential mortgages	\$ 260,586	\$ 734	\$ 259,852
Personal loans	97,874	2,117	95,757
Credit cards	17,730	1,360	16,370
Business and government	212,920	1,084	211,836
Total	\$ 589,110	\$ 5,295	\$ 583,815

<i>(\$ millions)</i>	As at					
	January 31, 2019			October 31, 2018		
	Gross carrying amount	Allowance for credit losses	Net carrying amount	Gross carrying amount	Allowance for credit losses	Net carrying amount
Residential mortgages	\$ 258,649	\$ 709	\$ 257,940	\$ 253,357	\$ 678	\$ 252,679
Personal loans	96,650	2,111	94,539	96,019	2,109	93,910
Credit cards	17,124	1,212	15,912	16,485	1,213	15,272
Business and government	198,793	1,079	197,714	191,038	1,065	189,973
Total	\$ 571,216	\$ 5,111	\$ 566,105	\$ 556,899	\$ 5,065	\$ 551,834

(b) Impaired loans⁽¹⁾⁽²⁾

	As at		
	April 30, 2019		
(\$ millions)	Gross impaired loans	Allowance for credit losses	Net
Residential mortgages	\$ 1,922	\$ 368	\$ 1,554
Personal loans	1,131	627	504
Credit cards	—	—	—
Business and government	2,311	674	1,637
Total	\$ 5,364	\$ 1,669	\$ 3,695
By geography:			
Canada	\$ 1,078	\$ 371	\$ 707
United States	129	17	112
Mexico	463	188	275
Peru	639	325	314
Chile	842	172	670
Colombia	578	154	424
Other international	1,635	442	1,193
Total	\$ 5,364	\$ 1,669	\$ 3,695

	As at					
	January 31, 2019			October 31, 2018		
(\$ millions)	Gross impaired loans	Allowance for credit losses	Net	Gross impaired loans	Allowance for credit losses	Net
Residential mortgages	\$ 1,868	\$ 362	\$ 1,506	\$ 1,797	\$ 360	\$ 1,437
Personal loans	1,108	640	468	1,069	644	425
Credit cards	—	—	—	—	—	—
Business and government	2,311	678	1,633	2,264	673	1,591
Total	\$ 5,287	\$ 1,680	\$ 3,607	\$ 5,130	\$ 1,677	\$ 3,453
By geography:						
Canada	\$ 1,058	\$ 367	\$ 691	\$ 999	\$ 381	\$ 618
United States	108	24	84	80	25	55
Mexico	413	172	241	359	164	195
Peru	615	338	277	581	317	264
Chile	793	158	635	753	158	595
Colombia	607	162	445	619	159	460
Other international	1,693	459	1,234	1,739	473	1,266
Total	\$ 5,287	\$ 1,680	\$ 3,607	\$ 5,130	\$ 1,677	\$ 3,453

(1) Interest income recognized on impaired loans during the three months ended April 30, 2019 was \$12 (January 31, 2019 – \$14; October 31, 2018 – \$12).

(2) Additional interest income of approximately \$100 would have been recorded if the above loans had not been classified as impaired (January 31, 2019 – \$94; October 31, 2018 – \$93).

(c) Allowance for credit losses**Key inputs and assumptions**

The Bank's allowance calculations are outputs of complex models with a number of underlying assumptions regarding the choice of variable inputs. 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, 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 which can result from changes to any of the above inputs and assumptions.

Allowance for credit losses on loans

(\$ millions)	Balance as at October 31 2018	Provision for credit losses	Net write-offs	Other, including foreign currency adjustment	Balance as at April 30 2019
Residential mortgages	\$ 678	\$ 59	\$ (30)	\$ 27	\$ 734
Personal loans	2,109	729	(776)	55	2,117
Credit cards	1,213	648	(537)	36	1,360
Business and government	1,147	125	(105)	(10)	1,157
	\$ 5,147	\$ 1,561	\$ (1,448)	\$ 108	\$ 5,368
Presented as:					
Allowance for credit losses on loans	\$ 5,065				\$ 5,295
Allowance for credit losses on acceptances	8				10
Allowance for credit losses on off-balance sheet exposures	74				63

(\$ millions)	Balance as at October 31 2017	Provision for credit losses	Net write-offs	Other, including foreign currency adjustment	Balance as at April 30 2018
Residential mortgages	\$ 717	\$ 36	\$ (36)	\$ 1	\$ 718
Personal loans	1,879	586	(579)	38	1,924
Credit cards	1,163	385	(424)	48	1,172
Business and government	1,261	81	(143)	(6)	1,193
	\$ 5,020	\$ 1,088	\$ (1,182)	\$ 81	\$ 5,007
Presented as:					
Allowance for credit losses on loans	\$ 4,920				\$ 4,929
Allowance for credit losses on acceptances	16				5
Allowance for credit losses on off-balance sheet exposures	84				73

Allowance for credit losses on loans

As at April 30, 2019

(\$ millions)	Stage 1	Stage 2	Stage 3	Total
Residential mortgages	\$ 129	\$ 237	\$ 368	\$ 734
Personal loans	609	881	627	2,117
Credit cards	458	902	—	1,360
Business and government	157	253	674	1,084
Total ⁽¹⁾	\$ 1,353	\$ 2,273	\$ 1,669	\$ 5,295

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

Allowance for credit losses on loans

As at October 31, 2018

(\$ millions)	Stage 1	Stage 2	Stage 3	Total
Residential mortgages	\$ 112	\$ 206	\$ 360	\$ 678
Personal loans	578	887	644	2,109
Credit cards	401	812	—	1,213
Business and government	132	260	673	1,065
Total ⁽¹⁾	\$ 1,223	\$ 2,165	\$ 1,677	\$ 5,065

(1) Excludes allowance for credit losses for other financial assets including acceptances, investment securities, deposits with banks and off-balance sheet credit risks amounted to \$89.

Allowance for credit losses on loans

As at April 30, 2018

(\$ millions)	Stage 1	Stage 2	Stage 3	Total
Residential mortgages	\$ 108	\$ 206	\$ 404	\$ 718
Personal loans	502	827	595	1,924
Credit cards	375	797	—	1,172
Business and government	118	250	747	1,115
Total ⁽¹⁾	\$ 1,103	\$ 2,080	\$ 1,746	\$ 4,929

(1) Excludes allowance for credit losses for other financial assets including acceptances, investment securities, deposits with banks and off-balance sheet credit risks amounted to \$88.

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

(\$ millions)	As at and for the three months ended								As at and for the six months ended			
	April 30, 2019				January 31, 2019				April 30, 2019			
	Stage 1	Stage 2	Stage 3	Total	Stage 1	Stage 2	Stage 3	Total	Stage 1	Stage 2	Stage 3	Total
Residential mortgages												
Balance at beginning of period	\$ 121	\$ 226	\$ 362	\$ 709	\$ 112	\$ 206	\$ 360	\$ 678	\$ 112	\$ 206	\$ 360	\$ 678
Provision for credit losses												
Remeasurement ⁽¹⁾	(17)	7	27	17	(24)	8	29	13	(41)	15	56	30
Newly originated or purchased financial assets	12	–	–	12	23	–	–	23	35	–	–	35
Derecognition of financial assets and maturities	–	(2)	–	(2)	(1)	(3)	–	(4)	(1)	(5)	–	(6)
Changes in models and methodologies	–	–	–	–	–	–	–	–	–	–	–	–
Transfer to (from):												
Stage 1	15	(13)	(2)	–	12	(11)	(1)	–	27	(24)	(3)	–
Stage 2	(3)	27	(24)	–	(5)	28	(23)	–	(8)	55	(47)	–
Stage 3	–	(10)	10	–	–	(9)	9	–	–	(19)	19	–
Gross write-offs	–	–	(23)	(23)	–	–	(20)	(20)	–	–	(43)	(43)
Recoveries	–	–	11	11	–	–	2	2	–	–	13	13
Foreign exchange and other movements	1	2	7	10	4	7	6	17	5	9	13	27
Balance at end of period ⁽²⁾	\$ 129	\$ 237	\$ 368	\$ 734	\$ 121	\$ 226	\$ 362	\$ 709	\$ 129	\$ 237	\$ 368	\$ 734
Personal loans												
Balance at beginning of period	\$ 596	\$ 875	\$ 640	\$ 2,111	\$ 578	\$ 887	\$ 644	\$ 2,109	\$ 578	\$ 887	\$ 644	\$ 2,109
Provision for credit losses												
Remeasurement ⁽¹⁾	(155)	138	300	283	(152)	140	304	292	(307)	278	604	575
Newly originated or purchased financial assets	123	–	–	123	118	–	–	118	241	–	–	241
Derecognition of financial assets and maturities	(20)	(23)	–	(43)	(19)	(25)	–	(44)	(39)	(48)	–	(87)
Changes in models and methodologies	–	–	–	–	–	–	–	–	–	–	–	–
Transfer to (from):												
Stage 1	110	(107)	(3)	–	108	(107)	(1)	–	218	(214)	(4)	–
Stage 2	(48)	70	(22)	–	(46)	66	(20)	–	(94)	136	(42)	–
Stage 3	(1)	(79)	80	–	(1)	(79)	80	–	(2)	(158)	160	–
Gross write-offs	–	–	(438)	(438)	–	–	(480)	(480)	–	–	(918)	(918)
Recoveries	–	–	70	70	–	–	72	72	–	–	142	142
Foreign exchange and other movements	4	7	–	11	10	(7)	41	44	14	–	41	55
Balance at end of period ⁽²⁾	\$ 609	\$ 881	\$ 627	\$ 2,117	\$ 596	\$ 875	\$ 640	\$ 2,111	\$ 609	\$ 881	\$ 627	\$ 2,117
Credit cards												
Balance at beginning of period	\$ 410	\$ 802	\$ –	\$ 1,212	\$ 401	\$ 812	\$ –	\$ 1,213	\$ 401	\$ 812	\$ –	\$ 1,213
Provision for credit losses												
Remeasurement ⁽¹⁾	(141)	220	204	283	(68)	108	170	210	(209)	328	374	493
Newly originated or purchased financial assets	171	–	–	171	46	–	–	46	217	–	–	217
Derecognition of financial assets and maturities	(15)	(16)	–	(31)	(14)	(17)	–	(31)	(29)	(33)	–	(62)
Changes in models and methodologies	–	–	–	–	–	–	–	–	–	–	–	–
Transfer to (from):												
Stage 1	63	(63)	–	–	69	(69)	–	–	132	(132)	–	–
Stage 2	(32)	32	–	–	(32)	32	–	–	(64)	64	–	–
Stage 3	–	(71)	71	–	–	(70)	70	–	–	(141)	141	–
Gross write-offs	–	–	(335)	(335)	–	–	(312)	(312)	–	–	(647)	(647)
Recoveries	–	–	55	55	–	–	55	55	–	–	110	110
Foreign exchange and other movements	2	(2)	5	5	8	6	17	31	10	4	22	36
Balance at end of period ⁽²⁾	\$ 458	\$ 902	\$ –	\$ 1,360	\$ 410	\$ 802	\$ –	\$ 1,212	\$ 458	\$ 902	\$ –	\$ 1,360

