Royal Bank of Canada | Third Quarter 2017

Royal Bank of Canada third quarter 2017 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.

TORONTO, August 23, 2017 – Royal Bank of Canada (RY on TSX and NYSE) today reported net income of $2,796 million for the third quarter ended July 31, 2017, down $99 million or 3% from a year ago. Excluding an after-tax gain of $235 million from the sale of our home and auto insurance manufacturing business in the prior year, net income was up $136 million or 5%[1]. Results reflect strong earnings growth in Wealth Management, Insurance excluding the prior year gain on sale[1], and Investor & Treasury Services, as well as solid earnings in Personal & Commercial Banking. These factors were partially offset by lower results in Capital Markets primarily due to less favourable market conditions.

Compared to last quarter, net income was relatively unchanged. Credit quality remains strong, with a provision for credit losses (PCL) ratio of 0.23%. We remain well-capitalized with a Common Equity Tier 1 (CET1) ratio of 10.9%. In addition, today we announced an increase to our quarterly dividend of $0.04 or 5% to $0.91 per share.

“RBC had a solid third quarter and strong results for the first nine months of the year, and we are proud to have been ranked highest in overall customer satisfaction for the second year in a row[2]. I am also pleased to announce a 5% increase to our quarterly dividend as part of our commitment to deliver long-term shareholder value,” said Dave McKay, RBC President and Chief Executive Officer. “We are driving sustainable growth by further investing in our people, digital capabilities, and key markets, while leveraging our strengths in data and technology to exceed our clients’ expectations.”

Q3 2017 compared to Q3 2016	• Net income of $2,796 million	↓ 3%	**Excluding specified item[1]:**	
	• Diluted EPS[3] of $1.85	↓ 2%	• Net income of $2,796 million	↑ 5%
	• ROE[4] of 16.3%	↓ 170 bps	• Diluted EPS of $1.85	↑ 8%
	• CET1 ratio of 10.9%	↑ 40 bps	• ROE of 16.3%	↓ 20 bps
Q3 2017 compared to Q2 2017	• Net income of $2,796 million	→ 0%		
	• Diluted EPS of $1.85	→ 0%		
	• ROE of 16.3%	↓ 90 bps		
	• CET1 ratio of 10.9%	↑ 30 bps		
YTD 2017 compared to YTD 2016	• Net income of $8,632 million	↑ 9%	**Excluding specified items[1]:**	
	• Diluted EPS of $5.67	↑ 11%	• Net income of $8,420 million	↑ 10%
	• ROE of 17.2%	↑ 70 bps	• Diluted EPS of $5.53	↑ 11%
			• ROE of 16.8%	↑ 80 bps

The specified items comprise: In Q1 2017, our share of a gain recorded related to the sale of the U.S. operations of Moneris to Vantiv, Inc., which was $212 million (before- and after-tax); and in Q3 2016, a gain of $287 million ($235 million after-tax) from the sale of our home and auto insurance manufacturing business, RBC General Insurance Company, to Aviva Canada Inc.

1 These measures are non-GAAP. For further information, including a reconciliation, refer to the Key performance and non-GAAP measures section of this Q3 2017 Report to Shareholders.
2 Highest in Customer Satisfaction Among the Big Five Banks, J.D. Power 2017 Canadian Retail Banking Satisfaction Study, July 2017.
3 Earnings per share (EPS).
4 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 2017 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, 2017, compared to the corresponding periods in the prior fiscal year and the three month period ended April 30, 2017. This MD&A should be read in conjunction with our unaudited Interim Condensed Consolidated Financial Statements for the quarter ended July 31, 2017 (Condensed Financial Statements) and related notes and our 2016 Annual Report. This MD&A is dated August 22, 2017. 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 2016 Annual Information Form, is available free of charge on our website at rbc.com/investorrelations, on the Canadian Securities Administrators' website at sedar.com and on the EDGAR section of the United States (U.S.) Securities and Exchange Commission's (SEC) website at 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 2017 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 and market review and outlook for Canadian, U.S., European and global economies, the regulatory environment in which we operate, the outlook and priorities for each of our business segments, 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 management and Overview of other risks sections of our 2016 Annual Report and the Risk management section of this Q3 2017 Report to Shareholders; global uncertainty, the Brexit vote to have the United Kingdom leave the European Union (EU), weak oil and gas prices, cyber risk, anti-money laundering, exposure to more volatile sectors, technological innovation and new Fintech entrants, increasing complexity of regulation, data management, litigation and administrative penalties, 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 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 2017 Report to Shareholders are set out in the Overview and outlook section and for each business segment under the heading Outlook and priorities in our 2016 Annual Report, as updated by the Overview and outlook section of this Q3 2017 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 management and Overview of other risks sections of our 2016 Annual Report and the Risk management section of this Q3 2017 Report to Shareholders.

Overview and outlook

About Royal Bank of Canada

Royal Bank of Canada is Canada's largest bank, and one of the largest banks in the world, based on market capitalization. We are one of North America's leading diversified financial services companies, and provide personal and commercial banking, wealth management, insurance, investor services and capital markets products and services on a global basis. We have approximately 81,000 full- and part-time employees who serve more than 16 million personal, business, public sector and institutional clients through offices in Canada, the U.S. and 35 other countries. For more information, please visit 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 July 31 2017	April 30 2017	July 31 2016	As at or for the nine months ended July 31 2017	July 31 2016
Total revenue	$ 9,986	$ 10,310	$ 10,255	$ 29,842	$ 29,140
Provision for credit losses (PCL)	320	302	318	916	1,188
Insurance policyholder benefits, claims and acquisition expense (PBCAE)	643	1,090	1,210	1,916	3,027
Non-interest expense	5,435	5,229	5,091	15,879	14,938
Income before income taxes	3,588	3,689	3,636	11,131	9,987
Net income	$ 2,796	$ 2,809	$ 2,895	$ 8,632	$ 7,915
Segments – net income					
Personal & Commercial Banking	$ 1,399	$ 1,360	$ 1,322	$ 4,351	$ 3,909
Wealth Management	486	431	388	1,347	1,077
Insurance	161	166	364	461	672
Investor & Treasury Services	178	193	157	585	439
Capital Markets	611	668	635	1,941	1,788
Corporate Support	(39)	(9)	29	(53)	30
Net income	$ 2,796	$ 2,809	$ 2,895	$ 8,632	$ 7,915
Selected information					
Earnings per share (EPS) – basic	$ 1.86	$ 1.86	$ 1.88	$ 5.69	$ 5.15
– diluted	1.85	1.85	1.88	5.67	5.13
Return on common equity (ROE) (1), (2)	16.3%	17.2%	18.0%	17.2%	16.5%
Average common equity (1)	$ 65,750	$ 64,800	$ 61,800	$ 65,050	$ 61,900
Net interest margin (NIM) – on average earning assets (3)	1.69%	1.73%	1.69%	1.72%	1.70%
Total PCL as a % of average net loans and acceptances (1)	0.23%	0.23%	0.24%	0.23%	0.30%
PCL on impaired loans as a % of average net loans and acceptances (1)	0.23%	0.23%	0.24%	0.23%	0.29%
Gross impaired loans (GIL) as a % of loans and acceptances (4)	0.53%	0.59%	0.70%	0.53%	0.70%
Liquidity coverage ratio (LCR) (5)	121%	123%	126%	121%	126%
Capital ratios and Leverage ratio					
Common Equity Tier 1 (CET1) ratio (6)	10.9%	10.6%	10.5%	10.9%	10.5%
Tier 1 capital ratio (6)	12.4%	12.0%	12.1%	12.4%	12.1%
Total capital ratio (6)	14.4%	14.1%	14.2%	14.4%	14.2%
Leverage ratio (6)	4.4%	4.3%	4.2%	4.4%	4.2%
Selected balance sheet and other information (7)					
Total assets	$ 1,201,047	$ 1,202,919	$ 1,198,875	$ 1,201,047	$ 1,198,875
Securities	214,170	219,405	233,998	214,170	233,998
Loans (net of allowance for loan losses)	534,034	532,262	515,820	534,034	515,820
Derivative related assets	105,833	100,763	130,462	105,833	130,462
Deposits	778,618	785,583	754,415	778,618	754,415
Common equity	65,561	65,858	62,541	65,561	62,541
Total capital risk-weighted assets	458,136	471,176	445,114	458,136	445,114
Assets under management (AUM)	601,200	614,600	575,000	601,200	575,000
Assets under administration (AUA) (8), (9)	5,390,000	5,314,500	4,823,700	5,390,000	4,823,700
Common share information					
Shares outstanding (000s) – average basic	1,457,854	1,468,015	1,485,915	1,470,066	1,486,550
– average diluted	1,465,035	1,475,562	1,494,126	1,477,615	1,494,877
– end of period	1,457,934	1,457,291	1,485,085	1,457,934	1,485,085
Dividends declared per common share	$ 0.87	$ 0.87	$ 0.81	$ 2.57	$ 2.41
Dividend yield (10)	3.7%	3.6%	4.1%	3.8%	4.4%
Common share price (RY on TSX) (11)	$ 93.01	$ 93.47	$ 79.59	$ 93.01	$ 79.59
Market capitalization (TSX) (11)	135,602	136,213	118,198	135,602	118,198
Business information (number of)					
Employees (full-time equivalent) (FTE)	76,720	75,281	76,941	76,720	76,941
Bank branches	1,388	1,401	1,422	1,388	1,422
Automated teller machines (ATMs)	4,758	4,893	4,901	4,758	4,901
Period average US$ equivalent of C$1.00 (12)	$ 0.770	$ 0.746	$ 0.768	$ 0.756	$ 0.754
Period-end US$ equivalent of C$1.00	$ 0.802	$ 0.733	$ 0.766	$ 0.802	$ 0.766

(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) NIM is calculated as net interest income divided by average earning assets. Average amounts are calculated using methods intended to approximate the average of the daily balances for the period.
(4) GIL includes $268 million (April 30, 2017 – $331 million; July 31, 2016 – $508 million) related to the acquired credit-impaired (ACI) loans portfolio from our acquisition of City National Corporation (City National). ACI loans added 5 bps to our July 31, 2017 GIL ratio (April 30, 2017 – 6 bps; July 31, 2016 – 10 bps). For further details, refer to Note 5 of our Condensed Financial Statements.
(5) LCR is calculated using the Basel III Liquidity Adequacy Requirements (LAR) guideline. Effective the first quarter of 2017, the Office of the Superintendent of Financial Institutions (OSFI) requires the LCR to be disclosed based on the average of the daily positions during the quarter. For further details, refer to the Liquidity and funding risk section.
(6) Capital and Leverage ratios presented above are on an "all-in" basis. The Leverage ratio is a regulatory measure under the Basel III framework. For further details, refer to the Capital management section.
(7) Represents period-end spot balances.
(8) AUA includes $18.4 billion and $8.2 billion (April 30, 2017 – $18.9 billion and $9.8 billion; July 31, 2016 – $18.8 billion and $9.4 billion) of securitized residential mortgages and credit card loans, respectively.
(9) Prior period amounts have been revised from those previously disclosed.
(10) Defined as dividends per common share divided by the average of the high and low share price in the relevant period.
(11) Based on TSX closing market price at period-end.
(12) Average amounts are calculated using month-end spot rates for the period.

Economic, market and regulatory review and outlook – data as at August 22, 2017

The economic 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.

