

# Third Quarter 2019



## Royal Bank of Canada third quarter 2019 results

All amounts are in Canadian dollars and are based on financial statements prepared in compliance with International Accounting Standard 34 *Interim Financial Reporting*, unless otherwise noted.

Net Income  
**\$3.3 Billion**

*Diversified earnings growth*

Diluted EPS<sup>(1)</sup>  
**\$2.22**

*Solid 6% growth YoY*

ROE<sup>(2)</sup>  
**16.7%**

*Balanced capital deployment*

CET1 Ratio  
**11.9%**

*Strong capital ratio*

**TORONTO, August 21, 2019** — Royal Bank of Canada (RY on TSX and NYSE) today reported net income of \$3,263 million for the quarter ended July 31, 2019, up \$154 million or 5% from the prior year, with solid diluted EPS growth of 6%. Results reflected strong earnings growth in Personal & Commercial Banking, Wealth Management and Insurance. These were partially offset by lower earnings in Capital Markets and Investor & Treasury Services amidst challenging market conditions.

Compared to last quarter, net income was up \$33 million with higher earnings in Personal & Commercial Banking, Wealth Management and Insurance, largely offset by lower earnings in Capital Markets and Investor & Treasury Services.

Provisions for credit losses (PCL) on impaired loans ratio of 25 basis points (bps) was up 8 bps from a year ago (down 4 bps compared to last quarter), largely due to higher provisions in Capital Markets compared to recoveries in the prior year. Higher provisions in Personal & Commercial Banking also contributed to the increase. Our capital position remained strong with a Common Equity Tier 1 (CET1) ratio of 11.9%, up 10 bps from last quarter. In addition, today we announced an increase to our quarterly dividend of \$0.03 or 3% to \$1.05 per share.

*“Our focused strategy and diversified business mix continue to deliver strong returns for our shareholders as we leverage our scale and investments in technology to create new value streams for our clients. This commitment is underpinned by the strength of our balance sheet, disciplined risk and expense management, and the power of imagination and insight our people deliver every day. RBC is well-positioned to further grow our market share and navigate the evolving market environment.”*

– Dave McKay, RBC President and Chief Executive Officer

### Q3 2019 Compared to Q3 2018

- Net income of \$ 3,263 million ↑ 5%
- Diluted EPS<sup>(1)</sup> of \$2.22 ↑ 6%
- ROE<sup>(2)</sup> of 16.7% ↓ 60 bps
- CET1 ratio of 11.9% ↑ 80 bps

### Q3 2019 Compared to Q2 2019

- Net income of \$3,263 million ↑ 1%
- Diluted EPS<sup>(1)</sup> of \$2.22 ↑ 1%
- ROE<sup>(2)</sup> of 16.7% ↓ 80 bps
- CET1 ratio of 11.9% ↑ 10 bps

### YTD 2019 Compared to YTD 2018

- Net income of \$9,665 million ↑ 5%
- Diluted EPS<sup>(1)</sup> of \$6.57 ↑ 7%
- ROE<sup>(2)</sup> of 17.0% ↓ 60 bps

(1) Earnings per share (EPS).

(2) Return on Equity (ROE). This measure does not have a standardized meaning under GAAP. For further information, refer to the Key performance and non-GAAP measures section of this Q3 2019 Report to Shareholders.

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## Management's Discussion and Analysis

Management's Discussion and Analysis (MD&A) is provided to enable a reader to assess our results of operations and financial condition for the three and nine month periods ended or as at July 31, 2019, compared to the corresponding periods in the prior fiscal year and the three month period ended April 30, 2019. This MD&A should be read in conjunction with our unaudited Interim Condensed Consolidated Financial Statements for the quarter ended July 31, 2019 (Condensed Financial Statements) and related notes and our 2018 Annual Report. This MD&A is dated August 20, 2019. All amounts are in Canadian dollars, unless otherwise specified, and are based on financial statements prepared in accordance with International Financial Reporting Standards (IFRS) as issued by the International Accounting Standards Board (IASB), unless otherwise noted.

Additional information about us, including our 2018 Annual Information Form, is available free of charge on our website at [rbc.com/investorrelations](http://rbc.com/investorrelations), on the Canadian Securities Administrators' website at [sedar.com](http://sedar.com) and on the EDGAR section of the United States (U.S.) Securities and Exchange Commission's (SEC) website at [sec.gov](http://sec.gov).

Information contained in or otherwise accessible through the websites mentioned does not form part of this report. All references in this report to websites are inactive textual references and are for your information only.

### Caution regarding forward-looking statements

From time to time, we make written or oral forward-looking statements within the meaning of certain securities laws, including the "safe harbour" provisions of the *United States Private Securities Litigation Reform Act of 1995* and any applicable Canadian securities legislation. We may make forward-looking statements in this Q3 2019 Report to Shareholders, in other filings with Canadian regulators or the SEC, in other reports to shareholders, and in other communications. Forward-looking statements in this document include, but are not limited to, statements relating to our financial performance objectives, vision and strategic goals, the Economic, market, and regulatory review and outlook for Canadian, U.S., European and global economies, the regulatory environment in which we operate, and the risk environment including our liquidity and funding risk, and includes our President and Chief Executive Officer's statements. The forward-looking information contained in this document is presented for the purpose of assisting the holders of our securities and financial analysts in understanding our financial position and results of operations as at and for the periods ended on the dates presented, as well as our financial performance objectives, vision and strategic goals, and may not be appropriate for other purposes. Forward-looking statements are typically identified by words such as "believe", "expect", "foresee", "forecast", "anticipate", "intend", "estimate", "goal", "plan" and "project" and similar expressions of future or conditional verbs such as "will", "may", "should", "could" or "would".

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 could cause our actual results to differ materially from the expectations expressed in such forward-looking statements. These factors – many of which are beyond our control and the effects of which can be difficult to predict – include: credit, market, liquidity and funding, insurance, operational, regulatory compliance, strategic, reputation, legal and regulatory environment, competitive and systemic risks and other risks discussed in the risk sections of our 2018 Annual Report and the Risk management section of this Q3 2019 Report to Shareholders; including global uncertainty, Canadian housing and household indebtedness, information technology and cyber risk, regulatory changes, digital disruption and innovation, data and third party related risks, climate change, the business and economic conditions in the geographic regions in which we operate, the effects of changes in government fiscal, monetary and other policies, tax risk and transparency, and environmental and social risk.

We caution that the foregoing list of risk factors is not exhaustive and other factors could also adversely affect our results. When relying on our forward-looking statements to make decisions with respect to us, investors and others should carefully consider the foregoing factors and other uncertainties and potential events. Material economic assumptions underlying the forward-looking statements contained in this Q3 2019 Report to Shareholders are set out in the Economic, market and regulatory review and outlook section and for each business segment under the Strategic priorities and Outlook headings in our 2018 Annual Report, as updated by the Economic, market and regulatory review and outlook section of this Q3 2019 Report to Shareholders. Except as required by law, we do not undertake to update any forward-looking statement, whether written or oral, that may be made from time to time by us or on our behalf.

Additional information about these and other factors can be found in the risk sections of our 2018 Annual Report and the Risk management section of this Q3 2019 Report to Shareholders.

### Overview and outlook

### About Royal Bank of Canada

Royal Bank of Canada is a global financial institution with a purpose-driven, principles-led approach to delivering leading performance. Our success comes from the 86,000+ employees who bring our vision, values and strategy to life so we can help our clients thrive and communities prosper. As Canada's biggest bank, and one of the largest in the world based on market capitalization, we have a diversified business model with a focus on innovation and providing exceptional experiences to more than 16 million clients in Canada, the U.S. and 34 other countries. Learn more at [rbc.com](http://rbc.com).

## Selected financial and other highlights

(Millions of Canadian dollars, except per share, number of and percentage amounts)	As at or for the three months ended			As at or for the nine months ended	
	July 31 2019	April 30 2019	July 31 2018	July 31 2019	July 31 2018
Total revenue	\$ 11,544	\$ 11,499	\$ 11,025	\$ 34,632	\$ 31,907
Provision for credit losses (PCL)	425	426	346	1,365	954
Insurance policyholder benefits, claims and acquisition expense (PBCAE)	1,046	1,160	925	3,431	2,182
Non-interest expense	5,992	5,916	5,858	17,820	16,951
Income before income taxes	4,081	3,997	3,896	12,016	11,820
<b>Net income</b>	<b>\$ 3,263</b>	<b>\$ 3,230</b>	<b>\$ 3,109</b>	<b>\$ 9,665</b>	<b>\$ 9,181</b>
<b>Segments – net income (loss)</b>					
Personal & Commercial Banking	\$ 1,664	\$ 1,549	\$ 1,510	\$ 4,784	\$ 4,490
Wealth Management	639	585	578	1,821	1,712
Insurance	204	154	158	524	457
Investor & Treasury Services	118	151	155	430	586
Capital Markets	653	776	698	2,082	2,111
Corporate Support	(15)	15	10	24	(175)
<b>Net income</b>	<b>\$ 3,263</b>	<b>\$ 3,230</b>	<b>\$ 3,109</b>	<b>\$ 9,665</b>	<b>\$ 9,181</b>
<b>Selected information</b>					
Earnings per share (EPS) – basic	\$ 2.23	\$ 2.20	\$ 2.10	\$ 6.59	\$ 6.19
– diluted	2.22	2.20	2.10	6.57	6.16
Return on common equity (ROE) (1) (2)	16.7%	17.5%	17.3%	17.0%	17.6%
Average common equity (1)	\$ 75,800	\$ 74,000	\$ 69,650	\$ 74,450	\$ 68,000
Net interest margin (NIM) – on average earning assets (1)	1.62%	1.64%	1.66%	1.62%	1.66%
PCL on loans as a % of average net loans and acceptances	0.27%	0.29%	0.23%	0.30%	0.23%
PCL on performing loans as a % of average net loans and acceptances	0.02%	–%	0.06%	0.03%	0.02%
PCL on impaired loans as a % of average net loans and acceptances	0.25%	0.29%	0.17%	0.27%	0.21%
Gross impaired loans (GIL) as a % of loans and acceptances	0.47%	0.49%	0.40%	0.47%	0.40%
Liquidity coverage ratio (LCR) (3)	122%	127%	120%	122%	120%
<b>Capital ratios and Leverage ratio</b>					
Common Equity Tier 1 (CET1) ratio	11.9%	11.8%	11.1%	11.9%	11.1%
Tier 1 capital ratio	13.0%	12.9%	12.3%	13.0%	12.3%
Total capital ratio	15.0%	14.8%	14.1%	15.0%	14.1%
Leverage ratio	4.4%	4.3%	4.3%	4.4%	4.3%
<b>Selected balance sheet and other information (4)</b>					
Total assets	\$ 1,406,893	\$ 1,378,876	\$ 1,292,374	\$ 1,406,893	\$ 1,292,374
Securities, net of applicable allowance	240,661	240,991	217,132	240,661	217,132
Loans, net of allowance for loan losses	612,393	602,392	563,097	612,393	563,097
Derivative related assets	98,774	84,812	88,503	98,774	88,503
Deposits	881,211	864,101	832,261	881,211	832,261
Common equity	76,574	76,139	71,475	76,574	71,475
Total capital risk-weighted assets	510,664	510,463	498,896	510,664	498,896
Assets under management (AUM)	744,800	733,100	686,600	744,800	686,600
Assets under administration (AUA) (5)	5,588,600	5,655,600	5,486,200	5,588,600	5,486,200
<b>Common share information</b>					
Shares outstanding (000s) – average basic	1,434,276	1,435,091	1,440,477	1,435,485	1,445,136
– average diluted	1,440,130	1,441,163	1,446,956	1,441,499	1,451,823
– end of period (6)	1,433,954	1,434,879	1,440,008	1,433,954	1,440,008
Dividends declared per common share	\$ 1.02	\$ 1.02	\$ 0.94	\$ 3.02	\$ 2.79
Dividend yield (7)	3.9%	3.9%	3.8%	4.1%	3.6%
Common share price (RY on TSX) (8)	\$ 104.22	\$ 106.77	\$ 101.55	\$ 104.22	\$ 101.55
Market capitalization (TSX) (8)	149,447	153,202	146,350	149,447	146,350
<b>Business information (number of)</b>					
Employees (full-time equivalent) (FTE)	84,087	82,197	82,236	84,087	82,236
Bank branches	1,328	1,335	1,338	1,328	1,338
Automated teller machines (ATMs)	4,586	4,569	4,792	4,586	4,792
Period average US\$ equivalent of C\$1.00 (9)	\$ 0.754	\$ 0.751	\$ 0.767	\$ 0.751	\$ 0.780
Period-end US\$ equivalent of C\$1.00	\$ 0.757	\$ 0.746	\$ 0.769	\$ 0.757	\$ 0.769

(1) Average amounts are calculated using methods intended to approximate the average of the daily balances for the period. This includes Average common equity used in the calculation of ROE. For further details, refer to the Key performance and non-GAAP measures section.

(2) These measures may not have a standardized meaning under generally accepted accounting principles (GAAP) and may not be comparable to similar measures disclosed by other financial institutions. For further details, refer to the Key performance and non-GAAP measures section.

(3) LCR is the average for the three months ended for each respective period and is calculated in accordance with Office of the Superintendent of Financial Institutions' (OSFI) Liquidity Adequacy Requirements (LAR) guideline. For further details, refer to the Liquidity and funding risk section.

(4) Represents period-end spot balances.

(5) AUA includes \$15.7 billion and \$8.3 billion (April 30, 2019 – \$16.2 billion and \$8.3 billion; July 31, 2018 – \$16.8 billion and \$9.8 billion) of securitized residential mortgages and credit card loans, respectively.

(6) Effective Q4 2018, Common shares outstanding includes the impact of treasury shares. Comparative amounts have been adjusted to conform with this presentation.

(7) Defined as dividends per common share divided by the average of the high and low share price in the relevant period.

(8) Based on TSX closing market price at period-end.

(9) Average amounts are calculated using month-end spot rates for the period.

## Economic, market and regulatory review and outlook – data as at August 20, 2019

The predictions and forecasts in this section are based on information and assumptions from sources we consider reliable. If this information or these assumptions are not accurate, actual economic outcomes may differ materially from the outlook presented in this section.

### Economic and market review and outlook

#### Canada

The Canadian economy is expected to have grown by 3.0%<sup>1</sup> in the second calendar quarter of 2019, a substantial improvement on the previous calendar quarter's 0.4%<sup>1</sup> increase. Stronger growth in the second calendar quarter partly reflects a rebound in the energy sector, which weighed on the economy in each of the prior three calendar quarters. The industry has been supported by easing production limits in Alberta and higher oil prices domestically and globally relative to late last calendar year. However, concerns about trade tensions and global growth have put downward pressure on oil prices more recently. Outside of the energy sector, growth has picked up with labour markets continuing to improve and housing markets stabilizing in most provinces. The Bank of Canada has left its overnight rate unchanged at 1.75% since October 2018. The central bank maintained a neutral policy bias in July but raised concerns about global developments.

#### U.S.

U.S. GDP growth moderated to 2.1%<sup>1</sup> in the second calendar quarter of 2019 from 3.1%<sup>1</sup> in the previous calendar quarter. However, the composition of growth was stronger with domestic spending rising at a faster rate. Household spending growth was particularly strong, helping dispel concerns about the health of U.S. consumers following two calendar quarters of slower growth. Government spending also increased, reversing earlier weakness related to the partial federal government shutdown around the turn of the calendar year. However, business investment declined for the first time since 2016. U.S. employment growth has slowed in calendar 2019 relative to the previous calendar year, particularly in some trade-sensitive sectors. Notwithstanding, the pace of job growth has remained strong enough to put modest downward pressure on the unemployment rate, which averaged 3.6% in the second calendar quarter of 2019. Concerns about rising trade tensions and slowing global growth and business investment, as well as below-target inflation, prompted the Federal Reserve (Fed) to lower its benchmark interest rate by 25 basis points to a range of 2.00-2.25% in July. The rate cut was framed as a "mid-cycle" policy adjustment and not the start of a longer-term easing cycle.

#### Europe

Euro area GDP growth slowed to 0.2% in the second calendar quarter of 2019 from 0.4% in the previous calendar quarter. A slowdown in the manufacturing sector continues to weigh on growth, though service industries have continued to grow and unemployment continued to decline. Inflation remains well below the European Central Bank (ECB)'s target and inflation expectations have declined. Concerns about the inflation and growth outlook prompted the ECB to introduce an easing bias in its forward guidance, with the potential to lower interest rates further and restart asset purchases. The United Kingdom (U.K.) GDP declined by 0.2% in the second calendar quarter of 2019. Ongoing uncertainty over Brexit continues to weigh on business sentiment, and rising odds of a no-deal Brexit pushed the Sterling to its lowest level in more than two years.

#### Financial markets

Government bond yields have continued to decline amid low inflation and expectations of easing monetary policy from a number of central banks. The latter supported equity markets despite growing concerns about global growth and uncertainty regarding trade policy. Oil prices have been under downward pressure due to trade tensions and global growth concerns. Yield curves have flattened further or inverted, signaling greater investor concern about the risk of an economic downturn.

#### Regulatory environment

We continue to monitor and prepare for regulatory developments and changes in a manner that seeks to ensure compliance with new requirements while mitigating any adverse business or financial impacts. Such impacts could result from new or amended laws or regulations and the expectations of those who enforce them. A high level summary of the key regulatory changes that have the potential to increase our costs, impact our profitability, and increase the complexity of our operations is included in the Legal and regulatory environment risk section of our 2018 Annual Report, as updated below.

#### Global Uncertainty

Trade policy remains a risk to the global economic outlook, including Brexit negotiations, and Canadian and U.S. trade tensions with China. In July 2019, the International Monetary Fund further lowered its 2019 and 2020 global growth projections, due to continued geopolitical uncertainty, weaker than anticipated global trade activity and softening inflation. The outcome and resulting impact of the Brexit negotiations, including the rising odds of a no-deal Brexit, remains uncertain. The Canadian economy is vulnerable to continued trade tensions given Canada's trading relationships with the U.S. and China. Tensions also remain elevated between China and the U.S. as they continue to negotiate a trade deal. In August 2019, the U.S. announced a 10% tariff on US\$300 billion of Chinese goods not previously subject to tariffs, some of which will not be effective until December 2019.

#### Climate Change

Climate change regulations, frameworks, and guidance that apply to banks, insurers and asset managers are rapidly evolving. The Bank of Canada and European Central Bank Financial System Reviews were published in May 2019 and address the

<sup>1</sup> Annualized rate

financial and economic risks of climate change. While no specific requirements have been released, we will continue to monitor developments and any resulting implications for us.

### **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 and will be effective by June 2021. These amendments 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, which represent increased oversight and regulatory monitoring, will require substantial changes to our client-facing systems, transaction and payment processing systems, and records management systems mainly due to the need for the capture of additional client data.

### **United States Regulatory Initiatives**

Policymakers continue to evaluate and implement reforms to various U.S. financial regulations, which could result in either expansion or reduction to the U.S. regulatory requirements and associated changes in compliance costs. A regulation that establishes new standards of conduct for retail brokers and investment advisors will be effective June 2020. On August 20, 2019, the Federal Deposit Insurance Corporation (FDIC) and the Office of the Comptroller of the Currency (OCC) approved a final rule to make changes to the Volcker Rule's requirements regarding proprietary trading and compliance requirements. We expect the other financial regulatory agencies responsible for implementing the Volcker Rule to approve and publish their final rules within the next several weeks. We will continue to monitor developments and any resulting implications for us.

For a discussion on risk factors resulting from these and other regulatory developments which may affect our business and financial results, refer to the Risk management – Top and emerging risks and Legal and regulatory environment risk sections of our 2018 Annual Report and the Capital, liquidity and other regulatory developments section of our Q1 2019, Q2 2019 and of this Q3 2019 Report to Shareholders. For further details on our framework and activities to manage risks, refer to the risk and Capital management sections of our 2018 Annual Report and the Risk management and Capital management sections of this Q3 2019 Report to Shareholders.

## Financial performance

### Overview

#### **Q3 2019 vs. Q3 2018**

Net income of \$3,263 million was up \$154 million or 5% from a year ago. Diluted earnings per share (EPS) of \$2.22 was up \$0.12 or 6% and return on common equity (ROE) of 16.7% was down 60 bps from 17.3% last year. Our Common Equity Tier 1 (CET1) ratio of 11.9% was up 80 bps from a year ago.

Our results were driven by strong earnings growth in Personal & Commercial Banking, Wealth Management, and Insurance partially offset by lower results in Capital Markets and Investor & Treasury Services.

Personal & Commercial Banking earnings increased mainly due to average volume growth of 7% and higher spreads in Canadian Banking. These factors were partially offset by an increase in staff related costs as well as technology and related costs.

Wealth Management results were up mainly attributable to higher average fee-based client assets and an increase in net interest income. These factors were partially offset by higher costs in support of business growth, and higher variable compensation commensurate with revenue growth.

Insurance results increased primarily reflecting higher favourable investment-related experience and the impact of new longevity reinsurance contracts. These factors were partially offset by higher disability and life retrocession claims costs and favourable reinsurance contract renegotiations in the prior year.

Capital Markets results were down primarily due to lower revenue in Corporate and Investment Banking and Global Markets, and higher PCL. These factors were partially offset by a lower effective tax rate largely reflecting changes in earnings mix and lower compensation on decreased results.

Investor & Treasury Services earnings decreased primarily due to lower client deposit margins, lower revenue from our asset services business, and lower funding and liquidity revenue.

For further details on our business segment results and CET1 ratio, refer to the Business segment results and Capital management sections, respectively.

#### **Q3 2019 vs. Q2 2019**

Net income of \$3,263 million was up \$33 million or 1% from the prior quarter. Diluted EPS of \$2.22 was up \$0.02 or 1% and ROE of 16.7% was down 80 bps. Our CET1 ratio of 11.9% was up 10 bps.

Our results reflected strong earnings growth in Personal & Commercial Banking, Wealth Management, and Insurance largely offset by lower results in Capital Markets and Investor & Treasury Services.

Personal & Commercial Banking results were higher reflecting average volume growth of 2% in Canadian Banking, three more days in the quarter and lower PCL. An increase in service charges and higher balances driving higher mutual fund distribution fees also contributed to the increase. These factors were partially offset by higher staff related costs.

Wealth Management earnings increased primarily reflecting higher average fee-based client assets driven by net sales and market appreciation, and an increase in net interest income mainly due to average volume growth and three more days in the quarter. These factors were partially offset by higher variable compensation commensurate with revenue growth, and the net change in the fair value of our U.S. share-based compensation plans.

Insurance results were up mainly due to higher favourable investment-related experience and the impact of new longevity reinsurance contracts. These factors were partially offset by favourable reinsurance contract renegotiations in the prior quarter.

Capital Markets earnings were down mainly due to lower fixed income trading largely in the U.S., lower debt origination primarily in Europe and the U.S., and higher PCL mainly on performing loans. Lower equity trading in North America also contributed to the decrease. These factors were partially offset by lower compensation on decreased results.

Investor & Treasury Services results decreased primarily due to lower client deposit margins, higher costs in support of efficiency initiatives as well as technology and related costs, and lower funding and liquidity revenue.

### Q3 2019 vs. Q3 2018 (Nine months ended)

Net income of \$9,665 million increased \$484 million or 5% from a year ago. Nine month diluted EPS of \$6.57 was up \$0.41 or 7% and ROE of 17.0% was down 60 bps.

Our results reflected higher earnings in Personal & Commercial Banking, Wealth Management, and Insurance partially offset by lower results in Investor & Treasury Services and Capital Markets. Our results also reflected an increase due to foreign exchange translation and the impact in the prior year of the U.S. Tax Reform which resulted in the write-down of net deferred tax assets.

Personal & Commercial Banking earnings increased due to average volume growth of 7% and higher spreads. These factors were partially offset by an increase in PCL, and higher staff related costs.

Wealth Management results were higher primarily reflecting an increase in net interest income, and higher average fee-based client assets. These factors were partially offset by increased costs in support of business growth, higher variable compensation commensurate with revenue growth, and higher PCL.

Insurance earnings were up mainly due to higher favourable reinsurance contract renegotiations.

Investor & Treasury Services results were down largely due to lower funding and liquidity revenue, lower revenue from our asset services business and higher costs in support of efficiency and technology initiatives.

Capital Markets results decreased driven by lower revenue in Corporate and Investment Banking and higher PCL. These factors were partially offset by a lower effective tax rate largely reflecting changes in earnings mix, the impact of foreign exchange translation, and lower compensation on decreased results.

Corporate Support net income was \$24 million, largely due to asset/liability management activities, partially offset by net unfavourable tax adjustments. Net loss was \$175 million in the prior year, largely due to the impact of the U.S. Tax Reform of \$178 million as noted above, partially offset by asset/liability management activities.

