

Quarterly Report to Shareholders

Scotiabank reports third quarter results

TORONTO, August 27, 2019 – Scotiabank reported third quarter net income of \$1,984 million compared to \$1,939 million in the same period last year. Diluted earnings per share were \$1.50, compared to \$1.55 in the same period a year ago. Return on equity was 11.5% compared to 13.1% a year ago.

Adjusting for Acquisition and divestiture-related amounts⁽¹⁾, net income increased 9% to \$2,455 million and diluted earnings per share were \$1.88 compared to \$1.76 last year. Return on equity was 14.3% compared to 14.5% a year ago.

“Meaningful progress was made this quarter to reposition the Bank and simplify the operations. As a result, we are better positioned for growth in our key markets. We formalized agreements to reduce our investment in Thailand and announced the divestiture of our operations in Puerto Rico and US Virgin Islands. The repositioning of our international footprint is now substantially complete” said Brian Porter, President and CEO of Scotiabank.

“Canadian Banking reported good results this quarter, producing positive operating leverage, margin expansion, and double-digit deposit growth. Canadian Wealth Management earnings grew 20%, with good organic growth and strong contributions from MD Financial and Jarislowsky Fraser.

“International Banking delivered another quarter of double-digit earnings growth. The business remains focused on successfully integrating our recent acquisitions while continuing to drive organic growth. We continue to see strong growth in the Pacific Alliance countries, led by Chile and Peru.

“The Bank continued to maintain strong capital ratios and reported a Common Equity Tier 1 capital ratio of 11.2%, or 11.7% on a pro-forma basis, including the estimated impact from announced divestitures. This quarter we announced a 3 cent increase in the quarterly dividend to 90 cents per common share, 6% higher than a year ago.

“We are pleased that a number of key milestones were achieved this quarter in delivering digital innovations for our customers, including being recognized as the industry leader in mobile banking by J.D. Power and launching our new mobile banking app in Canada. In addition, Tangerine benefitted from our long-term partnership with Maple Leaf Sports and Entertainment as the Official Bank of the 2019 NBA Championships. We remain focused on achieving strong consistent long-term results for our shareholders.”



Live audio Web broadcast of the Bank's analysts' conference call. See page 74 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 nine months ended

(Unaudited)	July 31 2019	April 30 2019	July 31 2018	July 31 2019	July 31 2018
Operating results (\$ millions)					
Net interest income	4,374	4,193	4,085	12,841	11,971
Non-interest income	3,285	3,610	3,096	10,225	9,356
Total revenue	7,659	7,803	7,181	23,066	21,327
Provision for credit losses	713	873	943	2,274	2,021
Non-interest expenses	4,209	4,046	3,770	12,426	10,994
Income tax expense	753	625	529	1,876	1,859
Net income	1,984	2,259	1,939	6,490	6,453
Net income attributable to common shareholders	1,839	2,125	1,956	6,071	6,247
Operating performance					
Basic earnings per share (\$)	1.51	1.74	1.60	4.96	5.18
Diluted earnings per share (\$)	1.50	1.73	1.55	4.94	5.10
Return on equity (%)	11.5	13.8	13.1	13.0	14.7
Productivity ratio (%)	55.0	51.8	52.5	53.9	51.5
Core banking margin (%) ⁽¹⁾	2.45	2.45	2.46	2.45	2.46
Financial position information (\$ millions)					
Cash and deposits with financial institutions	45,262	50,121	51,891		
Trading assets	131,068	117,140	92,881		
Loans	589,243	583,815	548,597		
Total assets	1,066,740	1,058,169	946,703		
Deposits	722,346	712,282	654,182		
Common equity	63,534	63,571	60,752		
Preferred shares and other equity instruments	3,884	3,884	4,234		
Assets under administration ⁽²⁾	547,862	549,775	484,744		
Assets under management ⁽²⁾	297,105	297,167	253,234		
Capital and liquidity measures					
Common Equity Tier 1 (CET1) capital ratio (%)	11.2	11.1	11.4		
Tier 1 capital ratio (%)	12.3	12.5	12.8		
Total capital ratio (%)	14.8	14.7	14.5		
Leverage ratio (%)	4.2	4.3	4.9		
CET1 risk-weighted assets (\$ millions) ⁽³⁾	417,058	415,212	411,426		
Liquidity coverage ratio (LCR) (%)	123	125	125		
Credit quality					
Net impaired loans (\$ millions)	3,559	3,695	3,707		
Allowance for credit losses (\$ millions) ⁽⁴⁾	5,273	5,376	5,418		
Net impaired loans as a % of loans and acceptances	0.58	0.61	0.65		
Provision for credit losses as a % of average net loans and acceptances (annualized) ⁽⁵⁾	0.48	0.61	0.69	0.52	0.51
Provision for credit losses on impaired loans as a % of average net loans and acceptances (annualized) ⁽⁵⁾	0.52	0.49	0.41	0.49	0.44
Net write-offs as a % of average net loans and acceptances (annualized)	0.50	0.50	0.39	0.50	0.43
Adjusted results⁽¹⁾					
Adjusted net income (\$ millions)	2,455	2,263	2,259	7,009	6,799
Adjusted diluted earnings per share (\$)	1.88	1.70	1.76	5.32	5.34
Adjusted return on equity (%)	14.3	13.6	14.5	13.9	15.2
Adjusted productivity ratio (%)	51.7	52.3	51.8	52.7	51.1
Adjusted provision for credit losses as a % of average net loans and acceptances (annualized) ⁽⁵⁾	0.48	0.51	0.40	0.48	0.41
Common share information					
Closing share price (\$) (TSX)	70.46	73.78	77.09		
Shares outstanding (millions)					
Average – Basic	1,221	1,224	1,223	1,224	1,207
Average – Diluted	1,251	1,252	1,240	1,253	1,223
End of period	1,220	1,222	1,232		
Dividends paid per share (\$)	0.87	0.87	0.82	2.59	2.43
Dividend yield (%) ⁽⁶⁾	4.9	4.8	4.2	4.9	4.1
Market capitalization (\$ millions) (TSX)	85,993	90,188	94,954		
Book value per common share (\$)	52.06	52.01	49.32		
Market value to book value multiple	1.4	1.4	1.6		
Price to earnings multiple (trailing 4 quarters)	10.5	10.9	11.3		
Other information					
Employees (full-time equivalent) ⁽²⁾	101,809	100,945	96,473		
Branches and offices	3,129	3,147	2,963		

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

(2) Prior period amounts have been restated to conform with current period presentation.

(3) 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.

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

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

(6) 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 July 31, 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 August 27, 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. The costs for Q2, 2019 relate to Banco Cencosud, Peru and Banco Dominicano del Progreso, Dominican Republic. The costs for Q3, 2018 relate to BBVA, Chile and Citibank, Colombia.
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/loss on divestitures** – relates to the loss on sale of operations in Puerto Rico announced in Q3, 2019, gain on divestiture 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 in Q2, 2019. These amounts are recorded in the Other segment.

Reconciliation of reported and adjusted results and diluted earnings per share

	For the three months ended			For the nine months ended	
(\$ millions)	July 31 2019	April 30 2019	July 31 2018	July 31 2019	July 31 2018
Reported Results					
Net interest income	\$ 4,374	\$ 4,193	\$ 4,085	\$12,841	\$11,971
Non-interest income	3,285	3,610	3,096	10,225	9,356
Total revenue	7,659	7,803	7,181	23,066	21,327
Provision for credit losses	713	873	943	2,274	2,021
Non-interest expenses	4,209	4,046	3,770	12,426	10,994
Income before taxes	2,737	2,884	2,468	8,366	8,312
Income tax expense	753	625	529	1,876	1,859
Net income	\$ 1,984	\$ 2,259	\$ 1,939	\$ 6,490	\$ 6,453
Net income attributable to non-controlling interests in subsidiaries (NCI)	120	70	(44)	301	84
Net income attributable to equity holders	1,864	2,189	1,983	6,189	6,369
Net income attributable to common shareholders	1,839	2,125	1,956	6,071	6,247
Diluted earnings per share (in dollars)	\$ 1.50	\$ 1.73	\$ 1.55	\$ 4.94	\$ 5.10
Acquisition and divestiture-related amounts					
Day 1 provision for credit losses on acquired performing financial instruments ⁽¹⁾	\$ –	\$ 151	\$ 404	\$ 151	\$ 404
Integration costs ⁽²⁾	43	25	26	99	26
Amortization of Acquisition-related intangible assets, excluding software ⁽²⁾	30	28	23	88	59
Acquisition-related costs	73	204	453	338	489
Net loss/(gain) on divestitures ⁽³⁾	320	(173)	–	147	–
Acquisition and divestiture-related amounts (Pre-tax)	393	31	453	485	489
Income tax expense/(benefit)	78	(27)	(133)	34	(143)
Acquisition and divestiture-related amounts (After tax)	471	4	320	519	346
Adjustment attributable to NCI	(5)	(45)	(113)	(55)	(113)
Acquisition and divestiture-related amounts (After tax and NCI)	\$ 466	\$ (41)	\$ 207	\$ 464	\$ 233
Adjusted Results					
Net interest income	\$ 4,374	\$ 4,193	\$ 4,085	\$12,841	\$11,971
Non-interest income	3,591	3,437	3,096	10,358	9,356
Total revenue	7,965	7,630	7,181	23,199	21,327
Provision for credit losses	713	722	539	2,123	1,617
Non-interest expenses	4,122	3,993	3,721	12,225	10,909
Income before taxes	3,130	2,915	2,921	8,851	8,801
Income tax expense	675	652	662	1,842	2,002
Net income	\$ 2,455	\$ 2,263	\$ 2,259	\$ 7,009	\$ 6,799
Net income attributable to NCI	125	115	69	356	197
Net income attributable to equity holders	2,330	2,148	2,190	6,653	6,602
Net income attributable to common shareholders	\$ 2,305	\$ 2,084	\$ 2,163	\$ 6,535	\$ 6,480
Adjusted diluted earnings per share					
Adjusted net income attributable to common shareholders	\$ 2,305	\$ 2,084	\$ 2,163	\$ 6,535	\$ 6,480
Dilutive impact of share-based payment options and others	44	39	31	131	51
Adjusted net income attributable to common shareholders (diluted)	\$ 2,349	\$ 2,123	\$ 2,194	\$ 6,666	\$ 6,531
Weighted average number of basic common shares outstanding (millions)	1,221	1,224	1,223	1,224	1,207
Dilutive impact of share-based payment options and others (millions)	30	28	26	29	16
Adjusted weighted average number of diluted common shares outstanding (millions)	1,251	1,252	1,249	1,253	1,223
Adjusted diluted earnings per share (in dollars)	\$ 1.88	\$ 1.70	\$ 1.76	\$ 5.32	\$ 5.34
Impact of adjustments on diluted earnings per share (in dollars)	\$ 0.38	\$ (0.03)	\$ 0.21	\$ 0.38	\$ 0.24

(1) Recorded in provision for credit losses.

(2) Recorded in non-interest expenses.

(3) Loss/(gain) on divestitures are recorded in non-interest income; costs related to divestitures are recorded in non-interest expenses.

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

Canadian Banking ⁽¹⁾	For the three months ended			For the nine months ended	
	July 31 2019	April 30 2019	July 31 2018	July 31 2019	July 31 2018
(\$ millions)					
Reported Results					
Net interest income	\$ 2,120	\$ 1,990	\$ 2,024	\$ 6,146	\$ 5,869
Non-interest income	1,412	1,390	1,349	4,181	4,038
Total revenue	3,532	3,380	3,373	10,327	9,907
Provision for credit losses	240	252	181	725	596
Non-interest expenses	1,723	1,711	1,661	5,164	4,907
Income before taxes	1,569	1,417	1,531	4,438	4,404
Income tax expense	409	369	401	1,157	1,155
Net income	\$ 1,160	\$ 1,048	\$ 1,130	\$ 3,281	\$ 3,249
Net income attributable to non-controlling interests in subsidiaries (NCI)	—	—	—	—	—
Net income attributable to equity holders	\$ 1,160	\$ 1,048	\$ 1,130	\$ 3,281	\$ 3,249
Adjustments for Acquisition-related costs					
Day 1 provision for credit losses on acquired performing financial instruments ⁽²⁾	\$ —	\$ —	\$ —	\$ —	\$ —
Integration costs ⁽³⁾	4	6	3	17	3
Amortization of Acquisition-related intangible assets, excluding software ⁽³⁾	14	14	12	42	26
Acquisition-related costs (Pre-tax)	18	20	15	59	29
Income tax expense/(benefit)	(4)	(6)	(4)	(15)	(8)
Acquisition-related costs (After tax)	14	14	11	44	21
Adjustment attributable to NCI	—	—	—	—	—
Acquisition-related costs (After tax and NCI)	\$ 14	\$ 14	\$ 11	\$ 44	\$ 21
Adjusted Results					
Net interest income	\$ 2,120	\$ 1,990	\$ 2,024	\$ 6,146	\$ 5,869
Non-interest income	1,412	1,390	1,349	4,181	4,038
Total revenue	3,532	3,380	3,373	10,327	9,907
Provision for credit losses	240	252	181	725	596
Non-interest expenses	1,705	1,691	1,646	5,105	4,878
Income before taxes	1,587	1,437	1,546	4,497	4,433
Income tax expense	413	375	405	1,172	1,163
Net income	\$ 1,174	\$ 1,062	\$ 1,141	\$ 3,325	\$ 3,270
Net income attributable to NCI	—	—	—	—	—
Net income attributable to equity holders	\$ 1,174	\$ 1,062	\$ 1,141	\$ 3,325	\$ 3,270

(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 nine months ended	
(\$ millions)	July 31 2019	April 30 2019	July 31 2018	July 31 2019	July 31 2018
Reported Results					
Net interest income	\$ 2,157	\$ 2,121	\$ 1,827	\$ 6,358	\$ 5,292
Non-interest income	1,270	1,235	1,026	3,756	3,007
Total revenue	3,427	3,356	2,853	10,114	8,299
Provision for credit losses	476	628	771	1,574	1,455
Non-interest expenses	1,780	1,710	1,510	5,232	4,390
Income before taxes	1,171	1,018	572	3,308	2,454
Income tax expense	269	249	97	744	509
Net income	\$ 902	\$ 769	\$ 475	\$ 2,564	\$ 1,945
Net income attributable to non-controlling interests in subsidiaries (NCI)	121	69	(44)	301	84
Net income attributable to equity holders	\$ 781	\$ 700	\$ 519	\$ 2,263	\$ 1,861
Adjustments for Acquisition-related costs					
Day 1 provision for credit losses on acquired performing financial instruments ⁽²⁾	\$ –	\$ 151	\$ 404	\$ 151	\$ 404
Integration costs ⁽³⁾	39	19	23	82	23
Amortization of Acquisition-related intangible assets, excluding software ⁽³⁾	16	14	11	46	33
Acquisition-related costs (Pre-tax)	55	184	438	279	460
Income tax expense/(benefit)	(16)	(53)	(129)	(81)	(135)
Acquisition-related costs (After tax)	39	131	309	198	325
Adjustment attributable to NCI	(5)	(44)	(113)	(54)	(113)
Acquisition-related costs (After tax and NCI)	\$ 34	\$ 87	\$ 196	\$ 144	\$ 212
Adjusted Results					
Net interest income	\$ 2,157	\$ 2,121	\$ 1,827	\$ 6,358	\$ 5,292
Non-interest income	1,270	1,235	1,026	3,756	3,007
Total revenue	3,427	3,356	2,853	10,114	8,299
Provision for credit losses	476	477	367	1,423	1,051
Non-interest expenses	1,725	1,677	1,476	5,104	4,334
Income before taxes	1,226	1,202	1,010	3,587	2,914
Income tax expense	285	302	226	825	644
Net income	\$ 941	\$ 900	\$ 784	\$ 2,762	\$ 2,270
Net income attributable to NCI	126	113	69	355	197
Net income attributable to equity holders	\$ 815	\$ 787	\$ 715	\$ 2,407	\$ 2,073

(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 nine months ended	
(\$ millions)	July 31 2019	April 30 2019	July 31 2018	July 31 2019	July 31 2018
Reported Results					
Net interest income	\$ (240)	\$ (268)	\$ (131)	\$ (722)	\$ (307)
Non-interest income	(144)	184	(24)	37	(27)
Total revenue	(384)	(84)	(155)	(685)	(334)
Provision for credit losses	1	(1)	1	1	–
Non-interest expenses	113	31	56	198	17
Income before taxes	(498)	(114)	(212)	(884)	(351)
Income tax expense/(benefit)	(46)	(136)	(105)	(400)	(268)
Net income (loss)	\$ (452)	\$ 22	\$ (107)	\$ (484)	\$ (83)
Net income attributable to non-controlling interests in subsidiaries (NCI)	(1)	1	–	–	–
Net income (loss) attributable to equity holders	\$ (451)	\$ 21	\$ (107)	\$ (484)	\$ (83)
Adjustments for Net loss/(gain) on divestitures⁽²⁾	\$ 320	\$ (173)	\$ –	\$ 147	\$ –
Income tax expense	98	32	–	130	–
Net loss/(gain) on divestitures (After tax)	418	(141)	–	277	–
Adjustment attributable to NCI	–	(1)	–	(1)	–
Net loss/(gain) on divestitures (After tax and NCI)	\$ 418	\$ (142)	\$ –	\$ 276	\$ –
Adjusted Results					
Net interest income	\$ (240)	\$ (268)	\$ (131)	\$ (722)	\$ (307)
Non-interest income	162	11	(24)	170	(27)
Total revenue	(78)	(257)	(155)	(552)	(334)
Provision for credit losses	1	(1)	1	1	–
Non-interest expenses	99	31	56	184	17
Income before taxes	(178)	(287)	(212)	(737)	(351)
Income tax expense/(benefit)	(144)	(168)	(105)	(530)	(268)
Net income (loss)	\$ (34)	\$ (119)	\$ (107)	\$ (207)	\$ (83)
Net income attributable to NCI	(1)	2	–	1	–
Net income (loss) attributable to equity holders	\$ (33)	\$ (121)	\$ (107)	\$ (208)	\$ (83)

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

(2) Loss / (gain) on divestitures are recorded in non-interest income; costs related to divestitures are recorded in non-interest expenses.

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.

	For the three months ended						For the nine months ended		
(\$ millions)	April 30, 2019			July 31, 2018			July 31, 2018		
(Taxable equivalent basis)	Reported	Foreign exchange	Constant dollar	Reported	Foreign exchange	Constant dollar	Reported	Foreign exchange	Constant dollar
Net interest income	\$ 2,121	\$ 36	\$ 2,085	\$ 1,827	\$ 13	\$ 1,814	\$ 5,292	\$ (11)	\$ 5,303
Non-interest income	1,235	6	1,229	1,026	(7)	1,033	3,007	9	2,998
Total revenue	3,356	42	3,314	2,853	6	2,847	8,299	(2)	8,301
Provision for credit losses	628	12	616	771	36	735	1,455	32	1,423
Non-interest expenses	1,710	27	1,683	1,510	18	1,492	4,390	19	4,371
Income tax expense	249	–	249	97	(10)	107	509	(9)	518
Net income	\$ 769	\$ 3	\$ 766	\$ 475	\$ (38)	\$ 513	\$ 1,945	\$ (44)	\$ 1,989
Net income attributable to non-controlling interest in subsidiaries	\$ 69	\$ (3)	\$ 72	\$ (44)	\$ 1	\$ (45)	\$ 84	\$ 2	\$ 82
Net income attributable to equity holders of the Bank	\$ 700	\$ 6	\$ 694	\$ 519	\$ (39)	\$ 558	\$ 1,861	\$ (46)	\$ 1,907
Other measures									
Average assets (\$ billions)	\$ 203	\$ 3	\$ 200	\$ 164	\$ –	\$ 164	\$ 159	\$ –	\$ 159
Average liabilities (\$ billions)	\$ 156	\$ 3	\$ 153	\$ 129	\$ 1	\$ 128	\$ 123	\$ (1)	\$ 124

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 announced requirements, the Bank increased the capital attributed to its business lines to approximate 10.0% of Basel III common equity capital requirements based on credit, market and operational risks and leverage inherent within 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 \$1,984 million compared to \$1,939 million in the same period last year, and \$2,259 million last quarter. Diluted earnings per share were \$1.50 compared to \$1.55 in the same period last year and \$1.73 last quarter. Return on equity was 11.5% compared to 13.1% last year and 13.8% last quarter.

Adjusting for Acquisition and divestiture-related amounts of \$471 million after-tax (\$393 million pre-tax), including the net loss on the announced divestiture of Puerto Rico of \$402 million after-tax (\$302 million pre-tax) this quarter, net income was \$2,455 million compared to \$2,259 million last year, up 9%. Adjusted diluted earnings per share was \$1.88, and increased 7% compared to \$1.76 last year. Adjusted return on equity was 14.3% compared to 14.5% a year ago.

Adjusted net income was \$2,455 million this quarter compared to \$2,263 million last quarter, up 8%. Adjusted diluted earnings per share was \$1.88 compared to \$1.70 last quarter, and Adjusted return on equity was 14.3% compared to 13.6% 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 4.

For the three months ended	Average exchange rate			% Change	
	July 31, 2019	April 30, 2019	July 31, 2018	July 31, 2019 vs. April 30, 2019	July 31, 2019 vs. July 31, 2018
U.S. dollar/Canadian dollar	0.753	0.751	0.767	0.3%	(1.8)%
Mexican Peso/Canadian dollar	14.421	14.360	15.035	0.4%	(4.1)%
Peruvian Sol/Canadian dollar	2.497	2.485	2.511	0.5%	(0.5)%
Colombian Peso/Canadian dollar	2,454	2,354	2,209	4.2%	11.1%
Chilean Peso/Canadian dollar	519.551	499.097	489.565	4.1%	6.1%

For the nine months ended	Average exchange rate		% Change
	July 31, 2019	July 31, 2018	July 31, 2019 vs. July 31, 2018
U.S. dollar/Canadian dollar	0.752	0.781	(3.7)%
Mexican Peso/Canadian dollar	14.558	14.874	(2.1)%
Peruvian Sol/Canadian dollar	2.502	2.537	(1.4)%
Colombian Peso/Canadian dollar	2,402	2,254	6.6%
Chilean Peso/Canadian dollar	509.583	485.074	5.1%

Impact on net income ⁽¹⁾ (\$ millions except EPS)	For the three months ended		For the nine months ended
	July 31, 2019 vs. July 31, 2018	July 31, 2019 vs. April 30, 2019	July 31, 2019 vs. July 31, 2018
Net interest income	\$ (29)	\$ (28)	\$ (21)
Non-interest income ⁽²⁾	(4)	22	15
Non-interest expenses	31	40	3
Other items (net of tax)	9	(1)	14
Net income	\$ 7	\$ 33	\$ 11
Earnings per share (diluted)	\$0.01	\$0.03	\$0.01
Impact by business line (\$ millions)			
Canadian Banking	\$ 3	\$ –	\$ 7
International Banking ⁽²⁾	18	25	4
Global Banking and Markets	(1)	–	27
Other ⁽²⁾	(13)	8	(27)
Net income	\$ 7	\$ 33	\$ 11

(1) Includes the impact of all currencies.