CONDENSED INTERIM CONSOLIDATED FINANCIAL STATEMENTS

(\$ millions)	As at and for the three months ended								As at and for the six months ended			
	April 30, 2019				January 31, 2019				April 30, 2019			
	Stage 1	Stage 2	Stage 3	Total	Stage 1	Stage 2	Stage 3	Total	Stage 1	Stage 2	Stage 3	Total
Business and government												
Balance at beginning of period	\$ 197	\$ 272	\$ 679	\$ 1,148	\$ 173	\$ 291	\$ 675	\$ 1,139	\$ 173	\$ 291	\$ 675	\$ 1,139
Provision for credit losses												
Remeasurement ⁽¹⁾	(8)	13	64	69	(16)	12	69	65	(24)	25	133	134
Newly originated or purchased financial assets	41	–	–	41	39	–	–	39	80	–	–	80
Derecognition of financial assets and maturities	(38)	(4)	(8)	(50)	(27)	(8)	(7)	(42)	(65)	(12)	(15)	(92)
Changes in models and methodologies	–	–	–	–	–	–	–	–	–	–	–	–
Transfer to (from):												
Stage 1	7	(7)	–	–	30	(30)	–	–	37	(37)	–	–
Stage 2	(3)	3	–	–	(5)	7	(2)	–	(8)	10	(2)	–
Stage 3	–	(3)	3	–	–	(2)	2	–	–	(5)	5	–
Gross write-offs	–	–	(67)	(67)	–	–	(65)	(65)	–	–	(132)	(132)
Recoveries	–	–	11	11	–	–	16	16	–	–	27	27
Foreign exchange and other movements	2	–	(7)	(5)	3	2	(9)	(4)	5	2	(16)	(9)
Balance at end of period including off-balance sheet exposures ⁽²⁾	\$ 198	\$ 274	\$ 675	\$ 1,147	\$ 197	\$ 272	\$ 679	\$ 1,148	\$ 198	\$ 274	\$ 675	\$ 1,147
Less: Allowance for credits losses on off-balance sheet exposures ⁽²⁾⁽³⁾	(41)	(21)	(1)	(63)	(45)	(23)	(1)	(69)	(41)	(21)	(1)	(63)
Balance at end of period ⁽²⁾	\$ 157	\$ 253	\$ 674	\$ 1,084	\$ 152	\$ 249	\$ 678	\$ 1,079	\$ 157	\$ 253	\$ 674	\$ 1,084

- (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) Interest income on impaired loans for residential mortgages, personal and credit cards, and business and government loans totaled \$100 (January 31, 2019 – \$94).
- (3) Allowance for credit losses on off-balance sheet exposures is recorded in other liabilities in the Consolidated Statement of Financial Position.
- (4) Allowance for credit losses on acceptances are recorded against the financial asset in the Consolidated Statement of Financial Position.
- (5) There are no accumulated credit losses on purchased or originated credit impaired loans.

(d) Carrying value of exposures by risk rating

Residential mortgages Category of PD grades (\$ millions)	As at April 30, 2019				As at October 31, 2018			
	Stage 1	Stage 2	Stage 3 ⁽¹⁾	Total	Stage 1	Stage 2	Stage 3 ⁽¹⁾	Total
Very low	\$ 148,139	\$ 403	\$ –	\$ 148,542	\$ 146,461	\$ 307	\$ –	\$ 146,768
Low	59,025	426	–	59,451	58,154	378	–	58,532
Medium	12,635	1,016	–	13,651	11,689	972	–	12,661
High	1,610	3,341	–	4,951	1,615	3,515	–	5,130
Very high	16	1,932	–	1,948	25	1,779	–	1,804
Loans not graded ⁽²⁾	26,202	3,919	–	30,121	23,139	3,526	–	26,665
Default	–	–	1,922	1,922	–	–	1,797	1,797
Total	\$ 247,627	\$ 11,037	\$ 1,922	\$ 260,586	\$ 241,083	\$ 10,477	\$ 1,797	\$ 253,357
Allowance for credit losses	129	237	368	734	112	206	360	678
Carrying value	\$ 247,498	\$ 10,800	\$ 1,554	\$ 259,852	\$ 240,971	\$ 10,271	\$ 1,437	\$ 252,679

- (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 Category of PD grades (\$ millions)	As at April 30, 2019				As at October 31, 2018			
	Stage 1	Stage 2	Stage 3 ⁽¹⁾	Total	Stage 1	Stage 2	Stage 3 ⁽¹⁾	Total
Very low	\$ 29,788	\$ 90	\$ –	\$ 29,878	\$ 30,660	\$ 66	\$ –	\$ 30,726
Low	26,197	275	–	26,472	26,039	151	–	26,190
Medium	8,694	593	–	9,287	8,315	402	–	8,717
High	6,892	3,455	–	10,347	6,686	3,647	–	10,333
Very high	56	1,550	–	1,606	58	1,362	–	1,420
Loans not graded ⁽²⁾	16,754	2,399	–	19,153	15,452	2,112	–	17,564
Default	–	–	1,131	1,131	–	–	1,069	1,069
Total	\$ 88,381	\$ 8,362	\$ 1,131	\$ 97,874	\$ 87,210	\$ 7,740	\$ 1,069	\$ 96,019
Allowance for credit losses	609	881	627	2,117	578	887	644	2,109
Carrying value	\$ 87,772	\$ 7,481	\$ 504	\$ 95,757	\$ 86,632	\$ 6,853	\$ 425	\$ 93,910

- (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, 2019				As at October 31, 2018			
	Stage 1	Stage 2	Stage 3	Total	Stage 1	Stage 2	Stage 3	Total
Category of PD grades (\$ millions)								
Very low	\$ 1,325	\$ 9	\$ –	\$ 1,334	\$ 1,418	\$ 5	\$ –	\$ 1,423
Low	2,442	16	–	2,458	2,436	14	–	2,450
Medium	3,477	52	–	3,529	3,358	71	–	3,429
High	3,205	1,498	–	4,703	2,929	1,455	–	4,384
Very high	43	730	–	773	37	697	–	734
Loans not graded ⁽¹⁾	3,450	1,483	–	4,933	2,906	1,159	–	4,065
Default	–	–	–	–	–	–	–	–
Total	\$ 13,942	\$ 3,788	\$ –	\$ 17,730	\$ 13,084	\$ 3,401	\$ –	\$ 16,485
Allowance for credit losses	458	902	–	1,360	401	812	–	1,213
Carrying value	\$ 13,484	\$ 2,886	\$ –	\$ 16,370	\$ 12,683	\$ 2,589	\$ –	\$ 15,272