### Impact of foreign currency translation

(Millions of Canadian dollars, except per share amounts)	For the three months ended		For the nine months ended
	Q3 2019 vs. Q3 2018	Q3 2019 vs. Q2 2019	Q3 2019 vs. Q3 2018
<i>Increase (decrease):</i>			
Total revenue	\$ 30	\$ (40)	\$ 307
PCL	(3)	(4)	6
Non-interest expense	12	(33)	186
Income taxes	3	–	12
Net income	18	(3)	103
Impact on EPS			
Basic	\$ 0.01	\$ –	\$ 0.07
Diluted	0.01	–	0.07

The relevant average exchange rates that impact our business are shown in the following table:

(Average foreign currency equivalent of C\$1.00) (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
U.S. dollar	0.754	0.751	0.767	0.751	0.780
British pound	0.603	0.573	0.581	0.586	0.573
Euro	0.673	0.667	0.656	0.665	0.650

(1) Average amounts are calculated using month-end spot rates for the period.

## Total revenue

(Millions of Canadian dollars)	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 and dividend income	\$ 10,610	\$ 10,132	\$ 8,626	\$ 30,891	\$ 24,031
Interest expense	5,562	5,295	4,030	16,122	10,569
<b>Net interest income</b>	<b>\$ 5,048</b>	<b>\$ 4,837</b>	<b>\$ 4,596</b>	<b>\$ 14,769</b>	<b>\$ 13,462</b>
<b>NIM</b>	<b>1.62%</b>	<b>1.64%</b>	<b>1.66%</b>	<b>1.62%</b>	<b>1.66%</b>
Insurance premiums, investment and fee income	\$ 1,463	\$ 1,515	\$ 1,290	\$ 4,557	\$ 3,240
Trading revenue	140	250	234	748	788
Investment management and custodial fees	1,440	1,381	1,347	4,271	3,990
Mutual fund revenue	924	899	908	2,696	2,655
Securities brokerage commissions	324	316	334	982	1,023
Service charges	480	466	458	1,414	1,341
Underwriting and other advisory fees	488	554	541	1,387	1,539
Foreign exchange revenue, other than trading	252	243	273	744	831
Card service revenue	272	266	266	820	790
Credit fees	322	288	378	925	1,023
Net gains on investment securities	26	37	26	109	114
Share of profit in joint ventures and associates	21	14	(26)	50	13
Other	344	433	400	1,160	1,098
<b>Non-interest income</b>	<b>\$ 6,496</b>	<b>\$ 6,662</b>	<b>\$ 6,429</b>	<b>\$ 19,863</b>	<b>\$ 18,445</b>
<b>Total revenue</b>	<b>\$ 11,544</b>	<b>\$ 11,499</b>	<b>\$ 11,025</b>	<b>\$ 34,632</b>	<b>\$ 31,907</b>
<b>Additional information</b>					
Total trading revenue					
Net interest income	\$ 573	\$ 619	\$ 577	\$ 1,793	\$ 1,651
Non-interest income	140	250	234	748	788
<b>Total trading revenue</b>	<b>\$ 713</b>	<b>\$ 869</b>	<b>\$ 811</b>	<b>\$ 2,541</b>	<b>\$ 2,439</b>

## Q3 2019 vs. Q3 2018

Total revenue increased \$519 million or 5% from last year, mainly due to higher net interest income and an increase in insurance premiums, investment and fee income (Insurance revenue). The impact of foreign exchange translation also increased total revenue by \$30 million. These factors were partially offset by lower trading revenue.

Net interest income increased \$452 million or 10%, largely due to volume growth in Canadian Banking and Wealth Management. Improved spreads in Canadian Banking and higher lending revenue in Capital Markets also contributed to the increase.

NIM was down 4 bps compared to last year, mainly due to changes in average earning asset mix with volume growth primarily in reverse repos. These factors were partially offset by higher interest rates resulting in improved spreads in Canadian Banking and Wealth Management.

Insurance revenue increased \$173 million or 13%, primarily due to the change in fair value of instruments backing our policyholder liabilities, partially offset by lower group annuity sales, both of which are largely offset in PCBAE.

Trading revenue decreased \$94 million or 40%, mainly due to lower equity trading revenue primarily in North America.

## Q3 2019 vs. Q2 2019

Total revenue increased \$45 million from the prior quarter, mainly due to higher net interest income, largely offset by lower trading revenue. The impact of foreign exchange translation decreased total revenue by \$40 million.

Net interest income increased \$211 million or 4%, driven by volume growth and three more days in the quarter in Canadian Banking and Wealth Management. These factors were partially offset by lower trading revenue in Capital Markets.

Trading revenue decreased \$110 million or 44%, mainly due to lower equity trading revenue primarily in North America and lower foreign exchange trading revenue largely in Europe.

## Q3 2019 vs. Q3 2018 (Nine months ended)

Total revenue increased \$2,725 million or 9% from the prior year, mainly due to higher Insurance revenue, net interest income and investment management and custodial fees. The impact of foreign exchange translation also increased total revenue by \$307 million. These factors were partially offset by lower underwriting and advisory fees.

Net interest income increased \$1,307 million or 10%, largely due to volume growth and higher spreads in Personal and Commercial Banking and Wealth Management. Higher trading revenue and lending revenue in Capital Markets also contributed to the increase. Net interest income was also impacted by lower funding and liquidity revenue, which was largely offset by the related gains on non-trading derivatives in Other revenue.

Insurance revenue increased \$1,317 million or 41%, mainly reflecting the change in fair value of instruments backing our policyholder liabilities and business growth including higher group annuity sales, both of which were largely offset in PBCAE.

Investment management and custodial fees increased \$281 million or 7%, driven by higher average fee-based clients reflecting market appreciation and net sales in Wealth Management.

Underwriting and other advisory fees decreased \$152 million or 10%, due to lower equity and debt origination primarily in North America.

**Provision for credit losses****Q3 2019 vs. Q3 2018**

Total PCL in Q3 2019 of \$425 million increased \$79 million or 23%.

PCL on loans of \$429 million increased \$91 million, or 27% from the prior year, due to higher provisions in Capital Markets, Wealth Management and Personal & Commercial Banking. The PCL ratio on loans of 27 bps increased 4 bps.

**Q3 2019 vs. Q2 2019**

Total PCL decreased \$1 million from the prior quarter.

PCL on loans of \$429 million decreased \$12 million, or 3% from the prior quarter, mainly due to lower provisions in Personal & Commercial Banking, partially offset by higher provisions in Capital Markets. The PCL ratio on loans improved 2 bps.

**Q3 2019 vs. Q3 2018 (Nine months ended)**

Total PCL increased \$411 million or 43% from the prior year.

PCL on loans of \$1,386 million increased \$436 million, or 46% from the prior year, due to higher provisions in Capital Markets, Personal & Commercial Banking and Wealth Management. The PCL ratio on loans of 30 bps increased 7 bps.

For further details on PCL, refer to Credit quality performance in the Credit risk section.

**Insurance policyholder benefits, claims and acquisition expense (PBCAE)****Q3 2019 vs. Q3 2018**

PBCAE increased \$121 million or 13% from a year ago, mainly reflecting the change in fair value of investments backing our policyholder liabilities, which is largely offset in revenue, higher disability and life retrocession claims costs, and favourable reinsurance contract renegotiations in the prior year. These factors were partially offset by lower group annuity sales, which is largely offset in revenue, higher favourable investment-related experience, and the impact of new longevity reinsurance contracts.

**Q3 2019 vs. Q2 2019**

PBCAE decreased \$114 million or 10% from the prior quarter, primarily reflecting lower group annuity sales, which is largely offset in revenue and higher favourable investment-related experience. These factors were partially offset by favourable reinsurance contract renegotiations in the prior quarter.

**Q3 2019 vs. Q3 2018 (Nine months ended)**

PBCAE increased \$1,249 million or 57% from the prior year, mainly reflecting the change in fair value of investments backing our policyholder liabilities, and business growth, including group annuity sales, both of which are largely offset in revenue. These factors were partially offset by higher favourable reinsurance contract renegotiations.

**Non-interest expense**

	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 of Canadian dollars, except percentage amounts)					
Salaries	\$ 1,647	\$ 1,607	\$ 1,554	\$ 4,862	\$ 4,502
Variable compensation	1,413	1,430	1,442	4,231	4,164
Benefits and retention compensation	468	471	432	1,431	1,377
Share-based compensation	87	114	93	356	304
Human resources	\$ 3,615	\$ 3,622	\$ 3,521	\$ 10,880	\$ 10,347
Equipment	449	445	416	1,325	1,174
Occupancy	409	405	393	1,211	1,158
Communications	281	273	260	794	733
Professional fees	328	290	359	923	961
Amortization of other intangibles	299	299	271	888	798
Other	611	582	638	1,799	1,780
<b>Non-interest expense</b>	<b>\$ 5,992</b>	<b>\$ 5,916</b>	<b>\$ 5,858</b>	<b>\$ 17,820</b>	<b>\$ 16,951</b>
<b>Efficiency ratio <sup>(1)</sup></b>	<b>51.9%</b>	<b>51.4%</b>	<b>53.1%</b>	<b>51.5%</b>	<b>53.1%</b>
<b>Efficiency ratio adjusted <sup>(2)</sup></b>	<b>53.7%</b>	<b>53.2%</b>	<b>53.4%</b>	<b>53.0%</b>	<b>53.0%</b>

(1) Efficiency ratio is calculated as Non-interest expense divided by Total revenue.

(2) Measures have been adjusted by excluding the change in fair value of investments backing our policyholder liabilities. These are non-GAAP measures. For further details, refer to the Key performance and non-GAAP measures section.

**Q3 2019 vs. Q3 2018**

Non-interest expense increased \$134 million or 2% from the prior year, largely due to increased costs in support of business growth and higher staff-related costs, as well as an increase in technology and related costs, including digital initiatives.

Our efficiency ratio of 51.9% decreased 120 bps from 53.1% last year. Excluding the change in fair value of investments backing our policyholder liabilities, our efficiency ratio of 53.7% increased 30 bps from 53.4% last year.

**Q3 2019 vs. Q2 2019**

Non-interest expense increased \$76 million or 1% from the prior quarter, primarily due to higher technology and related costs, staff-related costs, and professional fees. These factors were partially offset by the change in the fair value of our U.S. share-based compensation plans, which was largely offset in Other revenue, and the impact of foreign exchange translation.

Our efficiency ratio of 51.9% increased 50 bps from 51.4% last quarter. Excluding the change in fair value of investments backing our policyholder liabilities, our efficiency ratio of 53.7% increased 50 bps from 53.2% last quarter.

### Q3 2019 vs. Q3 2018 (Nine months ended)

Non-interest expense increased \$869 million or 5% from the prior year, primarily attributable to increased costs in support of business growth and higher staff-related costs, the impact of foreign exchange translation and an increase in technology and related costs, including digital initiatives. Marketing costs and higher variable compensation commensurate with revenue growth also contributed to the increase.

Our efficiency ratio of 51.5% decreased 160 bps from 53.1%. Excluding the change in fair value of investments backing our policyholder liabilities, our efficiency ratio of 53.0% remained unchanged from last year.

Efficiency ratio excluding the change in fair value of investments backing our policyholder liabilities is a non-GAAP measure. For further details, including a reconciliation, refer to the Key performance and non-GAAP measures section.

### Income taxes

(Millions of Canadian dollars, except percentage amounts)	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
<b>Income taxes</b>	\$ 818	\$ 767	\$ 787	\$ 2,351	\$ 2,639
<b>Income before income taxes</b>	\$ 4,081	\$ 3,997	\$ 3,896	\$ 12,016	\$ 11,820
<b>Effective income tax rate</b>	<b>20.0%</b>	19.2%	20.2%	<b>19.6%</b>	22.3%

### Q3 2019 vs. Q3 2018

Income tax expense increased \$31 million or 4% from last year, primarily due to higher income before income taxes and lower favourable tax adjustments in the current year, partially offset by higher income from lower tax rate jurisdictions.

The effective income tax rate of 20.0% decreased 20 bps, mainly due to an increase in income from lower tax rate jurisdictions, partially offset by lower favourable tax adjustments in the current year.

### Q3 2019 vs. Q2 2019

Income tax expense increased \$51 million or 7% from last quarter, primarily due to higher favourable tax adjustments in the prior quarter and higher income before income taxes.

The effective income tax rate of 20.0% increased 80 bps, mainly due to higher favourable tax adjustments in the prior quarter.

### Q3 2019 vs. Q3 2018 (Nine months ended)

Income tax expense decreased \$288 million or 11% from last year, primarily due to the impact of the U.S. Tax Reform which resulted in the write-down of net deferred tax assets in the prior year, an increase in income from lower tax rate jurisdictions and higher favourable tax adjustments in the current year. These factors were partially offset by higher income before income taxes.

The effective income tax rate of 19.6% decreased 270 bps, primarily due to the impact of the U.S. Tax Reform which resulted in the write-down of net deferred tax assets in the prior year, an increase in income from lower tax rate jurisdictions and higher favourable tax adjustments in the current year.

## Business segment results

### How we measure and report our business segments

The key methodologies and assumptions used in our management reporting framework are periodically reviewed by management to ensure they remain valid. They remain unchanged from October 31, 2018.

For further details on our key methodologies and assumptions used in our management reporting framework, refer to the How we measure and report our business segments section of our 2018 Annual Report.

## Key performance and non-GAAP measures

### Performance measures

#### Return on common equity

We measure and evaluate the performance of our consolidated operations and each business segment using a number of financial metrics, such as net income and ROE. We use ROE, at both the consolidated and business segment levels, as a measure of return on total capital invested in our business. Management views the business segment ROE measure as a useful measure for supporting investment and resource allocation decisions because it adjusts for certain items that may affect comparability between business segments and certain competitors. ROE does not have a standardized meaning under GAAP and may not be comparable to similar measures disclosed by other financial institutions. For further details, refer to the Key performance and non-GAAP measures section of our 2018 Annual Report.

The following table provides a summary of our ROE calculations:

(Millions of Canadian dollars, except percentage amounts)	For the three months ended							April 30	July 31
	July 31 2019							2019	2018
	Personal & Commercial Banking	Wealth Management	Insurance	Investor & Treasury Services	Capital Markets	Corporate Support	Total	Total	Total
Net income available to common shareholders	\$ 1,644	\$ 625	\$ 202	\$ 115	\$ 633	\$ (22)	\$ 3,197	\$ 3,161	\$ 3,031
Total average common equity (1) (2)	23,300	14,400	2,050	3,450	22,700	9,900	75,800	74,000	69,650
ROE (3)	28.0%	17.2%	39.2%	13.2%	11.1%	n.m.	16.7%	17.5%	17.3%

(Millions of Canadian dollars, except percentage amounts)	For the nine months ended							July 31
	July 31 2019							2018
	Personal & Commercial Banking	Wealth Management	Insurance	Investor & Treasury Services	Capital Markets	Corporate Support	Total	Total
Net income available to common shareholders	\$ 4,716	\$ 1,781	\$ 518	\$ 420	\$ 2,019	\$ –	\$ 9,454	\$ 8,939
Total average common equity (1) (2)	23,100	14,250	1,950	3,500	22,900	8,750	74,450	68,000
ROE (3)	27.3%	16.7%	35.6%	16.0%	11.8%	n.m.	17.0%	17.6%

(1) Total average common equity represents rounded figures.

(2) The amounts for the segments are referred to as attributed capital.

(3) ROE is based on actual balances of average common equity before rounding.

n.m. not meaningful

### Non-GAAP measures

We believe that certain non-GAAP measures described below are more reflective of our ongoing operating results and provide readers with a better understanding of management's perspective on our performance. These measures enhance the comparability of our financial performance for the three and nine months ended July 31, 2019 with the corresponding period in the prior year and the three months ended April 30, 2019, as well as, in the case of economic profit, measure relative contribution to shareholder value. Non-GAAP measures do not have a standardized meaning under GAAP and may not be comparable to similar measures disclosed by other financial institutions.

The following discussion describes the non-GAAP measures we use in evaluating our operating results.

### Economic profit

Economic profit is net income excluding the after-tax effect of amortization of other intangibles less a capital charge for use of attributed capital. It measures the return generated by our businesses in excess of our cost of shareholders' equity, thus enabling users to identify relative contributions to shareholder value.

The capital charge includes a charge for common equity and preferred shares. For 2019, our cost of common equity remains unchanged at 8.5%.

### Economic profit

(Millions of Canadian dollars)	For the three months ended							April 30	July 31
	July 31 2019							2019	2018
	Personal & Commercial Banking	Wealth Management	Insurance	Investor & Treasury Services	Capital Markets	Corporate Support	Total	Total	Total
Net income	\$ 1,664	\$ 639	\$ 204	\$ 118	\$ 653	\$ (15)	\$ 3,263	\$ 3,230	\$ 3,109
add: Non-controlling interests	–	(1)	–	–	–	1	–	(4)	(8)
After-tax effect of amortization of other intangibles	4	43	–	2	–	–	49	56	55
Adjusted net income	\$ 1,668	\$ 681	\$ 204	\$ 120	\$ 653	\$ (14)	\$ 3,312	\$ 3,282	\$ 3,156
less: Capital charge	520	322	45	76	505	222	1,690	1,600	1,564
Economic profit (loss)	\$ 1,148	\$ 359	\$ 159	\$ 44	\$ 148	\$ (236)	\$ 1,622	\$ 1,682	\$ 1,592

(Millions of Canadian dollars)	For the nine months ended							July 31
	July 31 2019							2018
	Personal & Commercial Banking	Wealth Management	Insurance	Investor & Treasury Services	Capital Markets	Corporate Support	Total	Total
Net income	\$ 4,784	\$ 1,821	\$ 524	\$ 430	\$ 2,082	\$ 24	\$ 9,665	\$ 9,181
add: Non-controlling interests	(5)	(1)	–	–	–	–	(6)	(28)
After-tax effect of amortization of other intangibles	9	143	–	7	–	–	159	164
Adjusted net income	\$ 4,788	\$ 1,963	\$ 524	\$ 437	\$ 2,082	\$ 24	\$ 9,818	\$ 9,317
less: Capital charge	1,533	944	129	233	1,517	583	4,939	4,537
Economic profit (loss)	\$ 3,255	\$ 1,019	\$ 395	\$ 204	\$ 565	\$ (559)	\$ 4,879	\$ 4,780

### Results excluding specified item

- For the nine months ended July 31, 2017, our share of a gain related to the sale by our payment processing joint venture Moneris of its U.S. operations to Vantiv, Inc., which was \$212 million (before- and after-tax) and recorded in Canadian Banking.

There were no specified items for the three months ended July 31, 2019, April 30, 2019, and July 31, 2018, or for the nine months ended July 31, 2019 and July 31, 2018.

The following table provides calculations of our Canadian Banking results and measures excluding the specified item for the nine months ended July 31, 2017 for the purpose of calculating the adjusted operating leverage ratio for the nine months ended July 31, 2018, which is a non-GAAP measure:

### Canadian Banking

(Millions of Canadian dollars, except percentage amounts)	For the nine months ended		
	July 31 2017		
	As reported	Item excluded Gain related to the sale by Moneris (1)	Adjusted
<b>Total revenue</b>	\$ 11,111	\$ (212)	\$ 10,899
PCL	765	–	765
Non-interest expense	4,738	–	4,738
Net income before income taxes	\$ 5,608	\$ (212)	\$ 5,396
<b>Net income</b>	\$ 4,211	\$ (212)	\$ 3,999
<b>Other information</b>			
Non-interest expense	\$ 4,738	\$ –	\$ 4,738
Total revenue	11,111	(212)	10,899
Efficiency ratio	42.6%		43.5%
Revenue growth rate	6.5%		4.5%
Non-interest expense growth rate	3.8%		3.8%
Operating leverage	2.7%		0.7%

(1) Includes foreign currency translation.

#### Efficiency ratio excluding the change in fair value of investments in Insurance

Our efficiency ratio is impacted by the change in fair value of investments backing our policyholder liabilities, which is reported in revenue and largely offset in PBCAE.

The following table provides calculations of our consolidated efficiency ratio excluding the change in fair value of investments backing our policyholder liabilities:

(Millions of Canadian dollars, except percentage amounts)	For the three months ended								
	July 31 2019			April 30 2019			July 31 2018		
	As reported	Item excluded Change in fair value of investments backing policyholder liabilities	Adjusted	As reported	Item excluded Change in fair value of investments backing policyholder liabilities	Adjusted	As reported	Item excluded Change in fair value of investments backing policyholder liabilities	Adjusted
Total revenue	\$ 11,544	\$ (385)	\$ 11,159	\$ 11,499	\$ (383)	\$ 11,116	\$ 11,025	\$ (55)	\$ 10,970
Non-interest expense	5,992	–	5,992	5,916	–	5,916	5,858	–	5,858
Efficiency ratio	51.9%		53.7%	51.4%		53.2%	53.1%		53.4%

(Millions of Canadian dollars, except percentage amounts)	For the nine months ended								
	July 31 2019			July 31 2018					
	As reported	Item excluded Change in fair value of investments backing policyholder liabilities	Adjusted	As reported	Item excluded Change in fair value of investments backing policyholder liabilities	Adjusted			
Total revenue	\$ 34,632	\$ (1,015)	\$ 33,617	\$ 31,907	\$ 93	\$ 32,000			
Non-interest expense	17,820	–	17,820	16,951	–	16,951			
Efficiency ratio	51.5%		53.0%	53.1%		53.0%			

## Personal &amp; Commercial Banking

	As at or for the three months ended			As at or for the nine months ended	
	July 31 2019	April 30 2019	July 31 2018	July 31 2019	July 31 2018
(Millions of Canadian dollars, except percentage amounts and as otherwise noted)					
Net interest income	\$ 3,221	\$ 3,060	\$ 3,001	\$ 9,415	\$ 8,709
Non-interest income	1,325	1,273	1,283	3,882	3,843
<b>Total revenue</b>	<b>4,546</b>	<b>4,333</b>	<b>4,284</b>	<b>13,297</b>	<b>12,552</b>
PCL on performing assets	15	9	31	59	90
PCL on impaired assets	326	363	308	1,002	866
<b>PCL</b>	<b>341</b>	<b>372</b>	<b>339</b>	<b>1,061</b>	<b>956</b>
Non-interest expense	1,959	1,887	1,910	5,761	5,539
<b>Income before income taxes</b>	<b>2,246</b>	<b>2,074</b>	<b>2,035</b>	<b>6,475</b>	<b>6,057</b>
<b>Net income</b>	<b>\$ 1,664</b>	<b>\$ 1,549</b>	<b>\$ 1,510</b>	<b>\$ 4,784</b>	<b>\$ 4,490</b>
<b>Revenue by business</b>					
Canadian Banking	\$ 4,304	\$ 4,099	\$ 4,040	\$ 12,573	\$ 11,838
Caribbean & U.S. Banking	242	234	244	724	714
<b>Selected balance sheet and other information</b>					
ROE	28.0%	27.2%	27.2%	27.3%	27.9%
NIM	2.86%	2.85%	2.80%	2.85%	2.77%
Efficiency ratio	43.1%	43.5%	44.6%	43.3%	44.1%
Operating leverage	3.5%	2.4%	3.3%	1.9%	1.6%
Effective income tax rate	25.9%	25.3%	25.8%	26.1%	25.9%
Average total earning assets, net	\$ 447,200	\$ 440,300	\$ 425,900	\$ 441,600	\$ 420,300
Average loans and acceptances, net	449,500	441,900	426,500	443,200	420,800
Average deposits	396,300	389,000	363,100	389,200	359,400
AUA <sup>(1)</sup>	282,200	283,300	276,700	282,200	276,700
Average AUA	280,600	277,900	274,800	274,100	270,700
PCL on impaired loans as a % of average net loans and acceptances	0.29%	0.34%	0.25%	0.30%	0.26%
<b>Other selected information – Canadian Banking</b>					
Net income	\$ 1,609	\$ 1,460	\$ 1,491	\$ 4,613	\$ 4,397
NIM	2.80%	2.80%	2.74%	2.80%	2.72%
Efficiency ratio	41.5%	42.0%	42.2%	41.7%	42.1%
Operating leverage	1.7%	1.7%	5.0%	1.1%	1.3%
Operating leverage adjusted <sup>(2)</sup>	n.a.	n.a.	n.a.	n.a.	3.4%
Effective income tax rate	26.4%	26.2%	26.1%	26.3%	26.0%

(1) AUA represents period-end spot balances and includes securitized residential mortgages and credit card loans as at July 31, 2019 of \$15.7 billion and \$8.3 billion, respectively (April 30, 2019 – \$16.2 billion and \$8.3 billion; July 31, 2018 – \$16.8 billion and \$9.8 billion).