(2) Includes the impact of foreign currency hedges.

Financial performance commentary

Net income

Q3 2019 vs Q3 2018

Net income was \$1,984 million compared to \$1,939 million. Adjusting for Acquisition and divestiture-related amounts, net income was \$2,455 million compared to \$2,259 million, up 9%. Higher net interest income and non-interest income were partly offset by higher non-interest expenses, provision for credit losses and income taxes.

Q3 2019 vs Q2 2019

Net income was \$1,984 million compared to \$2,259 million. Adjusting for Acquisition and divestiture-related amounts, net income was \$2,455 million compared to \$2,263 million, up 8%. Higher net interest income and non-interest income, and lower provision for credit losses, were partly offset by higher non-interest expenses and income taxes.

Year-to-date Q3 2019 vs Year-to-date Q3 2018

Net income was \$6,490 million compared to \$6,453 million. Adjusting for Acquisition and divestiture-related amounts, net income was \$7,009 million compared to \$6,799 million, up 3%. Higher net interest income and non-interest income and lower income taxes were partly offset by higher non-interest expenses and provision for credit losses.

Net interest income

Q3 2019 vs Q3 2018

Net interest income was \$4,374 million, an increase of \$289 million or 7%, primarily from the impact of acquisitions. Also contributing to the increase was growth in credit cards, automotive and commercial loans in Canadian Banking, commercial and retail lending in International Banking as well as higher corporate loans in Global Banking and Markets. These increases were partly offset by lower contribution from asset/liability management activities and the negative impact of foreign currency translation.

The core banking margin was down one basis point to 2.45%. Lower margins in Global Banking and Markets and on asset/liability management activities were mostly offset by improved business mix related to the impact of acquisitions in International Banking, and improvement in Canadian Banking margin.

Q3 2019 vs Q2 2019

Net interest income was \$4,374 million, an increase of \$181 million or 4%, primarily from growth in residential mortgages, automotive and commercial loans in Canadian Banking, commercial and retail lending in International Banking and the impact of fewer days in the prior quarter. These increases were partly offset by the impact of foreign currency translation.

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

Year-to-date Q3 2019 vs Year-to-date Q3 2018

Net interest income was \$12,841 million, an increase of \$870 million or 7%, mainly from the impact of acquisitions. Also contributing to the increase was growth in commercial and automotive loans in Canadian Banking, commercial and retail lending in International Banking, as well as higher corporate loans in Global Banking and Markets. These increases were partly offset by lower contribution from asset/liability management activities.

The core banking margin was 2.45%, in line with last year. Lower margins in Global Banking and Markets and on asset/liability management activities were mostly offset by improved business mix related to the impact of acquisitions in International Banking, and higher Canadian Banking margin.

Non-interest income

Q3 2019 vs Q3 2018

Non-interest income was \$3,285 million, up \$189 million or 6%. Adjusting for the Net loss on divestitures, non-interest income increased 16%, with approximately half of this growth from acquisitions. The remaining growth was driven by higher banking and trading revenues. Also contributing were higher income from associated corporations and investment gains. These were partly offset by lower underwriting and advisory fees in Global Banking and Markets, and the impact of the new revenue accounting standard that requires card expenses to be netted against card revenue.

Q3 2019 vs Q2 2019

Non-interest income was down \$325 million or 9%. Adjusting for the Net loss on divestitures recorded in the current quarter and the Net gain on divestitures in the prior quarter, non-interest income grew 4%. The growth was driven by higher trading revenues, income from associated corporations and investment gains. These were partly offset by lower underwriting and advisory fees.

Year-to-date Q3 2019 vs Year-to-date Q3 2018

Non-interest income was \$10,225 million, up \$869 million or 9%. Adjusting for the Net loss on divestitures, non-interest income increased 11%, with approximately three quarters of this growth driven by acquisitions. The remaining growth was driven by higher banking revenues, higher investment gains, as well as higher income from associated corporations. These were partly offset by lower brokerage, underwriting and advisory fees, as well as the impact of the new revenue accounting standard that requires card expenses to be netted against card revenue.

Provision for credit losses

Q3 2019 vs Q3 2018

The provision for credit losses was \$713 million, a decrease of \$230 million or 24%. Adjusting for the Day 1 provision on acquired performing loans recorded last year, the provision for credit losses increased \$174 million or 32%, due primarily to higher retail provisions in line with organic and acquisition driven asset growth. The provision for credit losses ratio was 48 basis points and increased eight basis points on an adjusted basis, due to portfolio mix changes.

Provision on impaired loans was \$776 million, up \$217 million due primarily to higher retail provisions in line with organic and acquisition driven asset growth primarily in International Banking. The provision for credit losses ratio on impaired loans was 52 basis points, an increase of 11 basis points.

Adjusting for the Day 1 provision on acquired performing loans, provision on performing loans decreased \$43 million due primarily to improving retail credit quality, partially offset by the impact of asset growth across both Canadian and International Banking.

Q3 2019 vs Q2 2019

The provision for credit losses was \$713 million, a decrease of \$160 million or 18%. Adjusting for the impact of Day 1 provision on acquired performing loans recorded in the prior quarter, the provision for credit losses decreased \$9 million or 1%. The provision for credit losses ratio decreased 13 basis points to 48 basis points, or three basis points on an adjusted basis.

Provision on impaired loans increased \$76 million, due to higher retail and commercial provisions. The provision for credit losses ratio on impaired loans was 52 basis points, an increase of three basis points.

Adjusting for the impact of Day 1 provision on acquired performing loans, provision on performing loans decreased \$85 million mostly in retail portfolios. This was due primarily to strong credit quality and more favourable macroeconomic trends compared to the last quarter.

Year-to-date Q3 2019 vs Year-to-date Q3 2018

The provision for credit losses was \$2,274 million, compared to \$2,021 million. Adjusting for the impact of Day 1 provision on acquired performing loans, provision for credit losses increased \$506 million or 31%. The provision for credit losses ratio increased one basis point to 52 basis points and increased seven basis points to 48 basis points on an adjusted basis.

The provision for credit losses on impaired loans was \$2,155 million, an increase of \$437 million relating primarily to retail portfolios in International Banking, mainly in Latin America, in line with asset growth. The provision for credit losses ratio on impaired loans was 49 basis points, an increase of five basis points.

Provision on performing loans was \$119 million, compared to \$303 million. Adjusting for the impact of Day 1 provision on acquired performing loans, provision for performing loans increased \$69 million due partly to movement of hurricane-related commercial provisions to provision on impaired loans last year. Impact of changes in macroeconomic trends in Canada and asset growth in International Banking were partially offset by improved credit quality primarily across retail.

Non-interest expenses

Q3 2019 vs Q3 2018

Non-interest expenses were \$4,209 million, up \$439 million or 12%. Adjusting for Acquisition and divestiture-related costs, non-interest expenses grew 11%. 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 4% increase was due to higher salaries and benefits related to regulatory and technology initiatives and higher depreciation and amortization, performance based compensation, share-based payment and advertising and business development expenses. Partly offsetting were lower professional fees and the positive impact of foreign currency translation.

The productivity ratio was 55.0% compared to 52.5%. Adjusting for Acquisition and divestiture-related amounts, the productivity ratio was 51.7% compared to 51.8%.

Q3 2019 vs Q2 2019

Non-interest expenses were up \$163 million or 4%. Adjusting for Acquisition and divestiture-related costs, non-interest expenses were up 3%. This was due to higher salaries and depreciation and amortization. This was partly offset by lower technology costs, other employee benefits expense and the positive impact of foreign currency translation.

The productivity ratio was 55.0% compared to 51.8%. Adjusting for Acquisition and divestiture-related amounts, the productivity ratio was 51.7% compared to 52.3%.

Year-to-date Q3 2019 vs Year-to-date Q3 2018

Non-interest expenses increased \$1,432 million or 13%. Adjusting for Acquisition and divestiture-related costs, non-interest expenses grew 12%. The prior year's remeasurement of an employee benefit liability from certain plan modifications ("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 to approximately 8% of the growth. The remaining 4% growth was due to investments in technology and regulatory initiatives, higher share-based payment, depreciation and amortization and business and capital taxes. This was partly offset by lower professional fees.

The productivity ratio was 53.9% compared to 51.5%. Adjusting for Acquisition and divestiture-related amounts and the impact of prior year's benefits remeasurement, the productivity ratio was 52.7% compared to 51.1%.

Operating leverage on a reported basis was negative 4.9%. Adjusting for Acquisition and divestiture-related amounts, operating leverage was negative 3.3%. The benefits remeasurement negatively impacted operating leverage by 2.1%.

Taxes

Q3 2019 vs Q3 2018

The effective tax rate was 27.5%, higher than 21.5% in the same quarter last year, due primarily to higher taxes related to the divestiture of Puerto Rico announced in the quarter. Adjusting for the Acquisition and divestiture-related amounts, the effective tax rate was 21.6% compared to 22.7%.

Q3 2019 vs Q2 2019

The effective tax rate increased to 27.5% from 21.7% last quarter, due primarily to higher taxes related to the divestiture of Puerto Rico announced in the quarter. Adjusting for the Acquisition and divestiture-related amounts, the effective tax rate was 21.6% compared to 22.4%.

Year-to-date Q3 2019 vs Year-to-date Q3 2018

The effective tax rate was 22.4%, unchanged from the prior year. Higher tax benefits in certain jurisdictions and higher tax-exempt income were offset by higher taxes related to the divestiture of foreign operations announced in the quarter.

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⁾

	For the three months ended			For the nine months ended	
(Unaudited) (\$ millions) (Taxable equivalent basis)	July 31 2019	April 30 2019	July 31 2018	July 31 2019	July 31 2018
Net interest income	\$ 2,120	\$ 1,990	\$ 2,024	\$ 6,146	\$ 5,869
Non-interest income ⁽²⁾⁽³⁾	1,412	1,390	1,349	4,181	4,038
Total revenue	3,532	3,380	3,373	10,327	9,907
Provision for credit losses	240	252	181	725	596
Non-interest expenses	1,723	1,711	1,661	5,164	4,907
Income tax expense	409	369	401	1,157	1,155
Net income	\$ 1,160	\$ 1,048	\$ 1,130	\$ 3,281	\$ 3,249
Net income attributable to non-controlling interest in subsidiaries	—	—	—	—	—
Net income attributable to equity holders of the Bank	\$ 1,160	\$ 1,048	\$ 1,130	\$ 3,281	\$ 3,249
Other financial data and measures					
Return on equity	19.5%	18.4%	23.0%	18.7%	23.3%
Net interest margin ⁽⁴⁾	2.49%	2.46%	2.46%	2.47%	2.44%
Provision for credit losses – performing (Stage 1 and 2)	\$ (16)	\$ 19	\$ 7	\$ 7	\$ (2)
Provision for credit losses – impaired (Stage 3)	\$ 256	\$ 233	\$ 174	\$ 718	\$ 598
Provision for credit losses as a percentage of average net loans and acceptances (annualized)	0.27%	0.30%	0.21%	0.28%	0.24%
Provision for credit losses on impaired loans as a percentage of average net loans and acceptances (annualized)	0.29%	0.28%	0.21%	0.28%	0.24%
Net write-offs as a percentage of average net loans and acceptances (annualized)	0.29%	0.28%	0.23%	0.28%	0.25%
Assets under administration (\$ billions) ⁽⁵⁾	\$ 382	\$ 381	\$ 323	\$ 382	\$ 323
Assets under management (\$ billions) ⁽⁵⁾	\$ 240	\$ 239	\$ 195	\$ 240	\$ 195
Average assets (\$ billions)	\$ 365	\$ 358	\$ 344	\$ 360	\$ 339
Average liabilities (\$ billions)	\$ 285	\$ 281	\$ 254	\$ 280	\$ 250

(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 July 31, 2019 – \$16 (April 30, 2019 – \$18; July 31, 2018 – \$11) and for the nine months ended July 31, 2019 – \$47 (July 31, 2018 – \$70).

(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.

(5) Prior period amounts have been restated to conform with current period presentation.

Net income

Q3 2019 vs Q3 2018

Net income attributable to equity holders was \$1,160 million, an increase of \$30 million or 3%. The increase was due primarily to solid asset and deposit growth and the impact of acquisitions, partly offset by higher non-interest expenses and provision for credit losses. Lower gains on sale of real estate impacted earnings growth by 2%.

Q3 2019 vs Q2 2019

Net income attributable to equity holders increased \$112 million or 11%. The increase was due primarily to higher net interest income driven by three additional days in the quarter and solid asset and deposit growth, and higher wealth management fees.

Year-to-date Q3 2019 vs Year-to-date Q3 2018

Net income attributable to equity holders increased \$32 million or 1%. Adjusting for Acquisition-related costs, net income increased by 2% due primarily to higher revenue driven by solid asset and deposit growth, and the impact of acquisitions, partly offset by higher non-interest expenses and provision for credit losses. Lower gains on sale of real estate, the prior year gain on the reorganization of Interac, and the prior year benefit from the Alignment of the reporting period of the insurance operations with the Bank, impacted earnings growth by 3%.

Average assets

Q3 2019 vs Q3 2018

Average assets grew \$21 billion or 6% to \$365 billion. The growth included \$6 billion or 3% in residential mortgages, \$5 billion or 10% in business loans and acceptances, and \$2 billion or 3% in personal loans.

Q3 2019 vs Q2 2019

Average assets grew \$7 billion or 2%. The growth included \$3 billion or 5% in business loans and acceptances, \$3 billion or 1% in residential mortgages, and \$1 billion or 2% in personal loans.

Year-to-date Q3 2019 vs Year-to-date Q3 2018

Average assets grew \$21 billion or 6% to \$360 billion. The growth included \$5 billion or 3% in residential mortgages, \$5 billion or 10% in business loans and acceptances, and \$2 billion or 3% in personal loans.

Average liabilities

Q3 2019 vs Q3 2018

Average liabilities increased \$31 billion or 12%, including strong growth of \$13 billion or 17% in non-personal deposits and \$12 billion or 7% in personal deposits.

Q3 2019 vs Q2 2019

Average liabilities increased \$4 billion or 2%, primarily in non-personal deposits.

Year-to-date Q3 2019 vs Year-to-date Q3 2018

Average liabilities increased \$30 billion or 12%, including strong growth of \$12 billion or 7% in personal deposits and \$11 billion or 15% in non-personal deposits.

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

Q3 2019 vs Q3 2018

AUA increased \$59 billion to \$382 billion or 18% and AUM increased \$45 billion or 23% to \$240 billion driven by the impact of prior year acquisitions and market appreciation.

Q3 2019 vs Q2 2019

AUA and AUM increased \$1 billion due primarily to net sales.

Net interest income

Q3 2019 vs Q3 2018

Net interest income of \$2,120 million increased \$96 million or 5%, largely reflecting solid asset and deposit growth. The margin improved three basis points to 2.49%, primarily driven by the impact of prior interest rate increases by the Bank of Canada.

Q3 2019 vs Q2 2019

Net interest income increased \$130 million or 7%, due primarily to three fewer days in the prior quarter and solid asset and deposit growth. The margin improved three basis points to 2.49%, largely due to improved spreads in retail banking products.

Year-to-date Q3 2019 vs Year-to-date Q3 2018

Net interest income of \$6,146 million increased \$277 million or 5%, reflecting improved margins and solid growth in assets and deposits. The margin improved three basis points to 2.47%, primarily driven by the impact of prior interest rate increases by the Bank of Canada.

Non-interest income

Q3 2019 vs Q3 2018

Non-interest income of \$1,412 million increased \$63 million or 5%. Higher wealth management fee income from acquisitions and credit fees were partly offset by reduced net card revenue due to the impact of the new revenue accounting standard and lower gains on sale of real estate.

Q3 2019 vs Q2 2019

Non-interest income increased \$22 million or 2% due primarily to higher wealth management fees.

Year-to-date Q3 2019 vs Year-to-date Q3 2018

Non-interest income of \$4,181 million increased \$143 million or 4%. Higher wealth management fee income from acquisitions and credit fees were partially offset by reduced net card revenue due to the impact of the new revenue accounting standard and lower gains on sale of real estate. The prior year benefitted from the gain on reorganization of Interac and Alignment of reporting period of the insurance operations with the Bank.

Provision for credit losses

Q3 2019 vs Q3 2018

The provision for credit losses was \$240 million, compared to \$181 million, up 33%. Provision on impaired loans was \$256 million compared to \$174 million, up 47% due primarily to higher retail provisions in line with asset growth and also due in part to lower recoveries. The provision for credit losses ratio on impaired loans was 29 basis points, an increase of eight basis points. Provision on performing loans was a net reversal of \$16 million, a decrease of \$23 million due primarily to improved retail credit quality. The provision for credit losses ratio was 27 basis points, an increase of six basis points due to portfolio mix changes.

Q3 2019 vs Q2 2019

The provision for credit losses was \$240 million, down \$12 million. Provision on impaired loans was up \$23 million due primarily to higher retail provisions. The provision for credit losses ratio on impaired loans was 29 basis points, an increase of one basis point. Provision on performing loans decreased \$35 million due primarily to lower retail provisions driven by more favourable macroeconomic forecast and improved credit quality, partially offset by the impact of asset growth. The provision for credit losses ratio was 27 basis points, a decrease of three basis points.

Year-to-date Q3 2019 vs Year-to-date Q3 2018

The provision for credit losses was \$725 million, compared to \$596 million. Provision on impaired loans was \$718 million, up \$120 million due primarily to higher retail provisions and lower recoveries. The provision for credit losses ratio on impaired loans was 28 basis points, an increase of four basis points. Provision on performing loans was \$7 million, an increase of \$9 million as unfavourable changes in macroeconomic trends were mostly offset by improved credit quality. The provision for credit losses ratio was 28 basis points, an increase of four basis points.

Non-interest expenses

Q3 2019 vs Q3 2018

Non-interest expenses were \$1,723 million, up \$62 million or 4% largely relating to the impact of prior year acquisitions. Higher personnel costs to support business development and regulatory initiatives, and higher marketing-related costs were partly offset by the impact of the new revenue accounting standard.

Q3 2019 vs Q2 2019

Non-interest expenses increased \$12 million or 1%, largely driven by three fewer days in the prior quarter.

Year-to-date Q3 2019 vs Year-to-date Q3 2018

Non-interest expenses were \$5,164 million, up \$257 million or 5%. Adjusting for Acquisition-related costs, non-interest expenses were \$5,105 million, up 5% largely relating to the prior year acquisitions. Higher personnel costs to support business development and regulatory initiatives were offset by the impact of the new revenue accounting standard.

Taxes

The effective tax rate of 26.1% was in line with the prior year and the prior quarter.

International Banking⁽¹⁾

	For the three months ended			For the nine months ended	
(Unaudited) (\$ millions) (Taxable equivalent basis)	July 31 2019	April 30 2019	July 31 2018	July 31 2019	July 31 2018
Net interest income	\$ 2,157	\$ 2,121	\$ 1,827	\$ 6,358	\$ 5,292
Non-interest income ⁽²⁾⁽³⁾	1,270	1,235	1,026	3,756	3,007
Total revenue	3,427	3,356	2,853	10,114	8,299
Provision for credit losses ⁽⁵⁾	476	628	771	1,574	1,455
Non-interest expenses	1,780	1,710	1,510	5,232	4,390
Income tax expense	269	249	97	744	509
Net income	\$ 902	\$ 769	\$ 475	\$ 2,564	\$ 1,945
Net income attributable to non-controlling interest in subsidiaries	\$ 121	\$ 69	\$ (44)	\$ 301	\$ 84
Net income attributable to equity holders of the Bank	\$ 781	\$ 700	\$ 519	\$ 2,263	\$ 1,861
Other financial data and measures					
Return on equity	14.1%	13.1%	11.2%	13.9%	14.5%
Net interest margin ⁽⁴⁾	4.45%	4.58%	4.70%	4.52%	4.70%
Provision for credit losses – performing (Stage 1 and 2) ⁽⁵⁾	\$ (46)	\$ 156	\$ 374	\$ 129	\$ 324
Provision for credit losses – impaired (Stage 3)	\$ 522	\$ 472	\$ 397	\$ 1,445	\$ 1,131
Provision for credit losses as a percentage of average net loans and acceptances (annualized)	1.24%	1.71%	2.58%	1.41%	1.71%
Provision for credit losses on impaired loans as a percentage of average net loans and acceptances (annualized)	1.36%	1.29%	1.33%	1.30%	1.32%
Net write-offs as a percentage of average net loans and acceptances (annualized)	1.27%	1.26%	1.14%	1.29%	1.26%
Average assets (\$ billions)	\$ 206	\$ 203	\$ 164	\$ 202	\$ 159
Average liabilities (\$ billions)	\$ 158	\$ 156	\$ 129	\$ 156	\$ 123

(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 July 31, 2019 – \$182 (April 30, 2019 – \$210; July 31, 2018 – \$153) and for the nine months ended July 31, 2019 – \$553 (July 31, 2018 – \$442).

(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 related to Chile of \$36 (After tax \$26) in the second quarter of 2018.

(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 months ended July 31, 2019 – nil (April 30, 2019 – \$151; July 31, 2018 – \$404) and for the nine months ended July 31, 2019 – \$151 (July 31, 2018 – \$404).

Net income**Q3 2019 vs Q3 2018**

Net income attributable to equity holders of \$781 million was up \$262 million. Adjusting for Acquisition-related costs, net income increased to \$815 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, higher non-interest income, and the positive impact of foreign currency translation. This was partly offset by increased provision for credit losses, non-interest expenses and higher income taxes.

Q3 2019 vs Q2 2019

Net income attributable to equity holders increased by \$81 million or 12%. Adjusting for Acquisition-related costs, net income increased by \$28 million or 4%. The impact of revenue growth and lower income taxes, were partly offset by higher non-interest expenses.

Year-to-date Q3 2019 vs Year-to-date Q3 2018

Net income attributable to equity holders of \$2,263 million was up \$402 million or 22%. Adjusting for Acquisition-related costs, net income increased to \$2,407 million, up 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, higher non-interest income, and the positive impact of foreign currency translation, partly offset by increased provision for credit losses and non-interest expenses.