(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, 2019				As at October 31, 2018			
	Stage 1	Stage 2	Stage 3	Total	Stage 1	Stage 2	Stage 3	Total
Category of PD grades (\$ millions)								
Very low	\$ 74,992	\$ 1	\$ –	\$ 74,993	\$ 72,321	\$ –	\$ –	\$ 72,321
Low	17,140	1	–	17,141	16,531	2	–	16,533
Medium	6,392	116	–	6,508	6,029	79	–	6,108
High	2,853	698	–	3,551	2,631	670	–	3,301
Very high	29	345	–	374	26	367	–	393
Loans not graded ⁽¹⁾	10,962	2,327	–	13,289	14,774	3,364	–	18,138
Default	–	–	–	–	–	–	–	–
Carrying value	\$ 112,368	\$ 3,488	\$ –	\$ 115,856	\$ 112,312	\$ 4,482	\$ –	\$ 116,794

(1) 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, 2019				As at October 31, 2018			
	Stage 1	Stage 2	Stage 3 ⁽¹⁾	Total	Stage 1	Stage 2	Stage 3 ⁽¹⁾	Total
Grade (\$ millions)								
Investment grade	\$ 100,140	\$ 1,587	\$ –	\$ 101,727	\$ 87,047	\$ 3,770	\$ –	\$ 90,817
Non-investment grade	91,152	12,990	–	104,142	83,730	9,706	–	93,436
Watch list	147	2,762	–	2,909	130	2,689	–	2,819
Loans not graded ⁽²⁾	1,752	79	–	1,831	1,050	652	–	1,702
Default	–	–	2,311	2,311	–	–	2,264	2,264
Total	\$ 193,191	\$ 17,418	\$ 2,311	\$ 212,920	\$ 171,957	\$ 16,817	\$ 2,264	\$ 191,038
Allowance for credit losses	157	253	674	1,084	132	260	673	1,065
Carrying value	\$ 193,034	\$ 17,165	\$ 1,637	\$ 211,836	\$ 171,825	\$ 16,557	\$ 1,591	\$ 189,973

(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, 2019				As at October 31, 2018			
	Stage 1	Stage 2	Stage 3 ⁽¹⁾	Total	Stage 1	Stage 2	Stage 3 ⁽¹⁾	Total
Grade (\$ millions)								
Investment grade	\$ 173,367	\$ 1,703	\$ –	\$ 175,070	\$ 159,880	\$ 1,663	\$ –	\$ 161,543
Non-investment grade	57,522	2,740	–	60,262	56,001	3,445	–	59,446
Watch list	25	943	–	968	81	977	–	1,058
Loans not graded ⁽²⁾	2,325	201	–	2,526	2,178	28	–	2,206
Default	–	–	65	65	–	–	4	4
Total	\$ 233,239	\$ 5,587	\$ 65	\$ 238,891	\$ 218,140	\$ 6,113	\$ 4	\$ 224,257
Allowance for credit losses	41	21	1	63	41	31	2	74
Carrying value	\$ 233,198	\$ 5,566	\$ 64	\$ 238,828	\$ 218,099	\$ 6,082	\$ 2	\$ 224,183

(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.

(\$ millions)	As at April 30, 2019			
	31-60 days	61-90 days	91 days and greater ⁽²⁾	Total
Residential mortgages	\$ 1,285	\$ 559	\$ –	\$ 1,844
Personal loans	654	344	–	998
Credit cards	277	187	402	866
Business and government	232	134	–	366
Total	\$ 2,448	\$ 1,224	\$ 402	\$ 4,074

(\$ millions)	As at January 31, 2019			
	31-60 days	61-90 days	91 days and greater ⁽²⁾	Total
Residential mortgages	\$1,256	\$ 592	\$ –	\$1,848
Personal loans	614	367	–	981
Credit cards	230	161	380	771
Business and government	220	69	–	289
Total	\$2,320	\$1,189	\$380	\$3,889

(\$ millions)	As at October 31, 2018			
	31-60 days	61-90 days	91 days and greater ⁽²⁾	Total
Residential mortgages	\$1,290	\$ 521	\$ –	\$1,811
Personal loans	609	322	–	931
Credit cards	231	154	353	738
Business and government	167	40	–	207
Total	\$2,297	\$1,037	\$353	\$3,687

(1) Loans past due 30 days or less are not presented in this analysis as they are not administratively considered past due.

(2) 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) Loans acquired under FDIC guarantee

Loans purchased as part of the acquisition of R-G Premier Bank of Puerto Rico are subject to loss share agreements with the FDIC. Under this agreement, the FDIC guarantees 80% of net loan losses. As at April 30, 2019, the carrying value of loans covered by the FDIC guarantee was \$1.2 billion (January 31, 2019 – \$1.2 billion; October 31, 2018 – \$1.3 billion). The remaining guarantee on single family home loans will expire in April 2020.

(g) Purchased credit-impaired loans

Certain financial assets including loans are credit-impaired on initial recognition.

The following table provides details of such assets:

(\$ millions)	As at		
	April 30 2019	January 31 2019	October 31 2018
Unpaid principal balance ⁽¹⁾	\$ 538	\$ 533	\$ 548
Credit related fair value adjustments	(150)	(156)	(168)
Carrying value	388	377	380
Stage 3 allowance	–	–	–
Carrying value net related allowance	\$ 388	\$ 377	\$ 380

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

9. 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 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, and/or to third-party investors. The Trust issues securities to third-party investors.

The sale of mortgages under the above program does not meet the derecognition requirements, as the Bank retains the pre-payment and interest rate risks associated with the mortgages, which represents substantially all the risk 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:

(\$ millions)	As at		
	April 30 2019 ⁽¹⁾	January 31 2019 ⁽¹⁾	October 31 2018 ⁽¹⁾
Assets			
Carrying value of residential mortgage loans	\$ 21,110	\$ 20,439	\$ 20,498
Other related assets ⁽²⁾	3,285	2,963	2,679
Liabilities			
Carrying value of associated liabilities	\$ 21,994	\$ 21,173	\$ 21,459

(1) The fair value of the transferred assets is \$24,723 (January 31, 2019 – \$23,755; October 31, 2018 – \$23,237) and the fair value of the associated liabilities is \$23,822 (January 31, 2019 – \$22,560; October 31, 2018 – \$22,468) for a net position of \$901 (January 31, 2019 – \$1,195; October 31, 2018 – \$769).

(2) These include cash held in trust and trust permitted investment assets 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 unsecured personal lines of credit, 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 and credit cards loans.

During the quarter, the Bank securitized the following receivables:

- \$1,792 million of the Bank's Canadian credit card receivables were securitized in February 2019, on a revolving basis through Trillium Credit Card Trust II (Trillium), a Bank-sponsored consolidated structured entity. As at April 30, 2019, US \$1,359 million (\$1,820 million Canadian dollars) Class A senior notes and Class B and Class C subordinated notes were outstanding and included in Deposits – Business and government on the Consolidated Statement of Financial Position. As at April 30, 2019, assets pledged in relation to these notes were credit card receivables, denominated in Canadian dollars, of \$1,936 million.
- \$896 million of the Bank's Canadian auto loan receivables were securitized in February 2019, through Securitized Term Auto Receivables Trust 2019-1 (START 2019-1), a Bank-sponsored consolidated structured entity. As at April 30, 2019, US \$500 million (\$670 million Canadian dollars) START 2019-1 Class A notes that were issued to third party investors were outstanding and included in Deposits – Business and government on the Consolidated Statement of Financial Position. As at April 30, 2019, assets pledged in relation to these notes were Canadian auto loan receivables, denominated in Canadian dollars, of \$824 million.

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 along with the cash collateral received from the counterparty that is classified as deposit liabilities.

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

(\$ millions)	As at		
	April 30 2019 ⁽¹⁾	January 31 2019 ⁽¹⁾	October 31 2018 ⁽¹⁾
Carrying value of securities associated with:			
Repurchase agreements ⁽²⁾	\$ 106,895	\$ 91,557	\$ 82,816
Securities lending agreements	51,554	56,450	49,718
Total	158,449	148,007	132,534
Carrying value of associated liabilities ⁽³⁾	\$ 124,331	\$ 116,527	\$ 101,257

(1) The fair value of transferred assets is \$158,449 (January 31, 2019 – \$148,007; October 31, 2018 – \$132,534) and the fair value of the associated liabilities is \$124,331 (January 31, 2019 – \$116,527; October 31, 2018 – \$101,257), for a net position of \$34,118 (January 31, 2019 – \$31,480; October 31, 2018 – \$31,277).

(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.

10. Investments in associates

The Bank had significant investments in the following associates:

(\$ millions)	Country of incorporation	Nature of business	Ownership percentage	Date of financial statements ⁽¹⁾	As at		
					April 30 2019 Carrying value	January 31 2019 Carrying value	October 31 2018 Carrying value
Thanachart Bank Public Company Limited	Thailand	Banking	49.00%	April 30, 2019	\$ 3,266	\$ 3,218	\$ 2,961
Canadian Tire's Financial Services business (CTFS) ⁽²⁾	Canada	Financial Services	20.00%	March 31, 2019	521	518	518
Bank of Xi'an Co. Ltd.	China	Banking	17.99%	March 31, 2019	848	822	772
Maduro & Curiel's Bank N.V. ⁽³⁾	Curacao	Banking	48.10%	March 31, 2019	322	305	304

(1) Represents the date of the most recent financial statements made available to the Bank by the associates' management.