(2) This is a non-GAAP measure. The nine months ended July 31, 2018 operating leverage of 1.3% in Canadian Banking was impacted by our share of the gain related to the sale of the U.S. operations of Moneris of \$212 million (before- and after-tax) in Q1 2017, which was a specified item. For further details, including a reconciliation, refer to the Key Performance and non-GAAP measures section. The nine months ended July 31, 2018 revenue and expense growth rates in Canadian Banking were 6.5% and 5.2%, respectively. Excluding our share of the gain as noted above, the nine months ended July 31, 2018 adjusted revenue growth rate was 8.6%.

n.a. not applicable

## Financial performance

### Q3 2019 vs. Q3 2018

Net income increased \$154 million or 10% from last year, mainly due to average volume growth of 7% and higher spreads in Canadian Banking. These factors were partially offset by an increase in staff related costs as well as technology and related costs.

Total revenue increased \$262 million or 6%.

Canadian Banking revenue increased \$264 million or 7% compared to last year, largely reflecting average volume growth of 5% in loans and 10% in deposits and improved spreads, as well as higher service charges.

Caribbean & U.S. Banking revenue decreased \$2 million or 1% compared to last year.

Net interest margin was up 6 bps, mainly due to improved spreads on deposits in Canadian Banking, reflecting higher interest rates, partially offset by the impact of competitive pricing pressures.

PCL increased \$2 million or 1%. PCL on impaired loans ratio increased 4 bps. For further details, refer to Credit quality performance in the Credit risk section.

Non-interest expense increased \$49 million or 3%, primarily attributable to an increase in staff related costs as well as technology and related costs, including digital initiatives.

### Q3 2019 vs. Q2 2019

Net income increased \$115 million or 7% from last quarter, reflecting average volume growth of 2% in Canadian Banking, three more days in the quarter and lower PCL. An increase in service charges and higher balances driving higher mutual fund distribution fees also contributed to the increase. These factors were partially offset by higher staff related costs.

Net interest margin was up 1 bp.

### Q3 2019 vs. Q3 2018 (Nine months ended)

Net income increased \$294 million or 7% from last year, reflecting average volume growth of 7% and higher spreads. These factors were partially offset by an increase in PCL, and higher staff related costs.

Total revenue increased \$745 million or 6% from last year, mainly driven by average volume growth of 5% in loans and 8% in deposits. Improved spreads on deposits reflecting higher interest rates, partially offset by the impact of competitive pricing pressures, also contributed to the increase.

PCL increased \$105 million or 11%, reflecting higher provisions on impaired loans in our commercial portfolios in Canadian Banking, partially offset by lower provisions on performing assets. PCL on impaired loans ratio increased 4 bps. For further details, refer to Credit quality performance in the Credit risk section.

Non-interest expense increased \$222 million or 4%, largely reflecting an increase in staff related costs, technology and related costs, including digital initiatives, and marketing costs.

## Wealth Management

(Millions of Canadian dollars, except number of, percentage amounts and as otherwise noted)	As at or for the three months ended			As at or for the nine months ended	
	July 31 2019	April 30 2019	July 31 2018	July 31 2019	July 31 2018
Net interest income	\$ 773	\$ 731	\$ 679	\$ 2,248	\$ 1,923
Non-interest income					
Fee-based revenue	1,740	1,663	1,626	5,117	4,785
Transaction and other revenue	516	585	493	1,591	1,478
<b>Total revenue</b>	<b>3,029</b>	<b>2,979</b>	<b>2,798</b>	<b>8,956</b>	<b>8,186</b>
PCL on performing assets	10	13	12	38	(16)
PCL on impaired assets	17	17	(9)	45	(3)
<b>PCL</b>	<b>27</b>	<b>30</b>	<b>3</b>	<b>83</b>	<b>(19)</b>
Non-interest expense	2,183	2,204	2,059	6,551	6,009
<b>Income before income taxes</b>	<b>819</b>	<b>745</b>	<b>736</b>	<b>2,322</b>	<b>2,196</b>
<b>Net income</b>	<b>\$ 639</b>	<b>\$ 585</b>	<b>\$ 578</b>	<b>\$ 1,821</b>	<b>\$ 1,712</b>
<b>Revenue by business</b>					
Canadian Wealth Management	\$ 821	\$ 808	\$ 761	\$ 2,471	\$ 2,252
U.S. Wealth Management (including City National)	1,546	1,539	1,435	4,556	4,074
U.S. Wealth Management (including City National) (US\$ millions)	1,168	1,155	1,101	3,426	3,178
Global Asset Management	567	538	507	1,648	1,579
International Wealth Management	95	94	95	281	281
<b>Selected balance sheet and other information</b>					
ROE	17.2%	16.5%	16.4%	16.7%	16.5%
NIM	3.59%	3.66%	3.56%	3.63%	3.43%
Pre-tax margin (1)	27.0%	25.0%	26.3%	25.9%	26.8%
Number of advisors (2)	5,222	5,176	4,970	5,222	4,970
Average total earning assets, net	\$ 85,500	\$ 81,900	\$ 75,700	\$ 82,700	\$ 74,900
Average loans and acceptances, net	64,400	62,200	57,000	62,600	54,800
Average deposits	95,300	93,000	91,700	94,200	92,500
AUA (3)	1,050,800	1,050,900	985,800	1,050,800	985,800
U.S. Wealth Management (including City National) (3)	538,800	537,200	487,900	538,800	487,900
U.S. Wealth Management (including City National) (US\$ millions) (3)	408,100	400,900	375,200	408,100	375,200
AUM (3)	738,300	726,600	680,500	738,300	680,500
Average AUA	1,039,700	1,027,300	975,600	1,017,800	953,800
Average AUM (4)	729,300	712,200	673,800	705,500	659,300
PCL on impaired loans as a % of average net loans and acceptances	0.11%	0.12%	(0.06)%	0.10%	(0.01)%

## Estimated impact of U.S. dollar, British pound and Euro translation on key income statement items

(Millions of Canadian dollars, except percentage amounts)

	For the three months ended		For the nine months ended
	Q3 2019 vs. Q3 2018	Q3 2019 vs. Q2 2019	Q3 2019 vs. Q3 2018
<b>Increase (decrease):</b>			
Total revenue	\$ 17	\$ (15)	\$ 147
Non-interest expense	12	(12)	116
Net income	4	(2)	24
Percentage change in average U.S. dollar equivalent of C\$1.00	(2)%	–%	(4)%
Percentage change in average British pound equivalent of C\$1.00	4%	5%	2%
Percentage change in average Euro equivalent of C\$1.00	3%	1%	2%

(1) Pre-tax margin is defined as Income before income taxes divided by Total revenue.

(2) Represents client-facing advisors across all our Wealth Management businesses.

(3) Represents period-end spot balances.

(4) Amounts in the prior year have been revised from those previously presented.

## Financial performance

### Q3 2019 vs. Q3 2018

Net income increased \$61 million or 11%, primarily attributable to higher average fee-based client assets and an increase in net interest income. These factors were partially offset by higher costs in support of business growth, and higher variable compensation commensurate with revenue growth.

Total revenue increased \$231 million or 8%.

Canadian Wealth Management revenue increased \$60 million or 8%, primarily due to higher average fee-based client assets reflecting net sales and market appreciation.

U.S. Wealth Management (including City National) revenue increased \$111 million or 8%. In U.S. dollars, revenue increased \$67 million or 6%, primarily attributable to an increase in net interest income due to average volume growth, and higher average fee-based client assets reflecting net sales and market appreciation. These factors were partially offset by a gain in the prior year related to the sale of a mutual fund product and transfer of its associated team.

Global Asset Management revenue increased \$60 million or 12%, primarily due to higher average fee-based client assets reflecting market appreciation and net sales. In addition, the prior year included a loss on an investment in an international asset management joint venture.

PCL increased \$24 million, largely on our impaired assets in U.S. Wealth Management (including City National Bank), mainly in a few accounts. PCL on impaired loans ratio increased 17 bps. For further details, refer to Credit quality performance in the Credit risk section.

Non-interest expense increased \$124 million or 6%, primarily due to increased costs in support of business growth mainly reflecting higher staff-related costs, and higher variable compensation commensurate with revenue growth.

### Q3 2019 vs. Q2 2019

Net income increased \$54 million or 9%, primarily reflecting higher average fee-based client assets driven by net sales and market appreciation, and an increase in net interest income mainly due to average volume growth and three more days in the quarter. These factors were partially offset by higher variable compensation commensurate with revenue growth, and the net change in the fair value of our U.S. share-based compensation plans.

### Q3 2019 vs. Q3 2018 (Nine months ended)

Net income increased \$109 million or 6% from a year ago, primarily reflecting an increase in net interest income, and higher average fee-based client assets. These factors were partially offset by increased costs in support of business growth, higher variable compensation commensurate with revenue growth, and higher PCL.

Total revenue increased \$770 million or 9%, mainly due to an increase in net interest income driven by average volume growth and higher interest rates, higher average fee-based client assets reflecting market appreciation and net sales. The impact of foreign exchange translation and the change in the fair value of the hedges related to our U.S. share-based compensation plans, which was largely offset in non-interest expense, also contributed to the increase.

PCL increased \$102 million, primarily in U.S. Wealth Management (including City National). PCL on impaired loans ratio increased 11 bps. For further details, refer to Credit quality performance in the Credit risk section.

Non-interest expense increased \$542 million or 9%, mainly due to increased costs in support of business growth largely reflecting higher staff-related costs, the impact of foreign exchange translation and higher variable compensation commensurate with revenue growth. Higher regulatory costs and the change in the fair value of our U.S. share-based compensation plans, which was largely offset in revenue, also contributed to the increase.

## Insurance

	As at or for the three months ended			As at or for the nine months ended	
	July 31 2019	April 30 2019	July 31 2018	July 31 2019	July 31 2018
(Millions of Canadian dollars, except percentage amounts and as otherwise noted)					
Non-interest income					
Net earned premiums	\$ 914	\$ 964	\$ 1,047	\$ 3,040	\$ 2,810
Investment income (1)	505	515	181	1,401	260
Fee income	44	36	62	116	170
<b>Total revenue</b>	<b>1,463</b>	<b>1,515</b>	<b>1,290</b>	<b>4,557</b>	<b>3,240</b>
Insurance policyholder benefits and claims (1)	971	1,077	856	3,177	1,975
Insurance policyholder acquisition expense	75	83	69	254	207
Non-interest expense	149	150	153	453	443
<b>Income before income taxes</b>	<b>268</b>	<b>205</b>	<b>212</b>	<b>673</b>	<b>615</b>
<b>Net income</b>	<b>\$ 204</b>	<b>\$ 154</b>	<b>\$ 158</b>	<b>\$ 524</b>	<b>\$ 457</b>
<b>Revenue by business</b>					
Canadian Insurance	\$ 991	\$ 1,004	\$ 746	\$ 3,034	\$ 1,677
International Insurance	472	511	544	1,523	1,563
<b>Selected balances and other information</b>					
ROE	39.2%	32.4%	32.1%	35.6%	32.3%
Premiums and deposits (2)	\$ 1,079	\$ 1,106	\$ 1,197	\$ 3,499	\$ 3,273
Fair value changes on investments backing policyholder liabilities (1)	385	383	55	1,015	(93)

(1) Investment income can experience volatility arising from fluctuation of assets designated as fair value through profit and loss (FVTPL). The investments which support actuarial liabilities are predominantly fixed income assets designated as FVTPL. Consequently, changes in the fair values of these assets are recorded in the Consolidated Statements of Income and are largely offset by changes in the fair value of the actuarial liabilities, the impact of which is reflected in Insurance policyholder benefits, claims and acquisition expense.

(2) Premiums and deposits include premiums on risk-based insurance and annuity products, and individual and group segregated fund deposits, consistent with insurance industry practices.

## Financial performance

### Q3 2019 vs. Q3 2018

Net income increased \$46 million or 29% from a year ago, primarily reflecting higher favourable investment-related experience and the impact of new longevity reinsurance contracts. These factors were partially offset by higher disability and life retrocession claims costs and favourable reinsurance contract renegotiations in the prior year.

Total revenue increased \$173 million or 13%.

Canadian Insurance revenue increased \$245 million or 33%, primarily due to the change in fair value of investments backing our policyholder liabilities, partially offset by lower group annuity sales, both of which are largely offset in PBCAE as indicated below.

International Insurance revenue decreased \$72 million or 13%, mainly due to the change in the fair value of investments backing our policyholder liabilities, which is largely offset in PBCAE as indicated below.

PBCAE increased \$121 million or 13%, mainly reflecting the change in fair value of investments backing our policyholder liabilities, higher disability and life retrocession claims costs, and favourable reinsurance contract renegotiations in the prior year. These factors were partially offset by lower group annuity sales, higher favourable investment-related experience, and the impact of new longevity reinsurance contracts.

Non-interest expense decreased \$4 million or 3%, largely reflecting reduced costs associated with efficiencies driven by technology investments, partially offset by increased costs in support of sales and client service activities.

### Q3 2019 vs. Q2 2019

Net income increased \$50 million or 32%, mainly due to higher favourable investment-related experience and the impact of new longevity reinsurance contracts. These factors were partially offset by favourable reinsurance contract renegotiations in the prior quarter.

### Q3 2019 vs. Q3 2018 (Nine months ended)

Net income increased \$67 million or 15% from a year ago, primarily reflecting higher favourable reinsurance contract renegotiations.

Total revenue increased \$1,317 million or 41% compared to the prior year, mainly reflecting the change in fair value of investments backing our policyholder liabilities and business growth, including higher group annuity sales, both of which are largely offset in PBCAE as indicated below.

PBCAE increased \$1,249 million or 57%, mainly reflecting the change in fair value of investments backing our policyholder liabilities, and business growth, including group annuity sales. These factors were partially offset by higher favourable reinsurance contract renegotiations.

Non-interest expense increased \$10 million or 2%, largely reflecting increased costs in support of sales and client service activities.

## Investor & Treasury Services

(Millions of Canadian dollars, except percentage amounts and as otherwise noted)	As at or for the three months ended			As at or for the nine months ended	
	July 31 2019	April 30 2019	July 31 2018	July 31 2019	July 31 2018
Net interest income	\$ (16)	\$ (34)	\$ 32	\$ (81)	\$ 278
Non-interest income	577	621	588	1,860	1,689
<b>Total revenue</b>	<b>561</b>	<b>587</b>	<b>620</b>	<b>1,779</b>	<b>1,967</b>
PCL	1	–	1	1	1
Non-interest expense	411	388	416	1,217	1,196
<b>Income before income taxes</b>	<b>149</b>	<b>199</b>	<b>203</b>	<b>561</b>	<b>770</b>
<b>Net income</b>	<b>\$ 118</b>	<b>\$ 151</b>	<b>\$ 155</b>	<b>\$ 430</b>	<b>\$ 586</b>
<b>Selected balance sheet and other information</b>					
ROE	13.2%	17.4%	19.8%	16.0%	24.9%
Average deposits	\$ 179,300	\$ 173,900	\$ 162,500	\$ 175,100	\$ 160,400
Average client deposits	60,100	58,200	60,200	59,200	58,400
Average wholesale funding deposits	119,200	115,700	102,300	115,900	102,000
AUA <sup>(1)</sup>	4,242,100	4,307,800	4,210,600	4,242,100	4,210,600
Average AUA	4,290,900	4,271,000	4,276,100	4,250,800	4,405,000

### Estimated impact of U.S. dollar, British pound and Euro translation on key income statement items

(Millions of Canadian dollars, except percentage amounts)

	For the three months ended		For the nine months ended
	Q3 2019 vs. Q3 2018	Q3 2019 vs. Q2 2019	Q3 2019 vs. Q3 2018
<b>Increase (decrease):</b>			
Total revenue	\$ (6)	\$ (5)	\$ (14)
Non-interest expense	(5)	(4)	(13)
Net income	(1)	(1)	(1)
Percentage change in average U.S. dollar equivalent of C\$1.00	(2)%	–%	(4)%
Percentage change in average British pound equivalent of C\$1.00	4%	5%	2%
Percentage change in average Euro equivalent of C\$1.00	3%	1%	2%

(1) Represents period-end spot balances.

## Financial performance

### Q3 2019 vs. Q3 2018

Net income decreased \$37 million or 24%, primarily due to lower client deposit margins, lower revenue from our asset services business, and lower funding and liquidity revenue.

Total revenue decreased \$59 million or 10%, mainly due to lower client deposit revenue largely driven by margin compression primarily reflecting spread tightening, and lower revenue from our asset services business due to reduced client activity. Lower funding and liquidity revenue driven by lower gains from the disposition of certain securities and the impact of foreign exchange translation also contributed to the decrease.

Non-interest expense decreased \$5 million or 1%.

### Q3 2019 vs. Q2 2019

Net income decreased \$33 million or 22%, primarily due to lower client deposit margins, higher costs in support of efficiency initiatives as well as technology and related costs, and lower funding and liquidity revenue.

### Q3 2019 vs. Q3 2018 (Nine months ended)

Net income decreased \$156 million or 27%, largely due to lower funding and liquidity revenue, lower revenue from our asset services business and higher costs in support of efficiency and technology initiatives.

Total revenue decreased \$188 million or 10%, mainly due to lower funding and liquidity revenue driven by the impact of reduced money market opportunities in the current year and lower gains from the disposition of certain securities. Lower revenue from our asset services business due to challenging market conditions throughout the earlier part of 2019 and lower client activity also contributed to the decrease.

Non-interest expense increased \$21 million or 2%, primarily driven by higher costs in support of efficiency and technology initiatives.

## Capital Markets

(Millions of Canadian dollars, except percentage amounts and as otherwise noted)	As at or for the three months ended			As at or for the nine months ended	
	July 31 2019	April 30 2019	July 31 2018	July 31 2019	July 31 2018
Net interest income (1)	\$ 1,048	\$ 1,057	\$ 913	\$ 3,111	\$ 2,620
Non-interest income (1)	986	1,112	1,244	3,190	3,722
<b>Total revenue (1)</b>	<b>2,034</b>	<b>2,169</b>	<b>2,157</b>	<b>6,301</b>	<b>6,342</b>
PCL on performing assets	3	(23)	16	18	(30)
PCL on impaired assets	53	48	(13)	203	46
<b>PCL</b>	<b>56</b>	<b>25</b>	<b>3</b>	<b>221</b>	<b>16</b>
Non-interest expense	1,269	1,289	1,312	3,788	3,716
<b>Income before income taxes</b>	<b>709</b>	<b>855</b>	<b>842</b>	<b>2,292</b>	<b>2,610</b>
<b>Net income</b>	<b>\$ 653</b>	<b>\$ 776</b>	<b>\$ 698</b>	<b>\$ 2,082</b>	<b>\$ 2,111</b>
<b>Revenue by business</b>					
Corporate and Investment Banking	\$ 962	\$ 969	\$ 1,065	\$ 2,858	\$ 3,026
Global Markets	1,106	1,235	1,148	3,568	3,461
Other	(34)	(35)	(56)	(125)	(145)
<b>Selected balance sheet and other information</b>					
ROE	11.1%	13.6%	12.3%	11.8%	13.4%
Average total assets	\$ 676,700	\$ 648,900	\$ 579,400	\$ 656,500	\$ 571,200
Average trading securities	101,400	101,200	95,600	101,600	98,500
Average loans and acceptances, net	101,100	101,800	85,000	100,400	83,100
Average deposits	76,900	79,100	73,000	78,300	69,600
PCL on impaired loans as a % of average net loans and acceptances	0.21%	0.19%	(0.06)%	0.27%	0.07%

### Estimated impact of U.S. dollar, British pound and Euro translation on key income statement items

(Millions of Canadian dollars, except percentage amounts)

#### Increase (decrease):

	For the three months ended		For the nine months ended
	Q3 2019 vs. Q3 2018	Q3 2019 vs. Q2 2019	Q3 2019 vs. Q3 2018
Total revenue	\$ 13	\$ (18)	\$ 136
Non-interest expense	3	(15)	62
Net income	10	(1)	60
Percentage change in average U.S. dollar equivalent of C\$1.00	(2)%	–%	(4)%
Percentage change in average British pound equivalent of C\$1.00	4%	5%	2%
Percentage change in average Euro equivalent of C\$1.00	3%	1%	2%

(1) The taxable equivalent basis (teb) adjustment for the three months ended July 31, 2019 was \$111 million (April 30, 2019 – \$120 million; July 31, 2018 – \$157 million) and for the nine months ended July 31, 2019 was \$338 million (July 31, 2018 – \$400 million). For further discussion, refer to the How we measure and report our business segments section of our 2018 Annual Report.

## Financial performance

### Q3 2019 vs. Q3 2018

Net income decreased \$45 million or 6%, primarily due to lower revenue in Corporate and Investment Banking and Global Markets, and higher PCL. These factors were partially offset by a lower effective tax rate largely reflecting changes in earnings mix and lower compensation on decreased results.

Total revenue decreased \$123 million or 6%.

Corporate and Investment Banking revenue decreased \$103 million or 10% due to lower loan syndication activity primarily in the U.S. and Europe and lower M&A mainly in Canada reflecting reduced client activity and contraction of the global fee pool. These factors were partially offset by higher lending revenue across all regions driven by increased client demand.

Global Markets revenue decreased \$42 million or 4% due to lower equity trading revenue largely in the U.S. and lower foreign exchange trading revenue across all regions. These factors were partially offset by higher fixed income trading revenue across all regions.

Other revenue increased \$22 million largely reflecting lower residual funding costs.

PCL increased \$53 million, largely due to higher PCL on impaired loans mainly in a few accounts in the current year, while the prior year reflected higher recoveries. PCL on impaired loans ratio increased 27 bps. For further details, refer to Credit quality performance in the Credit risk section.

Non-interest expense decreased \$43 million or 3%, mainly due to lower compensation on decreased results.

### Q3 2019 vs. Q2 2019

Net income decreased \$123 million or 16% mainly due to lower fixed income trading largely in the U.S., lower debt origination primarily in Europe and the U.S., and higher PCL mainly on performing loans. Lower equity trading mainly in North America also contributed to the decrease. These factors were partially offset by lower compensation on decreased results.

### Q3 2019 vs. Q3 2018 (Nine months ended)

Net income decreased \$29 million or 1%, driven by lower revenue in Corporate and Investment Banking and higher PCL. These factors were partially offset by a lower effective tax rate largely reflecting changes in earnings mix, the impact of foreign exchange translation, and lower compensation on decreased results.

Total revenue decreased \$41 million or 1%, mainly driven by lower loan syndication activity primarily in the U.S. and Europe, and lower equity and debt origination primarily in North America. These factors were partially offset by the impact of foreign exchange translation, lower residual funding costs, higher lending revenue mainly in the U.S., and higher gains from the disposition of certain investment securities.

PCL increased \$205 million, largely due to higher provisions on impaired loans mainly in a few accounts. PCL on impaired loans ratio increased 20 bps. For further details, refer to Credit quality performance in the Credit risk section.

Non-interest expense increased \$72 million or 2%, largely reflecting the impact of foreign exchange translation and higher technology and related costs, partially offset by lower compensation on decreased results.

## Corporate Support

(Millions of Canadian dollars)	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
Net interest income (loss) (1)	\$ 22	\$ 23	\$ (29)	\$ 76	\$ (68)
Non-interest income (loss) (1)	(111)	(107)	(95)	(334)	(312)
<b>Total revenue</b> (1)	<b>(89)</b>	<b>(84)</b>	<b>(124)</b>	<b>(258)</b>	<b>(380)</b>
PCL	–	(1)	–	(1)	–
Non-interest expense	21	(2)	8	50	48
<b>Income (loss) before income taxes</b> (1)	<b>(110)</b>	<b>(81)</b>	<b>(132)</b>	<b>(307)</b>	<b>(428)</b>
Income taxes (recoveries) (1)	(95)	(96)	(142)	(331)	(253)
<b>Net income (loss)</b> (2)	<b>\$ (15)</b>	<b>\$ 15</b>	<b>\$ 10</b>	<b>\$ 24</b>	<b>\$ (175)</b>

(1) Teb adjusted.

(2) Net income reflects income attributable to both shareholders and Non-Controlling Interests (NCI). Net income attributable to NCI for the three months ended July 31, 2019 was \$(1) million (April 30, 2019 – \$1 million; July 31, 2018 – \$7 million) and for the nine months ended July 31, 2019 was \$nil (July 31, 2018 – \$23 million).

Due to the nature of activities and consolidation adjustments reported in this segment, we believe that a comparative period analysis is not relevant. The following identifies material items affecting the reported results in each period.