Canada

The Canadian economy is expected to have grown by an estimated rate of 3.7%(1) in the second calendar quarter, consistent with the first calendar quarter of 2017. The economy has shown broad growth across a majority of sectors and the energy sector has largely adjusted to the low oil price environment. July's national unemployment rate was 6.3%, which is its lowest position in nearly nine years. Consumer confidence remains strong due to steady job growth and wealth effects from rising home prices and equity markets. Recent government intervention has had a dampening impact on the housing market at the national level, with resales declining 15.3% since March's record sales pace. Furthermore, year-over-year growth in home prices slowed to 12.9% in July from a peak of 19.7% in April. Affordability remains stretched in Toronto and Vancouver and the Bank of Canada (BoC) continues to note financial system vulnerabilities stemming from housing market imbalances and household indebtedness. For the first time in seven years, the BoC raised its overnight rate, to 0.75% in July, citing broadening economic growth and limited slack in the economy. While inflation remains below the central bank's target, policymakers have attributed some of the recent decline to temporary factors and expect inflation will return to the 2.0% target as those factors dissipate and remaining economic slack is absorbed.

We expect the Canadian economy to grow at a rate of 2.9% during calendar 2017, which is above our estimate from May 24, 2017 of 2.4%. Business investment has been improving and government spending on infrastructure is ramping up. In addition, consumer spending will remain a significant driver of growth. As the economic backdrop improves, we expect a further reduction of monetary policy stimulus. We anticipate the BoC will increase its overnight rate to 1.0% in the fourth calendar quarter of 2017, with additional rate hikes in the latter half of 2018.

U.S.

Based on advanced estimates, economic activity in the U.S. grew at a rate of 2.6%(1) in the second calendar quarter, compared to the previous quarter's growth of 1.2%(1). Consumer spending improved due to a strong job market and rising disposable incomes, as well as wealth accumulation from rising stock markets and home prices. In July, the unemployment rate was 4.3%, matching a 16-year low reached in May. Business investment also contributed to growth with machinery and equipment investment rising and energy sector investment picking up. The Federal Reserve Board (Fed) noted that the labour market has continued to strengthen and economic activity has risen moderately; however, inflation remains below the Fed's target of 2.0%. In light of improving economic conditions, the Fed raised its funds target range by 25 basis points to 1.00 to 1.25% in June, its third increase in six months.

We expect the U.S. economy to grow at a rate of 2.1% for calendar 2017, which is unchanged from our previous estimate on May 24, 2017, as consumers and businesses continue to contribute to the economic expansion. Stimulative fiscal policy, including corporate tax cuts and infrastructure investments, now looks less likely, but we expect the U.S. economy will continue to grow at an above-trend rate even without a fiscal boost. As such, the Fed is likely to continue gradually withdrawing monetary policy stimulus. We expect the Fed will begin tapering reinvestment of earlier asset purchases in October and raise short-term interest rates again in December.

Europe

The Euro area grew by 0.6% in the second calendar quarter of 2017, up slightly from a 0.5% increase in the prior quarter. Economic expansion has been supported by rising consumer confidence, more political stability following several pro-EU election results, particularly in France, and improving labour markets. The June unemployment rate fell to 9.1%, the lowest rate since February 2009. Policymakers in the European Central Bank (ECB) have continued to express confidence in the economic outlook. However, in their July announcement, the ECB left its monetary policy unchanged and plans to continue its monthly asset purchase program until December 2017, or beyond, if necessary, in order to meet its inflation objectives.

We expect the Euro area to grow by 2.0% during calendar 2017, which is above our previous estimate of 1.6% on May 24, 2017. With a strong economic backdrop and diminishing political risks, business investment is expected to help sustain growth. However, since inflation targets have not been met at sustainable levels, we expect the ECB to hold its negative deposit rates, while continuing its stimulus program and extending asset purchases beyond 2017, albeit with purchases tapering off by mid-2018.

Financial markets

There was a distinct shift in tone at a number of global central banks this quarter, with many attributing strong economic data to the success of the monetary policies employed, including aggressive interest rate cuts. As growth continues, central bankers have been revisiting their monetary policies, emphasizing their intentions to consider tighter monetary policies. Political uncertainty in Europe has subsided, but the potential for a more protective U.S. trade policy, with NAFTA renegotiations underway, and increased tensions with North Korea, remain among the top external risk factors. Globally, bond yields have moved up somewhat over the last year, but remain at historical lows. Equity markets continue to rebound as a result of the economic growth, while corporate bond spreads have declined, given the global growth.

The macroeconomic headwinds discussed above, such as the potential for greater uncertainty or financial market instability related to proposed policies by the U.S. administration, including the NAFTA renegotiations and possible further cuts by the BoC and the Fed to their respective stimulus measures may alter our outlook and results for fiscal 2017 and future periods. These continuing pressures may lead to higher PCL in our wholesale and retail loan portfolios and impact the general business and economic conditions in the regions where we operate.

(1) Annualized rate

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. As discussed below, political developments, such as proposals from the presidential administration in the U.S. and the United Kingdom (U.K.) negotiations to exit the European Union (EU), have resulted in uncertainty as to the implementation, scope and timing of regulatory reforms.

U.S. Regulatory and Tax Reform

On February 3, 2017, the U.S. President signed an Executive Order directing the Secretary of the Treasury to review the adequacy of U.S. federal financial regulations in meeting the "Core Principles" for financial regulation identified in the Executive Order. The first report of the Treasury Secretary's recommendations to the President was issued on June 12, 2017 and recommends reform of multiple statutes and regulations, including those that pertain to the Volcker Rule, Comprehensive Capital Analysis and Review (CCAR), living wills, capital, liquidity, leverage, and the activities of non-U.S. banks. The U.S. Treasury Department expects to release three additional reports later in the year addressing: (i) capital markets (including securities and derivatives markets); (ii) insurance and asset management industries; and (iii) financial technology and innovation. These reports may lead to financial regulatory reforms, the extent, timing, and impact of which are unknown at this time.

As it relates to the Volcker Rule specifically, on July 21, 2017, the U.S. federal banking regulators published guidance stating that, prior to July 21, 2018, they do not plan to apply the proprietary trading restrictions to non-U.S. investment funds where certain conditions are satisfied. In their guidance, regulators acknowledged the concerns expressed by non-U.S. banks, government officials and other market participants regarding the unintended consequences and extraterritorial impact of the Volcker Rule and suggested that corrective amendments to the regulations or statute could be required. On August 2, 2017, the Office of the Comptroller of the Currency issued a notice requesting public input on potential revisions to the Volcker Rule.

The U.S. Administration has also proposed measures to reform the U.S. tax code by lowering corporate and individual tax rates, and by eliminating or revising certain tax provisions that would broaden the tax base for companies paying taxes in the U.S. The outcome of these proposals could be favourable for our U.S. operations in the form of lower U.S. federal tax rates and unfavourable to the extent the tax treatment of specific investments and activities is adversely impacted.

Uniform Fiduciary Standard

On April 6, 2016, the U.S. Department of Labor (DOL) issued a final rule establishing a uniform fiduciary standard for providers of investment advice and related services in connection with U.S. retirement plans and holders of individual retirement accounts, effective June 9, 2017. On February 3, 2017, the U.S. President directed the DOL to examine whether the rule may adversely affect the ability of Americans to gain access to retirement information and financial advice. The President further directed the Secretary of Labor to rescind or revise the rule as appropriate to ensure consistency with existing law. On May 22, 2017, the DOL released an enforcement bulletin indicating it will not pursue claims against fiduciaries who are working diligently and in good faith to comply with the rule and its exemptions, or treat those fiduciaries as being in violation of the rule and exemptions "during the phased implementation period ending on January 1, 2018". On June 1, 2017, the SEC announced that they would undertake an "updated assessment of the current regulatory framework, the current state of the market for retail investment advice, and market trends" in order to "evaluate the range of potential regulatory actions" that the SEC may consider taking. On July 6, 2017, the DOL initiated a public consultation on: (i) whether the January 1, 2018 applicability date should be delayed, and (ii) whether and to what extent the rule should be modified. Further, on August 9, 2017, the DOL indicated its intention to propose an 18-month extension of the transition period for full compliance with the fiduciary standard's prohibited transaction exemptions, from January 1, 2018 to July 1, 2019. There remains uncertainty about whether and to what extent the rule will be changed, although the 18-month extension would give the DOL time to further assess the rule and propose changes. In its current form, the rule presents significant operational challenges for our U.S. Wealth Management business and clients, but does not materially impact the financial results for that business or for RBC overall.

Global Over-the-Counter (OTC) Derivatives Reform

Global margin rules represent a fundamental change in how non-centrally cleared OTC derivatives are traded. The requirement to exchange regulatory margin is being phased in until 2020. We are already exchanging initial and variation margin on bilateral OTC derivatives with relevant counterparties in accordance with prior regulatory deadlines. U.S., EU and Canadian regulators provided a deferral to the March 1, 2017 deadline in respect of certain counterparties by allowing swap dealers up to September 1, 2017 to exchange variation margin and continue trading with counterparties that do not represent significant exposure. As of September 1, 2017, we will be required to exchange initial margin with the next category of market participants on a global basis.

In accordance with Canadian Securities Administrators (CSA) National Instrument 94-101, *Mandatory Central Counterparty Clearing of Derivatives,* effective April 4, 2017, as a subscribing clearing member of a regulated clearing agency, we began to clear specific OTC derivatives with other in-scope clearing members. The effective date for the clearing obligation on all other in-scope counterparties, which may include our affiliates with outstanding OTC derivatives exceeding a prescribed month-end amount, has been delayed to August 20, 2018.

On April 4, 2017, the CSA published proposed rules, National Instrument 93-101, *Derivatives: Business Conduct,* which seek to impose minimum business conduct standards to the OTC derivatives activities of derivatives firms with derivatives parties.

Effective April 10, 2017, we were required by the Commodity Futures Trading Commission (CFTC) to centrally clear expanded classes of OTC derivatives, including, among others, fixed-to-floating interest rate swaps and overnight index swaps denominated in Canadian dollars. The CFTC previously amended its recordkeeping requirement and is now focused on external business conduct standards and trade reporting.

Regulatory Capital and Related Requirements

The Basel Committee on Banking Supervision (BCBS) issued consultations in 2015 and 2016 on a number of proposals that would reform the manner in which banks calculate, measure, and report regulatory capital and related risk-weighting measures, including the use of a bank's own internal risk models. On January 3, 2017, the BCBS announced a delay in finalizing the proposed revisions. However, the G-20 Leaders and Financial Stability Board (FSB) have recently reconfirmed their commitment to finalizing these BCBS regulatory changes without significantly increasing overall capital requirements for the banking sector. As a result, the impact on our regulatory capital ratios will depend upon the final standards adopted by the BCBS and how those standards are ultimately implemented by the Office of the Superintendent of Financial Institutions (OSFI).

In January 2016, the BCBS finalized a revised framework for calculating market risk capital, the Fundamental Review of the Trading Book (FRTB). FRTB's purpose is to revise the framework for large, internationally active banks by including: (i) a revised boundary between the trading book and banking book; (ii) a revised internal models approach for market risk; (iii) a revised standardized approach for market risk; (iv) a shift from value-at-risk to an expected shortfall measure of risk under stress; and (v) incorporation of the risk of market illiquidity. As with similarly affected organizations, the rule will result in significant changes to our systems and methodologies for calculating market risk capital, and may increase the level of market risk risk-weighted assets that we are required to hold. On July 20, 2017, OSFI communicated its intention to delay the BCBS framework implementation to early 2021 to allow banks sufficient time to build the required infrastructure and obtain rule clarifications from the BCBS.