(2) Under the agreement Canadian Tire has an option to sell to the Bank up to an additional 29% equity interest within the next 10 years at the then fair value, that can be settled, at the Bank's discretion, by issuance of common shares or cash. After 10 years, 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) 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, 2019, these reserves amounted to \$63 (January 31, 2019 – \$62; October 31, 2018 – \$62).

11. Deposits

(\$ millions)	As at					January 31	October 31
	April 30, 2019					2019	2018
	Payable on demand ⁽¹⁾		Payable after notice ⁽²⁾	Payable on a fixed date ⁽³⁾	Total	Total	Total
	Interest-bearing	Non-interest-bearing					
Personal	\$ 6,924	\$ 8,290	\$ 124,220	\$ 85,499	\$ 224,933	\$ 221,921	\$ 214,545
Business and government	92,632	24,929	37,574	288,572	443,707	434,749	422,002
Financial institutions	6,327	1,103	1,515	34,697	43,642	34,209	39,987
	\$ 105,883	\$ 34,322	\$ 163,309 ⁽⁴⁾	\$ 408,768	\$ 712,282	\$ 690,879	\$ 676,534
Recorded in:							
Canada	\$ 78,553	\$ 17,328	\$ 126,994	\$ 258,302	\$ 481,177	\$ 471,509	\$ 472,798
United States	14,739	158	6,045	52,766	73,708	70,549	59,938
United Kingdom	–	–	340	18,343	18,683	17,059	16,847
Mexico	11	4,760	6,697	13,019	24,487	23,446	21,151
Peru	4,987	96	4,547	8,325	17,955	16,004	15,213
Chile	3,357	3,249	151	18,033	24,790	25,097	24,180
Colombia	46	577	4,285	5,041	9,949	10,194	9,543
Other International	4,190	8,154	14,250	34,939	61,533	57,021	56,864
Total ⁽⁵⁾	\$ 105,883	\$ 34,322	\$ 163,309	\$ 408,768	\$ 712,282	\$ 690,879	\$ 676,534

(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 \$133 (January 31, 2019 – \$128; October 31, 2018 – \$141) of non-interest-bearing deposits.

(5) Deposits denominated in U.S. dollars amount to \$237,027 (January 31, 2019 – \$224,829; October 31, 2018 – \$219,195), deposits denominated in Chilean pesos amount to \$22,610 (January 31, 2019 – \$23,141; October 31, 2018 – \$22,731), deposits denominated in Mexican pesos amount to \$20,863 (January 31, 2019 – \$20,240; October 31, 2018 – \$18,341) and deposits denominated in other foreign currencies amount to \$84,606 (January 31, 2019 – \$84,400; October 31, 2018 – \$79,582).

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, 2019	\$ 46,113	\$ 22,925	\$ 32,412	\$ 99,940	\$ 14,948	\$ 216,338
As at January 31, 2019	\$ 41,841	\$ 24,422	\$ 35,521	\$ 96,448	\$ 14,542	\$ 212,774
As at October 31, 2018	\$ 36,670	\$ 23,913	\$ 42,830	\$ 99,734	\$ 19,872	\$ 223,019

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

12. Capital and financing transactions

Subordinated debentures

Redemption

During the second quarter, the Bank purchased for cancellation approximately US \$12 million floating rate subordinated capital debentures due August, 2085.

Issuance

On January 18, 2019, the Bank issued \$1.75 billion subordinated debentures due January 18, 2029. On or after January 18, 2024, the debentures are redeemable at par plus accrued and unpaid interest. Interest will be payable semi-annually at a rate of 3.89% per annum until January 18, 2024 and thereafter payable quarterly until January 18, 2029 at the 90 day Bankers' Acceptance rate plus 1.58%. The debentures contain Non-Viability Contingent Capital (NVCC) provisions necessary for the debentures to qualify as Tier 2 regulatory capital.

Preferred shares

On January 28, 2019, the Bank redeemed all outstanding Non-Cumulative Preferred Shares Series 22 and 23 at their par value of \$234 million and \$66 million, respectively, together with all declared and unpaid dividends.

Common shares

Normal Course Issuer Bid

On May 28, 2019, the Bank announced its intention to seek TSX approval for a normal course issuer bid (the "2019 NCIB") pursuant to which it may repurchase for cancellation up to 24 million of the Bank's common shares. Purchases under the 2019 NCIB may commence on June 4, 2019 and terminate upon earlier of: (i) the Bank purchasing the maximum number of common shares under the 2019 NCIB, (ii) the Bank providing a notice of termination, or (iii) June 3, 2020. On a quarterly basis, the Bank will notify OSFI prior to making purchases.

On May 29, 2018, the Bank announced that OSFI and the Toronto Stock Exchange (TSX) approved a normal course issuer bid (the "2018 NCIB") pursuant to which it may repurchase for cancellation up to 24 million of the Bank's common shares. This 2018 NCIB will terminate on June 3, 2019.

During the six months ended April 30, 2019, the Bank repurchased and cancelled approximately 7.25 million common shares as part of the 2018 NCIB at a volume weighted average price of \$72.19 per share for a total amount of \$523 million. Under the 2018 NCIB, the Bank has cumulatively repurchased and cancelled approximately 13.23 million common shares at an average price of \$73.84 per share.

13. Capital management

The Bank's regulatory capital and leverage position were as follows:

(\$ millions)	As at		
	April 30 2019 ⁽¹⁾	January 31 2019 ⁽¹⁾	October 31 2018 ⁽¹⁾
Capital			
Common Equity Tier 1 capital	\$ 46,193	\$ 45,344	\$ 44,443
Net Tier 1 capital	51,709	50,869	50,187
Total regulatory capital	60,855	59,796	57,364
Risk-weighted assets/exposures used in calculation of capital ratios			
CET1 risk-weighted assets ⁽¹⁾⁽²⁾	\$ 415,212	\$ 408,565	\$ 400,507
Tier 1 risk-weighted assets ⁽¹⁾⁽²⁾	415,212	408,565	400,680
Total risk-weighted assets ⁽¹⁾⁽²⁾	415,212	408,565	400,853
Leverage exposures	1,204,111	1,167,691	1,119,099
Capital ratios			
Common Equity Tier 1 capital ratio	11.1%	11.1%	11.1%
Tier 1 capital ratio	12.5%	12.5%	12.5%
Total capital ratio	14.7%	14.6%	14.3%
Leverage ratio	4.3%	4.4%	4.5%

(1) In accordance with OSFI's requirements, effective January 31, 2019, CVA risk-weighted assets have been fully phased-in. In the prior year, CVA RWA were calculated using scalars of 0.80, 0.83 and 0.86 to compute the CET1 capital ratio, Tier 1 capital ratio and Total capital ratio, respectively.

(2) As at April 30, 2019, January 31, 2019 and October 31, 2018, the Bank did not have a regulatory capital floor add-on for CET1, Tier 1 and Total capital RWA.

The Bank substantially exceeded the OSFI minimum capital ratios as at April 30, 2019, including the Domestic Stability Buffer requirement.

14. Share-based payments

During the first quarter, the Bank granted 1,548,832 options with an exercise price of \$72.28 per option and a weighted average fair value of \$5.02 to selected 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 \$1 million and \$5 million for the three months and six months ended April 30, 2019 (April 30, 2018 – \$1 million and \$5 million) as a result of equity-classified share-based payment expense.

15. 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⁾.

(\$ millions)	For the three months ended					
	Pension plans			Other benefit plans		
	April 30 2019	January 31 2019	April 30 2018	April 30 2019	January 31 2019	April 30 2018
Defined benefit service cost	\$ 71	\$ 76	\$ 87	\$ 7	\$ 7	\$ 16
Interest on net defined benefit (asset) liability	1	(2)	4	13	13	12
Other	4	4	3	1	1	(1)
Defined benefit expense	\$ 76	\$ 78	\$ 94	\$ 21	\$ 21	\$ 27
Defined contribution expense	\$ 15	\$ 14	\$ 10	n/a	n/a	n/a
Increase (decrease) in other comprehensive income related to employee benefits ⁽³⁾	\$ (219)	\$ (395)	\$ 15	\$ (17)	\$ (65)	\$ 4

(\$ millions)	For the six months ended			
	Pension plans		Other benefit plans	
	April 30 2019	April 30 2018	April 30 2019	April 30 2018
Defined benefit service cost ⁽²⁾	\$ 147	\$ 166	\$ 14	\$(177)
Interest on net defined benefit (asset) liability	(1)	4	26	25
Other	8	6	2	(3)
Defined benefit expense	\$ 154	\$ 176	\$ 42	\$(155)
Defined contribution expense	\$ 29	\$ 20	n/a	n/a
Increase (decrease) in other comprehensive income related to employee benefits ⁽³⁾	\$ (614)	\$ 65	\$ (82)	\$ 38

(1) Other plans operated by certain subsidiaries of the Bank are not considered material and are not included in this note.

(2) The service cost for other benefit plans includes a decrease of \$203 million in the first quarter of fiscal 2018, related to modifications to the Bank's post-retirement benefits plan.

(3) 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.

16. 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 three business lines: Canadian Banking, International Banking and Global Banking and Markets. 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 2018 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.