Total revenue and Income taxes (recoveries) in each period in Corporate Support include the deduction of the teb adjustments related to the gross-up of income from Canadian taxable corporate dividends and the U.S. tax credit investment business recorded in Capital Markets. The amount deducted from revenue was offset by an equivalent increase in Income taxes (recoveries).

The teb amount for the three months ended July 31, 2019 was \$111 million, as compared to \$120 million in the prior quarter and \$157 million last year. The teb amount for the nine months ended July 31, 2019 was \$338 million, as compared to \$400 million in the prior year.

The following identifies the material items, other than the tax impacts noted previously, affecting the reported results in each period.

### Q3 2019

Net loss was \$15 million, mainly due to net unfavourable tax adjustments, largely offset by asset/liability management activities.

### Q2 2019

Net income was \$15 million, largely due to asset/liability management activities, partially offset by net unfavourable tax adjustments.

### Q3 2018

Net income was \$10 million, largely due to asset/liability management activities.

### Q3 2019 (Nine months ended)

Net income was \$24 million, largely due to asset/liability management activities, partially offset by net unfavourable tax adjustments.

### Q3 2018 (Nine months ended)

Net loss was \$175 million, largely due to the impact of the U.S. Tax Reform of \$178 million, partially offset by asset/liability management activities.

## Quarterly results and trend analysis

Our quarterly results are impacted by a number of trends and recurring factors, which include seasonality of certain businesses, general economic and market conditions, and fluctuations in the Canadian dollar relative to other currencies. The following table summarizes our results for the last eight quarters (the period):

### Quarterly results <sup>(1)</sup>

(Millions of Canadian dollars, except per share and percentage amounts)	2019			2018			2017	
	Q3	Q2	Q1	Q4	Q3	Q2	Q1	Q4
Personal & Commercial Banking	\$ 4,546	\$ 4,333	\$ 4,418	\$ 4,364	\$ 4,284	\$ 4,103	\$ 4,165	\$ 4,019
Wealth Management	3,029	2,979	2,948	2,740	2,798	2,605	2,783	2,562
Insurance	1,463	1,515	1,579	1,039	1,290	806	1,144	1,612
Investor & Treasury Services	561	587	631	624	620	671	676	602
Capital Markets <sup>(2)</sup>	2,034	2,169	2,098	2,056	2,157	2,010	2,175	1,954
Corporate Support <sup>(2)</sup>	(89)	(84)	(85)	(154)	(124)	(141)	(115)	(226)
<b>Total revenue</b>	<b>\$ 11,544</b>	<b>\$ 11,499</b>	<b>\$ 11,589</b>	<b>\$ 10,669</b>	<b>\$ 11,025</b>	<b>\$ 10,054</b>	<b>\$ 10,828</b>	<b>\$ 10,523</b>
PCL <sup>(3)</sup>	425	426	514	353	346	274	334	234
PBCAE	1,046	1,160	1,225	494	925	421	836	1,137
Non-interest expense	5,992	5,916	5,912	5,882	5,858	5,482	5,611	5,611
<b>Income before income taxes</b>	<b>\$ 4,081</b>	<b>\$ 3,997</b>	<b>\$ 3,938</b>	<b>\$ 3,940</b>	<b>\$ 3,896</b>	<b>\$ 3,877</b>	<b>\$ 4,047</b>	<b>\$ 3,541</b>
Income taxes	818	767	766	690	787	817	1,035	704
<b>Net income</b>	<b>\$ 3,263</b>	<b>\$ 3,230</b>	<b>\$ 3,172</b>	<b>\$ 3,250</b>	<b>\$ 3,109</b>	<b>\$ 3,060</b>	<b>\$ 3,012</b>	<b>\$ 2,837</b>
EPS – basic	\$ 2.23	\$ 2.20	\$ 2.15	\$ 2.21	\$ 2.10	\$ 2.06	\$ 2.02	\$ 1.89
– diluted	2.22	2.20	2.15	2.20	2.10	2.06	2.01	1.88
<b>Segments – net income (loss)</b>								
Personal & Commercial Banking	\$ 1,664	\$ 1,549	\$ 1,571	\$ 1,538	\$ 1,510	\$ 1,459	\$ 1,521	\$ 1,404
Wealth Management	639	585	597	553	578	537	597	491
Insurance	204	154	166	318	158	172	127	265
Investor & Treasury Services	118	151	161	155	155	212	219	156
Capital Markets	653	776	653	666	698	665	748	584
Corporate Support	(15)	15	24	20	10	15	(200)	(63)
<b>Net income</b>	<b>\$ 3,263</b>	<b>\$ 3,230</b>	<b>\$ 3,172</b>	<b>\$ 3,250</b>	<b>\$ 3,109</b>	<b>\$ 3,060</b>	<b>\$ 3,012</b>	<b>\$ 2,837</b>
Effective income tax rate	20.0%	19.2%	19.5%	17.5%	20.2%	21.1%	25.6%	19.9%
Period average US\$ equivalent of C\$1.00	\$ 0.754	\$ 0.751	\$ 0.749	\$ 0.767	\$ 0.767	\$ 0.778	\$ 0.794	\$ 0.792

(1) Fluctuations in the Canadian dollar relative to other foreign currencies have affected our consolidated results over the period.

(2) Tax adjusted. For further discussion, refer to the How we measure and report our business segments section of our 2018 Annual Report.

(3) Effective November 1, 2017, we adopted IFRS 9, *Financial Instruments*. Under IFRS 9, PCL relates primarily to loans, acceptances, and commitments, and also applies to all financial assets except for those classified or designated as FVTPL and equity securities designated as fair value through other comprehensive income (FVOCI). Prior to the adoption of IFRS 9, PCL related only to loans, acceptances, and commitments. PCL on loans, acceptances, and commitments is comprised of PCL on impaired loans (Stage 3 PCL under IFRS 9 and PCL on impaired loans under IAS 39) and PCL on performing loans (Stage 1 and Stage 2 PCL under IFRS 9 and PCL on loans not yet identified as impaired under IAS 39).

## Seasonality

Seasonal factors may impact our results in certain quarters. The first quarter has historically been stronger for our Capital Markets businesses. The second quarter has fewer days than the other quarters, which generally results in a decrease in net interest income and certain expense items. The third and fourth quarters include the summer months which results in lower client activity and may negatively impact the results of our Capital Markets brokerage business and our Wealth Management investment management business.

## Trend analysis

Earnings have generally trended upward over the period. However, results in the first quarter of 2019 were impacted by challenging market conditions throughout the earlier part of the quarter. Quarterly earnings are also affected by the impact of foreign exchange translation.

Personal & Commercial Banking revenue has benefitted from solid volume growth, higher spreads since the beginning of the period, and higher fee-based revenue.

Wealth Management revenue has generally trended upwards primarily due to growth in average fee-based client assets which benefitted from net sales and market appreciation, and the impact of higher interest rates and volume growth driving higher net interest income over the period. The change in the fair value of the hedges related to our U.S. share-based compensation plans, which is largely offset in Non-interest expense, also contributed to fluctuations in revenue over the period.

Insurance revenue fluctuated over the period, primarily due to the impact of changes in the fair value of investments backing our policyholder liabilities. Since 2017, revenues have generally benefitted from the impact of new group annuity sales, which is largely offset in PBCAE. We have also benefitted from business growth in Canadian and International Insurance throughout 2018 and 2019.

Investor & Treasury Services revenue is impacted by fluctuations in market conditions and client activity. The first half of 2018 trended higher due to generally higher market volatility, growth in client deposits, and increased client activity from our asset services business, combined with an improvement in funding & liquidity performance. Revenue from our funding and liquidity business was impacted by reduced money market opportunities in the current year and our asset services business was impacted by challenging market conditions during the first half of 2019. The latter part of the period was impacted by lower client activity and lower client deposit margins.

Capital Markets revenue is influenced, to a large extent, by market conditions that impact client activity in our Corporate and Investment Banking and Global Markets businesses, with the first quarter results generally stronger than the remaining quarters. The second quarter of 2018 experienced lower equity originations driven by lower market activity, decreased fixed income trading across all regions, and lower equity trading revenue in the U.S. The decline experienced in the fourth quarter of 2018 largely resulted from lower fixed income trading revenue. Client activity in 2019 was impacted by challenging market conditions resulting in lower investment banking fee revenues experienced across the industry. The third quarter saw lower fixed income and equity trading.

On November 1, 2017, we adopted IFRS 9, which resulted in the introduction of PCL on performing financial assets. PCL on performing assets has fluctuated over the period as it is impacted by macroeconomic conditions and volume growth. PCL saw lower provisions on impaired assets for the majority of 2018. The fourth quarter of 2018 was also impacted by the restructuring of portfolios in Barbados. PCL experienced higher provisions on impaired loans, in the first half of 2019, mainly relating to a few accounts in Capital Markets and Personal & Commercial Banking.

PBCAE has fluctuated quarterly as it includes the changes to the fair value of investments backing our policyholder liabilities and the impact of group annuity sales, all of which are largely offset in Revenue. PBCAE has also increased due to business growth, and has fluctuated due to investment-related experience and claims volumes over the period. Since late 2018, PBCAE has been positively impacted by favourable reinsurance contract renegotiations. Actuarial adjustments, which generally occur in the fourth quarter of each year, also impact PBCAE results.

Non-interest expense generally trended upwards over the period. Growth mainly reflects higher costs in support of business growth and our ongoing investments in technology and related costs, including digital initiatives. Fiscal 2018 was impacted by higher regulatory costs, and the decrease over the second and fourth quarter of 2018 mainly reflects the change in the fair value of our U.S. share-based compensation plans, which was largely offset in Revenue. The gradual increase across the first three quarters of fiscal 2019 reflects higher technology and related costs.

Our effective income tax rate has fluctuated over the period, mostly due to various levels of tax adjustments and changes in earnings mix. The first quarter of 2018 was adversely impacted by the U.S. Tax Reform, which resulted in the write-down of net deferred tax assets, however, this was more than offset during 2018 by the ongoing lower corporate tax rate. The first quarter of 2019 included a write-down of deferred tax assets resulting from a change in the corporate tax rate in Barbados.

## Financial condition

## Condensed balance sheets

(Millions of Canadian dollars)	As at	
	July 31 2019	October 31 2018
<b>Assets</b>		
Cash and due from banks	\$ 26,863	\$ 30,209
Interest-bearing deposits with banks	31,553	36,471
Securities, net of applicable allowance (1)	240,661	222,866
Assets purchased under reverse repurchase agreements and securities borrowed	309,640	294,602
Loans		
Retail	416,583	399,452
Wholesale	198,941	180,278
Allowance for loan losses	(3,131)	(2,912)
Other – Derivatives	98,774	94,039
– Other (2)	87,009	79,729
<b>Total assets</b>	<b>\$ 1,406,893</b>	<b>\$ 1,334,734</b>
<b>Liabilities</b>		
Deposits	\$ 881,211	\$ 837,046
Other – Derivatives	96,857	90,238
– Other (2)	336,629	318,364
Subordinated debentures	9,818	9,131
<b>Total liabilities</b>	<b>1,324,515</b>	<b>1,254,779</b>
<b>Equity attributable to shareholders</b>	<b>82,279</b>	<b>79,861</b>
Non-controlling interests	99	94
<b>Total equity</b>	<b>82,378</b>	<b>79,955</b>
<b>Total liabilities and equity</b>	<b>\$ 1,406,893</b>	<b>\$ 1,334,734</b>

(1) Securities are comprised of Trading and Investment securities.

(2) Other – Other assets and liabilities include Segregated fund net assets and liabilities, respectively.

## Q3 2019 vs. Q4 2018

Total assets increased \$72 billion or 5% from October 31, 2018. Foreign exchange translation increased total assets by \$12 billion.

Cash and due from banks was down \$3 billion or 11%, mainly due to lower deposits with central banks, reflecting our short-term cash management activities.

Interest-bearing deposits with banks decreased \$5 billion or 13%, primarily due to lower deposits with central banks, reflecting our cash management activities.

Securities, net of applicable allowance, were up \$18 billion or 8%, largely due to higher equity trading securities reflecting favourable market conditions. Higher government debt trading securities and corporate debt, reflecting our business activities, also contributed to the increase.

Assets purchased under reverse repurchase agreements (reverse repos) and securities borrowed increased \$15 billion or 5%, driven by client activity, partially offset by higher financial netting.

Loans were up \$36 billion or 6%, primarily due to volume growth, which led to higher wholesale loans and residential mortgages.

Derivative assets were up \$5 billion or 5%, primarily attributable to the impact of foreign exchange translation and growth in interest rate contracts, partially offset by lower fair values on foreign exchange contracts.

Other assets were up \$7 billion or 9%, largely reflecting higher cash collateral requirements. Higher commodities trading receivables and customers' liability under acceptances, driven by client demand, also contributed to the increase.

Total liabilities increased \$70 billion or 6%. Foreign exchange translation increased total liabilities by \$12 billion.

Deposits increased \$44 billion or 5%, mainly as a result of higher business and retail deposits driven by increased client activities.

Derivative liabilities were up \$7 billion or 7%, primarily attributable to the impact of foreign exchange translation and higher fair values on interest rate contracts, partially offset by lower fair values on foreign exchange contracts.

Other liabilities increased \$18 billion or 6%, mainly attributable to higher obligations related to repurchase agreements due to increased client activity and funding requirements, partially offset by higher financial netting.

Total equity increased \$2 billion or 3%, largely reflecting earnings, net of dividends, the impact of lower discount rates on the remeasurement of our employee benefit plans and redemptions of preferred shares.

## Off-balance sheet arrangements

In the normal course of business, we engage in a variety of financial transactions that, for accounting purposes, are not recorded on our Consolidated Balance Sheets. Off-balance sheet transactions are generally undertaken for risk, capital and funding management purposes which benefit us and our clients. These include transactions with structured entities and may also include the issuance of guarantees. These transactions give rise to, among other risks, varying degrees of market, credit, and liquidity and funding risk, which are discussed in the Risk management section of this Q3 2019 Report to Shareholders. Our significant off-balance sheet transactions include those described on pages 47 to 49 of our 2018 Annual Report.

## Risk management

## Credit risk

Credit risk is the risk of loss associated with an obligor's potential inability or unwillingness to fulfill its contractual obligations on a timely basis. Credit risk may arise directly from the risk of default of a primary obligor, indirectly from a secondary obligor, through off-balance sheet exposures, contingent credit risk and/or transactional risk.

Our Credit Risk Framework (CRF) and supporting credit policies are designed to clearly define roles and responsibilities, acceptable practices, limits and key controls. There have been no material changes to our CRF as described in our 2018 Annual Report.

## Credit risk exposure by portfolio, sector and geography

The following table presents our credit risk exposures under the Basel regulatory defined classes and reflects exposures at default (EAD). The classification of our sectors aligns with our view of credit risk by industry.

(Millions of Canadian dollars)	As at							April 30 2019
	July 31 2019						Total exposure	
	Credit risk (1)			Counterparty credit risk (2)				
	On-balance sheet amount	Off-balance sheet amount (3)		Repo-style transactions	Derivatives	Total exposure		
Undrawn		Other (4)						
<b>Retail</b>								
Residential secured (5)	\$ 310,116	\$ 64,094	\$ –	\$ –	\$ –	\$ 374,210	\$ 365,995	
Qualifying revolving (6)	26,307	71,488	–	–	–	97,795	95,807	
Other retail	59,175	15,290	72	–	–	74,537	71,701	
<b>Total retail</b>	<b>\$ 395,598</b>	<b>\$ 150,872</b>	<b>\$ 72</b>	<b>\$ –</b>	<b>\$ –</b>	<b>\$ 546,542</b>	<b>\$ 533,503</b>	
<b>Wholesale</b>								
Agriculture	\$ 8,979	\$ 1,874	\$ 38	\$ –	\$ 72	\$ 10,963	\$ 10,808	
Automotive	10,541	6,605	362	–	998	18,506	18,822	
Banking	43,334	1,938	600	47,177	16,742	109,791	122,097	
Consumer discretionary	15,558	8,691	557	–	461	25,267	25,442	
Consumer staples	5,078	7,162	360	–	1,100	13,700	13,405	
Oil & gas	7,678	11,057	1,386	–	1,682	21,803	21,597	
Financial services	27,610	20,892	2,670	118,117	18,431	187,720	185,396	
Financing products	320	860	504	119	599	2,402	3,532	
Forest products	1,472	681	116	–	33	2,302	2,229	
Governments	101,038	7,499	1,431	3,920	6,888	120,776	122,573	
Industrial products	7,582	8,721	570	–	652	17,525	17,022	
Information technology	5,351	5,349	214	–	2,945	13,859	15,466	
Investments	16,135	907	402	12	261	17,717	17,988	
Mining & metals	1,977	4,234	883	–	212	7,306	7,444	
Public works & infrastructure	2,040	1,712	488	–	193	4,433	4,308	
Real estate & related	59,676	11,807	1,342	–	695	73,520	72,701	
Other services	24,683	11,046	1,030	35	1,483	38,277	37,375	
Telecommunication & media	8,605	9,782	111	–	1,842	20,340	20,620	
Transportation	5,845	6,549	2,102	–	1,667	16,163	15,682	
Utilities	8,766	19,758	4,231	–	3,056	35,811	35,441	
Other sectors	1,794	453	1	14	19,384	21,646	21,650	
<b>Total wholesale</b>	<b>\$ 364,062</b>	<b>\$ 147,577</b>	<b>\$ 19,398</b>	<b>\$ 169,394</b>	<b>\$ 79,396</b>	<b>\$ 779,827</b>	<b>\$ 791,598</b>	
<b>Total exposure (7)</b>	<b>\$ 759,660</b>	<b>\$ 298,449</b>	<b>\$ 19,470</b>	<b>\$ 169,394</b>	<b>\$ 79,396</b>	<b>\$ 1,326,369</b>	<b>\$ 1,325,101</b>	
<b>By geography (8)</b>								
Canada	\$ 542,331	\$ 217,583	\$ 9,771	\$ 66,205	\$ 36,072	\$ 871,962	\$ 862,695	
U.S.	140,146	59,667	8,099	54,374	17,211	279,497	270,134	
Europe	45,605	18,232	1,439	43,443	21,938	130,657	146,789	
Other International	31,578	2,967	161	5,372	4,175	44,253	45,483	
<b>Total exposure (7)</b>	<b>\$ 759,660</b>	<b>\$ 298,449</b>	<b>\$ 19,470</b>	<b>\$ 169,394</b>	<b>\$ 79,396</b>	<b>\$ 1,326,369</b>	<b>\$ 1,325,101</b>	

(1) EAD for standardized exposures are reported net of allowance for impaired assets and EAD for internal ratings based exposures are reported gross of all allowance for credit losses and partial write-offs as per regulatory definitions.

(2) Counterparty credit risk EAD reflects exposure amounts after netting. Collateral is included in EAD for repo-style transactions to the extent allowed by regulatory guidelines.

(3) EAD for undrawn credit commitments and other off-balance sheet amounts are reported after the application of credit conversion factors.

(4) Includes other off-balance sheet exposures such as letters of credit and guarantees.

(5) Includes residential mortgages and home equity lines of credit.

(6) Includes credit cards, unsecured lines of credit and overdraft protection products.

(7) Excludes securitization, banking book equities and other assets not subject to the standardized or internal ratings based approach.

(8) Geographic profile is based on the country of residence of the borrower.

**Q3 2019 vs. Q2 2019**

Total credit risk exposure increased \$1 billion from the prior quarter, primarily due to growth in loans and acceptances, mostly offset by the impact of foreign exchange translation, lower repo-style transactions and lower derivatives.

Retail exposure increased \$13 billion or 2%, largely driven by growth in residential secured and other retail portfolios.

Wholesale exposure decreased \$12 billion or 1%, primarily due to the impact of foreign exchange translation, lower repo-style transactions and lower derivatives, partially offset by growth in loans and acceptances.

The geographic mix of our credit risk exposure remained largely consistent to the prior quarter. Our exposure in Canada, the U.S., Europe and Other International was 66%, 21%, 10% and 3%, respectively (April 30, 2019 – 65%, 21%, 11% and 3%, respectively).

**Net European exposure by country, asset type and client type** <sup>(1) (2)</sup>

(Millions of Canadian dollars)	As at								Total	
	July 31 2019									April 30 2019
	Asset type				Client type					Total
	Loans Outstanding	Securities (3)	Repo-style transactions	Derivatives	Financials	Sovereign	Corporate			
U.K.	\$ 7,707	\$ 13,657	\$ 462	\$ 3,303	\$ 14,713	\$ 2,863	\$ 7,552	\$ 25,129	\$ 27,592	
Germany	1,684	7,583	11	469	6,501	1,282	1,965	9,747	9,533	
France	887	7,932	54	322	1,343	6,747	1,105	9,195	10,556	
<b>Total U.K., Germany, France</b>	<b>\$ 10,278</b>	<b>\$ 29,172</b>	<b>\$ 527</b>	<b>\$ 4,094</b>	<b>\$ 22,557</b>	<b>\$ 10,892</b>	<b>\$ 10,622</b>	<b>\$ 44,071</b>	<b>\$ 47,681</b>	
Ireland	\$ 825	\$ 46	\$ 362	\$ 45	\$ 514	\$ 2	\$ 762	\$ 1,278	\$ 1,329	
Italy	55	84	–	19	82	14	62	158	171	
Portugal	–	24	23	1	25	–	23	48	11	
Spain	412	158	–	32	129	5	468	602	671	
<b>Total peripheral</b>	<b>\$ 1,292</b>	<b>\$ 312</b>	<b>\$ 385</b>	<b>\$ 97</b>	<b>\$ 750</b>	<b>\$ 21</b>	<b>\$ 1,315</b>	<b>\$ 2,086</b>	<b>\$ 2,182</b>	
Luxembourg (4)	\$ 2,339	\$ 5,754	\$ 234	\$ 40	\$ 1,816	\$ 5,244	\$ 1,307	\$ 8,367	\$ 10,072	
Netherlands (4)	702	950	65	333	957	10	1,083	2,050	1,800	
Norway	208	2,306	6	37	2,293	2	262	2,557	2,108	
Sweden	269	2,781	16	44	2,304	517	289	3,110	4,284	
Switzerland	1,057	5,814	163	262	805	5,528	963	7,296	5,504	
Other	1,751	2,417	147	429	1,480	1,518	1,746	4,744	4,348	
<b>Total other Europe</b>	<b>\$ 6,326</b>	<b>\$ 20,022</b>	<b>\$ 631</b>	<b>\$ 1,145</b>	<b>\$ 9,655</b>	<b>\$ 12,819</b>	<b>\$ 5,650</b>	<b>\$ 28,124</b>	<b>\$ 28,116</b>	
<b>Net exposure to Europe (5)</b>	<b>\$ 17,896</b>	<b>\$ 49,506</b>	<b>\$ 1,543</b>	<b>\$ 5,336</b>	<b>\$ 32,962</b>	<b>\$ 23,732</b>	<b>\$ 17,587</b>	<b>\$ 74,281</b>	<b>\$ 77,979</b>	

(1) Geographic profile is based on country of risk, which reflects our assessment of the geographic risk associated with a given exposure. Typically, this is the residence of the borrower.

(2) Exposures are calculated on a fair value basis and net of collateral, which includes \$130.9 billion against repo-style transactions (April 30, 2019 – \$134.9 billion) and \$13.1 billion against derivatives (April 30, 2019 – \$9.7 billion).

(3) Securities include \$11.4 billion of trading securities (April 30, 2019 – \$13.7 billion), \$22.5 billion of deposits (April 30, 2019 – \$24.7 billion) and \$15.6 billion of securities carried at FVOCI (April 30, 2019 – \$16.5 billion).

(4) Excludes \$2.5 billion (April 30, 2019 – \$2.1 billion) of exposures to supranational agencies.

(5) Reflects \$1.1 billion of mitigation through credit default swaps, which are largely used to hedge single name exposures and market risk (April 30, 2019 – \$1.2 billion).

**Q3 2019 vs. Q2 2019**

Net credit risk exposure to Europe decreased \$3.7 billion from last quarter, primarily driven by lower trading securities largely in the United Kingdom and lower deposits with central banks largely in Luxembourg, partially offset by higher derivatives primarily in the United Kingdom.

Our European corporate loan book is managed on a global basis with underwriting standards reflecting the same approach to the use of our balance sheet as we have applied in both Canada and the U.S. PCL on loans during the quarter was \$40 million. The gross impaired loans ratio of this loan book was 21 bps, up 5 bps from last quarter, mainly due to one account.



### Average loan-to-value (LTV) ratios

The following table provides a summary of our average LTV ratio for newly originated and acquired uninsured residential mortgages and Homeline products by geographic region.