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 nine months ended	
	July 31 2019	April 30 2019	July 31 2018	July 31 2019	July 31 2018
Constant dollars					
Net interest income	\$ 2,157	\$ 2,085	\$ 1,814	\$ 6,358	\$ 5,303
Non-interest income ⁽²⁾⁽³⁾	1,270	1,229	1,033	3,756	2,998
Total revenue	3,427	3,314	2,847	10,114	8,301
Provision for credit losses ⁽⁴⁾	476	616	735	1,574	1,423
Non-interest expenses	1,780	1,683	1,492	5,232	4,371
Income tax expense	269	249	107	744	518
Net income on constant dollar basis	\$ 902	\$ 766	\$ 513	\$ 2,564	\$ 1,989
Net income attributable to non-controlling interest in subsidiaries on a constant dollar basis	\$ 121	\$ 72	\$ (45)	\$ 301	\$ 82
Net income attributable to equity holders of the Bank on a constant dollar basis	\$ 781	\$ 694	\$ 558	\$ 2,263	\$ 1,907
Other financial data and measures					
Average assets (\$ billions)	\$ 206	\$ 200	\$ 164	\$ 202	\$ 159
Average liabilities (\$ billions)	\$ 158	\$ 153	\$ 128	\$ 156	\$ 124

(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 July 31, 2019 – \$182 (April 30, 2019 – \$213; July 31, 2018 – \$159) and for the nine months ended July 31, 2019 – \$553 (July 31, 2018 – \$461).

(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 months ended July 31, 2019 – nil (April 30, 2019 – \$149; July 31, 2018 – \$376) and for the nine months ended July 31, 2019 – \$151 (July 31, 2018 – \$376).

Net income

Q3 2019 vs Q3 2018

Net income attributable to equity holders of \$781 million was up \$223 million. Adjusting for Acquisition-related costs, net income increased to \$815 million, up 11%. 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. This was partly offset by increased provision for credit losses, and higher non-interest expenses and income taxes.

Q3 2019 vs Q2 2019

Net income attributable to equity holders increased by \$87 million or 13%. Adjusting for Acquisition-related costs, net income increased by \$36 million or 5%. Higher revenues and lower income taxes, were partly offset by higher non-interest expenses.

Year-to-date Q3 2019 vs Year-to-date Q3 2018

Net income attributable to equity holders of \$2,263 million was up \$356 million or 19%. Adjusting for Acquisition-related costs, net income increased to \$2,407 million, up \$311 million or 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, partly offset by increased provision for credit losses and non-interest expenses.

Average assets

Q3 2019 vs Q3 2018

Average assets of \$206 billion grew \$42 billion or 26%, driven by strong loan growth of 28%, primarily in the Pacific Alliance countries, partly due to acquisitions. Retail and commercial loan growth were 32% and 24%, respectively.

Q3 2019 vs Q2 2019

Average assets increased 3%, driven by good organic loan growth in the Pacific Alliance and the impact of acquisitions in Peru and Dominican Republic. Retail and commercial loan growth were 3% and 2%, respectively.

Year-to-date Q3 2019 vs Year-to-date Q3 2018

Average assets of \$202 billion increased \$43 billion or 27%, driven by strong 29% loan growth, primarily in the Pacific Alliance, partly due to acquisitions. Retail and commercial loan growth were 31% and 26%, respectively.

Average liabilities

Q3 2019 vs Q3 2018

Average liabilities of \$158 billion increased \$30 billion with deposit growth of 18%, primarily in the Pacific Alliance, due in part to acquisitions.

Q3 2019 vs Q2 2019

Average liabilities were up \$5 billion driven by deposit growth of 3%.

Year-to-date Q3 2019 vs Year-to-date Q3 2018

Average liabilities of \$156 billion increased \$32 billion with deposit growth of 18%, primarily in the Pacific Alliance, partly due to acquisitions.

Net interest income

Q3 2019 vs Q3 2018

Net interest income was \$2,157 million, up 19% driven by strong retail and commercial loan growth, with approximately three quarters of net interest income growth from acquisitions. Net interest margin decreased 25 basis points to 4.45% due primarily to business mix impact of acquisitions, and margin compression in Mexico.

Q3 2019 vs Q2 2019

Net interest income increased \$72 million or 3% driven by good retail and commercial loan growth in the Pacific Alliance countries. Net interest margin decreased by 13 basis points primarily driven by margin compression in Mexico and asset/liability management activities in Latin America, partly offset by the positive business mix impact of acquisitions that closed in the previous quarter.

Year-to-date Q3 2019 vs Year-to-date Q3 2018

Net interest income was \$6,358 million, up 20% driven by strong retail and commercial loan growth in the Pacific Alliance countries, of which approximately two-thirds was from acquisitions. The net interest margin decreased 18 basis points to 4.52% driven mainly by the business mix impact of acquisitions.

Non-interest income

Q3 2019 vs Q3 2018

Non-interest income was \$1,270 million, up \$237 million or 23% of which approximately half was from acquisitions. The remaining increase was driven by higher banking fees, an increased contribution from associated corporations, higher trading revenues and investment gains.

Q3 2019 vs Q2 2019

Non-interest income increased \$41 million or 3% from higher trading revenues and investment gains, partially offset by lower banking fees.

Year-to-date Q3 2019 vs Year-to-date Q3 2018

Non-interest income was \$3,756 million, up \$758 million or 25% of which almost half was due to the impact of acquisitions. The remaining increase was driven by higher banking fees, an increased contribution from associated corporations, higher trading revenues and investment gains.

Provision for credit losses

Q3 2019 vs Q3 2018

The provision for credit losses was \$476 million, compared to \$735 million, down \$259 million or 35%. Adjusting for the impact of Day 1 provision on acquired performing loans, the provision for credit losses of \$476 million increased by \$117 million, or 33% due to higher retail provisions. Provision on impaired loans increased \$134 million to \$522 million due to higher retail provisions in line with asset and acquisition-driven growth. The provision for credit losses ratio on impaired loans was 136 basis points, an increase of three basis points. Provision on performing loans was a reversal of \$46 million compared to \$347 million. Adjusting for the Day 1 provision on acquired performing loans, provision on performing loans decreased \$16 million primarily in retail provisions due to more favourable macroeconomic trends and strong credit quality, partially offset by the impact of asset growth. The provision for credit losses ratio was 124 basis points, an increase of one basis point on an adjusted basis.

Q3 2019 vs Q2 2019

The provision for credit losses was \$476 million, compared to \$616 million. Adjusting for the Day 1 provision on acquired performing loans last quarter, the provision for credit losses increased \$9 million. Provision on impaired loans was up \$60 million, primarily in retail portfolios, partly as a result of acquisitions and higher recoveries last quarter. The provision for credit losses ratio on impaired loans was 136 basis points, an increase of seven basis points. Provision on performing loans was a reversal of \$46 million, compared to \$154 million. Adjusting for the Day 1 provision on acquired performing loans, provision on performing loans decreased by \$51 million. This was due primarily to lower retail and commercial provisions from improving credit quality and more favourable macroeconomic trends partially offset by the impact of growth in the retail portfolio. The provision for credit losses ratio was 124 basis points, a decrease of six basis points on an adjusted basis.

Year-to-date Q3 2019 vs Year-to-date Q3 2018

The provision for credit losses was \$1,574 million, compared to \$1,423 million. Adjusting for the impact of Day 1 provision on acquired performing loans, the provision for credit losses increased \$376 million driven by higher retail provisions. Provision on impaired loans was \$1,445 million, up \$324 million due primarily to organic and acquisition-driven asset growth in the retail portfolio partially offset by lower commercial provisions. The provision for credit losses ratio on impaired loans was 130 basis points, a decrease of two basis points. Adjusting for the impact of Day 1 provision on acquired performing loans, provision on performing loans increased \$52 million. This was due to commercial provisions from movement of hurricane-related provisions to provision on impaired loans last year while retail provisions were lower from strong credit quality, partially offset by the impact of asset growth. On an adjusted basis, the provision for credit losses ratio was 127 basis points, an increase of three basis points.

Non-interest expenses

Q3 2019 vs Q3 2018

Non-interest expenses increased \$288 million or 19% to \$1,780 million, of which about three quarters was driven by acquisitions. The remaining increase was due to business volume growth, higher regulatory costs, and the impact of inflation.

Q3 2019 vs Q2 2019

Non-interest expenses increased \$97 million, with a third of the increase relating to acquisitions. The remaining increase was due mostly to business volume growth and seasonality.

Year-to-date Q3 2019 vs Year-to-date Q3 2018

Non-interest expenses increased \$861 million or 20% to \$5,232 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

Adjusting for Acquisition-related costs, the effective tax rate increased marginally to 23.2% from 22.3% last year due primarily to higher tax benefits in Mexico in the same quarter last year. Compared to last quarter, the effective tax rate decreased from 25.1% to 23.2% mainly from higher non-taxable revenues this quarter.

Year-to-date Q3 2019 vs Year-to-date Q3 2018

Adjusted for Acquisition-related costs, the effective tax rate increased slightly from 22.1% to 23.0% largely driven by higher tax benefits in Mexico in the same period last year.

Global Banking and Markets

	For the three months ended			For the nine months ended	
<i>(Unaudited) (\$ millions)</i>	July 31	April 30	July 31	July 31	July 31
<i>(Taxable equivalent basis)</i>	2019	2019	2018	2019	2018
Net interest income	\$ 337	\$ 350	\$ 365	\$ 1,059	\$ 1,117
Non-interest income	747	801	745	2,251	2,338
Total revenue	1,084	1,151	1,110	3,310	3,455
Provision for credit losses	(4)	(6)	(10)	(26)	(30)
Non-interest expenses	593	594	543	1,832	1,680
Income tax expense	121	143	136	375	463
Net income	\$ 374	\$ 420	\$ 441	\$ 1,129	\$ 1,342
Net income attributable to non-controlling interest in subsidiaries	–	–	–	–	–
Net income attributable to equity holders of the Bank	\$ 374	\$ 420	\$ 441	\$ 1,129	\$ 1,342
Other financial data and measures					
Return on equity	12.8%	15.2%	15.6%	13.1%	16.2%
Net interest margin ⁽¹⁾	1.61%	1.70%	1.82%	1.70%	1.88%
Provision for credit losses – performing (Stage 1 and 2)	\$ (2)	\$ (2)	\$ 2	\$ (19)	\$ (19)
Provision for credit losses – impaired (Stage 3)	\$ (2)	\$ (4)	\$ (12)	\$ (7)	\$ (11)
Provision for credit losses as a percentage of average net loans and acceptances (annualized)	(0.01)%	(0.02)%	(0.05)%	(0.03)%	(0.05)%
Provision for credit losses on impaired loans as a percentage of average net loans and acceptances (annualized)	(0.01)%	(0.02)%	(0.06)%	(0.01)%	(0.02)%
Net write-offs as a percentage of average net loans and acceptances	0.01%	0.09%	–%	0.03%	0.04%
Average assets (\$ billions)	\$ 374	\$ 361	\$ 311	\$ 366	\$ 322
Average liabilities (\$ billions)	\$ 306	\$ 295	\$ 258	\$ 300	\$ 267

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

Net income

Q3 2019 vs Q3 2018

Net income attributable to equity holders was \$374 million, a decrease of \$67 million or 15%. Lower net interest income, higher non-interest expenses, and lower recovery of provision for credit losses were partially offset by the favourable impact of foreign currency translation, and lower income taxes.

MANAGEMENT'S DISCUSSION & ANALYSIS

Q3 2019 vs Q2 2019

Net income attributable to equity holders decreased by \$46 million or 11%. Lower non-interest income, net interest income and recovery of provision for credit losses was partially offset by lower income taxes.

Year-to-date Q3 2019 vs Year-to-date Q3 2018

Net income attributable to equity holders decreased by \$213 million or 16%. Lower net interest income, non-interest income and higher non-interest expenses was partly offset by lower income taxes.

Average assets

Q3 2019 vs Q3 2018

Average assets were \$374 billion, an increase of \$63 billion or 20%. This increase was due primarily to growth in securities purchased under resale agreements, trading securities, business and government loans as well as the impact of foreign currency translation.

Q3 2019 vs Q2 2019

Average assets increased \$13 billion or 4% due mainly to growth in trading securities.

Year-to-date Q3 2019 vs Year-to-date Q3 2018

Average assets were \$366 billion, an increase of \$44 billion or 14% primarily due to growth in securities purchased under resale agreements, business and government loans and trading securities.

Average liabilities

Q3 2019 vs Q3 2018

Average liabilities of \$306 billion were higher by \$48 billion or 19% due to higher securities sold under repurchase agreements and deposits, as well as the impact of foreign currency translation.

Q3 2019 vs Q2 2019

Average liabilities increased \$11 billion or 4% due mainly to higher deposits and securities sold under repurchase agreements.

Year-to-date Q3 2019 vs Year-to-date Q3 2018

Average liabilities were \$300 billion, an increase of \$33 billion or 12% due to higher securities sold under repurchase agreements and deposits, as well as the impact of foreign currency translation.

Net interest income

Q3 2019 vs Q3 2018

Net interest income of \$337 million was down \$28 million or 8%. This decline was due mainly to deposit margin compression and the impact of higher funding costs on lending margins, partly offset by higher loan and deposit volumes. The net interest margin decreased 21 basis points to 1.61%.

Q3 2019 vs Q2 2019

Net interest income decreased by \$13 million or 4% mainly due to lower deposit margins, partly offset by higher lending margins in Canada and Asia. The net interest margin was lower by nine basis points compared to the prior quarter.

Year-to-date Q3 2019 vs Year-to-date Q3 2018

Net interest income was down by \$58 million or 5%. This decline was due to decreased lending margins in most of the regions and lower deposit margins. The net interest margin was down 18 basis points to 1.70%.

Non-interest income

Q3 2019 vs Q3 2018

Non-interest income was \$747 million, an increase of \$2 million from prior year. Strong growth in equity trading revenues was mostly offset by a decline in underwriting and advisory revenue compared to elevated levels in the prior year.

Q3 2019 vs Q2 2019

Non-interest income was down \$54 million or 7%. This decline was due mainly to lower underwriting, advisory fees and lower fixed income trading revenues.

Year-to-date Q3 2019 vs Year-to-date Q3 2018

Non-interest income was down \$87 million or 4% driven primarily by lower revenue in the equities business as well as higher underwriting and advisory fees in the prior year. This was partly offset by higher revenue in the fixed income business and higher credit fees.

Provision for credit losses

Q3 2019 vs Q3 2018

The provision for credit losses increased \$6 million due mainly to higher reversals in the US portfolio last year. The provision for credit losses ratio was negative one basis point, an increase of four basis points.

Q3 2019 vs Q2 2019

The provision for credit losses was a net reversal of \$4 million, compared to net reversal of \$6 million last quarter. Provision on impaired loans had a net reversal of \$2 million due primarily to higher reversal of provisions in the Asia Pacific portfolio. The provision for credit losses ratio on impaired loans was negative one basis point, an increase of one basis point. Provision on performing loans was a net reversal of \$2 million. The provision for credit losses ratio was negative one basis point, an increase of one basis point.

Year-to-date Q3 2019 vs Year-to-date Q3 2018

The provision for credit losses increased \$4 million due mainly to higher impaired loan provision reversals in the US portfolio during the past year. The provision for credit losses ratio was negative three basis points, an increase of two basis points.

Non-interest expenses

Q3 2019 vs Q3 2018

Non-interest expenses of \$593 million increased \$50 million or 9%. This increase was due to higher compliance and technology investments mainly driven by regulatory requirements, and the unfavourable impact of foreign currency translation.

Q3 2019 vs Q2 2019

Non-interest expenses decreased \$1 million as lower compensation and benefit costs were mostly offset by higher volume-driven costs in the capital markets business.

Year-to-date Q3 2019 vs Year-to-date Q3 2018

Non-interest expenses increased \$152 million or 9% due to higher compliance and technology investments mainly driven by regulatory requirements, higher share-based compensation, and the negative impact of foreign currency translation. This was partly offset by lower performance-based compensation.

Taxes

Q3 2019 vs Q3 2018

The effective tax rate for the quarter was 24.3%, compared to 23.6% due mainly to the change in income mix in certain foreign jurisdictions.

Q3 2019 vs Q2 2019

The effective tax rate for the quarter of 24.3%, compared to 25.5% in prior quarter was due mainly to the change in income mix in certain foreign jurisdictions.

Year-to-date Q3 2019 vs Year-to-date Q3 2018

The effective tax rate was 24.9%, compared to 25.7%. The lower tax rate was due mainly to the change in income mix in certain foreign jurisdictions.

Other ⁽¹⁾⁽²⁾	For the three months ended			For the nine months ended	
(Unaudited) (\$ millions) (Taxable equivalent basis)	July 31 2019	April 30 2019	July 31 2018	July 31 2019	July 31 2018
Business segment income					
Net interest income ⁽³⁾	\$ (240)	\$ (268)	\$ (131)	\$ (722)	\$ (307)
Non-interest income ⁽³⁾⁽⁴⁾	(144)	184	(24)	37	(27)
Total revenue	(384)	(84)	(155)	(685)	(334)
Provision for credit losses	1	(1)	1	1	–
Non-interest expenses	113	31	56	198	17
Income tax expense/(benefit) ⁽³⁾	(46)	(136)	(105)	(400)	(268)
Net income (loss)	\$ (452)	\$ 22	\$ (107)	\$ (484)	\$ (83)
Net income attributable to non-controlling interest in subsidiaries	\$ (1)	\$ 1	\$ –	\$ –	\$ –
Net income (loss) attributable to equity holders	\$ (451)	\$ 21	\$ (107)	\$ (484)	\$ (83)
Other measures					
Average assets (\$ billions)	\$ 116	\$ 117	\$ 116	\$ 116	\$ 117
Average liabilities (\$ billions)	\$ 242	\$ 238	\$ 229	\$ 239	\$ 234

(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 July 31, 2019 – \$48 (April 30, 2019 – \$41; July 31, 2018 – \$28) and for nine months ended July 31, 2019 – \$123 (July 31, 2018 – \$81) 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 July 31, 2019 – \$(8) (April 30, 2019 – \$(58); July 31, 2018 – \$(38)) and for the nine months ended July 31, 2019 – \$(111) (July 31, 2018 – \$(122)).

The Other segment includes Group Treasury, smaller operating segments, Net gain/loss 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.

Q3 2019 vs Q3 2018

Net loss attributable to equity holders was \$451 million. Adjusting for the Net loss on divestitures of \$418 million, net loss attributable to equity holders was \$33 million, compared to \$107 million. The lower net loss was due mainly to higher investment gains and lower taxes, partly offset by lower contributions from asset/liability management activities and higher non-interest expenses.

Q3 2019 vs Q2 2019

Net loss attributable to equity holders was \$451 million. Adjusting for the Net loss on divestitures in the current period and the Net gain on divestitures in the prior period, the net loss attributable to equity holders was \$33 million, compared to \$121 million. The lower net loss was due primarily to higher investment gains, higher contributions from asset/liability management activities and lower income taxes, partly offset by higher non-interest expenses.

Year-to-date Q3 2019 vs Year-to-date Q3 2018

Net loss attributable to equity holders was \$484 million. Adjusting for the Net loss on divestitures, the net loss attributable to equity holders was \$208 million, compared to \$83 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 and higher income taxes.

Geographic Highlights

	For the three months ended			For the nine months ended	
(Unaudited)	July 31 2019 ⁽¹⁾	April 30 2019 ⁽¹⁾	July 31 2018 ⁽¹⁾	July 31 2019 ⁽¹⁾	July 31 2018 ⁽¹⁾
Geographic segment income (loss) (\$ millions)					
Canada	\$ 1,210	\$ 1,022	\$ 1,159	\$ 3,290	\$ 3,615
United States	186	225	194	587	502
Mexico	136	140	169	458	494
Peru	195	140	190	546	510
Chile	133	126	(20)	376	179
Colombia	30	31	(36)	96	8
Caribbean and Central America	(215)	298	167	277	510
Other international	189	207	160	559	551
Net income (loss) attributable to equity holders of the Bank	\$ 1,864	\$ 2,189	\$ 1,983	\$ 6,189	\$ 6,369
Geographic segment adjusted income (loss) (\$ millions)					
Canada	\$ 1,224	\$ 1,036	\$ 1,170	\$ 3,344	\$ 3,636
United States	186	225	194	587	502
Mexico	136	140	169	458	494
Peru	197	184	190	593	512
Chile	147	140	115	421	322
Colombia	34	32	23	105	70
Caribbean and Central America	217	186	167	596	511
Other international	189	205	162	549	555
Adjusted net income (loss) attributable to equity holders of the Bank	\$ 2,330	\$ 2,148	\$ 2,190	\$ 6,653	\$ 6,602
Average assets (\$ billions)					
Canada	\$ 611	\$ 595	\$ 561	\$ 599	\$ 561
United States	148	147	118	147	120
Mexico	39	37	32	37	32
Peru	29	27	24	27	24
Chile	51	52	29	51	27
Colombia	13	14	12	14	12
Caribbean and Central America	42	42	41	42	40
Other international	128	125	118	127	121
Total	\$ 1,061	\$ 1,039	\$ 935	\$ 1,044	\$ 937

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

Quarterly Financial Highlights

For the three months ended

(Unaudited) (\$ millions)	July 31 2019 ⁽¹⁾	April 30 2019 ⁽¹⁾	January 31 2019 ⁽¹⁾	October 31 2018	July 31 2018	April 30 2018	January 31 2018	October 31 2017
Reported results								
Net interest income	\$ 4,374	\$ 4,193	\$ 4,274	\$ 4,220	\$ 4,085	\$ 3,950	\$ 3,936	\$ 3,831
Non-interest income	3,285	3,610	3,330	3,228	3,096	3,108	3,152	2,981
Total revenue	\$ 7,659	\$ 7,803	\$ 7,604	\$ 7,448	\$ 7,181	\$ 7,058	\$ 7,088	\$ 6,812
Provision for credit losses	713	873	688	590	943	534	544	536
Non-interest expenses	4,209	4,046	4,171	4,064	3,770	3,726	3,498	3,668
Income tax expense	753	625	498	523	529	621	709	538
Net income	\$ 1,984	\$ 2,259	\$ 2,247	\$ 2,271	\$ 1,939	\$ 2,177	\$ 2,337	\$ 2,070
Basic earnings per share (\$)	1.51	1.74	1.72	1.72	1.60	1.70	1.88	1.66
Diluted earnings per share (\$)	1.50	1.73	1.71	1.71	1.55	1.70	1.86	1.64
Core banking margin (%) ⁽²⁾	2.45	2.45	2.45	2.47	2.46	2.47	2.46	2.44
Effective tax rate (%)	27.5	21.7	18.1	18.7	21.5	22.2	23.3	20.6
Adjusted results⁽²⁾:								
Adjusted net income	\$ 2,455	\$ 2,263	\$ 2,291	\$ 2,345	\$ 2,259	\$ 2,190	\$ 2,350	\$ 2,084
Adjusted diluted earnings per share	\$ 1.88	\$ 1.70	\$ 1.75	\$ 1.77	\$ 1.76	\$ 1.71	\$ 1.87	\$ 1.65

(1) The amounts for the periods ended July 31, 2019, 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 current quarter's earnings were reduced by Acquisition and divestiture-related amounts of \$471 million (\$393 million pre-tax), and net income in the 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 increased through the period, driven by steady growth in retail loans in Canadian and International Banking, commercial loan growth across all three business lines, strong deposit growth, and the impact of acquisitions. Net interest margin has remained relatively stable over the period. The margin was 2.45% this quarter.