With respect to capital assessment in the U.S., our Intermediate Holding Company (IHC) is subject to CCAR, and the Fed's annual evaluation of the capital planning processes and capital adequacy of the largest U.S.-based bank holding companies and U.S. IHCs of Foreign Banking Organizations with total consolidated assets greater than US$50 billion. Under CCAR, the Fed also reviews planned capital actions such as dividend payments, share buybacks and issuances. Our U.S. IHC became subject to CCAR in 2017 and made its filing on a private basis. Publication of our quantitative and qualitative CCAR results will commence in 2018. We have incurred, and will continue to incur, costs to comply with these additional U.S. requirements, but the impacts are not expected to materially affect our overall results.

Canadian Bail-in Regime

Bail-in regimes are being implemented in a number of jurisdictions in an effort to limit taxpayer exposure to losses of a failing institution and ensure the institution's shareholders and creditors remain responsible for bearing such losses. On June 22, 2016, legislation came into force, amending certain federal statutes pertaining to banks to create a bank recapitalization or "bail-in" regime for Canada's six domestic systemically important banks (D-SIBs). On June 16, 2017, the Department of Finance announced the publication of draft regulations under the Canada Deposit Insurance Corporation (CDIC) Act and the Bank Act, which provide the final details of the conversion, issuance and compensation regimes for bail-in instruments issued by D-SIBs. Pursuant to the CDIC Act, 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. These changes are not expected to have a material impact on our cost of long-term unsecured funding.

Total Loss Absorbing Capacity (TLAC)

On June 16, 2017, OSFI released a draft guideline on Total Loss Absorbing Capacity (TLAC), which will apply to Canada's D-SIBs as part of the Federal Government's bail-in regime. The draft guideline is consistent with the TLAC standard released on November 9, 2015 by the FSB for institutions designated as global systemically important banks (G-SIBs), but tailored to the Canadian context. The standards are 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. We are expected to comply with the disclosure requirements by November 1, 2018 and the remaining TLAC standard requirements by November 1, 2021. The final guidance is expected to be issued later in 2017. We do not anticipate any challenges in meeting these TLAC requirements.

U.K. and European Regulatory Reform

The Markets in Financial Instruments Directive II/Regulation (MiFID II/MiFIR) becomes effective January 2018 and will have a significant technological and procedural impact for certain of our businesses operating in the EU as it relates to changes to pre- and post-trade transparency, market structure, transaction reporting, algorithmic trading, and conduct of business rules. Unlike the current MiFID regime, which applies primarily to equities, MiFID II/MiFIR will also extend to fixed income and "equity-like" products.

The provision of benchmarks will become a regulated activity under the Benchmarks Regulation, requiring benchmark providers to obtain prior authorization and undergo supervision at a national and EU level, effective January 2018. The Regulation will introduce obligations for us as an administrator of, contributor to and a user of benchmarks.

The General Data Protection Regulation becomes effective in May 2018 and introduces a number of obligations that will apply globally to entities that control or process personal data pertaining to EU individuals. These include requirements relating to breach notification, the appointment of an appropriately qualified and experienced Data Protection Officer, more stringent requirements with respect to obtaining valid consent to process data, and significantly increased information provisions, compliance and documentation obligations.

The U.K. Criminal Finances Bill was enacted in April 2017. Among its provisions is the introduction of two new corporate criminal offences which will come into effect on September 30, 2017: facilitation of the evasion of U.K. tax and facilitation of the evasion of foreign tax, where there is a U.K. nexus, by associated persons of an entity, including its employees. Implementation of demonstrable "reasonable prevention procedures" provides a defense against prosecution.

Formal notification of the U.K.'s intention to withdraw from the EU under Article 50 of the Treaty of Lisbon was given on March 29, 2017, triggering the start of a two year negotiation period to determine the terms of withdrawal. Until those negotiations are concluded or the negotiation period expires, the U.K. will remain an EU Member State, subject to all EU legislation.

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 environmental risk sections of our 2016 Annual Report; and the Regulatory environment sections of the Q1 2017 Report to Shareholders, Q2 2017 Report to Shareholders, and this Q3 2017 Report to Shareholders. For further details on our framework and activities to manage risks, refer to the Risk management and Capital management sections of our 2016 Annual Report and the Risk management and Capital management sections of this Q3 2017 Report to Shareholders.

Key corporate events of 2017

Sale of certain Caribbean Wealth Management businesses

On May 12, 2017, we completed the previously announced sale of our trust, custody and fund administration businesses in the Caribbean to SMP Partners Group. The transaction did not have a significant impact on our financial statements. For further details, refer to Note 6 of our Condensed Financial Statements.

Sale of U.S. operations of Moneris Solutions Corporation

On November 10, 2016, our payment processing joint venture with Bank of Montreal, Moneris Solutions Corporation (Moneris), signed a Purchase and Sale agreement to sell its U.S. operations to Vantiv, Inc. The transaction closed on December 21, 2016. As a result, we recorded our share of the gain which was $212 million (before- and after-tax) in Non-interest income – Share of profit in joint ventures and associates. For further details, refer to Note 6 of our Condensed Financial Statements.

Financial performance

Overview

Q3 2017 vs. Q3 2016

Net income of $2,796 million was down $99 million or 3% from a year ago, mainly due to the gain from the sale of RBC General Insurance Company in the prior period. Diluted earnings per share (EPS) of $1.85 was down $0.03 or 2% and return on common equity (ROE) of 16.3% was down 170 bps from 18.0% last year, largely due to the gain on sale, as previously noted. Our Common Equity Tier 1 (CET1) ratio was 10.9%, up 40 bps from a year ago.

Excluding the gain from the sale of RBC General Insurance Company, which was a specified item in the prior year as noted above, net income was up $136 million or 5% from last year, diluted EPS was up $0.13 or 8% and ROE decreased 20 bps from 16.5%. Our results reflected strong earnings in Wealth Management, Insurance, and Investor & Treasury Services, as well as solid earnings in Personal & Commercial Banking. These factors were partially offset by lower results in Capital Markets.

Wealth Management results increased primarily due to growth in average fee-based client assets and higher net interest income. These factors were partially offset by higher variable compensation on improved results, and higher costs in support of business growth.

Personal & Commercial Banking results were higher mainly reflecting volume growth of 6%, partially offset by lower spreads in Canada. Higher fee-based revenue also contributed to the increase. These factors were partially offset by higher staff-related costs including severance and higher costs in support of business growth.

Excluding the gain noted previously, Insurance earnings were up largely reflecting higher investment-related gains.

Investor & Treasury Services earnings increased primarily due to increased results from foreign exchange market execution driven by higher client activity and higher funding and liquidity results reflecting interest rate movements.

Capital Markets earnings were down largely driven by lower fixed income trading results reflecting reduced market volatility, higher costs related to changes in the timing of deferred compensation, and decreased results from Municipal Banking in the U.S. These factors were partially offset by higher equity trading results, a lower effective tax rate due to a lower proportion of pre-tax earnings in the U.S., and higher loan syndication and mergers and acquisition (M&A) activity.

Corporate Support net loss was $39 million in the current quarter, largely reflecting severance costs. Net income was $29 million in the prior year, largely reflecting asset/liability management activities.

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

Q3 2017 vs. Q2 2017

Net income of $2,796 million was down $13 million from the prior quarter. Diluted EPS was flat and ROE was down 90 bps from 17.2% last quarter. Our CET1 ratio was up 30 bps from 10.6% last quarter.

Our results were mainly driven by higher staff-related costs including severance and higher costs in support of business growth. Lower equity origination activity and higher costs related to changes in the deferred compensation plan in Capital Markets, and the impact of foreign exchange translation also contributed to the decrease. These factors were largely offset by the positive impact of additional days in the quarter, higher earnings from fee-based revenue in Wealth Management and Personal & Commercial Banking, and volume growth in Personal & Commercial Banking.

Q3 2017 vs. Q3 2016 (Nine months ended)

Net income of $8,632 million increased $717 million or 9% from a year ago. Nine month diluted EPS of $5.67 was up $0.54 or 11% and ROE of 17.2% was up 70 bps. Our results reflected increased earnings in Wealth Management, Personal & Commercial Banking, Capital Markets and Investor & Treasury Services, partially offset by lower earnings in Insurance.

Wealth Management earnings increased primarily reflecting higher average fee-based client assets which benefited from capital appreciation and net sales, higher net interest income due to volume growth and the impact from higher U.S. interest rates, and higher transaction revenue. These factors were partially offset by higher variable compensation on improved results, and higher costs in support of business growth.

Personal & Commercial Banking earnings increased largely due to volume growth of 6% partially offset by lower spreads, and our share of a gain related to the sale of the U.S. operations of Moneris in the current year, which is a specified item and is described further below. Higher fee-based revenue in Canada and lower PCL also contributed to the increase. These factors were partially offset by higher costs in support of business growth.

Capital Markets results were up mainly driven by higher earnings in Corporate and Investment Banking and Global Markets reflecting increased fee-based revenue, and lower PCL. These factors were partially offset by higher costs related to changes in the timing of deferred compensation, and lower results in Other.

Investor & Treasury Services results increased largely due to higher funding and liquidity earnings reflecting interest rate movements, increased results from foreign exchange market execution driven by higher client activity, and higher custodial fees.

Insurance earnings decreased primarily due to the gain on sale of RBC General Insurance Company in the prior year, as previously noted. Excluding the gain on sale, Insurance earnings were up primarily reflecting higher investment-related gains and business growth in both Canadian and International Insurance. These items were partially offset by a tax recovery in the prior year and reduced earnings associated with the sale of RBC General Insurance Company, as previously noted.

Specified items

For the nine months ended July 31, 2017, our results were impacted by our share of a gain of $212 million (before- and after-tax) related to the sale of the U.S. operations of Moneris. For the three and nine months ended July 31, 2016, our results were impacted by a gain of $287 million ($235 million after-tax) from the sale of RBC General Insurance Company, our home and auto insurance manufacturing business, to Aviva Canada Inc. (Aviva). Results excluding these specified items are non-GAAP measures. For further details, including a reconciliation, refer to the Key performance and non-GAAP measures section.

Impact of foreign currency translation

Our foreign currency-denominated results are impacted by exchange rate fluctuations. Revenue, PCL, insurance policyholder benefits, claims and acquisition expense (PBCAE), non-interest expense and net income denominated in foreign currency are translated at the average rate of exchange for the period.