	For the three months ended				For the nine months ended	
	July 31 2019		April 30 2019		July 31 2019	
	Uninsured		Uninsured		Uninsured	
	Residential mortgages (1)	Homeline products (2)	Residential mortgages (1)	Homeline products (2)	Residential mortgages (1)	Homeline products (2)
<b>Region (3)</b>						
Atlantic provinces	74%	75%	72%	75%	73%	74%
Quebec	72	74	71	73	72	73
Ontario	70	68	70	68	70	68
Alberta	73	72	72	71	73	72
Saskatchewan and Manitoba	74	74	74	74	74	74
B.C. and territories	68	65	67	64	67	64
U.S.	74	n.m.	73	n.m.	74	n.m.
Other International	71	n.m.	71	n.m.	71	n.m.
Average of newly originated and acquired for the period (4), (5)	71%	69%	70%	68%	70%	69%
<b>Total Canadian Banking residential mortgages portfolio (6)</b>	<b>57%</b>	<b>50%</b>	<b>57%</b>	<b>50%</b>	<b>57%</b>	<b>50%</b>

(1) Residential mortgages exclude residential mortgages within the Homeline products.

(2) Homeline products are comprised of both residential mortgages and home equity lines of credit.

(3) Region is based upon address of the property mortgaged. The Atlantic provinces are comprised of Newfoundland and Labrador, Prince Edward Island, Nova Scotia and New Brunswick, and B.C. and territories are comprised of British Columbia, Nunavut, Northwest Territories and Yukon.

(4) The average LTV ratio for newly originated and acquired uninsured residential mortgages and Homeline products is calculated on a weighted basis by mortgage amounts at origination.

(5) For newly originated mortgages and Homeline products, LTV is calculated based on the total facility amount for the residential mortgage and Homeline product divided by the value of the related residential property.

(6) Weighted by mortgage balances and adjusted for property values based on the Teranet – National Bank National Composite House Price Index.  
n.m. not meaningful

## Credit quality performance

The following credit quality performance tables and analysis provide information on loans, which represents loans, acceptances and commitments, and other financial assets.

### Provision for credit losses

(Millions of Canadian dollars, except percentage amounts)	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
Personal & Commercial Banking	\$ 345	\$ 385	\$ 330	\$ 1,077	\$ 948
Wealth Management	27	30	3	83	(19)
Capital Markets	56	27	4	226	20
Corporate Support and other	1	(1)	1	–	1
<b>PCL – Loans</b>	<b>\$ 429</b>	<b>\$ 441</b>	<b>\$ 338</b>	<b>\$ 1,386</b>	<b>\$ 950</b>
<b>PCL – Other financial assets</b>	<b>(4)</b>	<b>(15)</b>	<b>8</b>	<b>(21)</b>	<b>4</b>
<b>Total PCL</b>	<b>\$ 425</b>	<b>\$ 426</b>	<b>\$ 346</b>	<b>\$ 1,365</b>	<b>\$ 954</b>
PCL on loans is comprised of:					
Retail	\$ 23	\$ 30	\$ 44	\$ 86	\$ 90
Wholesale	7	(24)	46	43	(11)
<b>PCL on performing loans</b>	<b>\$ 30</b>	<b>\$ 6</b>	<b>\$ 90</b>	<b>\$ 129</b>	<b>\$ 79</b>
Retail	\$ 275	\$ 258	\$ 259	\$ 802	\$ 763
Wholesale	124	177	(11)	455	108
<b>PCL on impaired loans</b>	<b>\$ 399</b>	<b>\$ 435</b>	<b>\$ 248</b>	<b>\$ 1,257</b>	<b>\$ 871</b>
<b>PCL – Loans</b>	<b>\$ 429</b>	<b>\$ 441</b>	<b>\$ 338</b>	<b>\$ 1,386</b>	<b>\$ 950</b>
<b>PCL on loans as a % of average net loans and acceptances</b>	<b>0.27%</b>	<b>0.29%</b>	<b>0.23%</b>	<b>0.30%</b>	<b>0.23%</b>
<b>PCL on impaired loans as a % of average net loans and acceptances</b>	<b>0.25%</b>	<b>0.29%</b>	<b>0.17%</b>	<b>0.27%</b>	<b>0.21%</b>

### Additional information by geography <sup>(1)</sup>

Canada					
Residential mortgages	\$ 7	\$ 6	\$ 10	\$ 23	\$ 27
Personal	118	116	117	355	337
Credit cards	128	122	115	366	341
Small business	11	9	9	25	24
Retail	264	253	251	769	729
Wholesale	62	113	3	216	58
<b>PCL on impaired loans</b>	<b>\$ 326</b>	<b>\$ 366</b>	<b>\$ 254</b>	<b>\$ 985</b>	<b>\$ 787</b>
U.S.					
Retail	\$ 4	\$ 1	\$ 1	\$ 7	\$ 3
Wholesale	16	48	7	174	30
<b>PCL on impaired loans</b>	<b>\$ 20</b>	<b>\$ 49</b>	<b>\$ 8</b>	<b>\$ 181</b>	<b>\$ 33</b>
Other International					
Retail	\$ 7	\$ 4	\$ 7	\$ 26	\$ 31
Wholesale	46	16	(21)	65	20
<b>PCL on impaired loans</b>	<b>\$ 53</b>	<b>\$ 20</b>	<b>\$ (14)</b>	<b>\$ 91</b>	<b>\$ 51</b>
<b>PCL on impaired loans</b>	<b>\$ 399</b>	<b>\$ 435</b>	<b>\$ 248</b>	<b>\$ 1,257</b>	<b>\$ 871</b>

(1) Geographic information is based on residence of borrower.

### Q3 2019 vs. Q3 2018

Total PCL was \$425 million. PCL on loans of \$429 million increased \$91 million, or 27% from the prior year, due to higher provisions in Capital Markets, Wealth Management and Personal & Commercial Banking.

The PCL ratio on loans of 27 bps increased 4 bps, and the PCL on impaired loans ratio of 25 bps increased 8 bps.

PCL on performing loans of \$30 million decreased \$60 million, mainly due to lower provisions in Personal & Commercial Banking and Capital Markets.

PCL on impaired loans of \$399 million increased \$151 million, due to higher provisions in Capital Markets, Personal & Commercial Banking and Wealth Management.

PCL on loans in Personal & Commercial Banking increased \$15 million, largely reflecting higher provisions on impaired loans in Canadian Banking, mainly in our commercial portfolios. This was partially offset by lower provisions on performing loans in our Canadian Banking portfolios, as the prior year reflected unfavourable changes in macroeconomic factors.

PCL on loans in Wealth Management increased \$24 million, due to higher provisions on impaired loans in U.S. Wealth Management (including City National Bank), mainly in a few accounts.

PCL on loans in Capital Markets increased \$52 million, largely driven by higher provisions on impaired loans, mainly in a few accounts, while the prior year reflected higher recoveries. This was partially offset by lower provisions on performing loans in the current year.

**Q3 2019 vs. Q2 2019**

PCL on loans of \$429 million decreased \$12 million, or 3% from the prior quarter, mainly due to lower provisions in Personal & Commercial Banking, partially offset by higher provisions in Capital Markets.

The PCL ratio on loans decreased 2 bps, and the PCL on impaired loans ratio decreased 4 bps.

PCL on performing loans of \$30 million increased \$24 million, primarily relating to higher provisions in Capital Markets.

PCL on impaired loans of \$399 million decreased \$36 million from the prior quarter, mainly due to lower provisions in Personal & Commercial Banking.

PCL on loans in Personal & Commercial Banking decreased \$40 million, as the previous quarter included higher provisions on impaired loans in Canadian Banking, largely from a couple of accounts in our commercial portfolios.

PCL on loans in Capital Markets increased \$29 million, largely driven by higher provisions on performing loans, due to unfavourable changes in macroeconomic factors compared to the prior quarter.

**Q3 2019 vs. Q3 2018 (Nine months ended)**

Total PCL was \$1,365 million. PCL on loans of \$1,386 million increased \$436 million, or 46% from the prior year, due to higher provisions in Capital Markets, Personal & Commercial Banking and Wealth Management.

The PCL ratio on loans increased 7 bps, and the PCL on impaired loans ratio increased 6 bps.

PCL on performing loans of \$129 million increased \$50 million, reflecting higher provisions in Wealth Management and Capital Markets, partially offset by lower provisions in Personal & Commercial Banking.

PCL on impaired loans of \$1,257 million increased \$386 million from the prior year, mainly due to higher provisions in Personal & Commercial Banking and Capital Markets.

PCL on loans in Personal & Commercial Banking increased \$129 million, reflecting higher provisions on impaired loans in Canadian Banking, mainly from a couple of accounts in our commercial portfolios. This was partially offset by lower provisions on performing loans, due to favourable credit migration in our Caribbean Banking portfolios, and favourable changes in macroeconomic factors compared to the prior year in our commercial portfolios in Canadian Banking.

PCL on loans in Wealth Management increased \$102 million, primarily in U.S. Wealth Management (including City National). PCL on performing loans increased by \$54 million, largely due to higher repayments and maturities in the prior year. The current year also reflected unfavourable changes in macroeconomic factors compared to last year. In addition, PCL on impaired loans increased \$48 million, mainly in a few accounts.

PCL on loans in Capital Markets increased \$206 million, largely driven by higher provisions on impaired loans, mainly in a few accounts. Higher provisions on performing loans, driven by unfavourable changes in macroeconomic factors compared to the prior year, also contributed to the increase.

**Gross impaired loans**

	As at		
	July 31 2019	April 30 2019	July 31 2018
(Millions of Canadian dollars, except percentage amounts)			
Personal & Commercial Banking	\$ 1,704	\$ 1,786	\$ 1,632
Wealth Management	258	243	194
Capital Markets	1,028	1,013	495
Corporate Support and other	–	–	–
<b>Total GIL</b>	<b>\$ 2,990</b>	<b>\$ 3,042</b>	<b>\$ 2,321</b>
Canada (1)			
Retail	\$ 727	\$ 763	\$ 710
Wholesale	664	630	383
<b>GIL</b>	<b>1,391</b>	<b>1,393</b>	<b>1,093</b>
U.S. (1)			
Retail	\$ 31	\$ 31	\$ 32
Wholesale	929	969	354
<b>GIL</b>	<b>960</b>	<b>1,000</b>	<b>386</b>
Other International (1)			
Retail	\$ 302	\$ 324	\$ 336
Wholesale	337	325	506
<b>GIL</b>	<b>639</b>	<b>649</b>	<b>842</b>
<b>Total GIL</b>	<b>\$ 2,990</b>	<b>\$ 3,042</b>	<b>\$ 2,321</b>
Impaired loans, beginning balance	\$ 3,042	\$ 2,782	\$ 2,655
Classified as impaired during the period (new impaired) (2)	686	1,162	387
Net repayments (2)	(223)	(129)	(249)
Amounts written off	(437)	(501)	(395)
Other (2), (3)	(78)	(272)	(77)
Impaired loans, balance at end of period	\$ 2,990	\$ 3,042	\$ 2,321
<b>GIL as a % of related loans and acceptances</b>			
Total GIL as a % of related loans and acceptances	<b>0.47%</b>	0.49%	0.40%
Personal & Commercial Banking	<b>0.37%</b>	0.40%	0.38%
Canadian Banking	<b>0.28%</b>	0.29%	0.26%
Caribbean Banking	<b>5.72%</b>	6.23%	6.63%
Wealth Management	<b>0.39%</b>	0.38%	0.34%
Capital Markets	<b>1.02%</b>	0.99%	0.57%

(1) Geographic information is based on residence of borrower.

(2) Certain GIL movements for Canadian Banking retail and wholesale portfolios are generally allocated to new impaired, as return to performing status, Net repayments, sold, and exchange and other movements amounts are not reasonably determinable. Certain GIL movements for Caribbean Banking retail and wholesale portfolios are generally allocated to Net repayments and new impaired, as return to performing status, sold, and foreign exchange translation and other movements amounts are not reasonably determinable.

(3) Includes return to performing status during the period, recoveries of loans and advances previously written off, sold, and foreign exchange translation and other movements.

**Q3 2019 vs. Q3 2018**

Total GIL of \$2,990 million increased \$669 million or 29% from the prior year, and the total GIL ratio of 47 bps increased 7 bps, mainly reflecting higher impaired loans in Capital Markets.

GIL in Personal & Commercial Banking increased \$72 million or 4%, primarily due to higher impaired loans in our commercial portfolios in Canadian Banking, partially offset by lower impaired loans in our Caribbean Banking portfolios.

GIL in Wealth Management increased \$64 million or 33%, primarily reflecting higher impaired loans in U.S. Wealth Management (including City National), mainly due to a few accounts.

GIL in Capital Markets increased \$533 million or 108%, mainly due to a few accounts in a couple of sectors.

**Q3 2019 vs. Q2 2019**

Total GIL decreased \$52 million or 2% from the prior quarter, and the total GIL ratio of 47 bps improved 2 bps, mainly reflecting lower impaired loans in Personal & Commercial Banking.

GIL in Personal & Commercial Banking decreased \$82 million or 5%, mainly due to repayments in Caribbean Banking and write-offs in Canadian Banking.

GIL in Wealth Management increased \$15 million or 6%, primarily reflecting higher impaired loans in U.S. Wealth Management (including City National), mainly due to a few accounts, partially offset by repayments.

GIL in Capital Markets increased \$15 million or 1%, as new impaired loans were partially offset by repayments.

**Allowance for credit losses (ACL)**

(Millions of Canadian dollars)	As at		
	July 31 2019	April 30 2019	July 31 2018
Personal & Commercial Banking	\$ 2,671	\$ 2,692	\$ 2,523
Wealth Management	243	218	196
Capital Markets	405	378	335
Corporate Support and other	2	2	3
<b>ACL on loans</b>	<b>\$ 3,321</b>	<b>\$ 3,290</b>	<b>\$ 3,057</b>
<b>ACL on other financial assets</b>	<b>51</b>	<b>56</b>	<b>113</b>
<b>Total ACL</b>	<b>\$ 3,372</b>	<b>\$ 3,346</b>	<b>\$ 3,170</b>
ACL on loans is comprised of:			
Retail	\$ 1,839	\$ 1,818	\$ 1,724
Wholesale	678	677	614
<b>ACL on performing loans</b>	<b>\$ 2,517</b>	<b>\$ 2,495</b>	<b>\$ 2,338</b>
<b>ACL on impaired loans</b>	<b>804</b>	<b>795</b>	<b>719</b>

**Additional information by geography (1)**

Canada			
Retail	\$ 174	\$ 169	\$ 161
Wholesale	163	192	104
ACL on impaired loans	\$ 337	\$ 361	\$ 265
U.S.			
Retail	\$ 2	\$ –	\$ 1
Wholesale	137	141	126
ACL on impaired loans	\$ 139	\$ 141	\$ 127
Other International			
Retail	\$ 168	\$ 169	\$ 171
Wholesale	160	124	156
ACL on impaired loans	\$ 328	\$ 293	\$ 327
<b>ACL on impaired loans</b>	<b>\$ 804</b>	<b>\$ 795</b>	<b>\$ 719</b>

(1) Geographic information is based on residence of borrower.

**Q3 2019 vs. Q3 2018**

Total ACL of \$3,372 million increased \$202 million or 6% from the prior year, reflecting an increase of \$264 million in ACL on loans and a decrease of \$62 million in ACL on other financial assets.

ACL on performing loans of \$2,517 million increased \$179 million from the prior year, reflecting higher ACL in Personal & Commercial Banking, Capital Markets and Wealth Management, mainly driven by volume growth and unfavourable changes in macroeconomic factors compared to the prior year.

ACL on impaired loans of \$804 million increased \$85 million from the prior year, mainly due to higher ACL in Personal & Commercial Banking and Capital Markets.

ACL on other financial assets decreased \$62 million, mainly due to the restructuring of Barbados securities in Personal & Commercial Banking, in the fourth quarter of the prior year.

**Q3 2019 vs. Q2 2019**

Total ACL of \$3,372 million increased \$26 million or 1% from the prior quarter, largely due to higher ACL on performing loans.

For further details, refer to Note 5 of our Condensed Financial Statements.

**Market risk**

Market risk is defined to be the impact of market prices upon our financial condition. This includes potential gains or losses due to changes in market determined variables such as interest rates, credit spreads, equity prices, commodity prices, foreign exchange rates and implied volatilities. There have been no material changes to our Market Risk Framework from the framework described in our 2018 Annual Report. We continue to manage the controls and governance procedures that ensure that our market risk exposure is consistent with risk appetite constraints set by the Board of Directors. These controls include limits on probabilistic measures of potential loss in trading positions, such as Value-at-Risk (VaR) and Stressed Value-at-Risk (SVaR).

Market risk controls are also in place to manage structural interest rate risk (SIRR) arising from traditional banking products. Factors contributing to SIRR include the mismatch between future asset and liability repricing dates, relative changes in asset and liability rates, and product features that could affect the expected timing of cash flows, such as options to pre-pay loans or redeem term deposits prior to contractual maturity. To monitor and control SIRR, we assess two primary financial metrics, Net Interest Income (NII) risk and Economic Value of Equity (EVE) risk, under a range of market shocks and scenarios. For further details on our approach to the management of market risk, refer to the Market risk section of our 2018

Annual Report. There has been no material change to the SIRR measurement methodology, controls, or limits from those described in our 2018 Annual Report.

## Market risk measures – FVTPL positions

### VaR and SVaR

The following table presents our Market risk VaR and Market risk SVaR figures.

(Millions of Canadian dollars)	July 31, 2019				April 30, 2019		July 31, 2018	
	As at	For the three months ended			As at	For the three months ended	As at	For the three months ended
		Average	High	Low		Average		Average
Equity	\$ 18	\$ 17	\$ 24	\$ 11	\$ 14	\$ 15	\$ 11	\$ 10
Foreign exchange	3	4	5	2	4	4	4	5
Commodities	3	1	3	1	1	1	2	2
Interest rate (1)	14	14	16	12	15	13	10	17
Credit specific (2)	4	4	5	4	5	5	4	5
Diversification (3)	(16)	(17)	n.m.	n.m.	(21)	(18)	(15)	(17)
<b>Market risk VaR</b>	<b>\$ 26</b>	<b>\$ 23</b>	<b>\$ 29</b>	<b>\$ 17</b>	<b>\$ 18</b>	<b>\$ 20</b>	<b>\$ 16</b>	<b>\$ 22</b>
<b>Market risk Stressed VaR</b>	<b>\$ 113</b>	<b>\$ 106</b>	<b>\$ 123</b>	<b>\$ 84</b>	<b>\$ 86</b>	<b>\$ 96</b>	<b>\$ 57</b>	<b>\$ 66</b>

(Millions of Canadian dollars)	July 31, 2019				July 31, 2018	
	As at	For the nine months ended			As at	For the nine months ended
		Average	High	Low		Average
Equity	\$ 18	\$ 18	\$ 30	\$ 11	\$ 14	
Foreign exchange	3	5	13	4	4	
Commodities	3	2	4	2	2	
Interest rate (1)	14	14	19	10	18	
Credit specific (2)	4	5	6	4	5	
Diversification (3)	(16)	(18)	n.m.	(15)	(18)	
<b>Market risk VaR</b>	<b>\$ 26</b>	<b>\$ 26</b>	<b>\$ 45</b>	<b>\$ 15</b>	<b>\$ 25</b>	
<b>Market risk Stressed VaR</b>	<b>\$ 113</b>	<b>\$ 109</b>	<b>\$ 161</b>	<b>\$ 79</b>	<b>\$ 81</b>	

(1) General credit spread risk and funding spread risk associated with uncollateralized derivatives are included under interest rate VaR.

(2) Credit specific risk captures issuer-specific credit spread volatility.

(3) Market risk VaR is less than the sum of the individual risk factor VaR results due to portfolio diversification.

n.m. not meaningful

### Q3 2019 vs. Q3 2018

Average market risk VaR of \$23 million remained relatively stable as the effects of increased equity derivatives exposure in Q3 2019 were balanced out by lower average inventory levels in fixed income and other portfolios.

Average SVaR of \$106 million increased \$40 million from the prior year, largely due to growth in certain fixed income portfolios as well as increased equity derivatives exposure noted above.

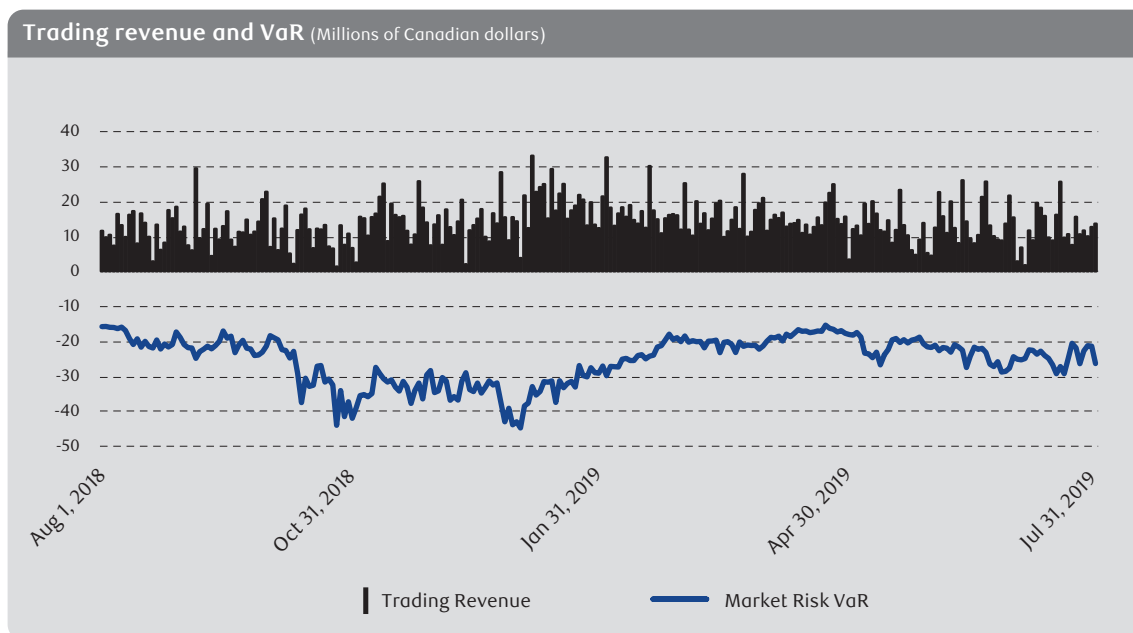
### Q3 2019 vs. Q2 2019

Average market risk VaR of \$23 million increased \$3 million and average SVaR of \$106 million increased \$10 million, mainly due to increased equity derivatives exposure and growth in certain fixed income portfolios.

### Q3 2019 vs. Q3 2018 (Nine months ended)

Average market risk VaR of \$26 million remained stable and average SVaR of \$109 million increased \$28 million from the prior year, both mainly reflecting the factors noted above.

The following chart displays a bar graph of our daily trading profit and loss and a line graph of our daily market risk VaR. We incurred no net trading losses in the three months ended July 31, 2019 and April 30, 2019.



#### Market risk measures for other FVTPL positions – Assets and liabilities of RBC Insurance

We offer a range of insurance products to clients and hold investments to meet the future obligations to policyholders. The investments which support actuarial liabilities are predominantly fixed income assets designated as FVTPL. Consequently, changes in the fair values of these assets are recorded in investment income within Total revenue in the Consolidated Statements of Income and are largely offset by changes in the fair value of the actuarial liabilities, the impact of which is reflected in Insurance policyholder benefits, claims and acquisition expense. As at July 31, 2019, we had liabilities with respect to insurance obligations of \$11.4 billion, up from \$11.0 billion in the prior quarter, and assets of \$9.8 billion in support of the liabilities, up from \$9.3 billion last quarter.

#### Market risk measures – Structural Interest Rate Sensitivities

The following table shows the potential before-tax impact of an immediate and sustained 100 bps increase or decrease in interest rates on projected 12-month NII and EVE for our structural balance sheet, assuming no subsequent hedging. Rate floors are applied within the declining rates scenarios, with floor levels set based on rate changes experienced globally. Interest rate risk measures are based upon interest rate exposures at a specific time and continuously change as a result of business activities and management actions.

(Millions of Canadian dollars)	July 31 2019						April 30 2019	July 31 2018		
	EVE risk			NII risk (1)			EVE risk	NII risk (1)	EVE risk	NII risk (1)
	Canadian dollar impact	U.S. dollar impact (2)	Total	Canadian dollar impact	U.S. dollar impact (2)	Total				
<b>Before-tax impact of:</b>										
100bps increase in rates	\$ (1,276)	\$ (9)	\$ (1,285)	\$ 268	\$ 119	\$ 387	\$ (1,112)	\$ 469	\$ (997)	\$ 580
100bps decrease in rates	1,132	(526)	606	(392)	(156)	(548)	505	(612)	583	(667)

(1) Represents the 12-month NII exposure to an instantaneous and sustained shift in interest rates.