Scotiabank's results, and average assets and liabilities, allocated by these operating segments, are as follows:

For the three months ended April 30, 2019					
	Canadian Banking	International Banking	Global Banking and Markets	Other ⁽¹⁾⁽²⁾	Total
Taxable equivalent basis (\$ millions)					
Net interest income ⁽³⁾	\$ 1,990	\$ 2,121	\$ 350	\$ (268)	\$ 4,193
Non-interest income ⁽⁴⁾⁽⁵⁾	1,390	1,235	801	184	3,610
Total revenues	3,380	3,356	1,151	(84)	7,803
Provision for credit losses	252	628	(6)	(1)	873
Non-interest expenses	1,711	1,710	594	31	4,046
Provision for income taxes	369	249	143	(136)	625
Net income	\$ 1,048	\$ 769	\$ 420	\$ 22	\$ 2,259
Net income attributable to non-controlling interests in subsidiaries	\$ –	\$ 69	\$ –	\$ 1	\$ 70
Net income attributable to equity holders of the Bank	\$ 1,048	\$ 700	\$ 420	\$ 21	\$ 2,189
Average assets (\$ billions)	\$ 358	\$ 203	\$ 361	\$ 117	\$ 1,039
Average liabilities (\$ billions)	\$ 281	\$ 156	\$ 295	\$ 238	\$ 970

(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 and non-interest income and provision for income taxes of \$41 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.

(2) Net income attributable to equity holders includes Net gain on divestitures of \$142 (pre-tax \$173).

(3) Interest income is reported net of interest expense as management relies primarily on net interest income as a performance measure.

(4) Card revenues, Banking services fees, and Investment management and trust fees are mainly earned in Canadian and International Banking. Mutual fund and Brokerage fees are primarily earned in Canadian Banking with the remainder being earned in International Banking. Underwriting and other advisory fees are predominantly earned in Global Banking and Markets.

(5) Includes income (on a taxable equivalent basis) from investments in associated corporations for Canadian Banking – \$18; International Banking – \$210 and Other – \$(58).

For the three months ended January 31, 2019					
	Canadian Banking	International Banking	Global Banking and Markets	Other ⁽¹⁾	Total
Taxable equivalent basis (\$ millions)					
Net interest income ⁽²⁾	\$ 2,036	\$ 2,080	\$ 372	\$ (214)	\$ 4,274
Non-interest income ⁽³⁾⁽⁴⁾	1,379	1,251	703	(3)	3,330
Total revenues	3,415	3,331	1,075	(217)	7,604
Provision for credit losses	233	470	(16)	1	688
Non-interest expenses	1,730	1,742	645	54	4,171
Provision for income taxes	379	226	111	(218)	498
Net income	\$ 1,073	\$ 893	\$ 335	\$ (54)	\$ 2,247
Net income attributable to non-controlling interests in subsidiaries	\$ –	\$ 111	\$ –	\$ –	\$ 111
Net income attributable to equity holders of the Bank	\$ 1,073	\$ 782	\$ 335	\$ (54)	\$ 2,136
Average assets (\$ billions)	\$ 356	\$ 197	\$ 364	\$ 116	\$ 1,033
Average liabilities (\$ billions)	\$ 274	\$ 154	\$ 297	\$ 239	\$ 964

(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 and non-interest income and provision for income taxes of \$34 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.

(2) Interest income is reported net of interest expense as management relies primarily on net interest income as a performance measure.

(3) Card revenues, Banking services fees, and Investment management and trust fees are mainly earned in Canadian and International Banking. Mutual fund and Brokerage fees are primarily earned in Canadian Banking with the remainder being earned in International Banking. Underwriting and other advisory fees are predominantly earned in Global Banking and Markets.

(4) Includes income (on a taxable equivalent basis) from investments in associated corporations for Canadian Banking – \$13; International Banking – \$161 and Other – \$(45).

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For the three months ended April 30, 2018

Taxable equivalent basis (\$ millions)	Canadian Banking	International Banking	Global Banking and Markets	Other ⁽¹⁾	Total
Net interest income ⁽²⁾	\$ 1,906	\$ 1,758	\$ 362	\$ (76)	\$ 3,950
Non-interest income ⁽³⁾⁽⁴⁾	1,325	984	793	6	3,108
Total revenues	3,231	2,742	1,155	(70)	7,058
Provision for credit losses	205	340	(11)	–	534
Non-interest expenses	1,641	1,438	565	82	3,726
Provision for income taxes	368	219	154	(120)	621
Net income	\$ 1,017	\$ 745	\$ 447	\$ (32)	\$ 2,177
Net income attributable to non-controlling interests in subsidiaries	\$ –	\$ 70	\$ –	\$ –	\$ 70
Net income attributable to equity holders of the Bank	\$ 1,017	\$ 675	\$ 447	\$ (32)	\$ 2,107
Average assets (\$ billions)	\$ 339	\$ 160	\$ 321	\$ 121	\$ 941
Average liabilities (\$ billions)	\$ 249	\$ 124	\$ 269	\$ 237	\$ 879

(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 and non-interest income and provision for income taxes of \$27 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.

(2) Interest income is reported net of interest expense as management relies primarily on net interest income as a performance measure.

(3) Card revenues, Banking services fees, and Investment management and trust fees are mainly earned in Canadian and International Banking. Mutual fund and Brokerage fees are primarily earned in Canadian Banking with the remainder being earned in International Banking. Underwriting and other advisory fees are predominantly earned in Global Banking and Markets.

(4) Includes income (on a taxable equivalent basis) from investments in associated corporations for Canadian Banking – \$44; International Banking – \$156 and Other – \$(46).

For the six months ended April 30, 2019

Taxable equivalent basis (\$ millions)	Canadian Banking	International Banking	Global Banking and Markets	Other ⁽¹⁾⁽²⁾	Total
Net interest income ⁽³⁾	\$ 4,026	\$ 4,201	\$ 722	\$ (482)	\$ 8,467
Non-interest income ⁽⁴⁾⁽⁵⁾	2,769	2,486	1,504	181	6,940
Total revenues	6,795	6,687	2,226	(301)	15,407
Provision for credit losses	485	1,098	(22)	–	1,561
Non-interest expenses	3,441	3,452	1,239	85	8,217
Provision for income taxes	748	475	254	(354)	1,123
Net income	\$ 2,121	\$ 1,662	\$ 755	\$ (32)	\$ 4,506
Net income attributable to non-controlling interests in subsidiaries	\$ –	\$ 180	\$ –	\$ 1	\$ 181
Net income attributable to equity holders of the Bank	\$ 2,121	\$ 1,482	\$ 755	\$ (33)	\$ 4,325
Average assets (\$ billions)	\$ 357	\$ 200	\$ 363	\$ 116	\$ 1,036
Average liabilities (\$ billions)	\$ 278	\$ 155	\$ 296	\$ 238	\$ 967

(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 and non-interest income and provision for income taxes of \$75 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.

(2) Net income attributable to equity holders includes Net gain on divestitures of \$142 (pre-tax \$173).

(3) Interest income is reported net of interest expense as management relies primarily on net interest income as a performance measure.

(4) Card revenues, Banking services fees, and Investment management and trust fees are mainly earned in Canadian and International Banking. Mutual fund and Brokerage fees are primarily earned in Canadian Banking with the remainder being earned in International Banking. Underwriting and other advisory fees are predominantly earned in Global Banking and Markets.

(5) Includes income (on a taxable equivalent basis) from investments in associated corporations for Canadian Banking – \$31; International Banking – \$371 and Other – \$(103).

For the six months ended April 30, 2018

	Canadian Banking	International Banking	Global Banking and Markets	Other ⁽¹⁾	Total
Taxable equivalent basis (\$ millions)					
Net interest income ⁽²⁾	\$ 3,845	\$ 3,465	\$ 752	\$ (176)	\$ 7,886
Non-interest income ⁽³⁾⁽⁴⁾	2,689	1,981	1,593	(3)	6,260
Total revenues	6,534	5,446	2,345	(179)	14,146
Provision for credit losses	415	684	(20)	(1)	1,078
Non-interest expenses	3,246	2,880	1,137	(39)	7,224
Provision for income taxes	754	412	327	(163)	1,330
Net income	\$ 2,119	\$ 1,470	\$ 901	\$ 24	\$ 4,514
Net income attributable to non-controlling interests in subsidiaries	\$ –	\$ 128	\$ –	\$ –	\$ 128
Net income attributable to equity holders of the Bank	\$ 2,119	\$ 1,342	\$ 901	\$ 24	\$ 4,386
Average assets (\$ billions)	\$ 337	\$ 157	\$ 327	\$ 117	\$ 938
Average liabilities (\$ billions)	\$ 249	\$ 120	\$ 272	\$ 235	\$ 876

(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 and non-interest income and provision for income taxes of \$53 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.

(2) Interest income is reported net of interest expense as management relies primarily on net interest income as a performance measure.

(3) Card revenues, Banking services fees, and Investment management and trust fees are mainly earned in Canadian and International Banking. Mutual fund and Brokerage fees are primarily earned in Canadian Banking with the remainder being earned in International Banking. Underwriting and other advisory fees are predominantly earned in Global Banking and Markets.