The prior quarter's net interest income was lower due to the impact of three fewer days in the quarter as well as lower contributions from asset/liability management activities.

Non-interest income

Non-interest income in the current quarter was impacted by the Net loss on divestitures of \$306 million. The prior quarter included Net gain on divestitures of \$173 million. Non-interest income has generally increased through the period, partly driven by acquisitions, the Net gain on divestitures in the prior quarter, and the Alignment of reporting period for certain units within the Bank. Gains on sale of real estate and the sale of investment securities have moderated since 2017. The sale of the Hollis Wealth 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 \$713 million in this quarter. The provision for credit losses ratio was 48 basis points, a decrease of 13 basis points from the prior quarter which included the Day 1 provision on acquired performing loans of \$151 million. The third quarter of 2018 included Day 1 provision on acquired performing loans of \$404 million.

Non-interest expenses

Non-interest expenses 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 27.5% this quarter or 21.6% adjusted for Acquisition and divestiture-related amounts. The effective tax rate averaged 22.0% over the period, with a range of 18.1% to 27.5%. 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 July 31, 2019 were \$1,067 billion, up \$68 billion or 7% from October 31, 2018. 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 \$17 billion due primarily to lower balances on deposit with central banks, while trading securities increased by \$31 billion primarily to hedge client driven transactions. Securities purchased under resale agreements and securities borrowed increased by \$15 billion due to increased client demand.

Investment securities increased \$4 billion from October 31, 2018 due primarily to higher holdings of corporate debt. As at July 31, 2019, the net unrealized loss on debt securities measured at fair value through other comprehensive income was \$25 million, after the impact of qualifying hedges.

Loans increased \$37 billion from October 31, 2018. Residential mortgages increased \$12 billion due to growth in Canada and Latin America. Personal loans and credit cards grew \$4 billion mainly in Latin America and Canada. Business and government loans increased \$22 billion due primarily to growth in Canada, Latin America and the U.S.

Total liabilities were \$997 billion as at July 31, 2019, up \$66 billion or 7% from October 31, 2018.

Total deposits increased \$46 billion. Personal deposits grew by \$8 billion due primarily to growth in Canada. Business and government deposits grew by \$35 billion mainly in the U.S., Canada and Latin America. Deposits from financial institutions increased \$3 billion.

Obligations related to securities sold under repurchase agreements and securities lent increased by \$19 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 and other liabilities increased \$3 billion, while obligations related to securities sold short decreased by \$6 billion.

Total shareholders' equity increased \$2,451 million from October 31, 2018. This increase was driven mainly by current year earnings of \$6,490 million. Partly offsetting were dividends paid of \$3,284 million, the repurchase and cancellation of approximately 10 million common shares of \$719 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 July 31, 2019 was \$5,273 million. The allowance for credit losses on loans was \$5,194 million, down \$101 million, due primarily to new provisions being offset by write-offs and the impact of foreign currency translation.

The allowance on impaired loans increased \$1 million to \$1,670 million from last quarter as new provisions were offset by write-offs. The allowance against performing loans was lower at \$3,524 million compared to \$3,626 million as at April 30, 2019, driven by decreases in retail allowances primarily due to the impact of foreign currency translation.

Impaired loans

Total gross impaired loans as at July 31, 2019 were \$5,229 million, down from \$5,364 million as at April 30, 2019, due primarily to the impact of foreign currency translation.

Net impaired loans in Canadian Banking were \$706 million as at July 31, 2019, a decrease of \$1 million from April 30, 2019. International Banking's net impaired loans were \$2,688 million as at July 31, 2019, a decrease of \$55 million from April 30, 2019. In Global Banking and Markets, net impaired loans were \$165 million as at July 31, 2019, a decrease of \$80 million from April 30, 2019 due largely to reversals during the quarter. Net impaired loans as a percentage of loans and acceptances were 0.58% as at July 31, 2019, a decrease of three basis points 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 July 31, 2019, these loans amounted to \$382 billion or 63% of the Bank's total loans and acceptances outstanding (April 30, 2019 – \$376 billion or 63%; October 31, 2018 – \$366 billion or 64%). Of these, \$286 billion or 75% are real estate secured loans (April 30, 2019 – \$282 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.

	As at July 31, 2019											
	Residential mortgages						Home equity lines of credit					
	Insured ⁽¹⁾		Uninsured		Total		Insured ⁽¹⁾		Uninsured		Total	
(\$ millions)	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%
Canada: ⁽²⁾												
Atlantic provinces	\$ 5,767	2.6%	\$ 5,358	2.4%	\$ 11,125	5.0%	\$ –	–%	\$ 1,156	5.5%	\$ 1,156	5.5%
Quebec	7,633	3.5	8,736	3.9	16,369	7.4	–	–	951	4.5	951	4.5
Ontario	39,953	18.0	73,753	33.1	113,706	51.1	–	–	11,392	54.0	11,392	54.0
Manitoba & Saskatchewan	5,437	2.4	4,096	1.9	9,533	4.3	1	–	763	3.6	764	3.6
Alberta	17,933	8.1	12,894	5.8	30,827	13.9	–	–	2,940	13.9	2,940	13.9
British Columbia & Territories	13,049	5.8	27,837	12.5	40,886	18.3	–	–	3,902	18.5	3,902	18.5
Canada ⁽³⁾	\$ 89,772	40%	\$ 132,674	60%	\$ 222,446	100%	\$ 1	–%	\$ 21,104	100%	\$ 21,105	100%
International	–	–	42,724	100	42,724	100	–	–	–	–	–	–
Total	\$ 89,772	34%	\$ 175,398	66%	\$ 265,170	100%	\$ 1	–%	\$ 21,104	100%	\$ 21,105	100%
As at April 30, 2019												
Canada ⁽³⁾	\$ 91,285	42.0%	\$ 125,854	58.0%	\$ 217,139	100%	\$ 2	–%	\$ 21,067	100%	\$ 21,069	100%
International	–	–	43,447	100	43,447	100	–	–	–	–	–	–
Total	\$ 91,285	35.0%	\$ 169,301	65.0%	\$ 260,586	100%	\$ 2	–%	\$ 21,067	100%	\$ 21,069	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 \$3,267 in July 31, 2019 (April 30, 2019 – \$3,123; October 31, 2018 – \$2,899) of which \$2,360 are insured (April 30, 2019 – \$2,302; 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 July 31, 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	34.0%	38.9%	25.9%	1.1%	0.1%	100%
International	65.5%	18.3%	13.8%	2.3%	0.1%	100%
As at April 30, 2019						
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 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 60% uninsured (April 30, 2019 – 58%; October 31, 2018 – 57%). The average loan-to-value (LTV) ratio of the uninsured portfolio is 55% (April 30, 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 July 31, 2019	
	Residential mortgages	Home equity lines of credit ⁽¹⁾
	LTV%	LTV%
Canada: ⁽²⁾		
Atlantic provinces	66.6%	58.8%
Quebec	64.8	68.7
Ontario	64.0	62.6
Manitoba & Saskatchewan	68.0	62.9
Alberta	67.5	73.1
British Columbia & Territories	62.7	62.5
Canada ⁽²⁾	64.1%	63.6%
International	73.0%	n/a
For the three months ended April 30, 2019		
Canada ⁽²⁾	64.5%	61.9%
International	72.0%	n/a
For the three months ended October 31, 2018		
Canada ⁽²⁾	63.5%	62.1%
International	69.2%	n/a

(1) Includes all home equity lines of credit (HELOC). For Scotia Total Equity Plan HELOC's, 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.

The Bank's exposure to sovereigns was \$6.9 billion as at July 31, 2019 (April 30, 2019 – \$7.3 billion; October 31, 2018 – \$8.5 billion), \$5.5 billion to banks (April 30, 2019 – \$3.6 billion; October 31, 2018 – \$5.8 billion) and \$16.7 billion to corporates (April 30, 2019 – \$16.9 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 \$1.0 billion as at July 31, 2019 (April 30, 2019 – \$0.8 billion; October 31, 2018 – \$0.7 billion).

The Bank's current European exposure is provided below:

As at

	July 31, 2019						April 30 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
Greece	\$ 57	\$ —	\$ —	\$ —	\$ 57	\$ —	\$ 57	\$ 114
Ireland	846	435	40	93	1,414	822	2,236	2,438
Italy	9	—	(35)	5	(21)	159	138	148
Portugal	—	—	—	2	2	—	2	2
Spain	1,010	18	56	153	1,237	247	1,484	1,701
Total GIIPS	\$ 1,922	\$ 453	\$ 61	\$ 253	\$ 2,689	\$ 1,228	\$ 3,917	\$ 4,609
U.K.	\$ 8,311	\$ 2,515	\$ 807	\$ 2,202	\$ 13,835	\$ 6,151	\$ 19,986	\$ 20,003
Germany	1,275	672	880	38	2,865	868	3,733	4,285
France	1,137	215	418	128	1,898	1,687	3,585	4,199
Netherlands	762	87	371	115	1,335	1,610	2,945	2,525
Switzerland	878	12	7	187	1,084	808	1,892	1,492
Other	2,072	204	2,639	376	5,291	2,346	7,637	7,988
Total Non-GIIPS	\$ 14,435	\$ 3,705	\$ 5,122	\$ 3,046	\$ 26,308	\$ 13,470	\$ 39,778	\$ 40,492
Total Europe	\$ 16,357	\$ 4,158	\$ 5,183	\$ 3,299	\$ 28,997	\$ 14,698	\$ 43,695	\$ 45,101

- (1) Individual allowances for impaired loans are \$3. 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 \$3,913 as at July 31, 2019 (April 30, 2019 – \$3,906; 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 \$1,481 and collateral held against SFT was \$22,049.
- (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		
	July 31 2019	April 30 2019	July 31 2018
Credit spread plus interest rate	\$ 9.8	\$ 9.6	\$ 11.1
Credit spread	8.1	6.9	8.2
Interest rate	7.2	6.8	8.9
Equities	3.5	3.3	3.8
Foreign exchange	4.0	3.6	2.9
Commodities	2.4	2.1	1.7
Debt specific	3.8	4.3	3.6
Diversification effect	(11.6)	(11.6)	(9.9)
Total VaR	\$ 11.9	\$ 11.3	\$ 13.2
Total Stressed VaR	\$ 37.3	\$ 33.7	\$ 46.9

In the third quarter of 2019, the average one-day Total VaR increased to \$11.9 million from \$11.3 million in the previous quarter, primarily driven by increased exposures to credit spreads and equity prices.

The average one-day Total Stressed VaR increased during the quarter to \$37.3 million from \$33.7 million in the previous quarter, primarily due to lower yields and declining equity prices. 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 were nil trading loss days in the third quarter, compared to 1 trading loss day 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 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.

As at									
July 31, 2019							April 30, 2019	July 31, 2018	
(\$ millions)	Net income			Economic value					
	Canadian dollar	Other currencies	Total	Canadian dollar	Other currencies	Total	Net income	Economic value	Net income
+100 bps	\$ (264)	\$ (11)	\$ (275)	\$ (836)	\$ (821)	\$ (1,657)	\$ (111)	\$ (1,368)	\$ (53)
-100 bps	262	7	269	667	754	1,421	107	1,079	51
									\$ (900)
									832

During the third quarter of 2019, both interest rate sensitivities remained within the Bank's approved consolidated limits.

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

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

Market risk linkage to Consolidated Statement of Financial Position

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

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

As at July 31, 2019	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	\$ 3,572	\$ 3,572	\$ –	\$ –	n/a
Trading assets	131,068	130,523	545	–	Interest rate, FX
Financial instruments designated at fair value through profit or loss	13	–	13	–	Interest rate
Derivative financial instruments	36,157	32,283	3,874	–	Interest rate, FX, equity
Investment securities	82,592	–	82,592	–	Interest rate, FX, equity
Loans	589,243	–	589,243	–	Interest rate, FX
Assets not subject to market risk ⁽¹⁾	224,095	–	–	224,095	n/a
Total assets	\$ 1,066,740	\$ 166,378	\$ 676,267	\$ 224,095	
Deposits	\$ 722,346	\$ –	\$ 688,431	\$ 33,915	Interest rate, FX, equity
Financial instruments designated at fair value through profit or loss	11,536	–	11,536	–	Interest rate, equity
Obligations related to securities sold short	25,669	25,669	–	–	n/a
Derivative financial instruments	37,307	31,772	5,535	–	Interest rate, FX, equity
Trading liabilities ⁽²⁾	5,100	5,100	–	–	n/a
Pension and other benefit liabilities	2,993	–	2,993	–	Interest rate, credit spread, equity
Liabilities not subject to market risk ⁽³⁾	191,658	–	–	191,658	n/a
Total liabilities	\$ 996,609	\$ 62,541	\$ 708,495	\$ 225,573	

(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 July 31, 2019, unencumbered liquid assets were \$217 billion (October 31, 2018 – \$202 billion). Securities including National Housing Act (NHA) mortgage-backed securities, comprised 82% 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 18% (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 July 31, 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:

As at July 31, 2019							
(\$ millions)	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	\$ 34,259	\$ –	\$ 34,259	\$ –	\$ 10,169	\$ 24,090	\$ –
Deposits with financial institutions	11,003	–	11,003	–	53	10,950	–
Precious metals	3,572	–	3,572	–	91	3,481	–
Securities:							
Canadian government obligations	44,691	11,997	56,688	29,581	–	27,107	–
Foreign government obligations	75,453	75,113	150,566	83,655	–	66,911	–
Other securities	73,968	67,836	141,804	90,201	–	51,603	–
Loans:							
NHA mortgage-backed securities ⁽²⁾	34,962	–	34,962	3,339	–	31,623	–
Call and short loans	745	–	745	–	–	745	–
Total	\$ 278,653	\$ 154,946	\$ 433,599	\$ 206,776	\$ 10,313	\$ 216,510	\$ –

As at October 31, 2018							
(\$ millions)	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	
	July 31 2019	October 31 2018
The Bank of Nova Scotia (Parent)	\$ 170,563	\$ 152,728
Bank domestic subsidiaries	8,489	15,344
Bank foreign subsidiaries	37,458	34,311
Total	\$ 216,510	\$ 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 (83%) 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 July 31, 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	\$ 34,259	\$ –	\$ 34,259	\$ –	\$ 10,169	\$ 24,090	\$ –
Deposits with financial institutions	11,003	–	11,003	–	53	10,950	–
Precious metals	3,572	–	3,572	–	91	3,481	–
Liquid securities:							
Canadian government obligations	44,691	11,997	56,688	29,581	–	27,107	–
Foreign government obligations	75,453	75,113	150,566	83,655	–	66,911	–
Other liquid securities	73,968	67,836	141,804	90,201	–	51,603	–
Other securities	4,481	4,893	9,374	4,142	–	–	5,232
Loans classified as liquid assets:							
NHA mortgage-backed securities	34,962	–	34,962	3,339	–	31,623	–
Call and short loans	745	–	745	–	–	745	–
Other loans	567,694	–	567,694	9,635	57,454	13,662	486,943
Other financial assets ⁽⁴⁾	175,976	(113,625)	62,351	4,117	–	–	58,234
Non-financial assets	39,936	–	39,936	–	–	–	39,936
Total	\$ 1,066,740	\$ 46,214	\$ 1,112,954	\$ 224,670	\$ 67,767	\$ 230,172	\$ 590,345

(\$ 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 July 31, 2019, total encumbered assets of the Bank were \$292 billion (October 31, 2018 – \$276 billion). Of the remaining \$821 billion (October 31, 2018 – \$776 billion) of unencumbered assets, \$230 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 July 31, 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 \$27 million or \$92 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.

MANAGEMENT'S DISCUSSION & ANALYSIS

The following table presents the Bank's LCR for the quarter ended July 31, 2019, based on the average daily positions in the quarter.

	Total unweighted value (Average) ⁽²⁾	Total weighted value (Average) ⁽³⁾
For the quarter ended July 31, 2019 (\$ millions)⁽¹⁾		
High-quality liquid assets		
Total high-quality liquid assets (HQLA)	*	\$ 159,929
Cash outflows		
Retail deposits and deposits from small business customers, of which:	\$ 179,844	\$ 12,873
Stable deposits	75,614	2,450
Less stable deposits	104,230	10,423
Unsecured wholesale funding, of which:	195,027	94,654
Operational deposits (all counterparties) and deposits in networks of cooperative banks	62,327	14,786
Non-operational deposits (all counterparties)	110,659	57,827
Unsecured debt	22,041	22,041
Secured wholesale funding	*	38,384
Additional requirements, of which:	208,939	42,226
Outflows related to derivative exposures and other collateral requirements	27,313	16,876
Outflows related to loss of funding on debt products	3,510	3,510
Credit and liquidity facilities	178,116	21,840
Other contractual funding obligations	1,293	1,182
Other contingent funding obligations ⁽⁴⁾	493,525	8,421
Total cash outflows	*	\$ 197,740
Cash inflows		
Secured lending (e.g. reverse repos)	\$ 139,760	\$ 27,370
Inflows from fully performing exposures	26,976	17,556
Other cash inflows	22,544	22,544
Total cash inflows	\$ 189,280	\$ 67,470
		Total adjusted value ⁽⁵⁾
Total HQLA	*	\$ 159,929
Total net cash outflows	*	\$ 130,270
Liquidity coverage ratio (%)	*	123%
For the quarter ended April 30, 2019 (\$ millions)		
Total HQLA	*	\$ 158,383
Total net cash outflows	*	\$ 126,966
Liquidity coverage ratio (%)	*	125%

* Disclosure is not required under regulatory guideline.

(1) Based on the average of daily positions of the 64 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 July 31, 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 \$303 billion as at July 31, 2019 (October 31, 2018 – \$289 billion). The increase since October 31, 2018 was primarily driven by personal deposit growth, issuance of subordinated debentures and internal capital generation net of redemption of additional tier 1 securities. 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 365 days) of \$154 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.

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.

The Department of Finance's bail-in regulations under the Canada Deposit Insurance Corporation (CDIC) Act and the Bank Act, became effective September 23, 2018. Senior long-term debt issued by the Bank on or after September 23, 2018, that is unsecured or partially secured, has an initial or amended term to maturity greater than 400 days and has been assigned a CUSIP or ISIN or similar identification number, subject to certain exceptions, is subject to the Canadian Bank Recapitalization (Bail-in) regime. Under the Bail-in regime, in circumstances when the Superintendent of Financial Institutions has determined that a bank may no longer be viable, the Governor in Council may, upon a recommendation of the Minister of Finance that they are of the opinion that it is in the public interest to do so, grant an order directing the CDIC to convert all or a portion of certain shares and liabilities of that bank into common shares. As at July 31, 2019, liabilities subject to conversion under the bail-in regime amounted to \$7 billion (October 31, 2018 – nil).