The following table reflects the estimated impact of foreign currency translation on key income statement items:

	For the three months ended		For the nine months ended
(Millions of Canadian dollars, except per share amounts)	**Q3 2017 vs. Q3 2016**	**Q3 2017 vs. Q2 2017**	**Q3 2017 vs. Q3 2016**
Increase (decrease):			
Total revenue	$ (35)	$ (91)	$ (199)
PCL	–	(2)	(1)
PBCAE	(8)	(2)	(65)
Non-interest expense	(22)	(52)	(160)
Income taxes	(4)	(12)	2
Net income	(1)	(23)	25
Impact on EPS			
Basic	$ –	$ (0.02)	$ 0.02
Diluted	–	(0.02)	0.02

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

	For the three months ended			For the nine months ended	
(Average foreign currency equivalent of C$1.00) (1)	**July 31 2017**	April 30 2017	July 31 2016	**July 31 2017**	July 31 2016
U.S. dollar	**0.770**	0.746	0.768	**0.756**	0.754
British pound	**0.591**	0.590	0.561	**0.595**	0.530
Euro	**0.670**	0.696	0.689	**0.691**	0.683

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

Total revenue

(Millions of Canadian dollars, except percentage amounts)	For the three months ended July 31 2017	April 30 2017	July 31 2016	For the nine months ended July 31 2017	July 31 2016
Interest income	$ 6,808	$ 6,491	$ 6,184	$ 19,758	$ 18,241
Interest expense	2,551	2,293	2,061	6,979	5,897
Net interest income	$ 4,257	$ 4,198	$ 4,123	$ 12,779	$ 12,344
NIM	1.69%	1.73%	1.69%	1.72%	1.70%
Investments (1)	$ 2,312	$ 2,267	$ 2,133	$ 6,851	$ 6,359
Insurance (2)	1,009	1,448	1,534	2,954	4,044
Trading	216	181	311	660	582
Banking (3)	1,331	1,272	1,144	3,860	3,580
Underwriting and other advisory	537	590	524	1,595	1,367
Other (4)	324	354	486	1,143	864
Non-interest income	$ 5,729	$ 6,112	$ 6,132	$ 17,063	$ 16,796
Total revenue	$ 9,986	$ 10,310	$ 10,255	$ 29,842	$ 29,140
Additional information					
Total trading revenue					
Net interest income	$ 544	$ 631	$ 570	$ 1,844	$ 1,805
Non-interest income	216	181	311	660	582
Total trading revenue	$ 760	$ 812	$ 881	$ 2,504	$ 2,387

(1) Includes securities brokerage commissions, investment management and custodial fees, and mutual fund revenue.
(2) Includes premiums and investment and fee income. Investment income includes the change in fair value of investments backing policyholder liabilities and is largely offset in PBCAE.
(3) Includes service charges, foreign exchange revenue other than trading, card service revenue and credit fees.
(4) Includes other non-interest income, net gain (loss) on available-for-sale (AFS) securities and share of profit in joint ventures and associates.

Q3 2017 vs. Q3 2016

Total revenue decreased $269 million or 3% from last year, primarily due to the gain on sale of our home and auto insurance manufacturing business in the prior year. Excluding the gain as noted previously, total revenue increased $18 million as higher banking and investments revenue were partially offset by lower insurance and trading revenue, as well as the impact of foreign exchange translation.

Net interest income increased $134 million or 3%, mainly due to volume growth in both Canadian Banking and Wealth Management, and the impact of higher U.S. interest rates. These factors were partially offset by lower spreads in Canada.

NIM was flat compared to last year largely due to higher net interest margin in Wealth Management partially offset by lower net interest margin in Canadian Banking.

Investments revenue increased $179 million or 8%, mainly due to higher average fee-based client assets reflecting capital appreciation and net sales, and higher balances driving higher mutual fund distribution fees in Canadian Banking.

Insurance revenue decreased $525 million or 34%, mainly reflecting the change in fair value of investments backing our policyholder liabilities, which was largely offset in PBCAE, as well as lower premiums reflecting the impact of the sale of our home and auto insurance manufacturing business in the prior year. These factors were partially offset by business growth in Canadian Insurance, and the impact of restructured international life contracts, which was also largely offset in PBCAE.

Trading revenue in Non-interest income decreased $95 million or 31% compared to the prior year. Total trading revenue of $760 million, which comprises trading-related revenue recorded in Net interest income and Non-interest income, was down $121 million or 14%, primarily driven by decreased fixed income trading revenue reflecting reduced market volatility, partially offset by higher equity trading revenue across most regions.

Banking revenue increased $187 million or 16% as the prior year included the negative impact of foreign exchange translation on certain AFS securities which was offset in Other revenue. Higher loan syndication activity primarily in the U.S. and higher card service revenue also contributed to the increase.

Underwriting and other advisory revenue increased $13 million or 2%, primarily reflecting increased M&A activity, largely in Europe.

Other revenue decreased $162 million from last year, as the prior year included the gain related to the sale of our home and auto insurance manufacturing business as noted previously, and the change in fair value of certain derivatives used to economically hedge the AFS securities noted previously.

Q3 2017 vs. Q2 2017

Total revenue decreased $324 million or 3% from the prior quarter primarily due to the change in fair value of investments backing our policyholder liabilities, largely offset in PBCAE, and the impact of foreign exchange translation. These factors were partially offset by the positive impact of additional days in the quarter, volume growth and higher fee-based revenue in Wealth Management and Canadian Banking.

Q3 2017 vs. Q3 2016 (Nine months ended)

Total revenue increased $702 million or 2%. Excluding our share of the gain related to the sale of the U.S. operations of Moneris and the gain on sale of our home and auto insurance manufacturing business noted previously, total revenue of $29,630 million increased $777 million or 3%, primarily reflecting higher volume and fee-based revenue growth in Canadian Banking as well as higher average fee-based client assets, the impact from higher U.S. interest rates, and volume growth in Wealth Management. Higher funding and liquidity earnings reflecting interest rate movements in Investor & Treasury Services, increased loan syndication, M&A and debt origination activity in Capital Markets, as well as business growth in both Canadian and International Insurance also contributed to the increase. These factors were partially offset by the change in fair value of investments backing our policyholder liabilities, which was largely offset in PBCAE, reduced premiums associated with the sale of our home and auto insurance manufacturing business, as previously noted and the impact of foreign exchange translation.

Revenue excluding the specified items noted previously are non-GAAP measures. For further details, including a reconciliation, refer to the Key performance and non-GAAP measures section.

Provision for credit losses
Q3 2017 vs. Q3 2016
Total PCL of $320 million increased $2 million or 1% from a year ago, mainly due to higher provisions in Capital Markets, partially offset by a recovery in Wealth Management. The total PCL ratio of 23 bps improved 1 bp.

Q3 2017 vs. Q2 2017
Total PCL increased $18 million or 6% as compared to prior quarter, and the total PCL ratio of 23 bps remained flat, mainly due to higher provisions in Capital Markets and Personal & Commercial Banking, partially offset by a recovery in Wealth Management.

Q3 2017 vs. Q3 2016 (Nine months ended)
Total PCL of $916 million decreased $272 million or 23% and the total PCL ratio of 23 bps, improved 7 bps from the prior year, mainly due to lower provisions in Capital Markets and Personal & Commercial Banking, partially offset by higher provisions in Wealth Management. In addition, the prior year included a $50 million increase in PCL for loans not yet identified as impaired.

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

Insurance policyholder benefits, claims and acquisition expense
Q3 2017 vs. Q3 2016
PBCAE of $643 million decreased $567 million or 47% from a year ago, primarily reflecting the change in fair value of investments backing our policyholder liabilities, largely offset in revenue. The impact of the sale of our home and auto insurance manufacturing business in the prior year and higher investment-related gains also contributed to the decrease. These factors were partially offset by business growth and the impact of restructured international life contracts, largely offset in revenue.

Q3 2017 vs. Q2 2017
PBCAE decreased $447 million from the prior quarter, mainly due to the change in fair value of investments backing our policyholder liabilities, largely offset in revenue. This factor was partially offset by business growth in Canadian Insurance.

Q3 2017 vs. Q3 2016 (Nine months ended)
PBCAE of $1,916 million decreased $1,111 million or 37% from the prior year, mainly reflecting the change in fair value of investments backing our policyholder liabilities, largely offset in revenue, lower claims reflecting the impact of the sale of our home and auto insurance manufacturing business in the prior year, and higher investment-related gains. These factors were partially offset by business growth and the impact of restructured international life contracts, largely offset in revenue.

Non-interest expense

	For the three months ended			For the nine months ended	
(Millions of Canadian dollars, except percentage amounts)	July 31 2017	April 30 2017	July 31 2016	July 31 2017	July 31 2016
Salaries	$ 1,559	$ 1,449	$ 1,462	$ 4,449	$ 4,399
Variable compensation	1,294	1,229	1,129	3,738	3,249
Benefits and retention compensation	444	465	402	1,377	1,296
Share-based compensation	88	98	86	325	225
Human resources	$ 3,385	$ 3,241	$ 3,079	$ 9,889	$ 9,169
Equipment	361	344	346	1,061	1,060
Occupancy	383	404	387	1,186	1,162
Communications	250	241	240	712	667
Professional fees	326	265	279	846	766
Amortization of other intangibles	255	251	250	758	713
Other	475	483	510	1,427	1,401
Non-interest expense	$ 5,435	$ 5,229	$ 5,091	$ 15,879	$ 14,938
Efficiency ratio (1)	54.4%	50.7%	49.6%	53.2%	51.3%
Efficiency ratio adjusted (2)	53.2%	52.6%	54.0%	53.0%	53.3%

(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, our share of the Q1 2017 gain related to the sale of the U.S. operations of Moneris of $212 million (before- and after-tax), and the Q3 2016 gain related to the sale of RBC General Insurance Company of $287 million ($235 million after-tax). These are non-GAAP measures. For further details, refer to the Key performance and non-GAAP measures section.

Q3 2017 vs. Q3 2016
Non-interest expense increased $344 million or 7%, largely due to higher staff-related costs including severance and increased costs in support of business growth. Higher costs reflecting ongoing investments in technology including digital initiatives, and higher marketing costs in Personal & Commercial Banking also contributed to the increase. These factors were partially offset by lower legal costs in Capital Markets and continued benefits from our efficiency management activities.

Our efficiency ratio of 54.4% increased 480 bps from 49.6% last year. Excluding the change in fair value of investments backing our policyholder liabilities and the gain on the sale of RBC General Insurance Company in the prior year, our efficiency ratio of 53.2% decreased 80 bps from 54.0% last year largely due to continued benefits from our efficiency management activities.

Q3 2017 vs. Q2 2017
Non-interest expense increased $206 million or 4%, mainly driven by higher staff-related costs including severance, the unfavourable impact of additional days in the quarter, and higher costs in support of business growth. These factors were partially offset by the impact of foreign exchange translation.

Our efficiency ratio of 54.4% increased 370 bps from 50.7% last quarter. Excluding the change in fair value of investments backing our policyholder liabilities, our efficiency ratio of 53.2% increased 60 bps from last quarter, largely driven by increased severance costs and higher costs in support of business growth.

Q3 2017 vs. Q3 2016 (Nine months ended)
Non-interest expense increased $941 million or 6% mainly due to higher staff-related costs including severance, increased costs in support of business growth, and higher costs reflecting ongoing investments in technology including digital initiatives. Higher marketing costs in Personal & Commercial Banking and an impairment related to properties held for sale in the Caribbean also contributed to the increase. These factors were partially offset by the impact of foreign exchange translation and continued benefits from our efficiency management activities.

Our efficiency ratio of 53.2% increased 190 bps from 51.3% last year. Excluding the change in fair value of investments backing our policyholder liabilities, our share of the gain related to the sale of the U.S. operations of Moneris, and the gain on the sale of RBC General Insurance Company noted previously, our efficiency ratio of 53.0% decreased 30 bps from last year mainly driven by continued benefits from our efficiency management activities, partially offset by higher costs in support of business growth and increased severance costs.

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

Income taxes

	For the three months ended			For the nine months ended	
(Millions of Canadian dollars, except percentage amounts)	July 31 2017	April 30 2017	July 31 2016	July 31 2017	July 31 2016
Income taxes	$ 792	$ 880	$ 741	$ 2,499	$ 2,072
Income before income taxes	$ 3,588	$ 3,689	$ 3,636	$ 11,131	$ 9,987
Canadian statutory income tax rate (1)	26.5%	26.5%	26.5%	26.5%	26.5%
Lower average tax rate applicable to subsidiaries	(3.3)%	(1.9)%	(5.1)%	(2.9)%	(3.0)%
Tax-exempt income from securities	(1.9)%	(2.1)%	(2.4)%	(2.0)%	(3.4)%
Tax rate change	–%	–%	0.1%	(0.1)%	–%
Effect of previously unrecognized tax loss, tax credit or temporary differences	–%	–%	–%	–%	(0.3)%
Other	0.8%	1.4%	1.3%	1.0%	0.9%
Effective income tax rate	22.1%	23.9%	20.4%	22.5%	20.7%

(1) Blended Federal and Provincial statutory income tax rate.