(4) Includes income (on a taxable equivalent basis) from investments in associated corporations for Canadian Banking – \$59; International Banking – \$289 and Other – \$(84).

17. Interest income and expense

	For the three months ended						For the six months ended			
	April 30, 2019		January 31, 2019		April 30, 2018		April 30, 2019		April 30, 2018	
(\$ 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⁾	\$ 7,641	\$ 3,892	\$ 7,570	\$ 3,711	\$ 6,382	\$ 2,755	\$ 15,211	\$ 7,603	\$ 12,554	\$ 5,286
Measured at FVOCI ⁽¹⁾	378	–	353	–	301	–	731	–	566	–
Other	8,019	3,892	7,923	3,711	6,683	2,755	15,942	7,603	13,120	5,286
	82	16	68	6	52	30	150	22	96	44
Total	\$ 8,101	\$ 3,908	\$ 7,991	\$ 3,717	\$ 6,735	\$ 2,785	\$ 16,092	\$ 7,625	\$ 13,216	\$ 5,330

(1) The interest income/expense on financial assets/liabilities are calculated using the effective interest method.

18. Trading revenues

The following table presents details of trading revenues.

	For the three months ended			For the six months ended	
	April 30 2019	January 31 2019	April 30 2018	April 30 2019	April 30 2018
Interest rate and credit	\$ 81	\$ 7	\$ 60	\$ 88	\$ 160
Equities	123	123	157	246	252
Commodities	45	68	63	113	135
Foreign exchange	59	84	68	143	151
Other	78	47	10	125	47
Total	\$ 386	\$ 329	\$ 358	\$ 715	\$ 745

19. Earnings per share

(\$ millions)	For the three months ended			For the six months ended	
	April 30 2019	January 31 2019	April 30 2018	April 30 2019	April 30 2018
Basic earnings per common share					
Net income attributable to common shareholders	\$ 2,125	\$ 2,107	\$ 2,042	\$ 4,232	\$ 4,291
Weighted average number of common shares outstanding (millions)	1,224	1,226	1,198	1,225	1,199
Basic earnings per common share ⁽¹⁾ (in dollars)	\$ 1.74	\$ 1.72	\$ 1.70	\$ 3.46	\$ 3.58
Diluted earnings per common share					
Net income attributable to common shareholders	\$ 2,125	\$ 2,107	\$ 2,042	\$ 4,232	\$ 4,291
Dilutive impact of share-based payment options and others ⁽²⁾	37	41	2	76	34
Net income attributable to common shareholders (diluted)	\$ 2,162	\$ 2,148	\$ 2,044	\$ 4,308	\$ 4,325
Weighted average number of common shares outstanding (millions)	1,224	1,226	1,198	1,225	1,199
Dilutive impact of share-based payment options and others ⁽²⁾ (millions)	28	29	5	28	16
Weighted average number of diluted common shares outstanding (millions)	1,252	1,255	1,203	1,253	1,215
Diluted earnings per common share ⁽¹⁾ (in dollars)	\$ 1.73	\$ 1.71	\$ 1.70	\$ 3.44	\$ 3.56

(1) Earnings per share calculations are based on full dollar and share amounts.

(2) Certain tandem stock appreciation rights or 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.

20. 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, 2018.

(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 Advanced Internal Ratings-Based approach (AIRB) 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 AIRB 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⁾	As at				
	April 30, 2019			January 31 2019	October 31 2018
(\$ millions)	AIRB	Standardized	Total	Total	Total
By exposure sub-type					
Non-retail					
Drawn ⁽²⁾⁽³⁾	\$ 368,240	\$ 66,312	\$ 434,552	\$ 422,234	\$ 425,009
Undrawn commitments	91,515	5,288	96,803	94,532	92,303
Other exposures ⁽⁴⁾	96,563	10,458	107,021	104,160	105,232
Total non-retail	\$ 556,318	\$ 82,058	\$ 638,376	\$ 620,926	\$ 622,544
Retail					
Drawn ⁽⁵⁾	\$ 195,526	\$ 93,743	\$ 289,269	\$ 286,670	\$ 278,605
Undrawn commitments	48,371	–	48,371	47,729	48,085
Total retail	\$ 243,897	\$ 93,743	\$ 337,640	\$ 334,399	\$ 326,690
Total	\$ 800,215	\$ 175,801	\$ 976,016	\$ 955,325	\$ 949,234

(1) After credit risk mitigation and excludes equity securities and other assets.

(2) Non-retail AIRB drawn exposures include government guaranteed and privately insured mortgages.

(3) Non-retail drawn includes loans, bankers' acceptances, deposits with financial institutions and FVOCI debt securities.

(4) 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.

(5) Retail drawn includes residential mortgages, credit cards, lines of credit and other personal loans.

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, 2018.

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, 2019, 42% (January 31, 2019 – 42%; October 31, 2018 – 43%) 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 55% (January 31, 2019 – 55%; October 31, 2018 – 54%).

Retail standardized portfolio

The retail standardized portfolio of \$94 billion as at April 30, 2019 (January 31, 2019 – \$92 billion; October 31, 2018 – \$87 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, \$49 billion (January 31, 2019 – \$48 billion; October 31, 2018 – \$45 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, 2019, 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 \$69 million (January 31, 2019 – \$66 million; April 30, 2018 – \$66 million) in the absence of hedging activity, primarily from exposure to U.S. dollars. The Bank hedges a portion of this foreign currency risk.

A similar change in the Canadian dollar as at April 30, 2019, would decrease (increase) the unrealized foreign currency translation gains in the accumulated other comprehensive income section of shareholders' equity by approximately \$386 million (January 31, 2019 – \$391 million; April 30, 2018 – \$350 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 7.

Trading portfolio risk management

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

(\$ millions)	For the three months ended			As at	As at	
	April 30, 2019			April 30	January 31	April 30
	Average	High	Low	2019	2019	2018
Credit spread plus interest rate	\$ 9.6	\$13.2	\$ 8.2	\$ 8.5	\$ 9.8	\$ 11.5
Credit spread	6.9	10.2	5.4	6.2	6.1	8.5
Interest rate	6.8	8.0	5.5	6.5	7.0	9.8
Equities	3.3	4.7	2.2	4.1	4.2	3.5
Foreign exchange	3.6	6.4	2.4	3.1	2.5	3.3
Commodities	2.1	3.2	1.5	2.6	2.5	1.7
Debt specific	4.3	5.1	3.6	3.7	4.3	3.2
Diversification effect	(11.6)	n/a	n/a	(12.0)	(12.3)	(11.3)
Total VaR	\$ 11.3	\$16.0	\$ 9.2	\$ 10.0	\$ 11.0	\$ 11.9
Total Stressed VaR	\$ 33.7	\$41.1	\$30.1	\$ 32.0	\$ 34.7	\$ 48.5

(iv) Operational risk

Operational risk is the risk of loss, whether direct or indirect, to which the Bank is exposed due to inadequate or failed internal processes or systems, human error, or external events. Operational risk includes legal and regulatory risk, business process and change risk, fiduciary or disclosure breaches, cyber risks, technology failure, financial crime and environmental risk. It exists in some form in every Bank business and function.

Operational risk can not only result in financial loss, but also regulatory sanctions and damage to the Bank's reputation. The Bank has developed policies, processes and assessment methodologies to ensure that operational risk is appropriately identified and managed with effective controls.

(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 investments and 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 under a benchmark rate.

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

(\$ millions)	Fair value			Change in fair value			Cumulative change in fair value ⁽¹⁾		
	As at			For the three months ended			As at		
	April 30 2019	January 31 2019	April 30 2018	April 30 2019	January 31 2019	April 30 2018	April 30 2019	January 31 2019	April 30 2018
Assets									
Investment securities ⁽²⁾	\$ 14	\$ 14	\$ 13	\$ –	\$ –	\$ –	\$ –	\$ –	\$ –
Liabilities									
Senior note liabilities ⁽³⁾	\$ 10,919	\$ 9,907	\$ 6,575	\$ (774)	\$ (176)	\$ 225	\$ (172)	\$ 602	\$ 193

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

(2) Changes in fair value are recorded in non-interest income – other.

(3) 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 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.

(\$ millions)	Senior note liabilities					
	Contractual maturity amount ⁽¹⁾	Carrying value	Difference between carrying value and contractual maturity amount	Changes in fair value for the three month period attributable to changes in own credit risk recorded in other comprehensive income		Cumulative changes in fair value due to changes in own credit risk ⁽¹⁾
As at April 30, 2019	\$ 10,747	\$ 10,919	\$ (172)	\$ (43)	\$ (79)	
As at January 31, 2019	\$ 10,509	\$ 9,907	\$ 602	\$ 30	\$ (36)	
As at April 30, 2018	\$ 6,768	\$ 6,575	\$ 193	\$ (7)	\$ (50)	

(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 consolidated financial statements in the 2018 Annual Report for the valuation techniques used to fair value its significant financial assets and liabilities.

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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.