MANAGEMENT'S DISCUSSION & ANALYSIS

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 July 31, 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⁾	\$ 4,148	\$ 158	\$ 537	\$ 397	\$ 103	\$ 5,343	\$ 4	\$ –	\$ –	\$ 5,347
Bearer notes, commercial paper and certificate of deposits	7,528	21,902	22,767	15,170	15,628	82,995	2,606	730	53	86,384
Asset-backed commercial paper ⁽³⁾	1,963	3,023	1,023	–	–	6,009	–	–	–	6,009
Senior notes ⁽⁴⁾⁽⁵⁾	1,504	3,764	4,995	2,509	5,067	17,839	16,766	26,643	12,055	73,303
Bail-inable notes ⁽⁵⁾	–	–	–	–	26	26	1,311	3,762	1,811	6,910
Asset-backed securities	2	14	1	1,292	1	1,310	3,625	1,181	228	6,344
Covered bonds	–	1,980	542	1,848	1,872	6,242	3,346	15,542	2,366	27,496
Mortgage securitization ⁽⁶⁾	–	508	601	771	663	2,543	4,315	12,336	4,598	23,792
Subordinated debt ⁽⁷⁾	–	–	–	–	–	–	81	153	10,611	10,845
Total wholesale funding sources	\$ 15,145	\$ 31,349	\$ 30,466	\$ 21,987	\$ 23,360	\$ 122,307	\$ 32,054	\$ 60,347	\$ 31,722	\$ 246,430
Of Which:										
Unsecured funding	\$ 13,180	\$ 25,824	\$ 28,299	\$ 18,076	\$ 20,824	\$ 106,203	\$ 20,768	\$ 31,288	\$ 24,530	\$ 182,789
Secured funding	1,965	5,525	2,167	3,911	2,536	16,104	11,286	29,059	7,192	63,641

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 \$217 billion as at July 31, 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 July 31, 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 July 31, 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	\$ 36,300	\$ 520	\$ 293	\$ 65	\$ 64	\$ 174	\$ 330	\$ 271	\$ 10,817	\$ 48,834
Trading assets	6,184	3,547	5,835	4,168	2,768	9,069	21,313	17,065	61,119	131,068
Financial instruments designated at fair value through profit or loss	—	13	—	—	—	—	—	—	—	13
Securities purchased under resale agreements and securities borrowed	93,763	16,785	6,364	1,373	1,193	—	—	—	—	119,478
Derivative financial instruments	2,190	3,359	1,422	1,701	1,500	5,917	5,999	14,069	—	36,157
Investment securities – FVOCI	3,405	6,668	6,780	3,317	4,701	7,424	15,838	8,064	1,559	57,756
Investment securities – amortized cost	691	983	910	1,529	809	7,318	4,012	7,974	—	24,226
Investment securities – FVTPL	—	—	—	—	—	—	—	—	610	610
Loans	37,447	28,918	34,930	30,866	35,359	90,904	225,777	44,465	60,577	589,243
Residential mortgages	4,470	6,365	10,947	12,547	15,998	49,029	132,222	31,234	2,358 ⁽¹⁾	265,170
Personal loans	4,498	2,734	3,722	3,426	3,483	12,500	23,751	5,766	38,799	98,679
Credit cards	—	—	—	—	—	—	—	—	17,933	17,933
Business and government	28,479	19,819	20,261	14,893	15,878	29,375	69,804	7,465	6,681 ⁽²⁾	212,655
Allowance for credit losses	—	—	—	—	—	—	—	—	(5,194)	(5,194)
Customers' liabilities under acceptances	11,765	1,799	237	95	27	—	—	—	—	13,923
Other assets	—	—	—	—	—	—	—	—	45,432	45,432
Total assets	\$ 191,745	\$ 62,592	\$ 56,771	\$ 43,114	\$ 46,421	\$ 120,806	\$ 273,269	\$ 91,908	\$ 180,114	\$ 1,066,740
Liabilities and equity										
Deposits	\$ 68,831	\$ 63,865	\$ 57,394	\$ 40,580	\$ 40,593	\$ 46,371	\$ 73,593	\$ 16,849	\$ 314,270	\$ 722,346
Personal	9,508	10,637	14,375	12,881	11,045	13,546	12,477	153	138,273	222,895
Non-personal	59,323	53,228	43,019	27,699	29,548	32,825	61,116	16,696	175,997	499,451
Financial instruments designated at fair value through profit or loss	119	459	618	407	871	4,029	1,621	3,412	—	11,536
Acceptances	11,774	1,799	237	95	27	—	—	—	—	13,932
Obligations related to securities sold short	259	1,149	1,427	938	421	2,082	6,150	5,606	7,637	25,669
Derivative financial instruments	1,786	3,479	2,630	1,674	1,577	6,555	7,254	12,352	—	37,307
Obligations related to securities sold under repurchase agreements and securities lent	112,971	5,642	947	514	481	—	—	—	—	120,555
Subordinated debentures	—	—	—	—	—	—	—	9,021	—	9,021
Other liabilities	854	1,294	2,219	1,359	1,396	3,392	7,349	6,382	31,998	56,243
Total equity	—	—	—	—	—	—	—	—	70,131	70,131
Total liabilities and equity	\$ 196,594	\$ 77,687	\$ 65,472	\$ 45,567	\$ 45,366	\$ 62,429	\$ 95,967	\$ 53,622	\$ 424,036	\$ 1,066,740
Off-balance sheet commitments										
Operating leases	\$ 39	\$ 79	\$ 116	\$ 112	\$ 109	\$ 400	\$ 913	\$ 1,058	\$ —	\$ 2,826
Credit commitments ⁽³⁾	1,925	9,785	11,857	11,685	19,166	24,664	115,532	11,236	—	205,850
Financial guarantees ⁽⁴⁾	—	—	—	—	—	—	—	—	36,012	36,012
Outsourcing obligations	18	36	52	52	52	183	84	—	1	478

(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.

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	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 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.

There were no changes to the Bank's credit ratings during the quarter.

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 June 2019, OSFI announced a 25 basis point increase to the Domestic Stability Buffer to 2.0% of total risk-weighted assets, effective October 31, 2019. OSFI's minimum regulatory capital ratio requirements, including the Domestic Systemically Important Banks (D-SIB) 1.0% surcharge and the Domestic Stability Buffer of 2.0%, are 10.0%, 11.5% and 13.5% 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:

	As at		
	July 31 2019	April 30 2019	October 31 2018
(\$ millions)			
Common Equity Tier 1 capital	\$ 46,565	\$ 46,193	\$ 44,443
Tier 1 capital	51,371	51,709	50,187
Total regulatory capital	61,546	60,855	57,364
CET1 risk-weighted assets ⁽¹⁾⁽²⁾	\$ 417,058	\$ 415,212	\$ 400,507
Tier 1 risk-weighted assets ⁽¹⁾⁽²⁾	417,058	415,212	400,680
Total risk-weighted assets ⁽¹⁾⁽²⁾	417,058	415,212	400,853
Capital ratios (%):			
Common Equity Tier 1 capital ratio	11.2	11.1	11.1
Tier 1 capital ratio	12.3	12.5	12.5
Total capital ratio	14.8	14.7	14.3
Leverage:			
Leverage exposures	\$ 1,211,612	\$ 1,204,111	\$ 1,119,099
Leverage ratio (%)	4.2	4.3	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 July 31, 2019, April 30, 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 11.2% at July 31, 2019, an increase of approximately 10 basis points from the prior quarter, primarily due to strong internal capital generation which was partly offset by organic growth in risk-weighted assets, the impact from employee pension and post-retirement benefits on accumulated other comprehensive income, and share buybacks under the Bank's Normal Course Issuer Bid.

The Bank's Tier 1 capital ratio was 12.3%, a decline of approximately 20 basis points from the prior quarter, primarily due to the redemption of \$650 million of Scotiabank Tier 1 Trust Securities, partly offset by the above impacts to the Common Equity Tier 1 (CET1) ratio. In addition, the Total Capital ratio increased by approximately 10 basis points during the quarter to 14.8%, primarily due to the issuance of \$1.5 billion of subordinated debentures.

The Bank's Leverage ratio was 4.2% at July 31, 2019, a decline of approximately 10 basis points from the prior quarter, primarily due to the redemption of Scotiabank Tier 1 Trust Securities noted above and growth from the Bank's consolidated balance sheet assets.

As at July 31, 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 \$46.6 billion, as at July 31, 2019, an increase of approximately \$0.4 billion during the quarter. Strong internal capital generation of \$0.8 billion net of the accounting impact from the announced divestiture of Puerto Rico, and decreases to regulatory capital deductions of \$0.8 billion were partly offset by lower accumulated other comprehensive income of \$1.0 billion, excluding the impact from cash flow hedges, and share buybacks net of share issuances of \$0.2 billion.

Risk-weighted assets

CET1 risk-weighted assets (RWA) increased by \$1.8 billion or 0.4% during the quarter to \$417.1 billion, due primarily to organic growth in RWA driven by good asset growth across all business lines, partly offset by the impact from foreign currency translation from a stronger Canadian dollar.

Normal Course Issuer Bid

On May 30, 2019, the Bank announced that OSFI and the Toronto Stock Exchange have approved 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 commenced 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 terminated on June 3, 2019.

During the quarter, the Bank repurchased and cancelled approximately 2.8 million common shares at a volume weighted average price of \$70.28 per share for a total amount of \$195 million. During the nine months ended July 31, 2019, the Bank repurchased and cancelled approximately 10 million common shares under these plans at a volume weighted average price of \$71.66 per share for a total amount of \$719 million.

Under the 2018 NCIB, which terminated on June 3, 2019, the Bank cumulatively repurchased and cancelled approximately 14.8 million common shares at an average price of \$73.46 per share. Under the 2019 NCIB, the Bank has cumulatively repurchased and cancelled approximately 1.2 million common shares at an average price of \$70.24 per share.

Common dividend

The Board of Directors, at its meeting on August 26, 2019, approved a dividend of 90 cents per share. This quarterly dividend is payable to shareholders of record as of October 1, 2019 on October 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. 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 \$5,438 billion as at July 31, 2019, compared to \$5,466 billion as at April 30, 2019 (October 31, 2018 – \$5,334 billion). The quarterly decrease was primarily due to foreign currency translation offset by higher volumes of currency contracts. The total notional amount of over-the-counter derivatives was \$5,203 billion compared to \$5,247 billion as at April 30, 2019 (October 31, 2018 – \$5,097 billion), of which \$3,520 billion was settled through central counterparties as at July 31, 2019 (April 30, 2019 – \$3,582 billion; October 31, 2018 – \$3,523 billion). The credit equivalent amount, after taking master netting arrangements into account, was \$30.2 billion, compared to \$28.1 billion at April 30, 2019. The increase was primarily attributable to an increase in the market value of interest rate and currency derivative contracts offset by foreign currency translation.

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. During the quarter, Scotiabank Tier 1 Trust, an unconsolidated structured entity of the Bank, was wound up following the redemption of \$650 million Scotiabank Tier 1 Securities – Series 2009-1. 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 subordinated notes issued by START 2019-1 and held by the Bank of \$45 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 \$4.0 billion as at July 31, 2019 (October 31, 2018 – \$4.0 billion). As at July 31, 2019, total commercial paper outstanding for these conduits was \$3.0 billion (October 31, 2018 – \$3.2 billion). Funded assets purchased and held by these conduits as at July 31, 2019, as reflected at original cost, were \$3.0 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 1% 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 \$147 million for the three months ended July 31, 2019, compared to \$143 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 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 such 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

On July 25, 2019, the Financial Consumer Agency of Canada (FCAC) released a new voluntary principles-based Code of Conduct for the delivery of banking services to seniors, defined as an individual in Canada who is 60 years of age or older and who is transacting for non-business purposes. The Code is to be adopted on publication, with additional timelines starting in January 2020. The FCAC will monitor compliance with the Code. Industry consultation continues with the Canadian Bankers Association (CBA) and Department of Finance regarding the interpretation of the new Federal Consumer Protection Framework (Bill C-86). The new consumer protection framework and regulations are expected to be implemented by the fall of 2021, although no date has been formally set.

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 December 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.

In June 2019, the BCBS finalized its revisions to the Pillar 3 disclosure requirements for the revised leverage ratio standards effective in Q1 2022. The announced changes are primarily for the inclusion of average values of securities financing transactions within the revised 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. In addition, the Bank is closely monitoring guidance issued by accounting standard setters with respect to the accounting implications of the transition.

Use of the Advance Measurement Approach for Operational Risk Capital

In July 2019, OSFI revised its capital requirements for operational risk in consideration of the final Basel III revisions published by the Basel Committee on Banking Supervision in December 2017. Effective Q1 2021, institutions will be required to use the revised Basel III Standardized Approach for operational risk.

In the interim, for fiscal year 2020, institutions currently approved for the Basel II Advanced Measurement Approach (AMA) for operational risk capital are to report using the existing Basel II Standardized Approach (TSA). As the Bank's AMA requirements are floored at TSA requirements, the impact from the adoption of the interim 2020 requirement is not material to the Bank.

Regulatory Developments Relating to Interest Rate Risk

In May 2019, OSFI updated its guidelines on Interest Rate Risk in the Banking Book ("IRRBB"), a risk control framework to identify, assess and manage interest rate risk. The Bank will apply the updated guidelines starting in January 2020, consistent with OSFI's requirement.

Volcker Rule Amendments

The proposed Volcker rule amendments were approved on August 20, 2019, by the FDIC and the OCC (approval from the Federal Reserve, CFTC and SEC is expected shortly). As anticipated, the final amendments will relax regulatory burden on financial institutions, including foreign banking organizations such as the Bank. The amendments take effect on January 1, 2020, with compliance required by January 1, 2021.

Canadian Anti-Money Laundering (AML) Regulations

In July 2019, amendments to Canada's Proceeds of Crime (Money Laundering) and Terrorist Financing Act regulations were released following extensive industry consultation. Amendments will take effect in a phased approach, with the majority coming into effect by June 2021. These changes aim to improve the effectiveness of Canada's anti-money laundering and counter-terrorism financing regime, and to improve compliance with international standards. New regulations will require the Bank to implement changes to processes, technology and data, to satisfy Financial Transactions and Reports Analysis Centre of Canada (FINTRAC) reporting requirements. The Bank is proactively working to implement the new regime with the aim to protect the Canadian financial system and our communities.

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 IFRS 16 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 substantially completed the assessment of its lease portfolio and is 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 issued an exposure draft on June 26, 2019 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 is assessing the proposed amendments and will continue to monitor developments related to the standard.

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 July 31, 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

Downside risks to the global economy are materializing. It appears likely that the trade conflict between the United States and China will extend well into 2020. This would see higher tariffs imposed on Chinese exports to the U.S. and a range of additional retaliatory measures imposed on both sides of the Pacific. The conflict also risks degenerating into a currency war. The elevation in trade tensions is generating significant concern in the broader global economy, with a number of central banks now cutting rates in response to increased uncertainty and weaker growth prospects.

While Canadian growth remains solid in light of strong population growth, very accommodative monetary policy, strengthening activity in the housing market, and still-strong business and consumer confidence, Canada cannot remain immune to higher uncertainty and lower global growth. Commodity prices are well below levels seen earlier this year, imparting a negative impulse to this important block of the Canadian economy. Inflation remains at the Bank of Canada's target and, with wages now rising at the strongest pace since 2009, inflationary pressures may be on the rise. Despite this, mounting risks to the outlook may prompt the Bank of Canada to join other central banks and cut policy rates by 50 basis points over the next two quarters as it insures against these risks.

U.S. economic activity is decelerating following a year of generally strong growth. This reflects lower fiscal stimulus as the impact of the early-2018 fiscal stimulus package wanes, but also the expected impact of increased uncertainty associated with the trade situation. The Federal Reserve is expected to cut its policy rates by another 50 basis points, for a total easing of 75 basis points, as U.S. growth is expected to slow to 2.5% this year, from 2.9% in 2018, and then to 1.6% in 2020.

The trade tensions between China and the U.S. are being felt in the Pacific Alliance countries (PAC), as the price of important regional commodities has fallen sharply this year. Adding to these issues are challenges in executing key reforms, and the outlook for the region has deteriorated, even though growth prospects for PAC countries in general remain much more solid than those in advanced economies. The impact of these developments is felt most strongly in Chile and Peru, where growth is expected to slow to around 3% from the 4% seen in 2018, and Mexico, where growth is expected to fall below 1% this year. In Colombia, growth is still expected to exceed that observed in 2018.

Share Data

As at July 31, 2019

	Amount (\$ millions)	Dividends declared per share ⁽¹⁾	Number outstanding (000s)	Conversion feature
Common shares⁽²⁾	\$ 18,295	\$ 0.90	1,220,446	n/a
Preferred shares				
Preferred shares Series 30 ⁽³⁾	154	0.113750	6,143	Series 31
Preferred shares Series 31 ⁽³⁾	111	0.167679	4,457	Series 30
Preferred shares Series 32 ⁽³⁾	279	0.128938	11,162	Series 33
Preferred shares Series 33 ⁽³⁾	130	0.189104	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

	Amount (\$ millions)	Distribution	Yield (%)	Number outstanding (000s)
Additional Tier 1 securities				
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⁾⁽⁶⁾	–	–	–	–
Subordinated additional Tier 1 capital securities (NVCC) ⁽⁴⁾⁽⁷⁾	US\$ 1,250	US\$ 23.25	4.650	1,250

	Amount (\$ millions)	Interest rate (%)
NVCC Subordinated debentures⁽⁴⁾		
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
Subordinated debentures due July 2029	1,500	2.84

	Number outstanding (000s)
Options	
Outstanding options granted under the Stock Option Plans to purchase common shares ⁽²⁾	12,224

- (1) Dividends on common shares are paid quarterly, if and when declared. Dividends declared as at August 27, 2019. The Board of Directors, at its meeting on August 26, 2019, approved a dividend of 90 cents per share payable to shareholders of record as of October 1, 2019 on October 29, 2019.
- (2) As at August 16, 2019, the number of outstanding common shares and options were 1,219,547 thousand and 12,207 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 July 31, 2019 would be 2,812 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) On June 30, 2019, the 7.802% Scotiabank Tier 1 Securities – Series 2009-1 issued by Scotiabank Tier 1 Trust were redeemed for 100% of their principal amount, together with accrued and unpaid interest to the redemption date.
- (7) 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

		As at		
(Unaudited) (\$ millions)	Note	July 31 2019	April 30 2019	October 31 2018
Assets				
Cash and deposits with financial institutions	6	\$ 45,262	\$ 50,121	\$ 62,269
Precious metals		3,572	3,543	3,191
Trading assets				
Securities		115,988	103,125	85,474
Loans		14,158	13,104	14,334
Other		922	911	454
		131,068	117,140	100,262
Financial instruments designated at fair value through profit or loss	20(b)	13	14	12
Securities purchased under resale agreements and securities borrowed		119,478	126,090	104,018
Derivative financial instruments		36,157	31,358	37,558
Investment securities	7	82,592	85,146	78,396
Loans				
Residential mortgages	8	265,170	260,586	253,357
Personal loans	8	98,679	97,874	96,019
Credit cards	8	17,933	17,730	16,485
Business and government	8	212,655	212,920	191,038
		594,437	589,110	556,899
Allowance for credit losses	8(c)	5,194	5,295	5,065
		589,243	583,815	551,834
Other				
Customers' liability under acceptances, net of allowance		13,923	12,823	16,329
Property and equipment		2,634	2,722	2,684
Investments in associates	10	5,496	5,303	4,850
Goodwill and other intangible assets		17,612	17,825	17,719
Deferred tax assets		1,706	2,069	1,938
Other assets		17,984	20,200	17,433
		59,355	60,942	60,953
Total assets		\$ 1,066,740	\$ 1,058,169	\$ 998,493
Liabilities				
Deposits				
Personal	11	\$ 222,895	\$ 224,933	\$ 214,545
Business and government	11	456,806	443,707	422,002
Financial institutions	11	42,645	43,642	39,987
		722,346	712,282	676,534
Financial instruments designated at fair value through profit or loss	20(b)	11,536	10,919	8,188
Other				
Acceptances		13,932	12,833	16,338
Obligations related to securities sold short		25,669	29,957	32,087
Derivative financial instruments		37,307	33,176	37,967
Obligations related to securities sold under repurchase agreements and securities lent		120,555	124,331	101,257
Subordinated debentures	12	9,021	7,554	5,698
Other liabilities		56,243	56,870	52,744
		262,727	264,721	246,091
Total liabilities		996,609	987,922	930,813
Equity				
Common equity				
Common shares	12	18,295	18,284	18,234
Retained earnings		43,682	43,056	41,414
Accumulated other comprehensive income (loss)		1,187	1,836	992
Other reserves		370	395	404
Total common equity		63,534	63,571	61,044
Preferred shares and other equity instruments	12	3,884	3,884	4,184
Total equity attributable to equity holders of the Bank		67,418	67,455	65,228
Non-controlling interests in subsidiaries		2,713	2,792	2,452
Total equity		70,131	70,247	67,680
Total liabilities and equity		\$ 1,066,740	\$ 1,058,169	\$ 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 nine months ended	
		July 31 2019 ⁽¹⁾	April 30 2019 ⁽¹⁾	July 31 2018	July 31 2019 ⁽¹⁾	July 31 2018
Revenue						
Interest income⁽²⁾						
Loans		\$ 7,490	\$ 7,164	\$ 6,332	\$ 21,745	\$ 18,114
Securities		593	567	446	1,676	1,283
Securities purchased under resale agreements and securities borrowed		126	140	118	396	317
Deposits with financial institutions		231	230	235	715	633
	17	8,440	8,101	7,131	24,532	20,347
Interest expense						
Deposits		3,574	3,485	2,735	10,394	7,481
Subordinated debentures		77	73	55	211	159
Other		415	350	256	1,086	736
	17	4,066	3,908	3,046	11,691	8,376
Net interest income		4,374	4,193	4,085	12,841	11,971
Non-interest income						
Card revenues		240	248	271	732	805
Banking services fees		445	461	404	1,339	1,232
Credit fees		325	322	312	971	883
Mutual funds		472	454	425	1,373	1,275
Brokerage fees		217	217	222	650	668
Investment management and trust		259	271	191	787	523
Underwriting and other advisory		110	149	145	351	411
Non-trading foreign exchange		171	175	158	506	464
Trading revenues	18	397	386	305	1,112	1,050
Net gain on sale of investment securities		118	86	35	226	136
Net income from investments in associated corporations		190	170	126	489	390
Insurance underwriting income, net of claims		165	169	158	518	517
Other fees and commissions		231	245	206	728	613
Other ⁽³⁾		(55)	257	138	443	389
		3,285	3,610	3,096	10,225	9,356
Total revenue		7,659	7,803	7,181	23,066	21,327
Provision for credit losses		713	873	943	2,274	2,021
		6,946	6,930	6,238	20,792	19,306
Non-interest expenses						
Salaries and employee benefits		2,138	2,026	1,879	6,328	5,483
Premises and technology		697	702	637	2,095	1,882
Depreciation and amortization		276	258	212	782	615
Communications		113	119	106	341	324
Advertising and business development		162	150	130	451	399
Professional		197	203	215	618	611
Business and capital taxes		130	122	117	389	351
Other		496	466	474	1,422	1,329
		4,209	4,046	3,770	12,426	10,994
Income before taxes		2,737	2,884	2,468	8,366	8,312
Income tax expense	21	753	625	529	1,876	1,859
Net income		\$ 1,984	\$ 2,259	\$ 1,939	\$ 6,490	\$ 6,453
Net income attributable to non-controlling interests in subsidiaries		120	70	(44)	301	84
Net income attributable to equity holders of the Bank		\$ 1,864	\$ 2,189	\$ 1,983	\$ 6,189	\$ 6,369
Preferred shareholders and other equity instrument holders		25	64	27	118	122
Common shareholders		\$ 1,839	\$ 2,125	\$ 1,956	\$ 6,071	\$ 6,247
Earnings per common share (in dollars)						
Basic	19	\$ 1.51	\$ 1.74	\$ 1.60	\$ 4.96	\$ 5.18
Diluted	19	1.50	1.73	1.55	4.94	5.10
Dividends paid per common share (in dollars)		0.87	0.87	0.82	2.59	2.43

(1) The amounts for the periods ended July 31, 2019 and April 30, 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 \$8,348 for the three months ended July 31, 2019 (April 30, 2019 – \$8,019; July 31, 2018 – \$7,080) and for the nine months ended July 31, 2019 – \$24,290 (July 31, 2018 – \$20,200).

(3) For the periods ended July 31, 2019 and April 30, 2019, includes Net gain/(loss) on divestitures. Refer to Note 22 for further details.