Q3 2017 vs. Q3 2016
Income tax expense increased $51 million or 7% from last year, despite lower income before income taxes, as the effective income tax rate of 22.1% increased 170 bps reflecting more favourable tax adjustments in the prior year, the impact from the gain on sale of RBC General Insurance Company in 2016, and lower tax-exempt income from securities.

Q3 2017 vs. Q2 2017
Income tax expense decreased $88 million from last quarter, due to lower income before income taxes and the effective income tax rate of 22.1% decreased 180 bps from 23.9% in the last quarter due to more favourable tax adjustments.

Q3 2017 vs. Q3 2016 (Nine months ended)
Income tax expense increased $427 million or 21% from the prior year, and the effective tax rate of 22.5% increased 180 bps, mainly due to lower tax-exempt income from securities. The prior year also included more favourable tax adjustments and the gain on sale of RBC General Insurance Company. These factors were partially offset by the impact from our share of a gain related to the sale of our U.S. operations of Moneris 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 and remain largely unchanged from October 31, 2016. For further details on attributed capital, refer to the Capital management section.

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 2016 Annual Report.

Key performance and non-GAAP measures

Performance measures

Return on common equity (ROE)

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 2016 Annual Report.

The following table provides a summary of our ROE calculations:

	For the three months ended								
	July 31 2017							April 30 2017	July 31 2016
(Millions of Canadian dollars, except percentage amounts)	Personal & Commercial Banking	Wealth Management	Insurance	Investor & Treasury Services	Capital Markets	Corporate Support	Total	Total	Total
Net income available to common shareholders	$ 1,371	$ 470	$ 159	$ 174	$ 588	$ (55)	$ 2,707	$ 2,724	$ 2,801
Total average common equity (1), (2)	20,500	13,450	1,700	3,150	19,550	7,400	65,750	64,800	61,800
ROE (3)	26.6%	13.9%	37.0%	21.9%	11.9%	n.m.	16.3%	17.2%	18.0%

	For the nine months ended							
	July 31 2017							July 31 2016
(Millions of Canadian dollars, except percentage amounts)	Personal & Commercial Banking	Wealth Management	Insurance	Investor & Treasury Services	Capital Markets	Corporate Support	Total	Total
Net income available to common shareholders	$ 4,276	$ 1,299	$ 455	$ 572	$ 1,874	$ (105)	$ 8,371	$ 7,653
Total average common equity (1), (2)	19,800	13,500	1,650	3,200	19,150	7,750	65,050	61,900
ROE (3)	28.9%	12.9%	37.4%	23.9%	13.1%	n.m.	17.2%	16.5%

(1) Total average common equity represents rounded figures.
(2) The amounts for the segments are referred to as attributed capital. Effective the first quarter of 2017, we increased our capital attribution rate to better align with higher regulatory capital requirements.
(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, 2017 with the corresponding periods in the prior year and the three months ended April 30, 2017 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. Effective the first quarter of 2017, we revised our cost of equity to 8.5% from 9.0% in 2016, largely as a result of lower long-term interest rates.

The following table provides a summary of our Economic profit:

(Millions of Canadian dollars)	For the three months ended July 31 2017 Personal & Commercial Banking	Wealth Management	Insurance	Investor & Treasury Services	Capital Markets	Corporate Support	Total	April 30 2017 Total	July 31 2016 Total
Net income	$ 1,399	$ 486	$ 161	$ 178	$ 611	$ (39)	$ 2,796	$ 2,809	$ 2,895
add: Non-controlling interests	(4)	–	–	–	–	(9)	(13)	(8)	(9)
After-tax effect of amortization of other intangibles	3	44	–	3	–	–	50	51	51
Adjusted net income (loss)	$ 1,398	$ 530	$ 161	$ 181	$ 611	$ (48)	$ 2,833	$ 2,852	$ 2,937
less: Capital charge	463	304	39	70	441	167	1,484	1,420	1,484
Economic profit (loss)	$ 935	$ 226	$ 122	$ 111	$ 170	$ (215)	$ 1,349	$ 1,432	$ 1,453

(Millions of Canadian dollars)	For the nine months ended July 31 2017 Personal & Commercial Banking	Wealth Management	Insurance	Investor & Treasury Services	Capital Markets	Corporate Support	Total	July 31 2016 Total
Net income	$ 4,351	$ 1,347	$ 461	$ 585	$ 1,941	$ (53)	$ 8,632	$ 7,915
add: Non-controlling interests	(6)	–	–	(1)	–	(26)	(33)	(43)
After-tax effect of amortization of other intangibles	9	137	–	11	–	–	157	159
Adjusted net income (loss)	$ 4,354	$ 1,484	$ 461	$ 595	$ 1,941	$ (79)	$ 8,756	$ 8,031
less: Capital charge	1,329	907	109	214	1,283	522	4,364	4,390
Economic profit (loss)	$ 3,025	$ 577	$ 352	$ 381	$ 658	$ (601)	$ 4,392	$ 3,641

Results excluding specified items

There were no specified items in the current period. Our results for the nine months ended July 31, 2017 and the three and nine months ended July 31, 2016 were impacted by the following specified items:

- 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 Personal & Commercial Banking.
- For the three and nine months ended July 31, 2016, a gain related to the sale of our home and auto insurance manufacturing business, RBC General Insurance Company, to Aviva, which was $287 million ($235 million after-tax) and recorded in Insurance.

The following tables provide calculations of our consolidated and business segment results and measures excluding these specified items:

Consolidated results

(Millions of Canadian dollars, except per share and percentage amounts)	For the three months ended (1) July 31 2016 As reported	Item excluded: Gain related to the sale of RBC General Insurance	Adjusted
Continuing operations			
Total revenue	$ 10,255	$ (287)	$ 9,968
PCL	318	–	318
PBCAE	1,210	–	1,210
Non-interest expense	5,091	–	5,091
Net income before income taxes	$ 3,636	$ (287)	$ 3,349
Income taxes	741	(52)	689
Net income	$ 2,895	$ (235)	$ 2,660
Net income available to common shareholders	$ 2,801	$ (235)	$ 2,566
Average number of common shares (thousands)	1,485,915		1,485,915
Basic earnings per share (in dollars)	$ 1.88	$ (0.16)	$ 1.72
Average number of diluted common shares (thousands)	1,494,126		1,494,126
Diluted earnings per share (in dollars)	$ 1.88	$ (0.16)	$ 1.72
Average common equity (2)	$ 61,800		$ 61,800
ROE (3)	18.0%		16.5%
Efficiency ratio	49.6%		51.1%
Effective tax rate	20.4%		20.6%

(1) There were no specified items for the three months ended July 31, 2017 or April 30, 2017.
(2) Average common equity represents rounded figures.
(3) ROE is based on actual balances of average common equity before rounding.

Consolidated results

(Millions of Canadian dollars, except per share and percentage amounts)	For the nine months ended (1) July 31 2017 As reported	Item excluded: Gain related to the sale by Moneris (2)	Adjusted	For the nine months ended (1) July 31 2016 As reported	Item excluded: Gain related to the sale of RBC General Insurance	Adjusted
Continuing operations						
Total revenue	$ 29,842	$ (212)	$ 29,630	$ 29,140	$ (287)	$ 28,853
PCL	916	–	916	1,188	–	1,188
PBCAE	1,916	–	1,916	3,027	–	3,027
Non-interest expense	15,879	–	15,879	14,938	–	14,938
Net income before income taxes	$ 11,131	$ (212)	$ 10,919	$ 9,987	$ (287)	$ 9,700
Income taxes	2,499	–	2,499	2,072	(52)	2,020
Net income	$ 8,632	$ (212)	$ 8,420	$ 7,915	$ (235)	$ 7,680
Net income available to common shareholders	$ 8,371	$ (212)	$ 8,159	$ 7,653	$ (235)	$ 7,418
Average number of common shares (thousands)	1,470,066		1,470,066	1,486,550		1,486,550
Basic earnings per share (in dollars)	$ 5.69	$ (0.14)	$ 5.55	$ 5.15	$ (0.16)	$ 4.99
Average number of diluted common shares (thousands)	1,477,615		1,477,615	1,494,877		1,494,877
Diluted earnings per share (in dollars)	$ 5.67	$ (0.14)	$ 5.53	$ 5.13	$ (0.16)	$ 4.97
Average common equity (3)	$ 65,050		$ 65,050	$ 61,900		$ 61,900
ROE (4)	17.2%		16.8%	16.5%		16.0%
Efficiency ratio	53.2%		53.6%	51.3%		51.8%
Effective tax rate	22.5%		22.9%	20.7%		20.8%

(1) There were no specified items for the three months ended July 31, 2017 or April 30, 2017.
(2) Includes foreign currency translation.
(3) Average common equity represents rounded figures.
(4) ROE is based on actual balances of average common equity before rounding.

Personal & Commercial Banking

(Millions of Canadian dollars, except percentage amounts)	For the nine months ended (1) July 31 2017 As reported	Item excluded: Gain related to the sale by Moneris (2)	Adjusted
Total revenue	$ 11,701	$ (212)	$ 11,489
PCL	784	–	784
Non-interest expense	5,161	–	5,161
Net income before income taxes	$ 5,756	$ (212)	$ 5,544
Net income	$ 4,351	$ (212)	$ 4,139
Selected balances and other information			
Non-interest expense	$ 5,161	$ –	$ 5,161
Total revenue	11,701	(212)	11,489
Efficiency ratio	44.1%		44.9%
Revenue growth rate	5.9%		4.0%
Non-interest expense growth rate	3.7%		3.7%
Operating leverage (3)	2.2%		0.3%

(1) There were no specified items for the three months ended July 31, 2017, April 30, 2017 or July 31, 2016 or for the nine months ended July 31, 2016.
(2) Includes foreign currency translation.
(3) Operating leverage is calculated as the difference between our revenue growth rate and non-interest expense growth rate.

Canadian Banking

(Millions of Canadian dollars, except percentage amounts)	For the nine months ended (1) July 31 2017 As reported	Item excluded: Gain related to the sale by Moneris (2)	Adjusted
Total revenue	$ 10,968	$ (212)	$ 10,756
PCL	765	–	765
Non-interest expense	4,595	–	4,595
Net income before income taxes	$ 5,608	$ (212)	$ 5,396
Net income	$ 4,211	$ (212)	$ 3,999
Selected balances and other information			
Non-interest expense	$ 4,595	$ –	$ 4,595
Total revenue	10,968	(212)	10,756
Efficiency ratio	41.9%		42.7%
Revenue growth rate	6.5%		4.4%
Non-interest expense growth rate	3.7%		3.7%
Operating leverage (3)	2.8%		0.7%

(1) There were no specified items for the three months ended July 31, 2017, April 30, 2017 or July 31, 2016 or for the nine months ended July 31, 2016.
(2) Includes foreign currency translation.
(3) Operating leverage is calculated as the difference between our revenue growth rate and non-interest expense growth rate.