(2) Represents the impact on the SIRR portfolios held in our City National and U.S. banking operations.

As at July 31, 2019, an immediate and sustained -100 bps shock would have had a negative impact to our NII of \$548 million, down from \$612 million last quarter. An immediate and sustained +100 bps shock at the end of July 31, 2019 would have had a negative impact to the Bank's EVE of \$1,285 million, up from \$1,112 million reported last quarter. The quarter-over-quarter changes in NII and EVE sensitivities are largely attributed to net growth in fixed rate assets. During the third quarter of 2019, NII and EVE risks remained well within approved limits.

#### Market risk measures for other material non-trading portfolios

##### Investment securities carried at FVOCI

We held \$54.2 billion of investment securities carried at FVOCI as at July 31, 2019 compared to \$54.9 billion in the prior quarter. We hold debt securities carried at FVOCI primarily as investments, as well as to manage liquidity risk and hedge interest rate risk in our non-trading banking balance sheet. Our portfolio of investment securities carried at FVOCI is interest rate sensitive and would impact OCI by a pre-tax change in value of \$6 million as at July 31, 2019 as measured by the change in the value of the securities for a one basis point parallel increase in yields. The portfolio also exposes us to credit spread risk of a pre-tax change in value of \$19 million, as measured by the change in value for a one basis point widening of credit spreads. The value

of the investment securities carried at FVOCI included in our SIRR measure as at July 31, 2019 was \$8.6 billion, up from \$7.9 billion in the prior quarter. Our investment securities carried at FVOCI also include equity exposures of \$0.4 billion as at July 31, 2019 compared to \$0.5 billion last quarter.

### **Derivatives related to non-trading activity**

Derivatives are also used to hedge market risk exposures unrelated to our trading activity. In aggregate, derivative assets not related to trading activity of \$2.3 billion as at July 31, 2019 were down from \$2.4 billion last quarter, and derivative liabilities of \$2.3 billion as at July 31, 2019 were up from \$2.2 billion last quarter.

#### *Non-trading derivatives in hedge accounting relationships*

The derivative assets and liabilities described above include derivative assets in a designated hedge accounting relationship of \$1.3 billion as at July 31, 2019, up from \$0.9 billion as at April 30, 2019, and derivative liabilities of \$1.8 billion as at July 31, 2019, unchanged from \$1.8 billion last quarter. These derivative assets and liabilities are included in our SIRR measure and other internal non-trading market risk measures. We use interest rate swaps to manage our investment securities and SIRR. To the extent these swaps are considered effective, changes in their fair value are recognized in Other comprehensive income. The interest rate risk for the swaps designated as cash flow hedges, measured as the change in the fair value of the derivatives for a one basis point parallel increase in yields, was \$10 million as of July 31, 2019, up from \$7 million as of April 30, 2019.

Interest rate swaps are also used to hedge changes in the fair value of certain fixed-rate instruments. Changes in fair value of the hedged instruments that are related to interest rate movements and the corresponding interest rate swaps are reflected in the Consolidated Statements of Income.

We also use foreign exchange derivatives to manage our exposure to equity investments in subsidiaries that are denominated in foreign currencies, particularly the U.S. dollar, British pound, and Euro. Changes in the fair value of these hedges and the cumulative translation adjustment related to our structural foreign exchange risk are reported in Other comprehensive income.

#### *Other non-trading derivatives*

The derivative assets and liabilities related to non-trading activity also include interest rate swaps and foreign exchange derivatives that are not in designated hedge accounting relationships, which are used to manage other non-trading exposures. Changes in the fair value of these derivatives are reflected in the Consolidated Statements of Income. Derivative assets of \$1.0 billion as at July 31, 2019 were down from \$1.5 billion as at April 30, 2019, and derivative liabilities of \$0.5 billion as at July 31, 2019 were up from \$0.4 billion last quarter.

### **Non-trading foreign exchange rate risk**

Foreign exchange rate risk is the potential adverse impact on earnings and economic value due to changes in foreign currency rates. Our revenue, expenses and income denominated in currencies other than the Canadian dollar are subject to fluctuations as a result of changes in the average value of the Canadian dollar relative to the average value of those currencies. Our most significant exposure is to the U.S. dollar, due to our operations in the U.S. and other activities conducted in U.S. dollars. Other significant exposures are to the British pound and the Euro, due to our activities conducted internationally in these currencies. A strengthening or weakening of the Canadian dollar compared to the U.S. dollar, British pound and the Euro could reduce or increase, as applicable, the translated value of our foreign currency denominated revenue, expenses and income and could have a significant effect on the results of our operations. We are also exposed to foreign exchange rate risk arising from our investments in foreign operations. For unhedged equity investments, when the Canadian dollar appreciates against other currencies, the unrealized translation losses on net foreign investments decreases our shareholders' equity through the other components of equity and decreases the translated value of the Risk-weighted Assets (RWA) of the foreign currency-denominated asset. The reverse is true when the Canadian dollar depreciates against other currencies. Consequently, we consider these impacts in selecting an appropriate level of our investments in foreign operations to be hedged.

### Linkage of market risk to selected balance sheet items

The following tables provide the linkages between selected balance sheet items with positions included in our trading market risk and non-trading market risk disclosures, which illustrates how we manage market risk for our assets and liabilities through different risk measures:

(Millions of Canadian dollars)	As at July 31, 2019			
	Balance sheet amount	Market risk measure		Non-traded risk primary risk sensitivity
		Traded risk (1)	Non-traded risk (2)	
<b>Assets subject to market risk</b>				
Cash and due from banks	\$ 26,863	\$ –	\$ 26,863	Interest rate
Interest-bearing deposits with banks	31,553	17,404	14,149	Interest rate
Securities				
Trading	140,421	130,575	9,846	Interest rate, credit spread
Investment, net of applicable allowance	100,240	–	100,240	Interest rate, credit spread, equity
Assets purchased under reverse repurchase agreements and securities borrowed	309,640	250,275	59,365	Interest rate
Loans				
Retail	416,583	9,389	407,194	Interest rate
Wholesale	198,941	11,319	187,622	Interest rate
Allowance for loan losses	(3,131)	–	(3,131)	Interest rate
Segregated fund net assets	1,602	–	1,602	Interest rate
Other				
Derivatives	98,774	96,454	2,320	Interest rate, foreign exchange
Other assets	79,708	4,238	75,470	Interest rate
<b>Assets not subject to market risk (3)</b>	<b>5,699</b>			
<b>Total assets</b>	<b>\$ 1,406,893</b>	<b>\$ 519,654</b>	<b>\$ 881,540</b>	
<b>Liabilities subject to market risk</b>				
Deposits	\$ 881,211	\$ 102,681	\$ 778,530	Interest rate
Segregated fund liabilities	1,602	–	1,602	Interest rate
Other				
Obligations related to securities sold short	33,602	33,602	–	
Obligations related to assets sold under repurchase agreements and securities loaned	220,027	213,818	6,209	Interest rate
Derivatives	96,857	94,590	2,267	Interest rate, foreign exchange
Other liabilities	74,661	8,664	65,997	Interest rate
Subordinated debentures	9,818	–	9,818	Interest rate
<b>Liabilities not subject to market risk (4)</b>	<b>6,737</b>			
<b>Total liabilities</b>	<b>\$ 1,324,515</b>	<b>\$ 453,355</b>	<b>\$ 864,423</b>	
<b>Total equity</b>	<b>\$ 82,378</b>			
<b>Total liabilities and equity</b>	<b>\$ 1,406,893</b>			

(1) Traded risk includes positions that are classified or designated as FVTPL and positions whose revaluation gains and losses are reported in revenue. Market risk measures of VaR and SVaR and stress testing are used as risk controls for traded risk.

(2) Non-traded risk includes positions used in the management of the SIRR and other non-trading portfolios. Other material non-trading portfolios include positions from RBC Insurance and investment securities, net of applicable allowance, not included in SIRR.

(3) Assets not subject to market risk include \$5,699 million of physical and other assets.

(4) Liabilities not subject to market risk include \$6,737 million of payroll related and other liabilities.

(Millions of Canadian dollars)	As at April 30, 2019				Non-traded risk primary risk sensitivity
	Balance sheet amount	Market risk measure			
		Traded risk (1)	Non-traded risk (2)		
<b>Assets subject to market risk</b>					
Cash and due from banks	\$ 33,041	\$ –	\$ 33,041		Interest rate
Interest-bearing deposits with banks	26,718	12,865	13,853		Interest rate
Securities					
Trading	138,916	129,593	9,323		Interest rate, credit spread
Investment, net of applicable allowance	102,075	–	102,075		Interest rate, credit spread, equity
Assets purchased under reverse repurchase agreements and securities borrowed	309,520	239,657	69,863		Interest rate
Loans					
Retail	407,222	7,770	399,452		Interest rate
Wholesale	198,263	9,236	189,027		Interest rate
Allowance for loan losses	(3,093)	–	(3,093)		Interest rate
Segregated fund net assets	1,561	–	1,561		Interest rate
Other					
Derivatives	84,812	82,402	2,410		Interest rate, foreign exchange
Other assets	73,905	2,892	71,013		Interest rate
<b>Assets not subject to market risk (3)</b>	<b>5,936</b>				
<b>Total assets</b>	<b>\$ 1,378,876</b>	<b>\$ 484,415</b>	<b>\$ 888,525</b>		
<b>Liabilities subject to market risk</b>					
Deposits	\$ 864,101	\$ 93,813	\$ 770,288		Interest rate
Segregated fund liabilities	1,561	–	1,561		Interest rate
Other					
Obligations related to securities sold short	34,049	34,049	–		
Obligations related to assets sold under repurchase agreements and securities loaned	223,980	218,288	5,692		Interest rate
Derivatives	82,168	79,957	2,211		Interest rate, foreign exchange
Other liabilities	76,895	8,814	68,081		Interest rate
Subordinated debentures	9,360	–	9,360		Interest rate
<b>Liabilities not subject to market risk (4)</b>	<b>4,816</b>				
<b>Total liabilities</b>	<b>\$ 1,296,930</b>	<b>\$ 434,921</b>	<b>\$ 857,193</b>		
<b>Total equity</b>	<b>\$ 81,946</b>				
<b>Total liabilities and equity</b>	<b>\$ 1,378,876</b>				

(1) Traded risk includes positions that are classified or designated as FVTPL and positions whose revaluation gains and losses are reported in revenue. Market risk measures of VaR and SVaR and stress testing are used as risk controls for traded risk.

(2) Non-traded risk includes positions used in the management of the SIRR and other non-trading portfolios. Other material non-trading portfolios include positions from RBC Insurance and investment securities, net of applicable allowance, not included in SIRR.

(3) Assets not subject to market risk include \$5,936 million of physical and other assets.

(4) Liabilities not subject to market risk include \$4,816 million of payroll related and other liabilities.

## Liquidity and funding risk

Liquidity and funding risk (liquidity risk) is the risk that we may be unable to generate sufficient cash or its equivalents in a timely and cost-effective manner to meet our commitments as they come due. Liquidity risk arises from mismatches in the timing and value of on-balance sheet and off-balance sheet cash flows.

Our Liquidity Risk Management Framework (LRMF) is designed to ensure that we have sufficient liquidity to satisfy current and prospective commitments in both normal and stressed conditions. There have been no material changes to our LRMF as described in our 2018 Annual Report.

We continue to maintain liquidity and funding that is appropriate for the execution of our strategy. Liquidity risk remains well within our risk appetite.

### Liquidity reserve

Our liquidity reserve consists of available unencumbered liquid assets as well as uncommitted and undrawn central bank borrowing facilities that could be accessed under extraordinary circumstances subject to satisfying certain preconditions as set by various Central Banks (e.g., BoC, the Fed, Bank of England, and Bank of France).

To varying degrees, unencumbered liquid assets represent a ready source of funding. Unencumbered assets are the difference between total and encumbered assets from both on- and off-balance sheet sources. Encumbered assets, in turn, are not considered a source of liquidity in measures of liquidity risk.

Although unused wholesale funding capacity, which is regularly assessed, could be another potential source of liquidity to mitigate stressed conditions, it is excluded in the determination of the liquidity reserve.

(Millions of Canadian dollars)	As at July 31, 2019				
	Bank-owned liquid assets	Securities received as collateral from securities financing and derivative transactions	Total liquid assets	Encumbered liquid assets	Unencumbered liquid assets
Cash and due from banks	\$ 26,863	\$ –	\$ 26,863	\$ 2,846	\$ 24,017
Interest-bearing deposits with banks	31,553	–	31,553	330	31,223
Securities issued or guaranteed by sovereigns, central banks or multilateral development banks (1)	197,020	307,372	504,392	342,783	161,609
Other securities	89,808	122,432	212,240	86,475	125,765
Undrawn credit lines granted by central banks (2)	11,380	–	11,380	–	11,380
Other assets eligible as collateral for discount (3)	106,819	–	106,819	–	106,819
Other liquid assets (4)	23,190	–	23,190	22,746	444
<b>Total liquid assets</b>	<b>\$486,633</b>	<b>\$429,804</b>	<b>\$916,437</b>	<b>\$455,180</b>	<b>\$461,257</b>

(Millions of Canadian dollars)	As at April 30, 2019				
	Bank-owned liquid assets	Securities received as collateral from securities financing and derivative transactions	Total liquid assets	Encumbered liquid assets	Unencumbered liquid assets
Cash and due from banks	\$ 33,041	\$ –	\$ 33,041	\$ 2,758	\$ 30,283
Interest-bearing deposits with banks	26,718	–	26,718	335	26,383
Securities issued or guaranteed by sovereigns, central banks or multilateral development banks (1)	193,628	291,472	485,100	329,956	155,144
Other securities	89,309	129,715	219,024	97,427	121,597
Undrawn credit lines granted by central banks (2)	11,217	–	11,217	–	11,217
Other assets eligible as collateral for discount (3)	102,507	–	102,507	–	102,507
Other liquid assets (4)	19,466	–	19,466	19,072	394
<b>Total liquid assets</b>	<b>\$ 475,886</b>	<b>\$ 421,187</b>	<b>\$ 897,073</b>	<b>\$ 449,548</b>	<b>\$ 447,525</b>

(Millions of Canadian dollars)	As at	
	July 31 2019	April 30 2019
Royal Bank of Canada	\$226,881	\$ 215,759
Foreign branches	71,360	73,112
Subsidiaries	163,016	158,654
<b>Total unencumbered liquid assets</b>	<b>\$461,257</b>	<b>\$ 447,525</b>

- (1) Includes liquid securities issued by provincial governments and U.S. government-sponsored entities working under U.S. Federal government's conservatorship (e.g., Federal National Mortgage Association and Federal Home Loan Mortgage Corporation).
- (2) Includes loans that qualify as eligible collateral for the discount window facility available to us at the Federal Reserve Bank of New York (FRBNY). Amounts are face value and would be subject to collateral margin requirements applied by the FRBNY to determine collateral value/borrowing capacity. Access to the discount window borrowing program is conditional on meeting requirements set by the FRBNY and borrowings are typically expected to be infrequent and due to uncommon occurrences requiring temporary accommodation.
- (3) Represents our unencumbered Canadian dollar non-mortgage loan book (at face value) that could, subject to satisfying conditions precedent to borrowing and application of prescribed collateral margin requirements, be pledged to the BoC for advances under its Emergency Lending Assistance (ELA) program. ELA is not considered a source of available liquidity in our normal liquidity risk profile but could in extraordinary circumstances, where normal market liquidity is seriously impaired, allow us and other banks to monetize assets eligible as collateral to meet requirements and mitigate further market liquidity disruption. The balance also includes our unencumbered mortgage loans that qualify as eligible collateral at Federal Home Loan Bank (FHLB).
- (4) Encumbered liquid assets amount represents cash collateral and margin deposit amounts pledged related to over-the-counter (OTC) and exchange-traded derivative transactions.

The liquidity reserve is typically most affected by routine flows of client banking activity where liquid asset portfolios adjust to the change in cash balances, and additionally from capital markets activities where business strategies and client flows may also affect the addition or subtraction of liquid assets in the overall calculation of the liquidity reserve. Corporate Treasury also affects liquidity reserves through the management of funding issuances where reserves absorb timing mismatches between debt issuances and deployment into business activities.

### Q3 2019 vs. Q2 2019

Total liquid assets increased \$19 billion or 2%, primarily due to an increase in securities received as collateral under collateral swap and reverse repo transactions. Other assets eligible as collateral for discount resulting from higher balances of residential mortgages eligible to pledge to the FHLB and cash collateral received as margin also contributed to the increase. However, the increase in collateral received was offset by a corresponding increase in collateral pledged under encumbered liquid assets due to collateral swap transactions.

## Asset encumbrance

The table below provides a summary of cash, securities and other assets, distinguishing between those that are encumbered or available for sale or use as collateral in secured funding transactions. Other assets, such as mortgages and credit card receivables, can also be monetized, albeit over longer timeframes than those required for marketable securities. As at July 31, 2019, our Unencumbered assets available as collateral comprised 28% of total assets (April 30, 2019 – 28%).

### Asset encumbrance

(Millions of Canadian dollars)	As at									
	July 31 2019					April 30 2019				
	Encumbered		Unencumbered			Encumbered		Unencumbered		
	Pledged as collateral	Other (1)	Available as collateral (2)	Other (3)	Total	Pledged as collateral	Other (1)	Available as collateral (2)	Other (3)	Total
Cash and due from banks	\$ –	\$ 2,846	\$ 24,017	\$ –	\$ 26,863	\$ –	\$ 2,758	\$ 30,283	\$ –	\$ 33,041
Interest-bearing deposits with banks	–	330	31,223	–	31,553	–	335	26,383	–	26,718
Securities										
Trading	38,675	–	99,037	2,709	140,421	42,029	–	94,404	2,483	138,916
Investment, net of applicable allowance	14,503	–	85,670	67	100,240	15,169	–	86,843	63	102,075
Assets purchased under reverse repurchase agreements and securities borrowed (4)	389,699	22,707	46,293	5,340	464,039	390,172	22,357	42,917	7,334	462,780
Loans										
Retail										
Mortgage securities	30,898	–	37,339	–	68,237	30,512	–	37,203	–	67,715
Mortgage loans	42,155	–	20,552	168,031	230,738	41,021	–	17,284	164,116	222,421
Non-mortgage loans	7,245	–	63,275	47,088	117,608	7,351	–	62,032	47,703	117,086
Wholesale	–	–	35,338	163,603	198,941	–	–	34,994	163,269	198,263
Allowance for loan losses	–	–	–	(3,131)	(3,131)	–	–	–	(3,093)	(3,093)
Segregated fund net assets	–	–	–	1,602	1,602	–	–	–	1,561	1,561
Other										
Derivatives	–	–	–	98,774	98,774	–	–	–	84,812	84,812
Other (5)	22,746	–	444	62,217	85,407	19,072	–	394	60,375	79,841
<b>Total assets</b>	<b>\$ 545,921</b>	<b>\$ 25,883</b>	<b>\$ 443,188</b>	<b>\$ 546,300</b>	<b>\$ 1,561,292</b>	<b>\$ 545,326</b>	<b>\$ 25,450</b>	<b>\$ 432,737</b>	<b>\$ 528,623</b>	<b>\$ 1,532,136</b>

(1) Includes assets restricted from use to generate secured funding due to legal or other constraints.

(2) Includes loans that could be used to collateralize central bank advances. Our unencumbered Canadian dollar non-mortgage loan book (at face value) could, subject to satisfying conditions for borrowing and application of prescribed collateral margin requirements, be pledged to the BoC for advances under its ELA program. It also includes our unencumbered mortgage loans that qualify as eligible collateral at FHLB. We also lodge loans that qualify as eligible collateral for the discount window facility available to us at the FRBNY. ELA and other central bank facilities are not considered sources of available liquidity in our normal liquidity risk profile. However, banks could monetize assets meeting collateral criteria during periods of extraordinary and severe disruption to market-wide liquidity.

(3) Other unencumbered assets are not subject to any restrictions on their use to secure funding or as collateral but would not be considered readily available since they may not be acceptable at central banks or for other lending programs.

(4) Includes bank-owned liquid assets and securities received as collateral from off-balance sheet securities financing, derivative transactions, and margin lending. Includes \$22.7 billion (April 30, 2019 – \$22.4 billion) of collateral received through reverse repurchase transactions that cannot be rehypothecated in its current legal form.

(5) The Pledged as collateral amount represents cash collateral and margin deposit amounts pledged related to OTC and exchange-traded derivative transactions.

## Funding

### Funding strategy

Core funding, comprising capital, longer-term wholesale liabilities and a diversified pool of personal and, to a lesser extent, commercial and institutional deposits, is the foundation of our structural liquidity position.

### Deposit and funding profile

As at July 31, 2019, relationship-based deposits, which are the primary source of funding for retail loans and mortgages, were \$578 billion or 51% of our total funding (April 30, 2019 – \$571 billion or 51%). The remaining portion is comprised of short- and long-term wholesale funding.

Funding for highly liquid assets consists primarily of short-term wholesale funding that reflects the monetization period of those assets. Long-term wholesale funding is used mostly to fund less liquid wholesale assets and to support liquidity asset buffers.

On April 18, 2018, the Department of Finance published bail-in regulations under the Canada Deposit Insurance Corporation (CDIC) Act and the Bank Act, which became effective September 23, 2018. Senior long-term debt issued by the bank on or after September 23, 2018, that has an original term greater than 400 days and is marketable, subject to certain exceptions, is subject to the Canadian Bank Recapitalization (Bail-in) regime. Under the Bail-in regime, in circumstances when the Superintendent of Financial Institutions has determined that a bank may no longer be viable, the Governor in Council may, upon a recommendation of the Minister of Finance that he or she is 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, the notional value of issued and outstanding long-term debt subject to conversion under the Bail-in regime was \$14,869 million (April 30, 2019 – \$8,533 million).

For further details on our wholesale funding, refer to the Composition of wholesale funding tables below.

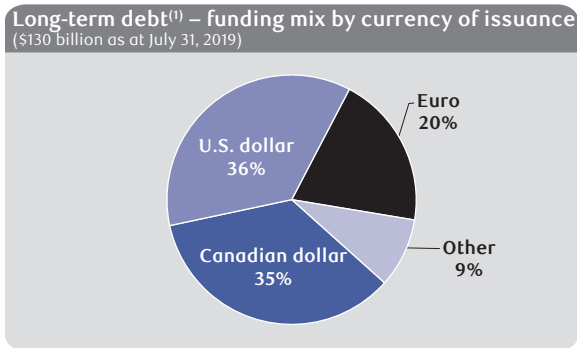
### Long-term debt issuance

Our wholesale funding activities are well-diversified by geography, investor segment, instrument, currency, structure and maturity. We maintain an ongoing presence in different funding markets, which allows us to continuously monitor market developments and trends, identify opportunities and risks, and take appropriate and timely actions. We operate longer-term debt issuance registered programs. The following table summarizes these programs with their authorized limits by geography.

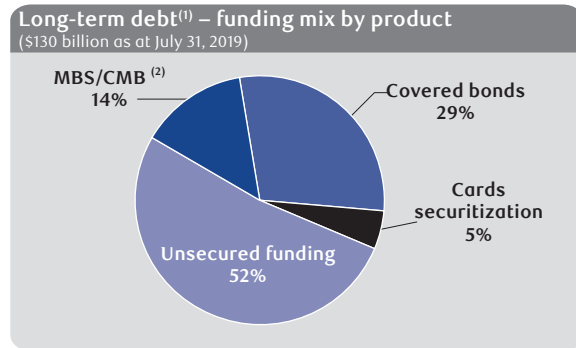
Programs by geography

Canada	U.S.	Europe/Asia
<ul style="list-style-type: none"> <li>Canadian Shelf Program – \$25 billion</li> </ul>	<ul style="list-style-type: none"> <li>U.S. Shelf Program – US\$40 billion</li> </ul>	<ul style="list-style-type: none"> <li>European Debt Issuance Program – US\$40 billion</li> <li>Global Covered Bond Program – €32 billion</li> <li>Japanese Issuance Programs – ¥1 trillion</li> </ul>

We also raise long-term funding using Canadian Deposit Notes, Canadian National Housing Act MBS, Canada Mortgage Bonds, credit card receivable-backed securities, Kangaroo Bonds (issued in the Australian domestic market by foreign firms) and Yankee Certificates of Deposit (issued in the U.S. domestic market by foreign firms). We continuously evaluate opportunities to expand into new markets and untapped investor segments since diversification expands our wholesale funding flexibility, minimizes funding concentration and dependency, and generally reduces financing costs. As presented in the following charts, our current long-term debt profile is well-diversified by both currency and product. Maintaining competitive credit ratings is also critical to cost-effective funding.