(\$ millions)	As at					
	April 30, 2019		January 31, 2019		October 31, 2018	
	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	\$ 50,121	\$ 50,121	\$ 52,942	\$ 52,942	\$ 62,269	\$ 62,269
Trading assets	117,140	117,140	106,956	106,956	100,262	100,262
Financial instruments designated at fair value through profit or loss	14	14	14	14	12	12
Securities purchased under resale agreements and securities borrowed	126,090	126,090	127,959	127,959	104,018	104,018
Derivative financial instruments	31,358	31,358	32,161	32,161	37,558	37,558
Investment securities – other	61,214	61,214	57,335	57,335	57,653	57,653
Investment securities – amortized cost	23,820	23,932	20,459	20,651	20,316	20,743
Loans	588,619	583,815	568,656	566,105	553,758	551,834
Customers' liability under acceptances	12,823	12,823	18,737	18,737	16,329	16,329
Other financial assets	12,761	12,761	13,079	13,079	10,913	10,913
Liabilities:						
Deposits	712,949	712,282	690,101	690,879	674,535	676,534
Financial instruments designated at fair value through profit or loss	10,919	10,919	9,907	9,907	8,188	8,188
Acceptances	12,833	12,833	18,746	18,746	16,338	16,338
Obligations related to securities sold short	29,957	29,957	31,621	31,621	32,087	32,087
Derivative financial instruments	33,176	33,176	35,970	35,970	37,967	37,967
Obligations related to securities sold under repurchase agreements and securities lent	124,331	124,331	116,527	116,527	101,257	101,257
Subordinated debentures	7,801	7,554	7,593	7,492	5,267	5,698
Other financial liabilities	38,030	37,601	36,446	36,231	35,432	34,805

(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, present value of cash flows or other valuation techniques. Fair value estimates do not consider forced or liquidation sales.

Where financial instruments trade in inactive 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 considered as Level 3.

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

As at

(\$ millions)	As at April 30, 2019				As at January 31, 2019			
	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⁾	\$ –	\$ 3,504	\$ 39	\$ 3,543	\$ –	\$ 3,608	\$ 14	\$ 3,622
Trading assets								
Loans	–	13,104	–	13,104	–	13,161	–	13,161
Canadian federal government and government guaranteed debt	13,514	1,789	–	15,303	12,497	1,843	–	14,340
Canadian provincial and municipal debt	–	6,892	–	6,892	–	10,043	–	10,043
US treasury and other US agencies' debt	10,974	–	–	10,974	9,070	–	–	9,070
Other foreign governments' debt	3,793	2,847	–	6,640	3,068	2,161	–	5,229
Corporate and other debt	3	9,714	15	9,732	8	9,548	18	9,574
Income funds	35	–	–	35	31	–	–	31
Equity securities	52,830	719	–	53,549	44,499	261	–	44,760
Other ⁽²⁾	911	–	–	911	748	–	–	748
	\$ 82,060	\$ 38,569	\$ 54	\$ 120,683	\$ 69,921	\$ 40,625	\$ 32	\$ 110,578
Financial assets designated at fair value through profit or loss								
Investment securities⁽³⁾								
Canadian federal government and government guaranteed debt	\$ 14	\$ –	\$ –	\$ 14	\$ 14	\$ –	\$ –	\$ 14
Canadian provincial and municipal debt	6,350	2,565	–	8,915	5,186	2,646	–	7,832
US treasury and other US agencies' debt	241	2,763	–	3,004	237	3,291	–	3,528
Other foreign governments' debt	22,198	507	–	22,705	20,218	473	–	20,691
Corporate and other debt	8,284	10,531	31	18,846	9,827	9,830	31	19,688
Mortgage-backed securities	188	1,698	16	1,902	230	1,944	17	2,191
Equity securities	–	3,787	–	3,787	–	1,600	–	1,600
	1,033	246	776	2,055	833	271	701	1,805
	\$ 38,294	\$ 22,097	\$ 823	\$ 61,214	\$ 36,531	\$ 20,055	\$ 749	\$ 57,335
Derivative financial instruments								
Interest rate contracts	\$ –	\$ 10,459	\$ 29	\$ 10,488	\$ –	\$ 9,934	\$ 46	\$ 9,980
Foreign exchange and gold contracts	2	16,773	–	16,775	–	18,771	–	18,771
Equity contracts	778	890	2	1,670	578	221	2	801
Credit contracts	–	189	–	189	–	307	–	307
Commodity contracts	8	2,228	–	2,236	68	2,234	–	2,302
	\$ 788	\$ 30,539	\$ 31	\$ 31,358	\$ 646	\$ 31,467	\$ 48	\$ 32,161
Liabilities:								
Deposits⁽⁴⁾								
Financial liabilities designated at fair value through profit or loss	\$ –	\$ (51)	\$ –	\$ (51)	\$ –	\$ (205)	\$ –	\$ (205)
Obligations related to securities sold short	–	10,919	–	10,919	–	9,907	–	9,907
Derivative financial instruments	25,327	4,630	–	29,957	26,434	5,187	–	31,621
Interest rate contracts	–	10,580	20	10,600	–	10,761	32	10,793
Foreign exchange and gold contracts	1	16,502	–	16,503	3	18,186	–	18,189
Equity contracts	865	2,629	2	3,496	967	2,712	7	3,686
Credit contracts	–	56	–	56	–	58	–	58
Commodity contracts	–	2,521	–	2,521	26	3,218	–	3,244
	\$ 866	\$ 32,288	\$ 22	\$ 33,176	\$ 996	\$ 34,935	\$ 39	\$ 35,970

(1) The fair value of precious metals is determined based on quoted market prices and forward spot prices, where applicable.

(2) Represents energy related assets.

(3) Excludes debt investment securities measured at amortized cost of \$23,932 (January 31, 2019 – \$20,651).

(4) These amounts represent embedded derivatives bifurcated from structured notes.

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As at October 31, 2018

(\$ millions)	Level 1	Level 2	Level 3	Total
Instruments carried at fair value on a recurring basis:				
Assets:				
Precious metals⁽¹⁾	\$ –	\$ 3,175	\$ 16	\$ 3,191
Trading assets				
Loans	–	14,334	–	14,334
Canadian federal government and government guaranteed debt	13,003	–	–	13,003
Canadian provincial and municipal debt	–	10,159	–	10,159
US treasury and other US agencies' debt	7,164	–	–	7,164
Other foreign governments' debt	4,610	1,833	–	6,443
Corporate and other debt	3	8,984	18	9,005
Income funds	29	–	–	29
Equity securities	39,513	158	–	39,671
Other ⁽²⁾	454	–	–	454
	\$ 64,776	\$ 38,643	\$ 34	\$ 103,453
Financial assets designated at fair value through profit or loss				
Investment securities⁽³⁾	\$ 12	\$ –	\$ –	\$ 12
Canadian federal government and government guaranteed debt	6,373	2,518	–	8,891
Canadian provincial and municipal debt	366	3,986	–	4,352
US treasury and other US agencies' debt	18,472	669	–	19,141
Other foreign governments' debt	10,457	9,485	48	19,990
Corporate and other debt	732	1,818	13	2,563
Mortgage-backed securities	–	906	–	906
Equity securities	838	263	709	1,810
	\$ 37,238	\$ 19,645	\$ 770	\$ 57,653
Derivative financial instruments				
Interest rate contracts	\$ –	\$ 8,927	\$ 112	\$ 9,039
Foreign exchange and gold contracts	5	22,197	–	22,202
Equity contracts	797	1,556	8	2,361
Credit contracts	–	349	–	349
Commodity contracts	92	3,515	–	3,607
	\$ 894	\$ 36,544	\$ 120	\$ 37,558
Liabilities:				
Deposits⁽⁴⁾	\$ –	\$ (401)	\$ –	\$ (401)
Financial liabilities designated at fair value through profit or loss				
Obligations related to securities sold short	24,563	7,524	–	32,087
Derivative financial instruments				
Interest rate contracts	–	11,012	74	11,086
Foreign exchange and gold contracts	–	20,537	–	20,537
Equity contracts	1,057	1,884	5	2,946
Credit contracts	–	70	–	70
Commodity contracts	34	3,294	–	3,328
	\$ 1,091	\$ 36,797	\$ 79	\$ 37,967

(1) The fair value of precious metals is determined based on quoted market prices and forward spot prices.

(2) Represents energy related assets.

(3) Excludes debt investment securities measured at amortized cost of \$20,743.

(4) These amounts represent embedded derivatives bifurcated from structured notes.

Level 3 instrument fair value changes

Financial instruments categorized as Level 3 as at April 30, 2019, in the fair value hierarchy comprise certain precious metals, certain foreign government bonds, structured corporate bonds, investments in private equity securities and complex derivatives.

The following table summarizes the changes in Level 3 instruments carried at fair value for the three months ended April 30, 2019.

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.