Insurance

(Millions of Canadian dollars, except percentage amounts)	For the three months ended (1) July 31 2016 As reported	Item excluded: Gain related to the sale of RBC General Insurance	Adjusted	For the nine months ended (1) July 31 2016 As reported	Item excluded: Gain related to the sale of RBC General Insurance	Adjusted
Total revenue	$ 1,818	$ (287)	$ 1,531	$ 4,328	$ (287)	$ 4,041
PBCAE	1,210	–	1,210	3,027	–	3,027
Non-interest expense	151	–	151	468	–	468
Net income before income taxes	$ 457	$ (287)	$ 170	$ 833	$ (287)	$ 546
Net income	$ 364	$ (235)	$ 129	$ 672	$ (235)	$ 437
Selected balance and other information						
ROE	75.7%		26.4%	52.3%		33.8%

(1) There were no specified items for the three months ended July 31, 2017 or April 30, 2017 or for the nine months ended July 31, 2017.

Efficiency ratio excluding the change in fair value of investments in Insurance and specified items

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. In addition, revenue for the nine months ended July 31, 2017 and for the three and nine months ended July 31, 2016 were impacted by the specified items noted previously.

The following tables provide calculations of our consolidated efficiency ratio excluding the change in fair value of investments backing our policyholder liabilities and the specified items:

(Millions of Canadian dollars, except percentage amounts)	For the three months ended July 31 2017 As reported	Item excluded: Change in fair value of investments backing policyholder liabilities	Adjusted	April 30 2017 As reported	Item excluded: Change in fair value of investments backing policyholder liabilities	Adjusted	July 31 2016 As reported	Items excluded: Change in fair value of investments backing policyholder liabilities	Items excluded: Gain related to the sale of RBC General Insurance	Adjusted
Continuing operations										
Total revenue	$ 9,986	$ 225	$ 10,211	$ 10,310	$ (369)	$ 9,941	$ 10,255	$ (543)	$ (287)	$ 9,425
Non-interest expense	5,435	–	5,435	5,229	–	5,229	5,091	–	–	5,091
Efficiency ratio	54.4%		53.2%	50.7%		52.6%	49.6%			54.0%

(Millions of Canadian dollars, except percentage amounts)	For the nine months ended July 31 2017 As reported	Items excluded: Change in fair value of investments backing policyholder liabilities	Items excluded: Gain related to the sale by Moneris (1)	Adjusted	July 31 2016 As reported	Items excluded: Change in fair value of investments backing policyholder liabilities	Items excluded: Gain related to the sale of RBC General Insurance	Adjusted
Continuing operations								
Total revenue	$ 29,842	$ 337	$ (212)	$ 29,967	$ 29,140	$ (805)	$ (287)	$ 28,048
Non-interest expense	15,879	–	–	15,879	14,938	–	–	14,938
Efficiency ratio	53.2%			53.0%	51.3%			53.3%

(1) Includes foreign currency translation.

Personal & Commercial Banking

(Millions of Canadian dollars, except percentage amounts and as otherwise noted)	As at or for the three months ended July 31 2017	April 30 2017	July 31 2016	As at or for the nine months ended July 31 2017	July 31 2016
Net interest income	$ 2,721	$ 2,597	$ 2,598	$ 7,967	$ 7,697
Non-interest income	1,200	1,153	1,137	3,734	3,355
Total revenue	3,921	3,750	3,735	11,701	11,052
PCL	273	262	271	784	834
Non-interest expense	1,777	1,661	1,687	5,161	4,977
Income before income taxes	1,871	1,827	1,777	5,756	5,241
Net income	$ 1,399	$ 1,360	$ 1,322	$ 4,351	$ 3,909
Revenue by business					
Canadian Banking	$ 3,680	$ 3,510	$ 3,499	$ 10,968	$ 10,301
Caribbean & U.S. Banking	241	240	236	733	751
Selected average balance sheet information					
ROE	26.6%	28.0%	28.0%	28.9%	27.6%
NIM	2.66%	2.67%	2.68%	2.66%	2.68%
Efficiency ratio	45.3%	44.3%	45.2%	44.1%	45.0%
Efficiency ratio adjusted (1)	n.a.	n.a.	n.a.	44.9%	n.a.
Operating leverage	(0.3)%	0.3%	0.6%	2.2%	1.9%
Operating leverage adjusted (1)	n.a.	n.a.	n.a.	0.3%	n.a.
Effective income tax rate	25.2%	25.6%	25.6%	24.4%	25.4%
Average total earning assets	$ 405,700	$ 398,900	$ 386,000	$ 400,000	$ 383,500
Average loans and acceptances	405,200	398,200	384,700	399,400	381,900
Average deposits	346,400	342,400	321,300	341,900	316,900
AUA (2)	252,500	258,100	235,300	252,500	235,300
PCL on impaired loans as a % of average net loans and acceptances	0.27%	0.27%	0.28%	0.26%	0.29%

(1) Measures have been adjusted by excluding our share of the Q1 2017 gain related to the sale of the U.S. operations of Moneris of $212 million (before- and after-tax). These are non-GAAP measures. For further details, refer to the Key performance and non-GAAP measures section.

(2) AUA represents period-end spot balances and includes securitized residential mortgages and credit card loans as at July 31, 2017 of $18.4 billion and $8.2 billion, respectively (April 30, 2017 – $18.9 billion and $9.8 billion; July 31, 2016 – $18.8 billion and $9.4 billion).

n.a. Not applicable

Financial performance

Q3 2017 vs. Q3 2016

Net income increased $77 million or 6% from the prior year, mainly reflecting volume growth of 6%, partially offset by lower spreads in Canada. Higher fee-based revenue also contributed to the increase. These factors were partially offset by higher staff-related costs including severance and higher costs in support of business growth.

Total revenue increased $186 million or 5% from the prior year.

Canadian Banking revenue increased $181 million or 5% mainly due to volume growth of 7% partially offset by lower spreads. Higher fee-based revenue also contributed to the increase, mainly due to higher balances driving higher mutual fund distribution fees, as well as higher card service revenue and foreign exchange revenue.

Caribbean & U.S. Banking revenue increased $5 million or 2% compared to last year.

NIM was down 2 bps mainly due to competitive pressures and spread compression.

PCL increased $2 million or 1%, with the PCL ratio improving 1 bp. For further details, refer to Credit quality performance in the Credit Risk section.

Non-interest expense increased $90 million or 5%, primarily attributable to increased staff-related costs including severance. Higher costs in support of business growth reflecting ongoing investments in technology, including digital initiatives, and marketing costs also contributed to the increase. These factors were partially offset by continued benefits from our efficiency management activities.

Q3 2017 vs. Q2 2017

Net income increased $39 million or 3% from last quarter, largely reflecting the positive impact of additional days in the quarter and volume growth. Higher fee-based revenue also contributed to the increase. These factors were partially offset by higher costs in support of business growth, higher staff-related costs including severance and higher PCL.

Q3 2017 vs. Q3 2016 (Nine months ended)

Net income increased $442 million or 11%. Excluding our share of the gain related to the sale of the U.S. operations of Moneris of $212 million (before- and after-tax), net income increased $230 million or 6%, largely due to volume growth of 6%, partially offset by lower spreads in Canada. Higher fee-based revenue in Canada and lower PCL also contributed to the increase. These factors were partially offset by higher costs in support of business growth.

Total revenue increased $649 million or 6%. Excluding our share of the gain noted previously, revenue increased $437 million or 4%, mainly due to volume growth of 6%, partially offset by lower spreads. Higher fee-based revenue also contributed to the increase, mainly due to higher balances driving higher mutual fund distribution fees, as well as higher card service revenue.

PCL decreased $50 million or 6%, and the PCL ratio improved 3 bps, mainly due to lower provisions in both our Canadian and Caribbean lending portfolios. For further details, refer to Credit quality performance in the Credit Risk section.

Non-interest expense increased $184 million or 4% compared to last year mainly due to higher costs in support of business growth reflecting ongoing investments in technology, including digital initiatives, and marketing costs. Increased staff-related costs including severance in Canada and an impairment related to properties held for sale in the Caribbean also contributed to the increase. These factors were partially offset by continued benefits from our efficiency management activities.

Results excluding the specified item noted previously are non-GAAP measures. For further details, including a reconciliation, refer to the Key performance and non-GAAP measures section.

Canadian Banking

(Millions of Canadian dollars, except percentage amounts and as otherwise noted)	As at or for the three months ended July 31 2017	April 30 2017	July 31 2016	As at or for the nine months ended July 31 2017	July 31 2016
Net interest income	$ 2,561	$ 2,435	$ 2,442	$ 7,484	$ 7,212
Non-interest income	1,119	1,075	1,057	3,484	3,089
Total revenue	3,680	3,510	3,499	10,968	10,301
PCL	259	256	265	765	804
Non-interest expense	1,602	1,479	1,503	4,595	4,432
Net income before income taxes	1,819	1,775	1,731	5,608	5,065
Net income	$ 1,349	$ 1,316	$ 1,284	$ 4,211	$ 3,756
Revenue by business					
Personal Financial Services	$ 2,062	$ 1,966	$ 1,973	$ 6,043	$ 5,813
Business Financial Services	850	812	814	2,482	2,379
Cards and Payment Solutions	768	732	712	2,443	2,109
Selected average balance sheet information					
ROE	30.6%	32.9%	33.4%	33.7%	32.7%
NIM	2.61%	2.62%	2.63%	2.61%	2.63%
Efficiency ratio	43.5%	42.1%	43.0%	41.9%	43.0%
Efficiency ratio adjusted (1)	n.a.	n.a.	n.a.	42.7%	n.a.
Operating leverage	(1.4)%	0.7%	1.4%	2.8%	1.7%
Operating leverage adjusted (1)	n.a.	n.a.	n.a.	0.7%	n.a.
Effective income tax rate	25.8%	25.9%	25.8%	24.9%	25.8%
Average total earning assets	$ 388,600	$ 381,400	$ 368,900	$ 382,800	$ 366,000
Average loans and acceptances	396,100	388,800	375,600	390,100	372,500
Average deposits	328,200	323,300	302,700	323,300	298,100
AUA (2)	244,400	249,200	227,400	244,400	227,400
PCL on impaired loans as a % of average net loans and acceptances	0.26%	0.27%	0.28%	0.26%	0.29%

(1) Measures have been adjusted by excluding our share of the Q1 2017 gain related to sale of the U.S. operations of Moneris of $212 million (before- and after-tax). These are non-GAAP measures. For further details, refer to the Key performance and non-GAAP measures section.
(2) AUA represents period-end spot balances and includes securitized residential mortgages and credit card loans as at July 31, 2017 of $18.4 billion and $8.2 billion, respectively (April 30, 2017 – $18.9 billion and $9.8 billion; July 31, 2016 – $18.8 billion and $9.4 billion).
n.a. Not applicable

Financial performance
Q3 2017 vs. Q3 2016
Net income increased $65 million or 5% compared to last year, largely reflecting volume growth of 7%, partially offset by lower spreads. Higher fee-based revenue and lower PCL also contributed to the increase. These factors were partially offset by higher staff-related costs including severance and higher costs in support of business growth.

Total revenue increased $181 million or 5% from last year.

Personal Financial Services revenue increased $89 million or 5%, mainly due to volume growth of 4% and increased fee-based revenue primarily attributable to higher balances driving higher mutual fund distribution fees.

Business Financial Services revenue increased $36 million or 4%, mainly reflecting volume growth of 12%, partially offset by lower spreads and gains related to our commercial mortgage-backed securities portfolio in the prior year.

Cards and Payment Solutions revenue increased $56 million or 8%, mainly due to higher loan balances and transaction volumes.

NIM decreased 2 bps mainly due to competitive pressures and spread compression.