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

Consolidated Statement of Comprehensive Income

	For the three months ended			For the nine months ended	
(Unaudited) (\$ millions)	July 31 2019	April 30 2019	July 31 2018	July 31 2019	July 31 2018
Net income	\$ 1,984	\$ 2,259	\$ 1,939	\$ 6,490	\$ 6,453
Other comprehensive income (loss)					
Items that will be reclassified subsequently to net income					
Net change in unrealized foreign currency translation gains (losses):					
Net unrealized foreign currency translation gains (losses)	(1,093)	628	43	340	346
Net gains (losses) on hedges of net investments in foreign operations	220	(350)	(203)	(314)	(227)
Income tax expense (benefit):					
Net unrealized foreign currency translation gains (losses)	(10)	5	(5)	2	(4)
Net gains (losses) on hedges of net investments in foreign operations	58	(92)	(56)	(82)	(60)
	(921)	365	(99)	106	183
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	412	247	(33)	1,102	(449)
Reclassification of net (gains) losses to net income	(366)	(196)	(10)	(933)	184
Income tax expense (benefit):					
Net gains (losses) in fair value	104	51	(7)	280	(107)
Reclassification of net (gains) losses to net income	(99)	(39)	(2)	(248)	46
	41	39	(34)	137	(204)
Net change in gains (losses) on derivative instruments designated as cash flow hedges:					
Net gains (losses) on derivative instruments designated as cash flow hedges	(842)	(136)	(801)	(257)	(323)
Reclassification of net (gains) losses to net income	1,324	127	643	1,077	(26)
Income tax expense (benefit):					
Net gains (losses) on derivative instruments designated as cash flow hedges	(223)	(37)	(212)	(69)	(84)
Reclassification of net (gains) losses to net income	349	34	171	282	(7)
	356	(6)	(117)	607	(258)
Other comprehensive income (loss) from investments in associates	25	38	(3)	82	40
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	(475)	(236)	212	(1,171)	315
Income tax expense (benefit)	(130)	(54)	56	(303)	88
	(345)	(182)	156	(868)	227
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	35	19	29	85	99
Income tax expense (benefit)	8	4	7	20	21
	27	15	22	65	78
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	6	(43)	30	(7)	16
Income tax expense (benefit)	2	(12)	9	(2)	5
	4	(31)	21	(5)	11
Other comprehensive income (loss) from investments in associates	—	—	—	(3)	(7)
Other comprehensive income (loss)	(813)	238	(54)	121	70
Comprehensive income (loss)	\$ 1,171	\$ 2,497	\$ 1,885	\$ 6,611	\$ 6,523
Comprehensive income (loss) attributable to non-controlling interests	(44)	59	(68)	227	136
Comprehensive income (loss) attributable to equity holders of the Bank	1,215	2,438	1,953	6,384	6,387
Preferred shareholders and other equity instrument holders	25	64	27	118	122
Common shareholders	\$ 1,190	\$ 2,374	\$ 1,926	\$ 6,266	\$ 6,265

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)														
	Common shares	Retained earnings ⁽¹⁾	Foreign currency translation	Available- for-sale securities	Debt instruments FVOCI	Equity instruments FVOCI	Cash flow hedges	Other ⁽²⁾	Other reserves	Total common equity	Preferred shares and other equity instruments	Total attributable to equity holders	Non- controlling interests in subsidiaries	Total
<i>(Unaudited)</i> (\$ millions)														
Balance as at October 31, 2018	\$ 18,234	\$ 41,414	\$ 1,441	\$ -	\$ (68)	\$ (126)	\$ (121)	\$ (134)	\$ 404	\$ 61,044	\$ 4,184	\$ 65,228	\$ 2,452	\$ 67,680
Cumulative effect of adopting IFRS 15 ⁽³⁾	-	(58)	-	-	-	-	-	-	-	(58)	-	(58)	-	(58)
Balance as at November 1, 2018	\$ 18,234	\$ 41,356	\$ 1,441	\$ -	\$ (68)	\$ (126)	\$ (121)	\$ (134)	\$ 404	\$ 60,986	\$ 4,184	\$ 65,170	\$ 2,452	\$ 67,622
Net income	-	6,071	-	-	-	-	-	-	-	6,071	118	6,189	301	6,490
Other comprehensive income (loss)	-	-	164	-	137	41	654	(801)	-	195	-	195	(74)	121
Total comprehensive income	\$ -	\$ 6,071	\$ 164	\$ -	\$ 137	\$ 41	\$ 654	\$ (801)	\$ -	\$ 6,266	\$ 118	\$ 6,384	\$ 227	\$ 6,611
Shares issued	211	-	-	-	-	-	-	-	(31)	180	-	180	-	180
Shares repurchased/redeemed	(150)	(569)	-	-	-	-	-	-	-	(719)	(300)	(1,019)	-	(1,019)
Dividends and distributions paid to equity holders	-	(3,166)	-	-	-	-	-	-	-	(3,166)	(118)	(3,284)	(131)	(3,415)
Share-based payments ⁽⁴⁾	-	-	-	-	-	-	-	-	6	6	-	6	-	6
Other	-	(10)	-	-	-	-	-	-	(9)	(19)	-	(19)	165 ⁽⁵⁾	146
Balance as at July 31, 2019	\$ 18,295	\$ 43,682	\$ 1,605	\$ -	\$ 69	\$ (85)	\$ 533	\$ (935)	\$ 370	\$ 63,534	\$ 3,884	\$ 67,418	\$ 2,713	\$ 70,131
Balance as at October 31, 2017	\$ 15,644	\$ 38,117	\$ 1,861	\$ (46)	\$ -	\$ -	\$ 235	\$ (473)	\$ 116	\$ 55,454	\$ 4,579	\$ 60,033	\$ 1,592	\$ 61,625
Cumulative effect of adopting IFRS 9	-	(564)	-	46	184	(179)	-	-	-	(513)	-	(513)	(97)	(610)
Balance as at November 1, 2017	\$ 15,644	\$ 37,553	\$ 1,861	\$ -	\$ 184	\$ (179)	\$ 235	\$ (473)	\$ 116	\$ 54,941	\$ 4,579	\$ 59,520	\$ 1,495	\$ 61,015
Net income	-	6,247	-	-	-	-	-	-	-	6,247	122	6,369	84	6,453
Other comprehensive income (loss)	-	-	146	-	(204)	69	(257)	264	-	18	-	18	52	70
Total comprehensive income	\$ -	\$ 6,247	\$ 146	\$ -	\$ (204)	\$ 69	\$ (257)	\$ 264	\$ -	\$ 6,265	\$ 122	\$ 6,387	\$ 136	\$ 6,523
Shares issued	2,692	-	-	-	-	-	-	-	(17)	2,675	-	2,675	-	2,675
Shares repurchased/redeemed	(44)	(208)	-	-	-	-	-	-	-	(252)	(345)	(597)	-	(597)
Dividends and distributions paid to equity holders	-	(2,942)	-	-	-	-	-	-	-	(2,942)	(122)	(3,064)	(80)	(3,144)
Share-based payments ⁽⁴⁾	-	-	-	-	-	-	-	-	6	6	-	6	-	6
Other	-	2	-	-	-	-	-	-	57	59	-	59	797 ⁽⁵⁾	856
Balance as at July 31, 2018	\$ 18,292	\$ 40,652	\$ 2,007	\$ -	\$ (20)	\$ (110)	\$ (22)	\$ (209)	\$ 162	\$ 60,752	\$ 4,234	\$ 64,986	\$ 2,348	\$ 67,334

(1) Includes undistributed retained earnings of \$62 (July 31, 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

(Unaudited) (\$ millions)

	For the three months ended		For the nine months ended	
Sources (uses) of cash flows	July 31 2019	July 31 2018	July 31 2019	July 31 2018
Cash flows from operating activities				
Net income	\$ 1,984	\$ 1,939	\$ 6,490	\$ 6,453
Adjustment for:				
Net interest income	(4,374)	(4,085)	(12,841)	(11,971)
Depreciation and amortization	276	212	782	615
Provision for credit losses	713	943	2,274	2,021
Equity-settled share-based payment expense	1	1	6	6
Net gain on sale of investment securities	(118)	(35)	(226)	(136)
Net loss on divestitures ⁽¹⁾	302	—	129	—
Net income from investments in associated corporations	(190)	(126)	(489)	(390)
Income tax expense	753	529	1,876	1,859
Changes in operating assets and liabilities:				
Trading assets	(16,188)	7,561	(31,620)	7,510
Securities purchased under resale agreements and securities borrowed	4,582	(57)	(15,963)	11,307
Loans	(11,567)	(8,680)	(36,406)	(23,686)
Deposits	18,271	(1,984)	45,677	14,861
Obligations related to securities sold short	(3,558)	(1,871)	(6,077)	(3,976)
Obligations related to securities sold under repurchase agreements and securities lent	(1,776)	(9,837)	19,495	(14,851)
Net derivative financial instruments	(1,394)	1,018	462	779
Other, net ⁽¹⁾	1,434	(114)	(630)	(1,183)
Dividends received	137	83	355	242
Interest received	8,594	7,015	24,409	20,025
Interest paid	(4,245)	(2,874)	(11,520)	(8,200)
Income tax paid ⁽¹⁾	(674)	(598)	(2,273)	(1,779)
Net cash from/(used in) operating activities ⁽¹⁾	(7,037)	(10,960)	(16,090)	(494)
Cash flows from investing activities				
Interest-bearing deposits with financial institutions	5,014	11,032	19,163	8,498
Purchase of investment securities	(22,724)	(20,824)	(67,536)	(66,526)
Proceeds from sale and maturity of investment securities	24,735	23,072	65,110	63,231
Acquisition/sale of subsidiaries, associated corporations or business units, net of cash acquired	—	(2,405)	(36)	(2,405)
Property and equipment, net of disposals	66	(106)	(38)	(221)
Other, net	(417)	(89)	(431)	(505)
Net cash from/(used in) investing activities	6,674	10,680	16,232	2,072
Cash flows from financing activities				
Proceeds from issue of subordinated debentures	1,500	—	3,250	—
Redemption/repayment of subordinated debentures	(4)	—	(18)	(233)
Redemption of preferred shares	—	—	(300)	(345)
Proceeds from common shares issued	53	1,718	211	1,814
Common shares purchased for cancellation	(196)	(74)	(719)	(252)
Cash dividends and distributions paid	(1,087)	(1,038)	(3,284)	(3,064)
Distributions to non-controlling interests	(39)	(23)	(131)	(80)
Other, net ⁽¹⁾	1,178	291	2,336	692
Net cash from/(used in) financing activities ⁽¹⁾	1,405	874	1,345	(1,468)
Effect of exchange rate changes on cash and cash equivalents	(154)	18	64	63
Net change in cash and cash equivalents	888	612	1,551	173
Cash and cash equivalents at beginning of period ⁽²⁾	9,660	7,386	8,997	7,825
Cash and cash equivalents at end of period ⁽²⁾	\$ 10,548	\$ 7,998	\$ 10,548	\$ 7,998

(1) Prior periods amounts have been restated to conform with current period presentation.

(2) 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 July 31, 2019 have been approved by the Board of Directors for issue on August 27, 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 nine months ended July 31, 2019, the impact of IFRS 15 was a decrease in non-interest income and non-interest expenses of approximately \$155 million (six months ended April 30, 2019 – \$105 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 issued an exposure draft on June 26, 2019 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 is assessing the proposed amendments and will continue to monitor developments related to the standard.

6. Cash and deposits with financial institutions

		As at	
(\$ millions)	July 31 2019	April 30 2019	October 31 2018
Cash and non-interest-bearing deposits with financial institutions	\$ 10,548	\$ 9,660	\$ 8,997
Interest-bearing deposits with financial institutions	34,714	40,461	53,272
Total	\$ 45,262 ⁽¹⁾	\$ 50,121 ⁽¹⁾	\$ 62,269 ⁽¹⁾

(1) Net of impairment allowances of \$3 (April 30, 2019 – \$4; October 31, 2018 – \$3).

The Bank is required to maintain balances with central banks, other regulatory authorities and certain counterparties and these amounted to \$10,396 million (April 30, 2019 – \$9,755 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.

	As at		
	July 31 2019	April 30 2019	October 31 2018
(\$ millions)			
Debt investment securities measured at FVOCI	\$ 56,197	\$ 59,159	\$ 55,843
Debt investment securities measured at amortized cost	24,226	23,932	20,743
Equity investment securities designated at FVOCI	1,559	1,500	1,305
Equity investment securities measured at FVTPL	610	555	505
Total investment securities	\$ 82,592	\$ 85,146	\$ 78,396

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

	Cost	Gross unrealized gains	Gross unrealized losses	Fair value
As at July 31, 2019 (\$ millions)				
Canadian federal government issued or guaranteed debt	\$ 10,690	\$ 198	\$ 12	\$ 10,876
Canadian provincial and municipal debt	2,894	31	7	2,918
U.S. treasury and other U.S. agency debt	17,880	302	8	18,174
Other foreign government debt	19,950	124	17	20,057
Other debt	4,156	26	10	4,172
Total	\$ 55,570	\$ 681	\$ 54	\$ 56,197

	Cost	Gross unrealized gains	Gross unrealized losses	Fair value
As at April 30, 2019 (\$ millions)				
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

	Cost	Gross unrealized gains	Gross unrealized losses	Fair value
As at October 31, 2018 (\$ millions)				
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

	As at					
	July 31, 2019		April 30, 2019		October 31, 2018	
(\$ millions)	Fair value	Carrying value ⁽¹⁾	Fair value	Carrying value ⁽¹⁾	Fair value	Carrying value ⁽¹⁾
Canadian federal and provincial government issued or guaranteed debt	\$ 5,278	\$ 5,317	\$ 5,806	\$ 5,859	\$ 6,530	\$ 6,681
U.S. treasury and other U.S. agency debt	3,726	3,766	4,002	4,074	4,321	4,462
Other foreign government debt	2,487	2,488	2,990	3,006	3,086	3,131
Corporate debt	12,827	12,655	11,022	10,993	6,379	6,469
Total	\$ 24,318	\$ 24,226	\$ 23,820	\$ 23,932	\$ 20,316	\$ 20,743

(1) Balances are net of impairment allowances of \$1 (April 30, 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 July 31, 2019 (\$ millions)</i>	Cost	Gross unrealized gains	Gross unrealized losses	Fair value
Preferred equity instruments	\$ 145	\$ 2	\$ 50	\$ 97
Common shares	1,280	193	11	1,462
Total	\$ 1,425	\$ 195	\$ 61	\$ 1,559

<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 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**

	As at July 31, 2019		
<i>(\$ millions)</i>	Gross carrying amount	Allowance for credit losses	Net carrying amount
Residential mortgages	\$ 265,170	\$ 721	\$ 264,449
Personal loans	98,679	2,098	96,581
Credit cards	17,933	1,293	16,640
Business and government	212,655	1,082	211,573
Total	\$ 594,437	\$ 5,194	\$ 589,243

	As at April 30, 2019			As at October 31, 2018		
<i>(\$ millions)</i>	Gross carrying amount	Allowance for credit losses	Net carrying amount	Gross carrying amount	Allowance for credit losses	Net carrying amount
Residential mortgages	\$ 260,586	\$ 734	\$ 259,852	\$ 253,357	\$ 678	\$ 252,679
Personal loans	97,874	2,117	95,757	96,019	2,109	93,910
Credit cards	17,730	1,360	16,370	16,485	1,213	15,272
Business and government	212,920	1,084	211,836	191,038	1,065	189,973
Total	\$ 589,110	\$ 5,295	\$ 583,815	\$ 556,899	\$ 5,065	\$ 551,834

(b) Impaired loans⁽¹⁾⁽²⁾

	As at		
	July 31, 2019		
(\$ millions)	Gross impaired loans	Allowance for credit losses	Net
Residential mortgages	\$ 1,910	\$ 364	\$ 1,546
Personal loans	1,091	628	463
Credit cards	—	—	—
Business and government	2,228	678	1,550
Total	\$ 5,229	\$ 1,670	\$ 3,559
By geography:			
Canada	\$ 1,078	\$ 373	\$ 705
United States	97	11	86
Mexico	479	190	289
Peru	638	340	298
Chile	816	192	624
Colombia	546	152	394
Other international	1,575	412	1,163
Total	\$ 5,229	\$ 1,670	\$ 3,559

	As at					
	April 30, 2019			October 31, 2018		
(\$ millions)	Gross impaired loans	Allowance for credit losses	Net	Gross impaired loans	Allowance for credit losses	Net
Residential mortgages	\$ 1,922	\$ 368	\$ 1,554	\$ 1,797	\$ 360	\$ 1,437
Personal loans	1,131	627	504	1,069	644	425
Credit cards	—	—	—	—	—	—
Business and government	2,311	674	1,637	2,264	673	1,591
Total	\$ 5,364	\$ 1,669	\$ 3,695	\$ 5,130	\$ 1,677	\$ 3,453
By geography:						
Canada	\$ 1,078	\$ 371	\$ 707	\$ 999	\$ 381	\$ 618
United States	129	17	112	80	25	55
Mexico	463	188	275	359	164	195
Peru	639	325	314	581	317	264
Chile	842	172	670	753	158	595
Colombia	578	154	424	619	159	460
Other international	1,635	442	1,193	1,739	473	1,266
Total	\$ 5,364	\$ 1,669	\$ 3,695	\$ 5,130	\$ 1,677	\$ 3,453

(1) Interest income recognized on impaired loans during the three months ended July 31, 2019 was \$13 (April 30, 2019 – \$12; October 31, 2018 – \$12).

(2) Additional interest income of approximately \$98 would have been recorded if the above loans had not been classified as impaired (April 30, 2019 – \$100; 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

(\$ millions)	Balance as at October 31 2018	Provision for credit losses	Net write-offs	Other, including foreign currency adjustment	Balance as at July 31 2019
Residential mortgages	\$ 678	\$ 83	\$ (51)	\$ 11	\$ 721
Personal loans	2,109	1,109	(1,160)	40	2,098
Credit cards	1,213	887	(815)	8	1,293
Business and government	1,147	195	(167)	(24)	1,151
	\$ 5,147	\$ 2,274	\$ (2,193)	\$ 35	\$ 5,263
Presented as:					
Allowance for credit losses on loans	\$ 5,065				\$ 5,194
Allowance for credit losses on acceptances ⁽¹⁾	8				8
Allowance for credit losses on off-balance sheet exposures ⁽²⁾	74				61

(1) Allowance for credit losses on acceptances are recorded against the financial asset in the Consolidated Statement of Financial Position.

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

(\$ millions)	Balance as at October 31 2017	Provision for credit losses	Net write-offs	Other, including foreign currency adjustment	Balance as at July 31 2018
Residential mortgages	\$ 717	\$ 102	\$ (60)	\$ 4	\$ 763
Personal loans	1,879	1,077	(861)	41	2,136
Credit cards	1,163	671	(624)	49	1,259
Business and government	1,261	181	(171)	(21)	1,250
	\$ 5,020	\$ 2,031	\$ (1,716)	\$ 73	\$ 5,408
Presented as:					
Allowance for credit losses on loans	\$ 4,920				\$ 5,323
Allowance for credit losses on acceptances ⁽¹⁾	16				8
Allowance for credit losses on off-balance sheet exposures ⁽²⁾	84				77

(1) Allowance for credit losses on acceptances are recorded against the financial asset in the Consolidated Statement of Financial Position.

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

Allowance for credit losses on loans

As at July 31, 2019

(\$ millions)	Stage 1	Stage 2	Stage 3	Total
Residential mortgages	\$ 127	\$ 230	\$ 364	\$ 721
Personal loans	602	868	628	2,098
Credit cards	443	850	—	1,293
Business and government	159	245	678	1,082
Total ⁽¹⁾	\$ 1,331	\$ 2,193	\$ 1,670	\$ 5,194

(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 \$79.

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.

As at July 31, 2018

(\$ millions)	Stage 1	Stage 2	Stage 3	Total
Residential mortgages	\$ 156	\$ 193	\$ 414	\$ 763
Personal loans	712	816	608	2,136
Credit cards	471	788	—	1,259
Business and government	154	258	753	1,165
Total ⁽¹⁾	\$ 1,493	\$ 2,055	\$ 1,775	\$ 5,323

(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 \$93.