As at April 30, 2019								
(\$ millions)	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⁾
Precious metals	\$ 14	\$ –	\$ –	\$ 25	\$ –	\$ –	\$ 39	\$ –
	14	–	–	25	–	–	39	–
Trading assets								
Corporate and other debt	18	–	–	–	(7)	4	15	–
	18	–	–	–	(7)	4	15	–
Investment securities								
Other foreign governments' debt	31	–	–	–	–	–	31	n/a
Corporate and other debt	17	–	3	–	–	(4)	16	n/a
Equity securities	701	5	14	92	(36)	–	776	5
	749	5	17	92	(36)	(4)	823	5
Derivative financial instruments – assets								
Interest rate contracts	46	(16)	–	–	(1)	–	29	(16)
Equity contracts	2	–	–	–	–	–	2	– ⁽²⁾
Derivative financial instruments – liabilities								
Interest rate contracts	(32)	11	–	–	1	–	(20)	11 ⁽³⁾
Equity contracts	(7)	3	–	–	–	2	(2)	3 ⁽²⁾
	9	(2)	–	–	–	2	9	(2)
Total	\$ 790	\$ 3	\$ 17	\$ 117	\$ (43)	\$ 2	\$ 886	\$ 3

(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.

(3) Certain unrealized losses on interest rate derivative contracts are largely offset by mark-to-market changes on embedded derivatives on certain deposit liabilities in the Consolidated Statement of Income.

The following tables summarize the changes in Level 3 instruments carried at fair value for the three months ended January 31, 2019 and October 31, 2018:

As at January 31, 2019							
(\$ 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
Precious metals	\$ 16	\$ –	\$ –	\$ –	\$ (2)	\$ –	\$ 14
Trading assets	18	–	–	–	–	–	18
Investment securities	770	12	11	85	(99)	(30)	749
Derivative financial instruments	41	(27)	–	1	(2)	(4)	9

(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, 2018							
(\$ 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
Precious metals	\$ 11	\$ –	\$ –	\$ 5	\$ –	\$ –	\$ 16
Trading assets	20	–	–	–	(2)	–	18
Investment securities	750	9	–	70	(39)	(20)	770
Derivative financial instruments	28	2	–	–	–	11	41

(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 as of the end of the reporting period during which the change has occurred.

There were no significant transfers into and out of Level 3 during the three months ended April 30, 2019, January 31, 2019 and October 31, 2018.

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, 2018 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.

21. Corporate income taxes

In November 2016, the Bank received a federal reassessment of \$179 million for tax and interest as a result of the Canada Revenue Agency denying the tax deductibility of certain Canadian dividends received during the 2011 taxation year. In August 2017, the Bank received a reassessment of \$185 million for tax and interest for the 2012 taxation year. The circumstances of the dividends subject to the reassessments are similar to those prospectively addressed by recently enacted rules which had been introduced in the 2015 Canadian federal budget. In June 2018, the Bank received a reassessment for \$211 million for tax and interest in respect of the same circumstances for the 2013 taxation year. 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.

22. Acquisitions and divestitures

Acquisitions

Acquired during the period

a) Banco Dominicano del Progreso, Dominican Republic

On March 1, 2019, the Bank completed the previously announced acquisition of 97.44% of Banco Dominicano del Progreso, Dominican Republic after receiving regulatory approvals. The acquired business forms part of the International Banking business segment.

On acquisition, approximately \$1.8 billion of assets (mainly loans) and \$1.4 billion of liabilities (mainly deposits) were recorded. Subsequent adjustments during the measurement period will occur as the Bank completes its estimation of fair values of assets acquired including intangibles, and liabilities assumed.

b) Banco Cencosud, Peru

On March 1, 2019, the Bank completed the acquisition of 51% of the controlling interest of Banco Cencosud, Peru after receiving regulatory approvals. The acquired business forms part of the International Banking business segment.

On acquisition, approximately \$0.4 billion of assets (mainly loans) and \$0.3 billion of liabilities (mainly deposits) were recorded. Subsequent adjustments during the measurement period will occur as the Bank completes its estimation of fair values of assets acquired including intangibles, and liabilities assumed.

Fair value determination of identifiable net assets completed during the period

a) Citibank's consumer and small and medium enterprise operations, Colombia

On June 30, 2018, the Bank's Colombian subsidiary, Scotiabank Colpatria S.A., completed the acquisition of Citibank's consumer (retail and credit cards) and small and medium enterprise operations in Colombia. The acquired business forms part of the International Banking business segment.

On acquisition, approximately \$2.0 billion of assets (mainly loans) and \$1.4 billion of liabilities (mainly deposits) were recorded. The Bank, during the quarter, has completed its estimation of fair values of assets acquired and liabilities assumed. This acquisition is not considered material to the Bank.

Divestitures

Divestitures impacting the current period

a) Scotia Crecer AFP and Scotia Seguros – pension and insurance businesses in the Dominican Republic

On April 30, 2019, the Bank completed the sale of Scotia Crecer AFP and Scotia Seguros, its pension and related insurance businesses in the Dominican Republic, upon receiving regulatory approvals and satisfying closing conditions. All assets and liabilities in relation to this business have been derecognized on the date of close and a net gain of approximately \$273 million after tax has been recorded in this quarter in Non-interest income – Other and reported in the Other segment.

b) Insurance and banking operations in El Salvador

On February 8, 2019, the Bank announced that it has reached an agreement under which the Bank will sell its banking and insurance operations in El Salvador, including Scotiabank El Salvador, its subsidiaries and Scotia Seguros, subject to regulatory approval and closing conditions.

As this transaction has met the accounting requirements of assets held for sale, a loss of approximately \$132 million after tax, that primarily represents the carrying value of goodwill relating to this business, has been recorded in this quarter in Non-interest income – Other and reported in the Other segment. The transaction is expected to close before the end of the fiscal year.

Divestitures previously announced

The following previously announced divestitures have not yet impacted the Bank's financial results in any period.

a) Insurance and banking operations in the Caribbean

On November 27, 2018, the Bank announced its subsidiaries in Jamaica and Trinidad & Tobago will sell their insurance operations. The Bank will partner with the buyer to provide an expanded suite of insurance products and services to customers in Jamaica and Trinidad & Tobago.

On November 27, 2018, the Bank also announced it has entered into an agreement with another party to sell its banking operations in nine non-core markets in the Caribbean (Anguilla, Antigua, Dominica, Grenada, Guyana, St. Kitts & Nevis, St. Lucia, St. Maarten, St. Vincent & the Grenadines).

These divestitures are subject to regulatory approvals and closing conditions.

b) Thanachart Bank, Thailand

On February 26, 2019, the Bank announced that it has entered into a non-binding memorandum of understanding (MOU) with a number of parties that would result, if concluded, in the Bank divesting its investment in Thanachart Bank Public Company Limited, Thailand and in the Bank holding a significantly smaller stake in a combined bank (merger of Thanachart Bank and TMB Bank Public Company Limited). The Bank will receive proceeds which are expected to result in a gain on sale. All transactions contemplated by the MOU remain subject to due diligence, negotiation and agreement by the parties as to definitive documentation (including terms), as well as regulatory approval. No assurance can be given that the parties will reach a definitive agreement or that the transactions will be concluded.

SHAREHOLDER INFORMATION

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 dividend reinvestment 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 2019

Record and payment dates for common and preferred shares, subject to approval by the Board of Directors.

Record Date	Payment Date
January 2, 2019	January 29, 2019
April 2, 2019	April 26, 2019
July 2, 2019	July 29, 2019
October 1, 2019	October 29, 2019

Normal Course Issuer Bid

A copy of the Notice of Intention to commence the Normal Course Issuer Bid is available without charge by contacting the Investor Relations Department at 416-775-0798 or investor.relations@scotiabank.com.

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 28, 2019, at 8:00 am EDT and is expected to last approximately one hour. Interested parties are invited to access the call live, in listen-only mode, by telephone at 647-484-0474 or toll-free, at 1-888-378-4398 using ID 478364# (please call shortly before 8:00 am EDT). In addition, an audio webcast, with accompanying slide presentation, may be accessed via the Investor Relations page of www.scotiabank.com.

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 28, 2019, to June 12, 2019, by calling 647-436-0148 or 1-888-203-1112 (North America toll-free) and entering the access code 2950667#. The archived audio webcast will be available on the Bank's website for three months.

Contact information

Investors:

Financial Analysts, Portfolio Managers and other Institutional Investors requiring financial information, please contact Investor Relations, Finance Department:

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Telephone: (416) 775-0798
E-mail: investor.relations@scotiabank.com

Media:

For media enquiries, please contact the Global Communications Department at the above address.

Telephone: (416) 775-0828
E-mail: corporate.communications@scotiabank.com

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:

Computershare Trust Company of Canada
100 University Avenue, 8th Floor
Toronto, Ontario, Canada M5J 2Y1
Telephone: 1-877-982-8767
Fax: 1-888-453-0330
E-mail: service@computershare.com

Co-Transfer Agent (U.S.A.)
Computershare Trust Company N.A.
250 Royall Street
Canton, MA 02021, U.S.A.
Telephone: 1-800-962-4284

For other shareholder enquiries, please contact the Corporate Secretary's Department:

Scotiabank
Scotia Plaza, 44 King Street West
Toronto, Ontario, Canada M5H 1H1
Telephone: (416) 866-3672
E-mail: corporate.secretary@scotiabank.com

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