(1) Based on original term to maturity greater than 1 year



(1) Based on original term to maturity greater than 1 year

(2) Mortgage-backed securities and Canada Mortgage Bonds

The following table provides our composition of wholesale funding based on remaining term to maturity:

### Composition of wholesale funding <sup>(1)</sup>

(Millions of Canadian dollars)	As at July 31, 2019							
	Less than 1 month	1 to 3 months	3 to 6 months	6 to 12 months	Less than 1 year sub-total	1 year to 2 years	2 years and greater	Total
Deposits from banks <sup>(2)</sup>	\$ 6,922	\$ –	\$ –	\$ 389	\$ 7,311	\$ –	\$ –	\$ 7,311
Certificates of deposit and commercial paper	5,331	11,726	12,298	25,743	55,098	2,177	–	57,275
Asset-backed commercial paper <sup>(3)</sup>	2,671	3,956	4,808	4,395	15,830	–	–	15,830
Senior unsecured medium-term notes <sup>(4)</sup>	1,520	1,227	2,260	14,057	19,064	25,369	26,510	70,943
Senior unsecured structured notes <sup>(5)</sup>	81	297	1,578	543	2,499	2,345	4,400	9,244
Mortgage securitization	–	588	524	2,167	3,279	3,462	10,936	17,677
Covered bonds/asset-backed securities <sup>(6)</sup>	–	3,912	–	6,293	10,205	13,361	21,967	45,533
Subordinated liabilities	99	–	2,000	971	3,070	1,500	5,269	9,839
Other <sup>(7)</sup>	9,276	1,390	695	1,269	12,630	146	9,919	22,695
<b>Total</b>	<b>\$ 25,900</b>	<b>\$ 23,096</b>	<b>\$ 24,163</b>	<b>\$ 55,827</b>	<b>\$ 128,986</b>	<b>\$ 48,360</b>	<b>\$ 79,001</b>	<b>\$ 256,347</b>
Of which:								
– Secured	\$ 11,110	\$ 9,069	\$ 5,332	\$ 12,855	\$ 38,366	\$ 16,823	\$ 32,903	\$ 88,092
– Unsecured	14,790	14,027	18,831	42,972	90,620	31,537	46,098	168,255

(Millions of Canadian dollars)	As at April 30, 2019							
	Less than 1 month	1 to 3 months	3 to 6 months	6 to 12 months	Less than 1 year sub-total	1 year to 2 years	2 years and greater	Total
Deposits from banks <sup>(2)</sup>	\$ 6,925	\$ 569	\$ 188	\$ 60	\$ 7,742	\$ –	\$ –	\$ 7,742
Certificates of deposit and commercial paper	5,906	11,110	16,878	19,719	53,613	–	134	53,747
Asset-backed commercial paper <sup>(3)</sup>	2,081	4,660	5,056	4,176	15,973	–	–	15,973
Senior unsecured medium-term notes <sup>(4)</sup>	1,375	4,043	2,865	11,113	19,396	26,363	24,165	69,924
Senior unsecured structured notes <sup>(5)</sup>	94	327	446	1,640	2,507	2,382	4,668	9,557
Mortgage securitization	–	514	587	2,317	3,418	2,119	11,928	17,465
Covered bonds/asset-backed securities <sup>(6)</sup>	–	1,503	3,991	6,353	11,847	11,773	21,402	45,022
Subordinated liabilities	–	1,000	102	2,000	3,102	2,500	3,847	9,449
Other <sup>(7)</sup>	9,796	3,310	1,221	803	15,130	156	9,968	25,254
<b>Total</b>	<b>\$ 26,177</b>	<b>\$ 27,036</b>	<b>\$ 31,334</b>	<b>\$ 48,181</b>	<b>\$ 132,728</b>	<b>\$ 45,293</b>	<b>\$ 76,112</b>	<b>\$ 254,133</b>
Of which:								
– Secured	\$ 10,777	\$ 8,353	\$ 10,706	\$ 12,846	\$ 42,682	\$ 13,892	\$ 33,331	\$ 89,905
– Unsecured	15,400	18,683	20,628	35,335	90,046	31,401	42,781	164,228

(1) Excludes bankers' acceptances and repos.

(2) Excludes deposits associated with services we provide to banks (e.g., custody, cash management).

(3) Only includes consolidated liabilities, including our collateralized commercial paper program.

(4) Includes deposit notes.

(5) Includes notes where the payout is tied to movements in foreign exchange, commodities and equities.

(6) Includes credit card and mortgage loans.

(7) Includes tender option bonds (secured) of \$7,996 million (April 30, 2019 – \$8,094 million), bearer deposit notes (unsecured) of \$3,878 million (April 30, 2019 – \$3,999 million), other long-term structured deposits (unsecured) of \$9,765 million (April 30, 2019 – \$9,811 million), and FHLB advances (secured) of \$1,056 million (April 30, 2019 – \$3,350 million).

### Credit ratings

Our ability to access unsecured funding markets and to engage in certain collateralized business activities on a cost-effective basis are primarily dependent upon maintaining competitive credit ratings. Credit ratings and outlooks provided by rating agencies reflect their views and methodologies. Ratings are subject to change, based on a number of factors including, but not limited to, our financial strength, competitive position, liquidity and other factors not completely within our control.

Other than as noted below, there have been no changes to our major credit ratings as disclosed in our 2018 Annual Report.

### Credit ratings <sup>(1)</sup>

	As at August 20, 2019			
	Short-term debt	Legacy senior long-term debt <sup>(2)</sup>	Senior long-term debt <sup>(3)</sup>	Outlook
Moody's <sup>(4)</sup>	P-1	Aa2	A2	stable
Standard & Poor's <sup>(5)</sup>	A-1+	AA-	A	stable
Fitch Ratings	F1+	AA	AA	stable
DBRS <sup>(6)</sup>	R-1 (high)	AA (high)	AA	stable

(1) Credit ratings are not recommendations to purchase, sell or hold a financial obligation inasmuch as they do not comment on market price or suitability for a particular investor. Ratings are determined by the rating agencies based on criteria established from time to time by them, and are subject to revision or withdrawal at any time by the rating organization.

(2) Includes senior long-term debt issued prior to September 23, 2018 and senior long-term debt issued on or after September 23, 2018 which is excluded from the Bail-in regime.

(3) Includes senior long-term debt issued on or after September 23, 2018 which is subject to conversion under the Bail-in regime.

(4) On August 1, 2019, Moody's affirmed our ratings with a stable outlook.

(5) On June 24, 2019, Standard & Poor's affirmed our ratings with a stable outlook.

(6) On June 18, 2019, DBRS revised our outlook to stable from positive, upgraded our legacy senior long-term debt rating to AA (high) from AA and upgraded our senior long-term debt rating to AA from AA (low).

*Additional contractual obligations for rating downgrades*

We are required to deliver collateral to certain counterparties in the event of a downgrade to our current credit rating. The following table provides the additional collateral obligations required at the reporting date in the event of a one-, two- or three-notch downgrade to our credit ratings. These additional collateral obligations are incremental requirements for each successive downgrade and do not represent the cumulative impact of multiple downgrades. The amounts reported change periodically as a result of several factors, including the transfer of trading activity to centrally cleared financial market infrastructures and exchanges, the expiration of transactions with downgrade triggers, the imposition of internal limitations on new agreements to exclude downgrade triggers, as well as normal course mark-to-market of positions with collateralized counterparties moving from a negative to a positive position. There is no outstanding senior debt issued in the market that contains rating triggers that would lead to early prepayment of principal.

**Additional contractual obligations for rating downgrades**

	As at					
	July 31 2019			April 30 2019		
	One-notch downgrade	Two-notch downgrade	Three-notch downgrade	One-notch downgrade	Two-notch downgrade	Three-notch downgrade
(Millions of Canadian dollars)						
Contractual derivatives funding or margin requirements	\$ 169	\$ 69	\$ 125	\$ 211	\$ 70	\$ 181
Other contractual funding or margin requirements (1)	180	176	–	187	179	–

(1) Includes Guaranteed Investment Certificates (GICs) issued by our municipal markets business out of New York.

**Liquidity Coverage Ratio (LCR)**

The LCR is a Basel III metric that measures the sufficiency of high-quality liquid assets (HQLA) available to meet liquidity needs over a 30-day period in an acute stress scenario. The Basel Committee on Banking Supervision (BCBS) and OSFI regulatory minimum coverage level for LCR is currently 100%.

OSFI requires Canadian banks to disclose the LCR using the standard Basel disclosure template and calculated using the average of daily LCR positions during the quarter.

## Liquidity coverage ratio common disclosure template (1)

	For the three months ended			
	July 31 2019		April 30 2019	
	Total unweighted value (average) (2)	Total weighted value (average)	Total unweighted value (average) (2)	Total weighted value (average)
(Millions of Canadian dollars, except percentage amounts)				
<b>High-quality liquid assets</b>				
Total high-quality liquid assets (HQLA)	n.a.	\$ 224,629	n.a.	\$ 224,088
<b>Cash outflows</b>				
Retail deposits and deposits from small business customers, of which:	\$ 258,989	19,680	\$ 258,262	19,749
Stable deposits (3)	88,841	2,665	86,823	2,605
Less stable deposits	170,148	17,015	171,439	17,144
Unsecured wholesale funding, of which:	302,672	142,038	294,733	137,808
Operational deposits (all counterparties) and deposits in networks of cooperative banks (4)	130,030	31,079	125,681	29,919
Non-operational deposits	148,207	86,524	142,231	81,068
Unsecured debt	24,435	24,435	26,821	26,821
Secured wholesale funding	n.a.	33,351	n.a.	35,654
Additional requirements, of which:	269,355	82,274	268,282	83,091
Outflows related to derivative exposures and other collateral requirements	66,828	44,430	63,802	44,671
Outflows related to loss of funding on debt products	6,080	6,080	6,884	6,884
Credit and liquidity facilities	196,447	31,764	197,596	31,536
Other contractual funding obligations (5)	20,370	20,370	19,547	19,547
Other contingent funding obligations (6)	431,682	7,842	431,700	7,714
<b>Total cash outflows</b>	n.a.	\$ 305,555	n.a.	\$ 303,563
<b>Cash inflows</b>				
Secured lending (e.g., reverse repos)	\$ 327,511	\$ 56,368	\$ 302,587	\$ 59,777
Inflows from fully performing exposures	14,399	9,909	13,763	9,444
Other cash inflows	55,667	55,667	57,747	57,747
<b>Total cash inflows</b>	n.a.	\$ 121,944	n.a.	\$ 126,968
		Total adjusted value		Total adjusted value
Total HQLA		\$ 224,629		\$ 224,088
Total net cash outflows		183,611		176,595
<b>Liquidity coverage ratio</b>		122%		127%

(1) The LCR is calculated in accordance with OSFI's Liquidity Adequacy Requirements (LAR) guideline, which, in turn, reflects liquidity-related requirements issued by the BCBS. The LCR for the quarter ended July 31, 2019 is calculated as an average of 64 daily positions.

(2) With the exception of other contingent funding obligations, unweighted inflow and outflow amounts are items maturing or callable in 30 days or less. Other contingent funding obligations also include debt securities with remaining maturity greater than 30 days.

(3) As defined by the BCBS, stable deposits from retail and small business customers are deposits that are insured and are either held in transactional accounts or the bank has an established relationship with the client making the withdrawal unlikely.

(4) Operational deposits from customers other than retail and small and medium-sized enterprises (SMEs), are deposits which clients need to keep with the bank in order to facilitate their access and ability to use payment and settlement systems primarily for clearing, custody and cash management activities.

(5) Other contractual funding obligations primarily include outflows from unsettled securities trades and outflows from obligations related to securities sold short.

(6) Other contingent funding obligations include outflows related to other off-balance sheet facilities that carry low LCR runoff factors (0% – 5%).

n.a. not applicable

We manage our LCR position within a target range that reflects our liquidity risk tolerance and takes into account business mix, asset composition and funding capabilities. The range is subject to periodic review in light of changes to internal requirements and external developments.

We maintain HQLAs in major currencies with dependable market depth and breadth. Our treasury management practices ensure that the levels of HQLA are actively managed to meet target LCR objectives. Our Level 1 assets, as calculated according to OSFI LAR and the BCBS LCR requirements, represent 82% of total HQLA. These assets consist of cash, placements with central banks and highly rated securities issued or guaranteed by governments, central banks and supranational entities.

LCR captures cash flows from on- and off-balance sheet activities that are either expected or could potentially occur within 30 days in an acute stress scenario. Cash outflows result from the application of withdrawal and non-renewal factors to demand and term deposits, differentiated by client type (wholesale, retail and small- and medium-sized enterprises). Cash outflows also arise from business activities that create contingent funding and collateral requirements, such as repo funding, derivatives, short sales of securities and the extension of credit and liquidity commitments to clients. Cash inflows arise primarily from maturing secured loans, interbank loans and non-HQLA securities.

LCR does not reflect any market funding capacity that we believe would be available in a stress situation. All maturing wholesale debt is assigned 100% outflow in the LCR calculation.

### Q3 2019 vs. Q2 2019

The average LCR for the quarter ended July 31, 2019 was 122%, which translates into a surplus of approximately \$41 billion, compared to 127% in the prior quarter. The decrease in the LCR surplus from the previous quarter is primarily due to a change in funding and business mix.

### Contractual maturities of financial assets, financial liabilities and off-balance sheet items

The following tables provide remaining contractual maturity profiles of all our assets, liabilities, and off-balance sheet items at their carrying value (e.g., amortized cost or fair value) at the balance sheet date. Off-balance sheet items are allocated based on the expiry date of the contract.

Details of contractual maturities and commitments to extend funds are a source of information for the management of liquidity risk. Among other purposes, these details form a basis for modelling a behavioural balance sheet with effective maturities to calculate liquidity risk measures. For further details, refer to the Risk measurement section within the Liquidity and funding risk section of our 2018 Annual Report.

(Millions of Canadian dollars)	As at July 31, 2019									
	Less than 1 month	1 to 3 months	3 to 6 months	6 to 9 months	9 to 12 months	1 year to 2 years	2 years to 5 years	5 years and greater	With no specific maturity	Total
<b>Assets</b>										
Cash and deposits with banks	\$ 56,082	\$ 1	\$ –	\$ –	\$ –	\$ –	\$ –	\$ –	\$ 2,333	\$ 58,416
Securities										
Trading (1)	89,430	28	89	23	10	80	67	8,529	42,165	140,421
Investment, net of applicable allowance	3,174	4,190	2,932	3,944	3,495	12,975	27,159	41,929	442	100,240
Assets purchased under reverse repurchase agreements and securities borrowed	186,792	65,378	29,239	12,108	7,207	558	–	–	8,358	309,640
Loans, net of applicable allowance	22,318	20,098	25,703	28,640	31,063	121,100	224,437	48,899	90,135	612,393
Other										
Customers' liability under acceptances	11,342	5,694	83	5	–	–	–	–	(23)	17,101
Derivatives	4,985	6,740	6,651	3,756	2,981	10,504	18,316	44,841	–	98,774
Other financial assets	29,239	1,537	909	166	66	163	271	1,770	2,133	36,254
<b>Total financial assets</b>	<b>\$ 403,362</b>	<b>\$ 103,666</b>	<b>\$ 65,606</b>	<b>\$ 48,642</b>	<b>\$ 44,822</b>	<b>\$ 145,380</b>	<b>\$ 270,250</b>	<b>\$ 145,968</b>	<b>\$ 145,543</b>	<b>\$ 1,373,239</b>
Other non-financial assets	2,554	1,453	847	98	298	1,151	1,483	1,713	24,057	33,654
<b>Total assets</b>	<b>\$ 405,916</b>	<b>\$ 105,119</b>	<b>\$ 66,453</b>	<b>\$ 48,740</b>	<b>\$ 45,120</b>	<b>\$ 146,531</b>	<b>\$ 271,733</b>	<b>\$ 147,681</b>	<b>\$ 169,600</b>	<b>\$ 1,406,893</b>
<b>Liabilities and equity</b>										
Deposits (2)										
Unsecured borrowing	\$ 67,401	\$ 37,914	\$ 34,575	\$ 41,881	\$ 35,613	\$ 38,605	\$ 53,012	\$ 16,655	\$ 456,752	\$ 782,408
Secured borrowing	3,348	6,223	6,180	6,916	3,530	9,364	18,752	5,588	–	59,901
Covered bonds	1	2,986	–	4,825	–	13,493	11,925	5,672	–	38,902
Other										
Acceptances	11,339	5,694	83	5	–	–	–	–	3	17,124
Obligations related to securities sold short	33,602	–	–	–	–	–	–	–	–	33,602
Obligations related to assets sold under repurchase agreements and securities loaned	181,479	26,230	4,685	290	461	–	–	–	6,882	220,027
Derivatives	4,859	7,511	6,042	3,386	3,303	10,479	17,219	44,047	11	96,857
Other financial liabilities	25,576	1,438	690	410	327	243	704	7,499	825	37,712
Subordinated debentures	100	–	–	–	–	–	317	9,401	–	9,818
<b>Total financial liabilities</b>	<b>\$ 327,705</b>	<b>\$ 87,996</b>	<b>\$ 52,255</b>	<b>\$ 57,713</b>	<b>\$ 43,234</b>	<b>\$ 72,184</b>	<b>\$ 101,929</b>	<b>\$ 88,862</b>	<b>\$ 464,473</b>	<b>\$ 1,296,351</b>
Other non-financial liabilities	1,204	915	2,245	1,830	248	779	734	11,132	9,077	28,164
Equity	–	–	–	–	–	–	–	–	82,378	82,378
<b>Total liabilities and equity</b>	<b>\$ 328,909</b>	<b>\$ 88,911</b>	<b>\$ 54,500</b>	<b>\$ 59,543</b>	<b>\$ 43,482</b>	<b>\$ 72,963</b>	<b>\$ 102,663</b>	<b>\$ 99,994</b>	<b>\$ 555,928</b>	<b>\$ 1,406,893</b>
<b>Off-balance sheet items</b>										
Financial guarantees	\$ 435	\$ 1,424	\$ 2,915	\$ 2,165	\$ 2,843	\$ 847	\$ 5,303	\$ 16	\$ 42	\$ 15,990
Lease commitments	69	136	200	198	196	715	1,578	3,004	–	6,096
Commitments to extend credit	2,039	5,334	8,321	10,773	14,196	40,406	164,082	17,501	3,750	266,402
Other credit-related commitments	487	1,098	1,436	1,624	1,874	207	598	7	93,824	101,155
Other commitments	44	–	–	–	–	–	–	–	472	516
<b>Total off-balance sheet items</b>	<b>\$ 3,074</b>	<b>\$ 7,992</b>	<b>\$ 12,872</b>	<b>\$ 14,760</b>	<b>\$ 19,109</b>	<b>\$ 42,175</b>	<b>\$ 171,561</b>	<b>\$ 20,528</b>	<b>\$ 98,088</b>	<b>\$ 390,159</b>

(1) Trading debt securities classified as FVTPL have been included in the less than 1 month category as there is no expectation to hold these assets to their contractual maturity.

(2) A major portion of relationship-based deposits are repayable on demand or at short notice on a contractual basis while, in practice, these customer balances form a core base for our operations and liquidity needs, as explained in the preceding Deposit and funding profile section.

(Millions of Canadian dollars)	As at April 30, 2019									
	Less than 1 month	1 to 3 months	3 to 6 months	6 to 9 months	9 to 12 months	1 year to 2 years	2 years to 5 years	5 years and greater	With no specific maturity	Total
<b>Assets</b>										
Cash and deposits with banks	\$ 57,442	\$ 3	\$ –	\$ –	\$ –	\$ –	\$ –	\$ –	\$ 2,314	\$ 59,759
Securities										
Trading (1)	91,020	98	–	22	13	85	64	8,010	39,604	138,916
Investment, net of applicable allowance	1,745	5,373	2,819	2,589	4,104	12,080	29,869	42,989	507	102,075
Assets purchased under reverse repurchase agreements and securities borrowed	179,752	74,419	25,129	11,132	8,921	608	–	–	9,559	309,520
Loans, net of applicable allowance	23,935	20,676	25,332	25,340	30,879	121,194	218,327	49,019	87,690	602,392
Other										
Customers' liability under acceptances	10,415	5,666	11	2	5	–	–	–	(26)	16,073
Derivatives	3,857	6,165	3,555	5,185	3,127	9,156	15,699	38,067	1	84,812
Other financial assets	25,014	1,287	611	390	75	149	264	1,814	2,226	31,830
<b>Total financial assets</b>	<b>\$ 393,180</b>	<b>\$ 113,687</b>	<b>\$ 57,457</b>	<b>\$ 44,660</b>	<b>\$ 47,124</b>	<b>\$ 143,272</b>	<b>\$ 264,223</b>	<b>\$ 139,899</b>	<b>\$ 141,875</b>	<b>\$ 1,345,377</b>
Other non-financial assets	2,080	1,352	35	1,014	333	1,503	1,482	1,468	24,232	33,499
<b>Total assets</b>	<b>\$ 395,260</b>	<b>\$ 115,039</b>	<b>\$ 57,492</b>	<b>\$ 45,674</b>	<b>\$ 47,457</b>	<b>\$ 144,775</b>	<b>\$ 265,705</b>	<b>\$ 141,367</b>	<b>\$ 166,107</b>	<b>\$ 1,378,876</b>
<b>Liabilities and equity</b>										
<b>Deposits (2)</b>										
Unsecured borrowing	\$ 56,402	\$ 40,044	\$ 43,148	\$ 33,069	\$ 37,624	\$ 37,183	\$ 50,801	\$ 16,205	\$ 451,183	\$ 765,659
Secured borrowing	2,689	6,277	7,458	4,043	5,420	6,827	21,373	6,432	–	60,519
Covered bonds	–	1,505	3,048	–	4,851	12,515	12,265	3,739	–	37,923
Other										
Acceptances	10,406	5,666	11	2	5	–	–	–	9	16,099
Obligations related to securities sold short	34,049	–	–	–	–	–	–	–	–	34,049
Obligations related to assets sold under repurchase agreements and securities loaned	191,135	21,020	3,928	74	49	501	–	–	7,273	223,980
Derivatives	3,968	5,859	3,842	4,412	2,476	9,118	15,247	37,242	4	82,168
Other financial liabilities	26,724	2,180	1,798	319	433	220	684	7,664	885	40,907
Subordinated debentures	–	–	102	–	–	–	321	8,937	–	9,360
<b>Total financial liabilities</b>	<b>\$ 325,373</b>	<b>\$ 82,551</b>	<b>\$ 63,335</b>	<b>\$ 41,919</b>	<b>\$ 50,858</b>	<b>\$ 66,364</b>	<b>\$ 100,691</b>	<b>\$ 80,219</b>	<b>\$ 459,354</b>	<b>\$ 1,270,664</b>
Other non-financial liabilities	1,117	944	81	3,304	285	713	765	10,600	8,457	26,266
Equity	–	–	–	–	–	–	–	–	81,946	81,946
<b>Total liabilities and equity</b>	<b>\$ 326,490</b>	<b>\$ 83,495</b>	<b>\$ 63,416</b>	<b>\$ 45,223</b>	<b>\$ 51,143</b>	<b>\$ 67,077</b>	<b>\$ 101,456</b>	<b>\$ 90,819</b>	<b>\$ 549,757</b>	<b>\$ 1,378,876</b>
<b>Off-balance sheet items</b>										
Financial guarantees	\$ 528	\$ 2,421	\$ 1,957	\$ 3,023	\$ 2,086	\$ 1,144	\$ 5,898	\$ 62	\$ 57	\$ 17,176
Lease commitments	69	136	200	195	192	716	1,561	3,044	–	6,113
Commitments to extend credit	2,460	5,004	7,629	9,382	14,389	37,045	165,072	18,321	2,608	261,910
Other credit-related commitments	842	1,170	1,130	1,425	1,539	357	669	121	101,324	108,577
Other commitments	98	–	–	–	–	–	–	–	482	580
<b>Total off-balance sheet items</b>	<b>\$ 3,997</b>	<b>\$ 8,731</b>	<b>\$ 10,916</b>	<b>\$ 14,025</b>	<b>\$ 18,206</b>	<b>\$ 39,262</b>	<b>\$ 173,200</b>	<b>\$ 21,548</b>	<b>\$ 104,471</b>	<b>\$ 394,356</b>

- (1) Trading debt securities classified as FVTPL have been included in the less than 1 month category as there is no expectation to hold these assets to their contractual maturity.
- (2) A major portion of relationship-based deposits are repayable on demand or at short notice on a contractual basis while, in practice, these customer balances form a core base for our operations and liquidity needs, as explained in the preceding Deposit and funding profile section.