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

	As at and for the three months ended								As at and for the nine months ended			
	July 31, 2019				April 30, 2019				July 31, 2019			
(\$ millions)	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	\$ 129	\$ 237	\$ 368	\$ 734	\$ 121	\$ 226	\$ 362	\$ 709	\$ 112	\$ 206	\$ 360	\$ 678
Provision for credit losses												
Remeasurement ⁽¹⁾	(25)	1	36	12	(17)	7	27	17	(66)	16	92	42
Newly originated or purchased financial assets	14	–	–	14	12	–	–	12	49	–	–	49
Derecognition of financial assets and maturities	–	(2)	–	(2)	–	(2)	–	(2)	(1)	(7)	–	(8)
Changes in models and methodologies	–	–	–	–	–	–	–	–	–	–	–	–
Transfer to (from):												
Stage 1	13	(13)	–	–	15	(13)	(2)	–	40	(37)	(3)	–
Stage 2	(3)	25	(22)	–	(3)	27	(24)	–	(11)	80	(69)	–
Stage 3	–	(11)	11	–	–	(10)	10	–	–	(30)	30	–
Gross write-offs	–	–	(27)	(27)	–	–	(23)	(23)	–	–	(70)	(70)
Recoveries	–	–	6	6	–	–	11	11	–	–	19	19
Foreign exchange and other movements	(1)	(7)	(8)	(16)	1	2	7	10	4	2	5	11
Balance at end of period ⁽²⁾	\$ 127	\$ 230	\$ 364	\$ 721	\$ 129	\$ 237	\$ 368	\$ 734	\$ 127	\$ 230	\$ 364	\$ 721
Personal loans												
Balance at beginning of period	\$ 609	\$ 881	\$ 627	\$ 2,117	\$ 596	\$ 875	\$ 640	\$ 2,111	\$ 578	\$ 887	\$ 644	\$ 2,109
Provision for credit losses												
Remeasurement ⁽¹⁾	(157)	130	342	315	(155)	138	300	283	(464)	408	946	890
Newly originated or purchased financial assets	112	–	–	112	123	–	–	123	353	–	–	353
Derecognition of financial assets and maturities	(21)	(26)	–	(47)	(20)	(23)	–	(43)	(60)	(74)	–	(134)
Changes in models and methodologies	–	–	–	–	–	–	–	–	–	–	–	–
Transfer to (from):												
Stage 1	121	(118)	(3)	–	110	(107)	(3)	–	339	(332)	(7)	–
Stage 2	(50)	69	(19)	–	(48)	70	(22)	–	(144)	205	(61)	–
Stage 3	(1)	(83)	84	–	(1)	(79)	80	–	(3)	(241)	244	–
Gross write-offs	–	–	(459)	(459)	–	–	(438)	(438)	–	–	(1,377)	(1,377)
Recoveries	–	–	75	75	–	–	70	70	–	–	217	217
Foreign exchange and other movements	(11)	15	(19)	(15)	4	7	–	11	3	15	22	40
Balance at end of period ⁽²⁾	\$ 602	\$ 868	\$ 628	\$ 2,098	\$ 609	\$ 881	\$ 627	\$ 2,117	\$ 602	\$ 868	\$ 628	\$ 2,098
Credit cards												
Balance at beginning of period	\$ 458	\$ 902	\$ –	\$ 1,360	\$ 410	\$ 802	\$ –	\$ 1,212	\$ 401	\$ 812	\$ –	\$ 1,213
Provision for credit losses												
Remeasurement ⁽¹⁾	(66)	84	205	223	(141)	220	204	283	(275)	412	579	716
Newly originated or purchased financial assets	48	–	–	48	171	–	–	171	265	–	–	265
Derecognition of financial assets and maturities	(15)	(17)	–	(32)	(15)	(16)	–	(31)	(44)	(50)	–	(94)
Changes in models and methodologies	–	–	–	–	–	–	–	–	–	–	–	–
Transfer to (from):												
Stage 1	62	(62)	–	–	63	(63)	–	–	194	(194)	–	–
Stage 2	(35)	35	–	–	(32)	32	–	–	(99)	99	–	–
Stage 3	–	(70)	70	–	–	(71)	71	–	–	(211)	211	–
Gross write-offs	–	–	(334)	(334)	–	–	(335)	(335)	–	–	(981)	(981)
Recoveries	–	–	56	56	–	–	55	55	–	–	166	166
Foreign exchange and other movements	(9)	(22)	3	(28)	2	(2)	5	5	1	(18)	25	8
Balance at end of period ⁽²⁾	\$ 443	\$ 850	\$ –	\$ 1,293	\$ 458	\$ 902	\$ –	\$ 1,360	\$ 443	\$ 850	\$ –	\$ 1,293

CONDENSED INTERIM CONSOLIDATED FINANCIAL STATEMENTS

	As at and for the three months ended								As at and for the nine months ended			
	July 31, 2019				April 30, 2019				July 31, 2019			
(\$ millions)	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	\$ 198	\$ 274	\$ 675	\$ 1,147	\$ 197	\$ 272	\$ 679	\$ 1,148	\$ 173	\$ 291	\$ 675	\$ 1,139
Provision for credit losses												
Remeasurement ⁽¹⁾	(5)	4	75	74	(8)	13	64	69	(30)	30	208	208
Newly originated or purchased financial assets	50	–	–	50	41	–	–	41	130	–	–	130
Derecognition of financial assets and maturities	(40)	(6)	(3)	(49)	(38)	(4)	(8)	(50)	(105)	(18)	(18)	(141)
Changes in models and methodologies	(2)	(2)	–	(4)	–	–	–	–	(2)	(2)	–	(4)
Transfer to (from):												
Stage 1	9	(9)	–	–	7	(7)	–	–	47	(47)	–	–
Stage 2	(3)	4	(1)	–	(3)	3	–	–	(11)	14	(3)	–
Stage 3	–	(1)	1	–	–	(3)	3	–	–	(6)	6	–
Gross write-offs	–	–	(70)	(70)	–	–	(67)	(67)	–	–	(202)	(202)
Recoveries	–	–	8	8	–	–	11	11	–	–	35	35
Foreign exchange and other movements	(4)	(2)	(7)	(13)	2	–	(7)	(5)	1	–	(23)	(22)
Balance at end of period including off-balance sheet exposures ⁽²⁾	\$ 203	\$ 262	\$ 678	\$ 1,143	\$ 198	\$ 274	\$ 675	\$ 1,147	\$ 203	\$ 262	\$ 678	\$ 1,143
Less: Allowance for credit losses on off-balance sheet exposures ⁽²⁾	(44)	(17)	–	(61)	(41)	(21)	(1)	(63)	(44)	(17)	–	(61)
Balance at end of period ⁽²⁾	\$ 159	\$ 245	\$ 678	\$ 1,082	\$ 157	\$ 253	\$ 674	\$ 1,084	\$ 159	\$ 245	\$ 678	\$ 1,082

(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 \$98 (April 30, 2019 – \$100).

(3) Includes allowance for credit losses on purchased or originated credit-impaired loans. Refer to Note 8(f).

(d) Carrying value of exposures by risk rating

Residential mortgages	As at July 31, 2019				As at October 31, 2018			
Category of PD grades (\$ millions)	Stage 1	Stage 2	Stage 3 ⁽¹⁾	Total	Stage 1	Stage 2	Stage 3 ⁽¹⁾	Total
Very low	\$ 150,010	\$ 442	\$ –	\$ 150,452	\$ 146,461	\$ 307	\$ –	\$ 146,768
Low	59,090	526	–	59,616	58,154	378	–	58,532
Medium	13,893	1,109	–	15,002	11,689	972	–	12,661
High	1,639	3,211	–	4,850	1,615	3,515	–	5,130
Very high	13	1,766	–	1,779	25	1,779	–	1,804
Loans not graded ⁽²⁾	27,684	3,877	–	31,561	23,139	3,526	–	26,665
Default	–	–	1,910	1,910	–	–	1,797	1,797
Total	\$ 252,329	\$ 10,931	\$ 1,910	\$ 265,170	\$ 241,083	\$ 10,477	\$ 1,797	\$ 253,357
Allowance for credit losses	127	230	364	721	112	206	360	678
Carrying value	\$ 252,202	\$ 10,701	\$ 1,546	\$ 264,449	\$ 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	As at July 31, 2019				As at October 31, 2018			
Category of PD grades (\$ millions)	Stage 1	Stage 2	Stage 3 ⁽¹⁾	Total	Stage 1	Stage 2	Stage 3 ⁽¹⁾	Total
Very low	\$ 30,218	\$ 112	\$ –	\$ 30,330	\$ 30,660	\$ 66	\$ –	\$ 30,726
Low	26,812	323	–	27,135	26,039	151	–	26,190
Medium	8,604	439	–	9,043	8,315	402	–	8,717
High	6,953	3,650	–	10,603	6,686	3,647	–	10,333
Very high	47	1,513	–	1,560	58	1,362	–	1,420
Loans not graded ⁽²⁾	16,559	2,358	–	18,917	15,452	2,112	–	17,564
Default	–	–	1,091	1,091	–	–	1,069	1,069
Total	\$ 89,193	\$ 8,395	\$ 1,091	\$ 98,679	\$ 87,210	\$ 7,740	\$ 1,069	\$ 96,019
Allowance for credit losses	602	868	628	2,098	578	887	644	2,109
Carrying value	\$ 88,591	\$ 7,527	\$ 463	\$ 96,581	\$ 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 July 31, 2019				As at October 31, 2018			
Category of PD grades (\$ millions)	Stage 1	Stage 2	Stage 3	Total	Stage 1	Stage 2	Stage 3	Total
Very low	\$ 1,448	\$ 11	\$ –	\$ 1,459	\$ 1,418	\$ 5	\$ –	\$ 1,423
Low	2,516	21	–	2,537	2,436	14	–	2,450
Medium	3,536	58	–	3,594	3,358	71	–	3,429
High	3,267	1,542	–	4,809	2,929	1,455	–	4,384
Very high	41	766	–	807	37	697	–	734
Loans not graded ⁽¹⁾	3,304	1,423	–	4,727	2,906	1,159	–	4,065
Default	–	–	–	–	–	–	–	–
Total	\$ 14,112	\$ 3,821	\$ –	\$ 17,933	\$ 13,084	\$ 3,401	\$ –	\$ 16,485
Allowance for credit losses	443	850	–	1,293	401	812	–	1,213
Carrying value	\$ 13,669	\$ 2,971	\$ –	\$ 16,640	\$ 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 July 31, 2019				As at October 31, 2018			
Category of PD grades (\$ millions)	Stage 1	Stage 2	Stage 3	Total	Stage 1	Stage 2	Stage 3	Total
Very low	\$ 75,936	\$ –	\$ –	\$ 75,936	\$ 72,321	\$ –	\$ –	\$ 72,321
Low	17,446	1	–	17,447	16,531	2	–	16,533
Medium	6,532	91	–	6,623	6,029	79	–	6,108
High	2,879	722	–	3,601	2,631	670	–	3,301
Very high	24	321	–	345	26	367	–	393
Loans not graded ⁽¹⁾	11,356	2,706	–	14,062	14,774	3,364	–	18,138
Default	–	–	–	–	–	–	–	–
Carrying value	\$ 114,173	\$ 3,841	\$ –	\$ 118,014	\$ 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 July 31, 2019				As at October 31, 2018			
Grade (\$ millions)	Stage 1	Stage 2	Stage 3 ⁽¹⁾	Total	Stage 1	Stage 2	Stage 3 ⁽¹⁾	Total
Investment grade	\$ 102,927	\$ 1,136	\$ –	\$ 104,063	\$ 87,047	\$ 3,770	\$ –	\$ 90,817
Non-investment grade	94,904	6,474	–	101,378	83,730	9,706	–	93,436
Watch list	71	3,000	–	3,071	130	2,689	–	2,819
Loans not graded ⁽²⁾	1,907	8	–	1,915	1,050	652	–	1,702
Default	–	–	2,228	2,228	–	–	2,264	2,264
Total	\$ 199,809	\$ 10,618	\$ 2,228	\$ 212,655	\$ 171,957	\$ 16,817	\$ 2,264	\$ 191,038
Allowance for credit losses	159	245	678	1,082	132	260	673	1,065
Carrying value	\$ 199,650	\$ 10,373	\$ 1,550	\$ 211,573	\$ 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 July 31, 2019				As at October 31, 2018			
Grade (\$ millions)	Stage 1	Stage 2	Stage 3 ⁽¹⁾	Total	Stage 1	Stage 2	Stage 3 ⁽¹⁾	Total
Investment grade	\$ 173,208	\$ 725	\$ –	\$ 173,933	\$ 159,880	\$ 1,663	\$ –	\$ 161,543
Non-investment grade	53,280	3,838	–	57,118	56,001	3,445	–	59,446
Watch list	18	939	–	957	81	977	–	1,058
Loans not graded ⁽²⁾	1,650	148	–	1,798	2,178	28	–	2,206
Default	–	–	149	149	–	–	4	4
Total	\$ 228,156	\$ 5,650	\$ 149	\$ 233,955	\$ 218,140	\$ 6,113	\$ 4	\$ 224,257
Allowance for credit losses	44	17	–	61	41	31	2	74
Carrying value	\$ 228,112	\$ 5,633	\$ 149	\$ 233,894	\$ 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.

	As at July 31, 2019			
(\$ millions)	31-60 days	61-90 days	91 days and greater ⁽²⁾	Total
Residential mortgages	\$ 1,241	\$ 548	\$ –	\$ 1,789
Personal loans	606	332	–	938
Credit cards	282	173	409	864
Business and government	180	48	–	228
Total	\$ 2,309	\$ 1,101	\$ 409	\$ 3,819

As at April 30, 2019				
(\$ millions)	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

As at October 31, 2018				
(\$ millions)	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) Purchased credit-impaired loans

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

The following table provides details of such assets:

As at			
(\$ millions)	July 31 2019	April 30 2019	October 31 2018
Unpaid principal balance ⁽¹⁾	\$ 500	\$ 538	\$ 548
Credit related fair value adjustments	(134)	(150)	(168)
Carrying value	366	388	380
Stage 3 allowance	(8)	–	–
Carrying value net related allowance	\$ 358	\$ 388	\$ 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, where 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:

As at			
(\$ millions)	July 31 2019 ⁽¹⁾	April 30 2019 ⁽¹⁾	October 31 2018 ⁽¹⁾
Assets			
Carrying value of residential mortgage loans	\$ 20,765	\$ 21,110	\$ 20,498
Other related assets ⁽²⁾	4,193	3,285	2,679
Liabilities			
Carrying value of associated liabilities	\$ 22,512	\$ 21,994	\$ 21,459

(1) The fair value of the transferred assets is \$25,364 (April 30, 2019 – \$24,723; October 31, 2018 – \$23,237) and the fair value of the associated liabilities is \$24,683 (April 30, 2019 – \$23,822; October 31, 2018 – \$22,468) for a net position of \$681 (April 30, 2019 – \$901; 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 second 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 July 31, 2019, US \$1,359 million (\$1,793 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 July 31, 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 July 31, 2019, US \$472 million (\$624 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 July 31, 2019, assets pledged in relation to these notes were Canadian auto loan receivables, denominated in Canadian dollars, of \$740 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)	July 31 2019 ⁽¹⁾	As at	
		April 30 2019 ⁽¹⁾	October 31 2018 ⁽¹⁾
Carrying value of securities associated with:			
Repurchase agreements ⁽²⁾	\$ 107,139	\$ 106,895	\$ 82,816
Securities lending agreements	48,531	51,554	49,718
Total	155,670	158,449	132,534
Carrying value of associated liabilities ⁽³⁾	\$ 120,555	\$ 124,331	\$ 101,257

(1) The fair value of transferred assets is \$155,670 (April 30, 2019 – \$158,449; October 31, 2018 – \$132,534) and the fair value of the associated liabilities is \$120,555 (April 30, 2019 – \$124,331; October 31, 2018 – \$101,257), for a net position of \$35,115 (April 30, 2019 – \$34,118; 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		
					July 31 2019 Carrying value	April 30 2019 Carrying value	October 31 2018 Carrying value
Thanachart Bank Public Company Limited ⁽²⁾	Thailand	Banking	49.00%	July 31, 2019	\$ 3,452	\$ 3,266	\$ 2,961
Canadian Tire's Financial Services business (CTFS) ⁽³⁾	Canada	Financial Services	20.00%	June 30, 2019	519	521	518
Bank of Xi'an Co. Ltd. ⁽⁴⁾	China	Banking	17.99%	June 30, 2019	817	848	772
Maduro & Curiel's Bank N.V. ⁽⁵⁾	Curacao	Banking	48.10%	June 30, 2019	321	322	304

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

(2) Refer to Note 22 - Acquisitions and Divestitures.

(3) 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.

(4) Based on the quoted price on the Shanghai Stock Exchange, the Bank's investment in Bank of Xi'an Co. Ltd. was \$1,081 as at July 31, 2019.

(5) 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 July 31, 2019, these reserves amounted to \$62 (April 30, 2019 – \$63; October 31, 2018 – \$62).

11. Deposits

As at						April 30 2019	October 31 2018
(\$ millions)	July 31, 2019					Total	Total
	Payable on demand ⁽¹⁾		Payable after notice ⁽²⁾	Payable on a fixed date ⁽³⁾	Total		
	Interest- bearing	Non-interest- bearing					
Personal	\$ 6,567	\$ 8,065	\$ 123,641	\$ 84,622	\$ 222,895	\$ 224,933	\$ 214,545
Business and government	104,319	24,651	39,208	288,628	456,806	443,707	422,002
Financial institutions	5,582	1,062	1,175	34,826	42,645	43,642	39,987
	\$ 116,468	\$ 33,778	\$ 164,024⁽⁴⁾	\$ 408,076	\$ 722,346	\$ 712,282	\$ 676,534
Recorded in:							
Canada	\$ 84,718	\$ 16,851	\$ 126,951	\$ 262,413	\$ 490,933	\$ 481,177	\$ 472,798
United States	19,888	69	6,029	50,276	76,262	73,708	59,938
United Kingdom	—	—	273	18,001	18,274	18,683	16,847
Mexico	10	4,534	7,335	12,076	23,955	24,487	21,151
Peru	4,857	111	4,476	8,733	18,177	17,955	15,213
Chile	3,166	3,819	147	15,599	22,731	24,790	24,180
Colombia	42	548	4,567	4,690	9,847	9,949	9,543
Other International	3,787	7,846	14,246	36,288	62,167	61,533	56,864
Total ⁽⁵⁾	\$ 116,468	\$ 33,778	\$ 164,024	\$ 408,076	\$ 722,346	\$ 712,282	\$ 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 \$137 (April 30, 2019 – \$133; October 31, 2018 – \$141) of non-interest-bearing deposits.

(5) Deposits denominated in U.S. dollars amount to \$249,722 (April 30, 2019 – \$237,027; October 31, 2018 – \$219,195), deposits denominated in Chilean pesos amount to \$21,012 (April 30, 2019 – \$22,610; October 31, 2018 – \$22,731), deposits denominated in Mexican pesos amount to \$20,173 (April 30, 2019 – \$20,863; October 31, 2018 – \$18,341) and deposits denominated in other foreign currencies amount to \$83,772 (April 30, 2019 – \$84,606; 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 July 31, 2019	\$ 48,111	\$ 24,313	\$ 40,746	\$ 93,713	\$ 13,664	\$ 220,547
As at April 30, 2019	\$ 46,113	\$ 22,925	\$ 32,412	\$ 99,940	\$ 14,948	\$ 216,338
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

Cancellation

During the nine months ended July 31, 2019, the Bank purchased for cancellation approximately US \$16 million floating rate subordinated capital debentures due August, 2085.

Issuance

On July 3, 2019, the Bank issued \$1.5 billion subordinated debentures due July 3, 2029. On or after July 3, 2024, the debentures are redeemable at par plus accrued and unpaid interest. Interest will be payable semi-annually at a rate of 2.836% per annum until July 3, 2024 and thereafter payable quarterly until July 3, 2029 at the Three-month Bankers' Acceptance rate plus 1.18%. The debentures contain non-viability contingent capital (NVCC) provisions necessary for the debentures to qualify as Tier 2 regulatory capital.

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 Three-month Bankers' Acceptance rate plus 1.58%. The debentures contain NVCC provisions necessary for the debentures to qualify as Tier 2 regulatory capital.

Additional Tier 1 Securities

On June 30, 2019, the 7.802% Scotiabank Tier 1 Securities – Series 2009-1 issued by Scotiabank Tier 1 Trust were redeemed for 100% of their principal amount, together with accrued and unpaid interest to the redemption date.

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 30, 2019, the Bank announced that OSFI and the Toronto Stock Exchange have approved 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 commenced 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 terminated on June 3, 2019.

During the quarter, the Bank repurchased and cancelled approximately 2.8 million common shares at a volume weighted average price of \$70.28 per share for a total amount of \$195 million. During the nine months ended July 31, 2019, the Bank repurchased and cancelled approximately 10 million common shares under these plans at a volume weighted average price of \$71.66 per share for a total amount of \$719 million.

Under the 2018 NCIB, which terminated on June 3, 2019, the Bank cumulatively repurchased and cancelled approximately 14.8 million common shares at an average price of \$73.46 per share. Under the 2019 NCIB, the Bank has cumulatively repurchased and cancelled approximately 1.2 million common shares at an average price of \$70.24 per share.

13. Capital management

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

	As at		
(\$ millions)	July 31 2019 ⁽¹⁾	April 30 2019 ⁽¹⁾	October 31 2018 ⁽¹⁾
Capital			
Common Equity Tier 1 capital	\$ 46,565	\$ 46,193	\$ 44,443
Net Tier 1 capital	51,371	51,709	50,187
Total regulatory capital	61,546	60,855	57,364
Risk-weighted assets/exposures used in calculation of capital ratios			
CET1 risk-weighted assets ⁽¹⁾⁽²⁾	\$ 417,058	\$ 415,212	\$ 400,507
Tier 1 risk-weighted assets ⁽¹⁾⁽²⁾	417,058	415,212	400,680
Total risk-weighted assets ⁽¹⁾⁽²⁾	417,058	415,212	400,853
Leverage exposures	1,211,612	1,204,111	1,119,099
Capital ratios			
Common Equity Tier 1 capital ratio	11.2%	11.1%	11.1%
Tier 1 capital ratio	12.3%	12.5%	12.5%
Total capital ratio	14.8%	14.7%	14.3%
Leverage ratio	4.2%	4.3%	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 July 31, 2019, April 30, 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 July 31, 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 \$6 million for the three months and nine months ended July 31, 2019 (July 31, 2018 – \$1 million and \$6 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⁾.

	For the three months ended					
	Pension plans			Other benefit plans		
(\$ millions)	July 31 2019	April 30 2019	July 31 2018	July 31 2019	April 30 2019	July 31 2018
Defined benefit service cost	\$ 73	\$ 71	\$ 83	\$ (1)	\$ 7	\$ 7
Interest on net defined benefit (asset) liability	(1)	1	2	13	13	11
Other	4	4	3	(7)	1	(5)
Defined benefit expense	\$ 76	\$ 76	\$ 88	\$ 5	\$ 21	\$ 13
Defined contribution expense	\$ 15	\$ 15	\$ 10	\$ 3	n/a	n/a
Increase (decrease) in other comprehensive income related to employee benefits ⁽²⁾	\$ (433)	\$ (219)	\$ 223	\$ (42)	\$ (17)	\$ (11)

	For the nine months ended			
	Pension plans		Other benefit plans	
(\$ millions)	July 31 2019	July 31 2018	July 31 2019	July 31 2018
Defined benefit service cost ⁽³⁾	\$ 220	\$ 249	\$ 13	\$(170)
Interest on net defined benefit (asset) liability	(2)	6	39	36
Other	12	9	(5)	(8)
Defined benefit expense	\$ 230	\$ 264	\$ 47	\$(142)
Defined contribution expense	\$ 44	\$ 30	\$ 3	n/a
Increase (decrease) in other comprehensive income related to employee benefits ⁽²⁾	\$ (1,047)	\$ 288	\$ (124)	\$ 27

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

(2) Changes in discount rates and return on plan assets are reviewed and updated on a quarterly basis. In the absence of legislated changes, all other assumptions are updated annually.

(3) 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.

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 July 31, 2019					
	Canadian Banking	International Banking	Global Banking and Markets	Other ⁽¹⁾⁽²⁾	Total
Taxable equivalent basis (\$ millions)					
Net interest income ⁽³⁾	\$ 2,120	\$ 2,157	\$ 337	\$ (240)	\$ 4,374
Non-interest income ⁽⁴⁾⁽⁵⁾	1,412	1,270	747	(144)	3,285
Total revenues	3,532	3,427	1,084	(384)	7,659
Provision for credit losses	240	476	(4)	1	713
Non-interest expenses	1,723	1,780	593	113	4,209
Provision for income taxes	409	269	121	(46)	753
Net income	\$ 1,160	\$ 902	\$ 374	\$ (452)	\$ 1,984
Net income attributable to non-controlling interests in subsidiaries	\$ –	\$ 121	\$ –	\$ (1)	\$ 120
Net income attributable to equity holders of the Bank	\$ 1,160	\$ 781	\$ 374	\$ (451)	\$ 1,864
Represented by:					
Net income attributable to equity holders of the Bank – relating to divested operations ⁽⁶⁾	–	–	–	–	–
Net income attributable to equity holders of the Bank – relating to operations other than divested operations	1,160	781	374	(451)	1,864
Average assets (\$ billions)	\$ 365	\$ 206	\$ 374	\$ 116	\$ 1,061
Average liabilities (\$ billions)	\$ 285	\$ 158	\$ 306	\$ 242	\$ 991

(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 \$48 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 loss on divestitures of \$418 (pre-tax \$320).