PCL decreased $6 million, with the PCL ratio improving 2 bps, mostly due to lower provisions in our personal lending portfolios and lower write-offs in our credit cards portfolio, partially offset by higher provisions in our commercial lending portfolios. For further details, refer to Credit quality performance in the Credit Risk section.

Non-interest expense increased $99 million or 7% mainly due to increased staff-related costs including severance and higher costs in support of business growth reflecting ongoing investments in technology, including digital initiatives, and marketing costs. These factors were partially offset by continued benefits from our efficiency management activities.

Q3 2017 vs. Q2 2017
Net income increased $33 million or 3% from last quarter, largely reflecting the positive impact of additional days in the quarter and volume growth. Higher fee-based revenue also contributed to the increase. These factors were partially offset by higher costs in support of business growth and higher staff-related costs including severance.

Q3 2017 vs. Q3 2016 (nine months ended)
Net income increased $455 million or 12%. Excluding our share of the gain related to the sale of the U.S. operations of Moneris of $212 million (before- and after-tax), net income increased $243 million or 6%, largely due to volume growth of 6%, partially offset by lower spreads. Higher fee-based revenue and lower PCL also contributed to the increase. These factors were partially offset by higher costs in support of business growth.

Total revenue increased $667 million or 6% compared to last year. Excluding our share of the gain as noted previously, revenue increased $455 million or 4%, largely reflecting volume growth of 6%, partially offset by lower spreads. Higher fee-based revenue also contributed to the increase, mainly due to higher balances driving higher mutual fund distribution fees, as well as higher card service revenue and foreign exchange revenue.

PCL decreased $39 million or 5%, and the PCL ratio improved 3 bps, mainly due to lower provisions across most of our portfolios. For further details, refer to Credit quality performance in the Credit Risk section.

Non-interest expense increased $163 million or 4% mainly due to higher costs in support of business growth reflecting ongoing investments in technology, including digital initiatives, and marketing costs. Increased staff-related costs including severance also contributed to the increase. These factors were partially offset by continued benefits from our efficiency management activities.

Results excluding the specified item noted previously are non-GAAP measures. For further details, including a reconciliation, refer to the Key performance and non-GAAP measures section.

Wealth Management

	As at or for the three months ended			As at or for the nine months ended	
(Millions of Canadian dollars, except number of and percentage amounts and as otherwise noted)	July 31 2017	April 30 2017	July 31 2016	July 31 2017	July 31 2016
Net interest income	$ 578	$ 546	$ 496	$ 1,665	$ 1,431
Non-interest income					
Fee-based revenue	1,431	1,371	1,276	4,153	3,778
Transaction and other revenue	485	510	463	1,534	1,293
Total revenue	2,494	2,427	2,235	7,352	6,502
PCL	6	15	14	34	26
Non-interest expense	1,856	1,838	1,717	5,549	5,065
Income before income taxes	632	574	504	1,769	1,411
Net income	$ 486	$ 431	$ 388	$ 1,347	$ 1,077
Revenue by business					
Canadian Wealth Management	$ 678	$ 676	$ 606	$ 2,052	$ 1,802
U.S. Wealth Management (including City National)	1,237	1,192	1,064	3,599	3,042
U.S. Wealth Management (including City National) (US$ millions)	954	888	817	2,723	2,300
Global Asset Management	483	461	458	1,411	1,330
International Wealth Management	96	98	107	290	328
Selected average balance sheet information					
ROE	13.9%	12.4%	11.4%	12.9%	10.6%
NIM (1)	3.14%	2.99%	2.87%	2.98%	2.85%
Pre-tax margin (2)	25.3%	23.7%	22.6%	24.1%	21.7%
Number of advisors (3)	4,860	4,817	4,716	4,860	4,716
Average total earning assets	$ 73,100	$ 74,800	$ 68,800	$ 74,700	$ 67,100
Average loans and acceptances	51,500	52,000	49,100	51,400	48,800
Average deposits	91,800	94,800	85,200	93,900	83,500
AUA (4), (5)	873,900	931,200	850,200	873,900	850,200
– U.S. Wealth Management (including City National) (4), (5)	412,300	427,100	389,600	412,300	389,600
– U.S. Wealth Management (including City National) (US$ millions) (4), (5)	330,500	312,900	298,500	330,500	298,500
AUM (4)	595,700	608,700	569,700	595,700	569,700
Average AUA (5)	892,900	916,400	842,500	897,800	839,600
Average AUM	604,400	599,500	559,300	594,600	554,800

Estimated impact of U.S. dollar, British pound and Euro translation on key income statement items (Millions of Canadian dollars, except percentage amounts and as otherwise noted)	For the three months ended Q3 2017 vs. Q3 2016	Q3 2017 vs. Q2 2017	For the nine months ended Q3 2017 vs. Q3 2016
Increase (decrease):			
Total revenue	$ (10)	$ (40)	$ (53)
Non-interest expense	(9)	(31)	(54)
Net income	(1)	(6)	1
Percentage change in average US$ equivalent of C$1.00	–%	3%	–%
Percentage change in average British pound equivalent of C$1.00	5%	–%	12%
Percentage change in average Euro equivalent of C$1.00	(3)%	(4)%	1%

(1) NIM is calculated as Net interest income divided by Average total earning assets.
(2) Pre-tax margin is defined as Income before income taxes divided by Total revenue.
(3) Represents investment advisors and financial consultants of our Canadian and U.S. full-service wealth businesses.
(4) Represents period-end spot balances.
(5) Amounts have been revised from those previously presented.

Financial performance
Q3 2017 vs. Q3 2016

Net income increased $98 million or 25% from a year ago, mainly due to increased earnings resulting from growth in average fee-based client assets and higher net interest income. These factors were partially offset by higher variable compensation on improved results, and higher costs in support of business growth.

Total revenue increased $259 million or 12%.

Canadian Wealth Management revenue increased $72 million or 12%, primarily due to higher average fee-based client assets reflecting capital appreciation and net sales.

U.S. Wealth Management (including City National) revenue increased $173 million or 16%. In U.S. dollars, revenue increased $137 million or 17%, mainly due to higher net interest income reflecting the impact from higher U.S. interest rates and volume growth, higher average fee-based client assets reflecting capital appreciation and net sales, and higher transaction revenue.

Global Asset Management revenue increased $25 million or 5%, primarily due to higher average fee-based client assets under management, reflecting capital appreciation.

International Wealth Management revenue decreased $11 million or 10%, mainly due to lower transaction revenue, as well as the impact from the exit of certain international businesses.

PCL decreased $8 million mainly reflecting a recovery in one account in International Wealth Management, partially offset by higher provisions related to U.S. Wealth Management (including City National).

Non-interest expense increased $139 million or 8%, largely due to higher variable compensation on improved results, and higher costs in support of business growth.

Q3 2017 vs. Q2 2017

Net income increased $55 million or 13% from the prior quarter, mainly due to earnings from fee-based revenue reflecting higher net sales and capital appreciation, an increase in net interest income reflecting the impact from higher U.S. interest rates and the favourable impact of additional days in the quarter. These factors were partially offset by higher variable compensation on improved results and higher costs in support of business growth.

Q3 2017 vs. Q3 2016 (Nine months ended)

Net income increased $270 million or 25% from a year ago, mainly due to higher average fee-based client assets which benefited from capital appreciation and net sales, an increase in net interest income due to volume growth and the impact from higher U.S. interest rates, and higher transaction revenue. These factors were partially offset by higher variable compensation on improved results and higher costs in support of business growth.

Total revenue increased $850 million or 13%, mainly due to growth in average fee-based client assets which benefited from capital appreciation and net sales, higher net interest income reflecting the impact from higher U.S. interest rates and volume growth, and higher transaction revenue.

PCL increased $8 million largely reflecting higher provisions related to U.S. Wealth Management (including City National), partially offset by a recovery in one account in International Wealth Management.

Non-interest expense increased $484 million or 10%, largely due to higher variable compensation on improved results and higher costs in support of business growth.

Insurance

	As at or for the three months ended			As at or for the nine months ended	
(Millions of Canadian dollars, except percentage amounts and as otherwise noted)	**July 31 2017**	April 30 2017	July 31 2016	**July 31 2017**	July 31 2016
Non-interest income					
Net earned premiums	**$ 1,081**	$ 879	$ 764	**$ 2,709**	$ 2,477
Investment income (1)	**(120)**	527	921	**54**	1,473
Fee income	**48**	42	133	**191**	378
Total revenue	**1,009**	1,448	1,818	**2,954**	4,328
Insurance policyholder benefits and claims (1)	**573**	1,021	1,158	**1,724**	2,859
Insurance policyholder acquisition expense	**70**	69	52	**192**	168
Non-interest expense	**147**	140	151	**427**	468
Income before income taxes	**219**	218	457	**611**	833
Net income	**$ 161**	$ 166	$ 364	**$ 461**	$ 672
Revenue by business					
Canadian Insurance	**$ 473**	$ 978	$ 1,437	**$ 1,471**	$ 3,078
International Insurance	**536**	470	381	**1,483**	1,250
Selected balances and other information					
ROE	**37.0%**	41.5%	75.7%	**37.4%**	52.3%
Premiums and deposits (2)	**$ 1,233**	$ 1,008	$ 1,131	**$ 3,244**	$ 3,529
Fair value changes on investments backing policyholder liabilities (1)	**(225)**	369	543	**(337)**	805

(1) Investment income can experience volatility arising from fluctuation of fair value through profit or loss (FVTPL) assets. The investments which support actuarial liabilities are predominantly fixed income assets designated as at FVTPL. Consequently, changes in the fair values of these assets are recorded in investment income in the consolidated statement 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 and claims.

(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 2017 vs. Q3 2016

Net income decreased $203 million or 56% from a year ago, primarily due to the gain on sale of our home and auto insurance manufacturing business in the prior year. Excluding the after-tax gain of $235 million, net income increased $32 million or 25%, primarily reflecting higher investment-related gains.

Total revenue decreased $809 million or 44% as compared to the prior year.

Canadian Insurance revenue decreased $964 million or 67%, mainly due to the change in fair value of investments backing our policyholder liabilities, largely offset in PBCAE. The prior year also included a gain of $287 million and the associated premiums relating to our home and auto insurance manufacturing business, which was sold on July 1, 2016. These factors were partially offset by business growth, primarily reflecting higher revenues from group annuity sales.

International Insurance revenue increased $155 million or 41%, mainly due to the impact of restructured international life contracts and the change in fair value of investments backing our policyholder liabilities, both of which are largely offset in PBCAE, and business growth.

PBCAE decreased $567 million or 47%, primarily reflecting the change in fair value of investments backing our policyholder liabilities, largely offset in revenue. The impact of the sale of our home and auto insurance manufacturing business in the prior year and higher investment-related gains also contributed to the decrease. These factors were partially offset by business growth and the impact of restructured international life contracts, largely offset in revenue.

Non-interest expense decreased $4 million or 3%, mainly due to lower costs reflecting the impact of the sale of our home and auto insurance manufacturing business in the prior year.

Q3 2017 vs. Q2 2017

Net income decreased $5 million or 3% from the prior quarter, largely due to higher claims costs, mainly in International Insurance, partially offset by business growth and actuarial adjustments reflecting management actions and assumption changes.

Q3 2017 vs. Q3 2016 (Nine months ended)

Net income decreased $211 million or 31% from a year ago, primarily due to the gain on sale of our home and auto insurance manufacturing business, as previously noted. Excluding the gain, net income increased $24 million or 5%, reflecting higher investment-related gains and business growth in both Canadian and International Insurance. These items were partially offset by a tax recovery in the prior year and reduced earnings associated with the sale of our home and auto insurance manufacturing business, as previously noted.