## Capital management

We continue to manage our capital in accordance with our Capital Management Framework as described in our 2018 Annual Report. In addition, we continue to monitor and prepare for new regulatory capital developments, including the BCBS Basel III reforms, in order to ensure timely and accurate compliance with these requirements. For additional details on new regulatory developments that relate to our Capital Management Framework, refer to the Capital, liquidity and other regulatory developments section of our Q1 2019, Q2 2019 and of this Q3 2019 Report to Shareholders.

OSFI expects Canadian banks to meet the Basel III targets for CET1, Tier 1 and Total capital ratios. Effective January 1, 2014, OSFI allowed Canadian banks to phase in the Basel III Credit Valuation Adjustment (CVA) risk capital charge over a five-year period ending December 31, 2018. As of January 1, 2019, the CVA scalars were fully phased-in for each tier of capital, resulting in all tiers of capital having the same risk-weighted assets value. In fiscal 2018, the CVA scalars were 80%, 83% and 86% for CET1, Tier 1 and Total capital, respectively.

The Financial Stability Board (FSB) has designated us as a Global Systemically Important Bank (G-SIB). This designation requires us to maintain a higher loss absorbency requirement (common equity as a percentage of risk-weighted assets) of 1%. As the Domestic Systemically Important Bank (D-SIB) requirement is equivalent to the G-SIB requirement of 1% of RWA, the G-SIB designation had no further impact to the loss absorbency requirements on our CET1 ratio.

On April 18, 2018, OSFI released its final guideline on Total Loss Absorbing Capacity (TLAC), which applies to Canadian D-SIBs as part of the Federal Government's Bail-in regime. The guideline is consistent with the TLAC standard released on November 9, 2015 by the FSB for institutions designated as G-SIBs, but tailored to the Canadian context. The TLAC requirement is intended to address the sufficiency of a systemically important bank's loss absorbing capacity in supporting its

recapitalization in the event of its failure. TLAC is defined as the aggregate of Tier 1 capital, Tier 2 capital, and other TLAC instruments, which allow conversion in whole or in part into common shares under the CDIC Act and meet all of the eligibility criteria under the guideline.

TLAC requirements established two minimum standards, which are required to be met effective November 1, 2021: the risk-based TLAC ratio, which builds on the risk-based capital ratios described in the Capital Adequacy Requirements (CAR) guideline, and the TLAC leverage ratio, which builds on the leverage ratio described in OSFI's Leverage Requirements guideline. OSFI has provided notification requiring systemically important banks to maintain a minimum TLAC ratio of 23.5%, which includes the revised Domestic Stability Buffer (DSB) effective October 31, 2019, as noted below, and a TLAC leverage ratio of 6.75%. We began issuing bail-in eligible debt in the fourth quarter of 2018 and this has contributed to improving our TLAC ratio. We expect our TLAC ratio to improve through normal course refinancing of maturing unsecured term debt.

Effective November 1, 2018, we were required to adopt OSFI's revisions to the CAR guidelines relating to the securitization framework and the standardized approach for measuring counterparty credit risk.

The following table provides a summary of OSFI's current regulatory target ratios under Basel III and Pillar 2 requirements. We are in compliance with all current capital and leverage requirements imposed by OSFI:

Basel III capital and leverage ratios	OSFI regulatory target requirements for large banks under Basel III					RBC capital and leverage ratios as at July 31, 2019	Domestic Stability Buffer (3)	Minimum including Capital Buffers, D-SIB/G-SIB surcharge and Domestic Stability Buffer
	Minimum	Capital Buffers (1)	Minimum including Capital Buffers	D-SIB/G-SIB Surcharge (2)	Minimum including Capital Buffers and D-SIB/G-SIB surcharge (2)			
Common Equity Tier 1	> 4.5%	2.5%	> 7.0%	1.0%	> 8.0%	11.9%	1.75%	> 9.8%
Tier 1 capital	> 6.0%	2.5%	> 8.5%	1.0%	> 9.5%	13.0%	1.75%	> 11.3%
Total capital	> 8.0%	2.5%	> 10.5%	1.0%	> 11.5%	15.0%	1.75%	> 13.3%
Leverage ratio	> 3.0%	n.a.	> 3.0%	n.a.	> 3.0%	4.4%	n.a.	> 3.0%

(1) The capital buffers include the capital conservation buffer and the countercyclical capital buffer as prescribed by OSFI.

(2) A capital surcharge, equal to the higher of our D-SIB surcharge and the BCBS's G-SIB surcharge, is applicable to risk-weighted capital.

(3) In 2018, OSFI required the public disclosure of their Pillar 2 DSB. Effective April 30, 2019, OSFI raised the level for the DSB to 1.75% of RWA from 1.5%. Effective October 31, 2019, OSFI has further raised the level for the DSB to 2.0% of RWA.

n.a. not applicable

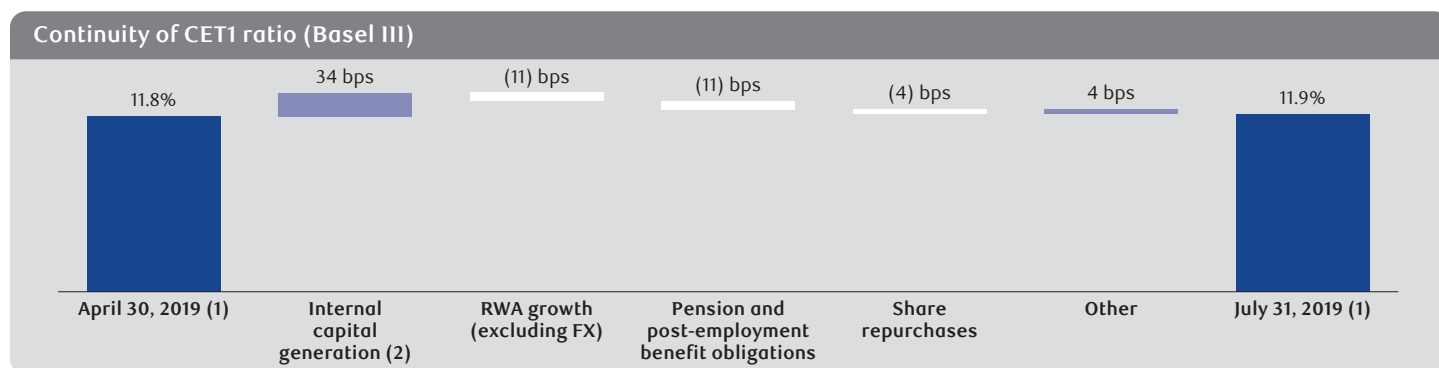
The following table provides details on our regulatory capital, RWA, and capital and leverage ratios. Our capital position remains strong and our capital and leverage ratios remain well above OSFI regulatory targets.

	As at		
	July 31 2019	April 30 2019	October 31 2018
(Millions of Canadian dollars, except percentage amounts and as otherwise noted)			
<b>Capital (1)</b>			
CET1 capital	\$ 60,938	\$ 60,314	\$ 57,001
Tier 1 capital	66,615	65,992	63,279
Total capital	76,563	75,491	72,494
<b>Risk-weighted Assets (RWA) used in calculation of capital ratios (1), (2)</b>			
CET1 capital RWA	\$ 510,664	\$ 510,463	\$ 495,528
Tier 1 capital RWA	510,664	510,463	495,993
Total capital RWA	510,664	510,463	496,459
Total capital RWA consisting of: (1)			
Credit risk	\$ 415,977	\$ 414,523	\$ 401,534
Market risk	29,425	31,453	32,209
Operational risk	65,262	64,487	62,716
<b>Total capital RWA</b>	<b>\$ 510,664</b>	<b>\$ 510,463</b>	<b>\$ 496,459</b>
<b>Capital ratios and Leverage ratio (1)</b>			
CET1 ratio	11.9%	11.8%	11.5%
Tier 1 capital ratio	13.0%	12.9%	12.8%
Total capital ratio	15.0%	14.8%	14.6%
Leverage ratio	4.4%	4.3%	4.4%
Leverage ratio exposure (billions)	\$ 1,529.4	\$ 1,521.2	\$ 1,450.8

(1) Capital, RWA, and capital ratios are calculated using OSFI's CAR guideline based on the Basel III framework. The Leverage ratio is calculated using OSFI Leverage Requirements Guideline based on the Basel III framework.

(2) In fiscal 2018, amounts included CVA scalars of 80%, 83% and 86%, respectively.

## Q3 2019 vs. Q2 2019



(1) Represents rounded figures.

(2) Internal capital generation of \$1.7 billion which represents Net income available to shareholders, less common and preferred shares dividends.

Our CET1 ratio was 11.9%, up 10 bps from last quarter, mainly reflecting internal capital generation, partially offset by higher RWA, the impact of lower discount rates in determining our pension and other post-employment benefit obligations, and share repurchases.

Our Tier 1 capital ratio of 13.0% was up 10 bps, reflecting the factors noted above under the CET1 ratio.

Our Total capital ratio of 15.0% was up 20 bps, reflecting the factors noted above under the Tier 1 ratio. Total capital ratio was also favourably impacted by the net issuance of subordinated debentures in the current quarter.

RWA increased \$0.2 billion, mainly driven by business growth in wholesale and retail lending, largely offset by lower market risk and the impact of foreign exchange translation.

Our Leverage ratio of 4.4% was up 10 bps from last quarter, mainly reflecting internal capital generation, partially offset by higher leverage exposures and the impact of lower discount rates in determining our pension and other post-employment benefit obligations. The increase in leverage exposure was primarily attributable to lending, repo-style transactions, and other assets, partially offset by lower derivatives.

### Selected capital management activity

The following table provides our selected capital management activity:

(Millions of Canadian dollars, except number of shares)	For the three months ended July 31, 2019		For the nine months ended July 31, 2019	
	Number of shares (000s)	Amount	Number of shares (000s)	Amount
<b>Tier 1 capital</b>				
Common shares activity				
Issued in connection with share-based compensation plans (1)	545	\$ 38	1,230	\$ 87
Purchased for cancellation	(1,914)	(24)	(5,705)	(70)
Issuance of preferred shares, Series BO (2) (3)	–	–	14,000	350
Redemption of preferred shares, Series AD (2)	–	–	(10,000)	(250)
Redemption of preferred shares, Series AJ (2)	–	–	(13,579)	(339)
Redemption of preferred shares, Series AK (2)	–	–	(2,421)	(61)
Redemption of preferred shares, Series AL (2)	–	–	(12,000)	(300)
<b>Tier 2 capital</b>				
Issuance of July 25, 2029 subordinated debentures (2) (3)		1,500		1,500
Redemption of July 17, 2024 subordinated debentures (2)		(1,000)		(1,000)

(1) Amounts include cash received for stock options exercised during the period and includes fair value adjustments to stock options.

(2) For further details, refer to Note 9 of our Condensed Financial Statements.

(3) Non-Viable Contingent Capital (NVCC) instruments.

On February 23, 2018, we announced a normal course issuer bid (NCIB) to purchase up to 30 million of our common shares. This NCIB was completed on February 26, 2019, with 9.7 million common shares repurchased and cancelled at a total cost of approximately \$947 million.

On February 27, 2019, we announced an NCIB program to purchase up to 20 million of our common shares, commencing on March 1, 2019 and continuing until February 29, 2020, or such earlier date as we complete the repurchase of all shares permitted under the bid. Since the inception of this NCIB, the total number of common shares repurchased and cancelled was approximately 2.0 million, at a cost of approximately \$208 million.

For the three months ended July 31, 2019, the total number of common shares repurchased and cancelled under our NCIB programs was approximately 1.9 million. The total cost of the shares repurchased was \$197 million.

For the nine months ended July 31, 2019, the total number of common shares repurchased and cancelled under our NCIB programs was approximately 5.7 million. The total cost of the shares repurchased was \$556 million.

We determine the amount and timing of the purchases under the NCIB, subject to prior consultation with OSFI. Purchases may be made through the TSX, the NYSE and other designated exchanges and alternative Canadian trading systems. The price paid for repurchased shares is at the prevailing market price at the time of acquisition.

On February 24, 2019, we redeemed all 2.4 million Non-Cumulative Floating Rate First Preferred Shares Series AK, all 13.6 million Non-Cumulative 5-Year Rate Reset First Preferred Shares Series AJ, and all 12 million Non-Cumulative 5-Year Rate Reset First Preferred Shares Series AL, at a price of \$25 per share.

On July 17, 2019, we redeemed all \$1,000 million of our outstanding NVCC 3.04% subordinated debentures due on July 17, 2024 for 100% of their principal amount plus interest accrued to, but excluding, the redemption date.

On July 25, 2019, we issued \$1,500 million of NVCC subordinated debentures. The notes bear interest at a fixed rate of 2.74% per annum until July 25, 2024, and at the three-month Canadian Dollar Offered Rate (CDOR) plus 0.98% thereafter until their maturity on July 25, 2029.

### Selected share data

(Millions of Canadian dollars, except number of shares and as otherwise noted)	As at July 31, 2019		
	Number of shares (000s)	Amount	Dividends declared per share
Common shares issued (1)	1,434,554	\$ 17,652	\$ 1.02
Treasury shares – common shares	(600)	(59)	
Common shares outstanding	1,433,954	\$ 17,593	
Stock options and awards			
Outstanding	8,364		
Exercisable	3,650		
First preferred shares issued			
Non-cumulative Series W (2)	12,000	\$ 300	\$ 0.31
Non-cumulative Series AA	12,000	300	0.28
Non-cumulative Series AC	8,000	200	0.29
Non-cumulative Series AE	10,000	250	0.28
Non-cumulative Series AF	8,000	200	0.28
Non-cumulative Series AG	10,000	250	0.28
Non-cumulative Series AZ (3), (4)	20,000	500	0.23
Non-cumulative Series BB (3), (4)	20,000	500	0.24
Non-cumulative Series BD (3), (4)	24,000	600	0.23
Non-cumulative Series BF (3), (4)	12,000	300	0.23
Non-cumulative Series BH (4)	6,000	150	0.31
Non-cumulative Series BI (4)	6,000	150	0.31
Non-cumulative Series BJ (4)	6,000	150	0.33
Non-cumulative Series BK (3), (4)	29,000	725	0.34
Non-cumulative Series BM (3), (4)	30,000	750	0.34
Non-cumulative Series BO (3), (4)	14,000	350	0.30
Non-cumulative Series C-2 (5)	20	31	US\$ 16.88
Preferred shares issued	227,020	\$ 5,706	
Treasury shares – preferred shares (6)	(36)	(1)	
Preferred shares outstanding	226,984	\$ 5,705	
Dividends			
Common		\$ 1,464	
Preferred (7)		66	

(1) For further details about our capital management activity, refer to Note 9 of our Condensed Financial Statements.

(2) Effective February 24, 2010, we have the right to convert these shares into common shares at our option, subject to certain restrictions.

(3) Dividend rate will reset every five years.

(4) NVCC instruments.

(5) Represents 815,400 depository shares relating to preferred shares Series C-2. Each depository share represents one-fortieth interest in a share of Series C-2.

(6) Positive amounts represent a short position in treasury shares.

(7) Dividends on preferred shares excludes distributions to non-controlling interests.

As at August 16, 2019, the number of outstanding common shares was 1,434,093,805 net of treasury shares held of 460,732, and the number of stock options and awards was 8,363,129.

NVCC provisions require the conversion of the capital instrument into a variable number of common shares in the event that OSFI deems a bank to be non-viable or a federal or provincial government in Canada publicly announces that a bank has accepted or agreed to accept a capital injection. If a NVCC trigger event were to occur, our NVCC capital instruments, which are the preferred shares Series AZ, BB, BD, BF, BH, BI, BJ, BK, BM, BO, and subordinated debentures due on September 29, 2026, June 4, 2025, January 20, 2026, January 27, 2026 and July 25, 2029, would be converted into RBC common shares pursuant to an automatic conversion formula with a conversion price based on the greater of: (i) a contractual floor price of \$5.00, and (ii) the current market price of our common shares at the time of the trigger event (10-day weighted average). Based on a floor price of \$5.00 and including an estimate for accrued dividends and interest, these NVCC capital instruments would convert into a maximum of 2,975 million RBC common shares, in aggregate, which would represent a dilution impact of 67.48% based on the number of RBC common shares outstanding as at July 31, 2019.

## Capital, liquidity, and other regulatory developments

### Interest rate risk management guidelines

On May 30, 2019, OSFI revised its Interest Rate Risk Management guidelines which is a framework to identify, assess and manage interest rate risk. We will be required to implement the new guidelines on January 1, 2020. We are currently assessing the impact of the guidelines and do not anticipate any issues with meeting the January 1, 2020 effective date.

### Domestic stability buffer (DSB)

In June 2019, OSFI announced that the DSB will be increased from 1.75% to 2.00% of total RWA, effective October 31, 2019. This change is to reflect OSFI's view that key vulnerabilities such as Canadian household indebtedness, asset imbalances and institutional indebtedness to D-SIBs remain elevated. We do not anticipate any challenges in meeting this requirement by the effective date.

### Basel III reforms

On July 18, 2019, OSFI revised its capital requirements for operational risk applicable to deposit taking institutions. Currently, we are required to apply the higher of the current Basel III Standardized Approach (SA) and the Advanced Measurement Approach (AMA) for measuring operational risk. Effective Q1 2020, institutions will be required to use the current SA as the use of AMA will no longer be effective. We do not expect an impact to our capital ratios resulting from this change. In addition, revisions to the Basel III Standardized Approach will be effective Q1 2021, one year in advance of BCBS requirements, and we are currently assessing the impact on adoption.

For a discussion on risk factors resulting from these and other regulatory developments which may affect our business and financial results, refer to the Risk management – Top and emerging risks and Legal and regulatory environment risk sections of our 2018 Annual Report and the Economic, market and regulatory review and outlook section of our Q1 2019, Q2 2019 and of this Q3 2019 Report to Shareholders. For further details on our framework and activities to manage risks, refer to the risk and Capital management sections of our 2018 Annual Report and the Risk management and Capital management sections of this Q3 2019 Report to Shareholders.

## Accounting and control matters

### Summary of accounting policies and estimates

Our Condensed Financial Statements are presented in compliance with International Accounting Standard (IAS) 34 *Interim Financial Reporting*. Our significant accounting policies are described in Note 2 of our audited 2018 Annual Consolidated Financial Statements and our Q3 2019 Condensed Financial Statements.

### Changes in accounting policies and disclosures

#### Changes in accounting policies

During the first quarter, we adopted *IFRS 15 Revenue from Contracts with Customers* (IFRS 15). As permitted by the transition provisions of IFRS 15, we elected not to restate comparative period results; accordingly, all comparative period information prior to the first quarter of 2019 is presented in accordance with our previous accounting policies, as described in our 2018 Annual Report. As a result of the adoption of IFRS 15, we adjusted our opening retained earnings as at November 1, 2018 to align the recognition of certain fees with the transfer of the performance obligations. Refer to Note 2 of our Condensed Financial Statements for details of these changes.

#### Future changes in accounting policies and disclosures

In January 2016, the IASB issued *IFRS 16 Leases* (IFRS 16), which sets out the principles for the recognition, measurement, presentation and disclosure of leases. The standard removes the current requirement for lessees to classify leases as finance leases or operating leases by introducing a single lessee accounting model that requires the recognition of lease assets and lease liabilities on the balance sheet for most leases. Lessees will also recognize depreciation expense on the lease asset and interest expense on the lease liability in the statement of income. There are no significant changes to lessor accounting aside from enhanced disclosure requirements.

IFRS 16 will be effective for us on November 1, 2019. We plan to adopt IFRS 16 by adjusting our Consolidated Balance Sheet at November 1, 2019, the date of initial application, with no restatement of comparative periods.

Our transition to IFRS 16 includes a centralized enterprise-wide program and governance structure led by Finance to assess our existing lease portfolio and the impact on systems, processes, training, communication and financial reporting. We are finalizing upgrades to our systems, processes and internal controls as well as assessing the quantification of our lease assets and liabilities, the impact on the capital ratios and developing the additional disclosures required by the new standard.

As we prepare for our transition to IFRS 16, we will continue to monitor industry interpretations of the new standard and assess the potential impact to our implementation.

Other future changes in accounting policies and disclosures that are not yet effective for us are described in Note 2 of our audited 2018 Annual Consolidated Financial Statements.

## Controls and procedures

### Disclosure controls and procedures

As of July 31, 2019, management evaluated, under the supervision of and with the participation of the President and Chief Executive Officer and the Chief Financial Officer, the effectiveness of our disclosure controls and procedures as defined under rules adopted by the U.S. SEC. Based on that evaluation, the President and Chief Executive Officer and the Chief Financial Officer concluded that our disclosure controls and procedures were effective as of July 31, 2019.

### Internal control over financial reporting

No changes were made in our internal control over financial reporting during the quarter ended July 31, 2019 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

## Related party transactions

In the ordinary course of business, we provide normal banking services and operational services, and enter into other transactions with associated and other related corporations, including our joint venture entities, on terms similar to those offered to non-related parties. We grant loans to directors, officers and other employees at rates normally accorded to preferred clients. In addition, we offer deferred share and other plans to non-employee directors, executives and certain other key employees. For further information, refer to Notes 11 and 26 of our audited 2018 Annual Consolidated Financial Statements.

## EDTF recommendations index

We aim to present transparent, high-quality risk disclosures by providing disclosures in our 2018 Annual Report, Q3 2019 Report to Shareholders (RTS), Supplementary Financial Information package (SFI), and Pillar 3 Report, in accordance with recommendations from the Financial Stability Board's (FSB) Enhanced Disclosure Task Force (EDTF). Information within the SFI and Pillar 3 Report is not and should not be considered incorporated by reference into our Q3 2019 Report to Shareholders.

The following index summarizes our disclosure by EDTF recommendation:

Type of Risk	Recommendation	Disclosure	Location of disclosure		
			RTS page	Annual Report page	SFI page
General	1	Table of contents for EDTF risk disclosure	48	112	1
	2	Define risk terminology and measures		50, 52-55 213-214	–
	3	Top and emerging risks		50-51	–
	4	New regulatory ratios	42-43	91-93	–
Risk governance, risk management and business model	5	Risk management organization		50, 52-55	–
	6	Risk culture		52-55	–
	7	Risk in the context of our business activities		98	–
	8	Stress testing		53-54, 67	–
Capital adequacy and risk-weighted assets (RWA)	9	Minimum Basel III capital ratios and Domestic systemically important bank surcharge	43	91-93	–
	10	Composition of capital and reconciliation of the accounting balance sheet to the regulatory balance sheet		–	20-23
	11	Flow statement of the movements in regulatory capital		–	24
	12	Capital strategic planning		90-93	–
	13	RWA by business segments		–	26
	14	Analysis of capital requirement, and related measurement model information		56-59	25,*
	15	RWA credit risk and related risk measurements		–	*
	16	Movement of risk-weighted assets by risk type		–	26
	17	Basel back-testing		53, 56-57	40
Liquidity	18	Quantitative and qualitative analysis of our liquidity reserve	34-35	73-75, 79-80	–
Funding	19	Encumbered and unencumbered assets by balance sheet category, and contractual obligations for rating downgrades	36, 39	75, 78	–
	20	Maturity analysis of consolidated total assets, liabilities and off-balance sheet commitments analyzed by remaining contractual maturity at the balance sheet date	41-42	80-81	–
	21	Sources of funding and funding strategy	36-38	75-77	–
Market risk	22	Relationship between the market risk measures for trading and non-trading portfolios and the balance sheet	33-34	71-72	–
	23	Decomposition of market risk factors	29-32	67-70	–
	24	Market risk validation and back-testing		67	–
	25	Primary risk management techniques beyond reported risk measures and parameters		67-70	–
Credit risk	26	Bank's credit risk profile	22-29	56-66, 159-165	29-40,*
		Quantitative summary of aggregate credit risk exposures that reconciles to the balance sheet	66-70	106-111	*
	27	Policies for identifying impaired loans		57-59, 101-102, 123-126, 128-129	–
	28	Reconciliation of the opening and closing balances of impaired loans and impairment allowances during the year		–	31, 36
	29	Quantification of gross notional exposure for OTC derivatives or exchange-traded derivatives		60	42
	30	Credit risk mitigation, including collateral held for all sources of credit risk		59	39
Other	31	Other risk types		83-90	–
	32	Publicly known risk events		86-87, 202-203	–

\* These disclosure requirements are satisfied or partially satisfied by disclosures provided in our Pillar 3 Reports as at July 31, 2019 and October 31, 2018.