(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 – \$16; International Banking – \$182 and Other – \$(8).

(6) Excludes gain/(loss) recognized on divestitures, which is recorded in the Other segment. Refer to Note 22 for further details.

For the three 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⁾	\$ 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
Represented by:					
Net income attributable to equity holders of the Bank – relating to divested operations ⁽⁶⁾	–	8	–	–	8
Net income attributable to equity holders of the Bank – relating to operations other than divested operations	1,048	692	420	21	2,181
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).

(6) Earnings from pension and related insurance business in the Dominican Republic divested in the current period. Refer to Note 22 for further details. These amounts exclude gain/(loss) recognized on divestitures, which is recorded in the Other segment.

For the three months ended July 31, 2018

Taxable equivalent basis (\$ millions)	Canadian Banking	International Banking	Global Banking and Markets	Other ⁽¹⁾	Total
Net interest income ⁽²⁾	\$ 2,024	\$ 1,827	\$ 365	\$(131)	\$ 4,085
Non-interest income ⁽³⁾⁽⁴⁾	1,349	1,026	745	(24)	3,096
Total revenues	3,373	2,853	1,110	(155)	7,181
Provision for credit losses	181	771	(10)	1	943
Non-interest expenses	1,661	1,510	543	56	3,770
Provision for income taxes	401	97	136	(105)	529
Net income	\$ 1,130	\$ 475	\$ 441	\$(107)	\$ 1,939
Net income attributable to non-controlling interests in subsidiaries	\$ –	\$ (44)	\$ –	\$ –	\$ (44)
Net income attributable to equity holders of the Bank	\$ 1,130	\$ 519	\$ 441	\$(107)	\$ 1,983
Represented by:					
Net income attributable to equity holders of the Bank – relating to divested operations ⁽⁵⁾	–	5	–	–	5
Net income attributable to equity holders of the Bank – relating to operations other than divested operations	1,130	514	441	(107)	1,978
Average assets (\$ billions)	\$ 344	\$ 164	\$ 311	\$ 116	\$ 935
Average liabilities (\$ billions)	\$ 254	\$ 129	\$ 258	\$ 229	\$ 870

(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 \$28 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 – \$11; International Banking – \$153 and Other – \$(38).

(5) Earnings from pension and related insurance business in the Dominican Republic divested in the second quarter of 2019. Refer to Note 22 for further details. These amounts exclude gain/(loss) recognized on divestitures, which is recorded in the Other segment.

For the nine months ended July 31, 2019

	Canadian Banking	International Banking	Global Banking and Markets	Other ⁽¹⁾⁽²⁾	Total
Taxable equivalent basis (\$ millions)					
Net interest income ⁽³⁾	\$ 6,146	\$ 6,358	\$ 1,059	\$(722)	\$12,841
Non-interest income ⁽⁴⁾⁽⁵⁾	4,181	3,756	2,251	37	10,225
Total revenues	10,327	10,114	3,310	(685)	23,066
Provision for credit losses	725	1,574	(26)	1	2,274
Non-interest expenses	5,164	5,232	1,832	198	12,426
Provision for income taxes	1,157	744	375	(400)	1,876
Net income	\$ 3,281	\$ 2,564	\$ 1,129	\$ (484)	\$ 6,490
Net income attributable to non-controlling interests in subsidiaries	\$ –	\$ 301	\$ –	\$ –	\$ 301
Net income attributable to equity holders of the Bank	\$ 3,281	\$ 2,263	\$ 1,129	\$ (484)	\$ 6,189
Represented by:					
Net income attributable to equity holders of the Bank – relating to divested operations ⁽⁶⁾	–	12	–	–	12
Net income attributable to equity holders of the Bank – relating to operations other than divested operations	3,281	2,251	1,129	(484)	6,177
Average assets (\$ billions)	\$ 360	\$ 202	\$ 366	\$ 116	\$ 1,044
Average liabilities (\$ billions)	\$ 280	\$ 156	\$ 300	\$ 239	\$ 975

(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 \$123 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 loss on divestitures of \$276 (pre-tax \$147).

(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 – \$47; International Banking – \$553 and Other – \$(111).

(6) Earnings from pension and related insurance business in the Dominican Republic divested in the second quarter of 2019. Refer to Note 22 for further details. These amounts exclude gain/(loss) recognized on divestitures, which is recorded in the Other segment.

For the nine months ended July 31, 2018

	Canadian Banking	International Banking	Global Banking and Markets	Other ⁽¹⁾	Total
Taxable equivalent basis (\$ millions)					
Net interest income ⁽²⁾	\$ 5,869	\$ 5,292	\$ 1,117	\$(307)	\$11,971
Non-interest income ⁽³⁾⁽⁴⁾	4,038	3,007	2,338	(27)	9,356
Total revenues	9,907	8,299	3,455	(334)	21,327
Provision for credit losses	596	1,455	(30)	–	2,021
Non-interest expenses	4,907	4,390	1,680	17	10,994
Provision for income taxes	1,155	509	463	(268)	1,859
Net income	\$ 3,249	\$ 1,945	\$ 1,342	\$ (83)	\$ 6,453
Net income attributable to non-controlling interests in subsidiaries	\$ –	\$ 84	\$ –	\$ –	\$ 84
Net income attributable to equity holders of the Bank	\$ 3,249	\$ 1,861	\$ 1,342	\$ (83)	\$ 6,369
Represented by:					
Net income attributable to equity holders of the Bank – relating to divested operations ⁽⁵⁾	–	25	–	–	25
Net income attributable to equity holders of the Bank – relating to operations other than divested operations	3,249	1,836	1,342	(83)	6,344
Average assets (\$ billions)	\$ 339	\$ 159	\$ 322	\$ 117	\$ 937
Average liabilities (\$ billions)	\$ 250	\$ 123	\$ 267	\$ 234	\$ 874

(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 \$81 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 – \$70; International Banking – \$442 and Other – \$(122).

(5) Earnings from pension and related insurance business in the Dominican Republic divested in the second quarter of 2019. Refer to Note 22 for further details. These amounts exclude gain/(loss) recognized on divestitures, which is recorded in the Other segment.

17. Interest income and expense

(\$ millions)	For the three months ended						For the nine months ended			
	July 31, 2019		April 30, 2019		July 31, 2018		July 31, 2019		July 31, 2018	
	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⁾	\$ 7,970	\$ 4,055	\$ 7,641	\$ 3,892	\$ 6,781	\$ 3,004	\$ 23,181	\$ 11,658	\$ 19,335	\$ 8,289
Measured at FVOCI ⁽¹⁾	378	–	378	–	299	–	1,109	–	865	–
Other ⁽²⁾	8,348	4,055	8,019	3,892	7,080	3,004	24,290	11,658	20,200	8,289
	92	11	82	16	51	42	242	33	147	87
Total	\$ 8,440	\$ 4,066	\$ 8,101	\$ 3,908	\$ 7,131	\$ 3,046	\$ 24,532	\$ 11,691	\$ 20,347	\$ 8,376

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

(2) Includes dividend income on equity securities designated at FVOCI.

18. Trading revenues

The following table presents details of trading revenues.

(\$ millions)	For the three months ended			For the nine months ended	
	July 31 2019	April 30 2019	July 31 2018	July 31 2019	July 31 2018
Interest rate and credit	\$ 45	\$ 81	\$ 72	\$ 133	\$ 232
Equities	124	123	58	370	310
Commodities	57	45	50	170	185
Foreign exchange	64	59	72	207	223
Other	107	78	53	232	100
Total	\$ 397	\$ 386	\$ 305	\$ 1,112	\$ 1,050

19. Earnings per share

(\$ millions)	For the three months ended			For the nine months ended	
	July 31 2019	April 30 2019	July 31 2018	July 31 2019	July 31 2018
Basic earnings per common share					
Net income attributable to common shareholders	\$ 1,839	\$ 2,125	\$ 1,956	\$ 6,071	\$ 6,247
Weighted average number of common shares outstanding (millions)	1,221	1,224	1,223	1,224	1,207
Basic earnings per common share ⁽¹⁾ (in dollars)	\$ 1.51	\$ 1.74	\$ 1.60	\$ 4.96	\$ 5.18
Diluted earnings per common share					
Net income attributable to common shareholders	\$ 1,839	\$ 2,125	\$ 1,956	\$ 6,071	\$ 6,247
Dilutive impact of share-based payment options and others ⁽²⁾	40	37	(39)	121	(5)
Net income attributable to common shareholders (diluted)	\$ 1,879	\$ 2,162	\$ 1,917	\$ 6,192	\$ 6,242
Weighted average number of common shares outstanding (millions)	1,221	1,224	1,223	1,224	1,207
Dilutive impact of share-based payment options and others ⁽²⁾ (millions)	30	28	17	29	16
Weighted average number of diluted common shares outstanding (millions)	1,251	1,252	1,240	1,253	1,223
Diluted earnings per common share ⁽¹⁾ (in dollars)	\$ 1.50	\$ 1.73	\$ 1.55	\$ 4.94	\$ 5.10

(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	October 31 2018
	July 31, 2019				
(\$ millions)	AIRB	Standardized	Total	Total	Total
By exposure sub-type					
Non-retail					
Drawn ⁽²⁾⁽³⁾	\$ 364,762	\$ 62,734	\$ 427,496	\$ 434,552	\$ 425,009
Undrawn commitments	92,883	3,938	96,821	96,803	92,303
Other exposures ⁽⁴⁾	93,538	10,595	104,133	107,021	105,232
Total non-retail	\$ 551,183	\$ 77,267	\$ 628,450	\$ 638,376	\$ 622,544
Retail					
Drawn ⁽⁵⁾	\$ 203,445	\$ 93,647	\$ 297,092	\$ 289,269	\$ 278,605
Undrawn commitments	49,735	–	49,735	48,371	48,085
Total retail	\$ 253,180	\$ 93,647	\$ 346,827	\$ 337,640	\$ 326,690
Total	\$ 804,363	\$ 170,914	\$ 975,277	\$ 976,016	\$ 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 July 31, 2019, 40% (April 30, 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% (April 30, 2019 – 55%; October 31, 2018 – 54%).

Retail standardized portfolio

The retail standardized portfolio of \$94 billion as at July 31, 2019 (April 30, 2019 – \$94 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, \$48 billion (April 30, 2019 – \$49 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 July 31, 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 \$64 million (April 30, 2019 – \$69 million; July 31, 2018 – \$62 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 July 31, 2019, would decrease (increase) the unrealized foreign currency translation gains in the accumulated other comprehensive income section of shareholders' equity by approximately \$382 million (April 30, 2019 – \$386 million; July 31, 2018 – \$371 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	
	July 31, 2019			July 31	April 30	July 31
	Average	High	Low	2019	2019	2018
Credit spread plus interest rate	\$ 9.8	\$14.4	\$ 7.7	\$ 8.9	\$ 8.5	\$ 7.7
Credit spread	8.1	10.6	5.3	8.7	6.2	6.8
Interest rate	7.2	10.3	5.1	6.3	6.5	7.8
Equities	3.5	7.8	1.0	2.7	4.1	2.7
Foreign exchange	4.0	6.0	2.5	4.2	3.1	3.4
Commodities	2.4	3.5	1.3	3.3	2.6	1.6
Debt specific	3.8	4.8	2.0	3.3	3.7	3.4
Diversification effect	(11.6)	n/a	n/a	(11.3)	(12.0)	(7.3)
Total VaR	\$ 11.9	\$15.7	\$ 9.2	\$ 11.1	\$ 10.0	\$11.5
Total Stressed VaR	\$ 37.3	\$48.9	\$26.7	\$ 27.3	\$ 32.0	\$41.0

(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		
	July 31 2019	April 30 2019	July 31 2018	July 31 2019	April 30 2019	July 31 2018	July 31 2019	April 30 2019	July 31 2018
Assets									
Investment securities ⁽²⁾	\$ 13	\$ 14	\$ 15	\$ –	\$ –	\$ –	\$ –	\$ –	\$ –
Liabilities									
Senior note liabilities ⁽³⁾	\$ 11,536	\$ 10,919	\$ 7,652	\$ (18)	\$ (774)	\$ (99)	\$ (190)	\$ (172)	\$ 94

(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 July 31, 2019	\$ 11,346	\$ 11,536	\$ (190)	\$ 6	\$ (73)
As at April 30, 2019	\$ 10,747	\$ 10,919	\$ (172)	\$ (43)	\$ (79)
As at July 31, 2018	\$ 7,746	\$ 7,652	\$ 94	\$ 30	\$ (20)

(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.

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					
	July 31, 2019		April 30, 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	\$ 45,262	\$ 45,262	\$ 50,121	\$ 50,121	\$ 62,269	\$ 62,269
Trading assets	131,068	131,068	117,140	117,140	100,262	100,262
Financial instruments designated at fair value through profit or loss	13	13	14	14	12	12
Securities purchased under resale agreements and securities borrowed	119,478	119,478	126,090	126,090	104,018	104,018
Derivative financial instruments	36,157	36,157	31,358	31,358	37,558	37,558
Investment securities – other	58,366	58,366	61,214	61,214	57,653	57,653
Investment securities – amortized cost	24,318	24,226	23,820	23,932	20,316	20,743
Loans	595,696	589,243	588,619	583,815	553,758	551,834
Customers' liability under acceptances	13,923	13,923	12,823	12,823	16,329	16,329
Other financial assets	11,237	11,237	12,761	12,761	10,913	10,913
Liabilities:						
Deposits	723,894	722,346	712,949	712,282	674,535	676,534
Financial instruments designated at fair value through profit or loss	11,536	11,536	10,919	10,919	8,188	8,188
Acceptances	13,932	13,932	12,833	12,833	16,338	16,338
Obligations related to securities sold short	25,669	25,669	29,957	29,957	32,087	32,087
Derivative financial instruments	37,307	37,307	33,176	33,176	37,967	37,967
Obligations related to securities sold under repurchase agreements and securities lent	120,555	120,555	124,331	124,331	101,257	101,257
Subordinated debentures	9,314	9,021	7,801	7,554	5,627	5,698
Other financial liabilities	37,532	36,948	38,030	37,601	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)	July 31, 2019				April 30, 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⁾	\$ –	\$ 3,571	\$ 1	\$ 3,572	\$ –	\$ 3,504	\$ 39	\$ 3,543
Trading assets								
Loans	–	14,158	–	14,158	–	13,104	–	13,104
Canadian federal government and government guaranteed debt	13,374	1,557	–	14,931	13,514	1,789	–	15,303
Canadian provincial and municipal debt	–	7,776	–	7,776	–	6,892	–	6,892
US treasury and other US agencies' debt	12,544	–	–	12,544	10,974	–	–	10,974
Other foreign governments' debt	6,746	2,981	–	9,727	3,793	2,847	–	6,640
Corporate and other debt	2	10,788	14	10,804	3	9,714	15	9,732
Income funds	40	–	–	40	35	–	–	35
Equity securities	59,987	179	–	60,166	52,830	719	–	53,549
Other ⁽²⁾	922	–	–	922	911	–	–	911
	\$ 93,615	\$ 41,010	\$ 15	\$ 134,640	\$ 82,060	\$ 38,569	\$ 54	\$ 120,683
Financial assets designated at fair value through profit or loss								
Investment securities⁽³⁾	\$ 13	\$ –	\$ –	\$ 13	\$ 14	\$ –	\$ –	\$ 14
Canadian federal government and government guaranteed debt	8,202	2,674	–	10,876	6,350	2,565	–	8,915
Canadian provincial and municipal debt	228	2,690	–	2,918	241	2,763	–	3,004
US treasury and other US agencies' debt	17,686	488	–	18,174	22,198	507	–	22,705
Other foreign governments' debt	10,035	9,991	31	20,057	8,284	10,531	31	18,846
Corporate and other debt	261	1,431	19	1,711	188	1,698	16	1,902
Mortgage-backed securities	–	2,461	–	2,461	–	3,787	–	3,787
Equity securities	1,098	260	811	2,169	1,033	246	776	2,055
	\$ 37,510	\$ 19,995	\$ 861	\$ 58,366	\$ 38,294	\$ 22,097	\$ 823	\$ 61,214
Derivative financial instruments								
Interest rate contracts	\$ –	\$ 13,720	\$ 12	\$ 13,732	\$ –	\$ 10,459	\$ 29	\$ 10,488
Foreign exchange and gold contracts	2	18,971	–	18,973	2	16,773	–	16,775
Equity contracts	837	699	1	1,537	778	890	2	1,670
Credit contracts	–	192	–	192	–	189	–	189
Commodity contracts	43	1,680	–	1,723	8	2,228	–	2,236
	\$ 882	\$ 35,262	\$ 13	\$ 36,157	\$ 788	\$ 30,539	\$ 31	\$ 31,358
Liabilities:								
Deposits⁽⁴⁾	\$ –	\$ 77	\$ –	\$ 77	\$ –	\$ (51)	\$ –	\$ (51)
Financial liabilities designated at fair value through profit or loss								
Obligations related to securities sold short	–	11,536	–	11,536	–	10,919	–	10,919
Derivative financial instruments	22,170	3,499	–	25,669	25,327	4,630	–	29,957
Interest rate contracts	–	12,786	22	12,808	–	10,580	20	10,600
Foreign exchange and gold contracts	8	19,558	–	19,566	1	16,502	–	16,503
Equity contracts	887	1,647	–	2,534	865	2,629	2	3,496
Credit contracts	–	49	–	49	–	56	–	56
Commodity contracts	–	2,350	–	2,350	–	2,521	–	2,521
	\$ 895	\$ 36,390	\$ 22	\$ 37,307	\$ 866	\$ 32,288	\$ 22	\$ 33,176

(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 \$24,226 (April 30, 2019-\$23,932).

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

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	\$ 12	\$ –	\$ –	\$ 12
Investment securities⁽³⁾				
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	–	8,188	–	8,188
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 July 31, 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 July 31, 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 July 31, 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	\$ 39	\$ –	\$ –	\$ –	\$ (38)	\$ –	\$ 1	\$ –
	39	–	–	–	(38)	–	1	–
Trading assets								
Corporate and other debt	15	–	–	–	(1)	–	14	–
	15	–	–	–	(1)	–	14	–
Investment securities								
Other foreign governments' debt	31	–	–	–	–	–	31	n/a
Corporate and other debt	16	–	3	–	–	–	19	n/a
Equity securities	776	7	8	46	(26)	–	811	7
	823	7	11	46	(26)	–	861	7
Derivative financial instruments – assets								
Interest rate contracts	29	(12)	–	–	(5)	–	12	(12)
Equity contracts	2	–	–	–	–	(1)	1	– ⁽²⁾
Derivative financial instruments – liabilities								
Interest rate contracts	(20)	(7)	–	(1)	6	–	(22)	(7) ⁽³⁾
Equity contracts	(2)	–	–	–	–	2	–	– ⁽²⁾
	9	(19)	–	(1)	1	1	(9)	(19)
Total	\$ 886	\$ (12)	\$ 11	\$ 45	\$ (64)	\$ 1	\$ 867	\$ (12)

(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 April 30, 2019 and October 31, 2018:

As at April 30, 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	\$ 14	\$ –	\$ –	\$ 25	\$ –	\$ –	\$ 39
Trading assets	18	–	–	–	(7)	4	15
Investment securities	749	5	17	92	(36)	(4)	823
Derivative financial instruments	9	(2)	–	–	–	2	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 July 31, 2019, April 30, 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

Acquisitions that closed during the prior 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.

Divestitures

Announced divestiture impacting the current period

Operations in Puerto Rico and the U.S. Virgin Islands

On June 26, 2019, the Bank announced the sale of its operations in Puerto Rico and the U.S. Virgin Islands to Oriental Bank, a subsidiary of OFG Bancorp.

As this transaction has met the accounting requirements of assets held for sale, a loss of \$402 million after tax, that primarily represents the carrying value of goodwill relating to this business, has been recorded this quarter in Non-interest income – Other and reported in the Other segment. This transaction is subject to regulatory approvals and closing conditions.

Announced divestiture impacting the prior period

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, was recorded in the second 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.

Closed divestiture impacting the prior period

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 was recorded in the second quarter in Non-interest income – Other and reported in the Other segment.

Divestitures previously announced not yet impacting the Bank's financial results

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 August 8, 2019, the Bank announced that it has signed agreements with ING Groep N.V., Thanachart Bank Public Company Limited ("TBank") and TMB Bank Public Company Limited ("TMB") that largely follow the memorandum of understanding announced on February 26, 2019. The carrying value of the Bank's 49% interest in TBank was \$3.45 billion as at July 31, 2019.

Upon closing and pursuant to these agreements, the Bank will sell its interest in TBank in exchange for cash and shares in TMB (and ultimately the new bank resulting from the subsequent merger of TMB and TBank ("the Merged Bank")). Based on current values, this would result in the Bank owning approximately 6% of the Merged Bank.

The announced transaction is subject to customary closing conditions, including regulatory approvals, and other non-customary closing conditions which are particular to the many parties involved. The transaction is expected to close in Q1 2020.

Upon closing, the Bank will record a gain of approximately \$300 million after tax, subject to closing adjustments including fair values and foreign exchange rates prevailing at the date of closing, and the Bank's common equity Tier 1 (CET1) ratio will increase by approximately 25 basis points.

The Bank will continue to retain 49% interest in two TBank subsidiaries that are not part of these signed agreements.

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
January 2, 2019
April 2, 2019
July 2, 2019
October 1, 2019

Payment Date
January 29, 2019
April 26, 2019
July 29, 2019
October 29, 2019

Annual Meeting

The Annual Meeting for fiscal year 2019 is scheduled for April 7, 2020, in Toronto, Ontario, Canada.

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 August 27, 2019, at 8:15 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 647-484-0473 or toll-free, at 1-800-289-0459 using ID 350989# (please call shortly before 8:15 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 August 27, 2019, to September 11, 2019, by calling 647-436-0148 or 1-888-203-1112 (North America toll-free) and entering the access code 3040720#. 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:
Scotiabank
Scotia Plaza, 44 King Street West
Toronto, Ontario, Canada M5H 1H1
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

Rapport trimestriel disponible en français

Le Rapport annuel et les états financiers de la Banque sont publiés en français et en anglais et distribués aux actionnaires dans la version de leur choix. Si vous préférez que la documentation vous concernant vous soit adressée en français, veuillez en informer Relations publiques, Affaires de la société et Affaires gouvernementales, La Banque de Nouvelle-Écosse, Scotia Plaza, 44, rue King Ouest, Toronto (Ontario), Canada M5H 1H1, en joignant, si possible, l'étiquette d'adresse, afin que nous puissions prendre note du changement.