Total revenue decreased $1,374 million or 32% as compared to the prior year, mainly due to the change in fair value of investments backing our policyholder liabilities, largely offset in PBCAE. The prior year also included the associated premiums and a gain of $287 million relating to our home and auto insurance manufacturing business, as previously noted. These factors were partially offset by higher group annuity sales in Canadian Insurance, volume growth in International Insurance, and the impact of restructured international life contracts, largely offset in PBCAE.

PBCAE decreased $1,111 million or 37%, mainly reflecting the change in fair value of investments backing our policyholder liabilities, largely offset in revenue, lower claims reflecting the impact of the sale of our home and auto insurance manufacturing business in the prior year, and higher investment-related gains. These factors were partially offset by business growth and the impact of restructured international life contracts, largely offset in revenue.

Non-interest expense decreased $41 million or 9%, mainly due to lower costs reflecting the impact of the sale of our home and auto insurance manufacturing business in the prior year.

Results excluding the gain from the sale of our home and auto insurance manufacturing business, RBC General Insurance Company, as noted previously are non-GAAP measures. For further details, including a reconciliation, refer to the Key performance and non-GAAP measures section.

Investor & Treasury Services

	As at or for the three months ended			As at or for the nine months ended	
(Millions of Canadian dollars, except percentage amounts)	**July 31 2017**	April 30 2017	July 31 2016	**July 31 2017**	July 31 2016
Net interest income	**$ 141**	$ 173	$ 195	**$ 551**	$ 611
Non-interest income	**453**	435	382	**1,282**	1,056
Total revenue	**594**	608	577	**1,833**	1,667
Non-interest expense	**364**	355	368	**1,069**	1,081
Net income before income taxes	**230**	253	209	**764**	586
Net income	**$ 178**	$ 193	$ 157	**$ 585**	$ 439
Selected average balance sheet information					
ROE	**21.9%**	24.6%	18.2%	**23.9%**	16.9%
Average deposits	**$ 132,000**	$ 127,900	$ 123,200	**$ 129,500**	$ 137,700
Client deposits	**55,600**	52,900	53,000	**53,700**	53,500
Wholesale funding deposits	**76,400**	75,000	70,200	**75,800**	84,200
AUA (1)	**4,251,300**	4,111,400	3,724,300	**4,251,300**	3,724,300
Average AUA	**4,228,400**	3,978,100	3,699,300	**3,993,700**	3,731,000

(1) Represents period-end spot balances.

Q3 2017 vs. Q3 2016

Net income increased $21 million or 13%, primarily due to increased results from foreign exchange market execution driven by higher client activity, and higher funding and liquidity results reflecting interest rate movements.

Total revenue increased $17 million or 3%, mainly due to the factors noted previously.

Non-interest expense decreased $4 million or 1%.

Q3 2017 vs. Q2 2017

Net income decreased $15 million or 8%, primarily driven by lower funding and liquidity earnings as the results in the prior quarter benefitted from tightening credit spreads as well as interest rate movements.

Q3 2017 vs. Q3 2016 (Nine months ended)

Net income increased $146 million or 33%, largely due to higher funding and liquidity earnings reflecting interest rate movements, increased results from foreign exchange market execution driven by higher client activity, and higher custodial fees.

Total revenue increased $166 million or 10%, mainly due to the factors noted previously.

Non-interest expense decreased $12 million or 1% largely driven by the impact of foreign exchange translation and lower staff-related costs, partially offset by higher investment in technology.

Capital Markets

	As at or for the three months ended			As at or for the nine months ended	
(Millions of Canadian dollars, except percentage amounts)	July 31 2017	April 30 2017	July 31 2016	July 31 2017	July 31 2016
Net interest income (1)	$ 845	$ 922	$ 892	$ 2,714	$ 2,947
Non-interest income (1)	1,195	1,195	1,195	3,514	3,110
Total revenue (1)	2,040	2,117	2,087	6,228	6,057
PCL	44	24	33	100	276
Non-interest expense	1,199	1,173	1,160	3,497	3,315
Net income before income taxes	797	920	894	2,631	2,466
Net income	$ 611	$ 668	$ 635	$ 1,941	$ 1,788
Revenue by business					
Corporate and Investment Banking	$ 995	$ 1,020	$ 956	$ 2,951	$ 2,718
Global Markets	1,134	1,162	1,148	3,490	3,383
Other	(89)	(65)	(17)	(213)	(44)
Selected average balance sheet information					
ROE	11.9%	14.2%	14.2%	13.1%	12.8%
Average total assets	$ 494,000	$ 499,600	$ 514,500	$ 495,700	$ 512,000
Average trading securities	86,800	95,000	104,600	93,500	104,800
Average loans and acceptances	83,100	83,600	87,400	83,500	88,900
Average deposits	59,500	59,900	61,600	59,400	62,300
PCL on impaired loans as a % of average net loans and acceptances	0.21%	0.12%	0.15%	0.16%	0.41%

Estimated impact of U.S. dollar, British pound and Euro translation on key income statement items (Millions of Canadian dollars, except percentage amounts and as otherwise noted)	For the three months ended Q3 2017 vs. Q3 2016	Q3 2017 vs. Q2 2017	For the nine months ended Q3 2017 vs. Q3 2016
Increase (decrease):			
Total revenue	$ (19)	$ (50)	$ (50)
Non-interest expense	(16)	(22)	(62)
Net income	(2)	(17)	11
Percentage change in average US$ equivalent of C$1.00	–%	3%	–%
Percentage change in average British pound equivalent of C$1.00	5%	–%	12%
Percentage change in average Euro equivalent of C$1.00	(3)%	(4)%	1%

(1) The taxable equivalent basis (teb) adjustment for the three months ended July 31, 2017 was $107 million (April 30, 2017 – $97 million, July 31, 2016 – $267 million) and for the nine months ended July 31, 2017 was $323 million (July 31, 2016 – $621 million). For further discussion, refer to the How we measure and report our business segments section of our 2016 Annual Report.

Q3 2017 vs. Q3 2016

Net income decreased $24 million or 4%, primarily due to lower fixed income trading results reflecting reduced market volatility, higher costs related to changes in the timing of deferred compensation, and decreased results from Municipal Banking in the U.S. These factors were partially offset by higher equity trading results, a lower effective tax rate due to a lower proportion of pre-tax earnings in the U.S., and higher loan syndication and M&A activity.

Total revenue decreased $47 million or 2%.

Corporate and Investment Banking revenue increased $39 million or 4%, mainly due to higher loan syndication activity primarily in the U.S. and increased M&A activity largely in Europe. Higher lending revenue in the U.S. and Canada also contributed to the increase. These factors were partially offset by lower revenue from Municipal Banking in the U.S. as compared to the strong levels experienced last year.

Global Markets revenue decreased $14 million or 1%, primarily driven by decreased fixed income trading revenue reflecting reduced market volatility, partially offset by higher equity trading revenue across most regions.

Other revenue decreased $72 million largely reflecting higher residual funding costs and lower revenue in our legacy portfolios.

PCL of $44 million increased $11 million or 33%, primarily due to higher provisions in the real estate & related sector, partially offset by lower provisions in the oil & gas sector. For further details, refer to the Credit quality performance section.

Non-interest expense increased $39 million or 3%, mainly due to higher costs related to changes in the timing of deferred compensation, partially offset by lower legal costs.

Q3 2017 vs. Q2 2017

Net income decreased $57 million or 9%, primarily due to lower equity origination activity mainly in the U.S., and higher costs related to changes in the deferred compensation plan. Decreased foreign exchange trading results largely in Canada, lower loan syndication activity mainly in the U.S., and higher PCL also contributed to the decrease. These factors were partially offset by a lower effective tax rate due to a lower proportion of pre-tax earnings in the U.S., and higher fixed income trading results in Canada.

Q3 2017 vs. Q3 2016 (Nine months ended)

Net income increased $153 million or 9%, driven by higher results in Corporate and Investment Banking and Global Markets reflecting increased fee-based revenue, as well as lower PCL. These factors were partially offset by higher costs related to changes in the timing of deferred compensation, and lower results in Other.

Total revenue increased $171 million or 3%, mainly due to increased loan syndication, M&A and debt origination activity primarily in the U.S., partially offset by higher residual funding costs in Other, and decreased commodities trading revenue across all regions.

PCL of $100 million decreased $176 million from the prior year, primarily due to lower provisions and higher recoveries in the oil & gas sector, partially offset by higher provisions in the real estate & related sector. For further details, refer to Credit quality performance in the Credit risk section.

Non-interest expense increased $182 million or 5%, largely due to higher costs related to changes in the timing of deferred compensation.

Corporate Support

	For the three months ended			For the nine months ended	
(Millions of Canadian dollars, except as otherwise noted)	**July 31 2017**	April 30 2017	July 31 2016	**July 31 2017**	July 31 2016
Net interest income (loss) (1)	**$ (28)**	$ (40)	$ (58)	**$ (118)**	$ (342)
Non-interest income (loss) (1)	**(44)**	–	(139)	**(108)**	(124)
Total revenue (1)	**(72)**	(40)	(197)	**(226)**	(466)
PCL	**(3)**	1	–	**(2)**	52
Non-interest expense	**92**	62	8	**176**	32
Net income (loss) before income taxes (1)	**(161)**	(103)	(205)	**(400)**	(550)
Income taxes (recoveries) (1)	**(122)**	(94)	(234)	**(347)**	(580)
Net income (loss) (2)	**$ (39)**	$ (9)	$ 29	**$ (53)**	$ 30

(1) Teb adjusted.
(2) Net income (loss) reflects income attributable to both shareholders and Non-Controlling Interests (NCI). Net income attributable to NCI for the three months ended July 31, 2017 was $9 million (April 30, 2017 – $8 million; July 31, 2016 – $7 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, 2017 was $107 million as compared to $97 million in the prior quarter and $267 million last year. The teb amounts for the nine months ended July 31, 2017 and July 31, 2016 were $323 million and $621 million respectively. For further discussion, refer to the How we measure and report our business segments section of our 2016 Annual Report.

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

Q3 2017
Net loss was $39 million, largely reflecting severance costs.

Q2 2017
Net loss was $9 million, as asset/liability management activities were more than offset by higher legal and severance costs.

Q3 2016
Net income was $29 million, largely reflecting asset/liability management activities.

Q3 2017 (Nine months ended)
Net loss was $53 million, as asset/liability management activities were more than offset by higher severance and legal costs.

Q3 2016 (Nine months ended)
Net income was $30 million, primarily reflecting asset/liability management activities, partially offset by a $50 million ($37 million after-tax) increase in the provision for credit losses for loans not yet identified as impaired.

Results by geographic segment (1)

For geographic reporting, our segments are grouped into the following: Canada, U.S., and Other International. Transactions are primarily recorded in the location that best reflects the risk arising from negative changes in economic conditions and prospects for growth arising from positive economic changes. The following table summarizes our financial results by geographic region:

	For the three months ended									For the nine months ended					
	July 31 2017			April 30 2017			July 31 2016 (2)			July 31 2017			July 31 2016 (2)		
(Millions of Canadian dollars)	Canada	U.S.	Other International	Canada	U.S.	Other International	Canada	U.S.	Other International	Canada	U.S.	Other International	Canada	U.S.	Other International
Total revenue	$ 5,999	$ 2,242	$ 1,745	$ 6,334	$ 2,337	$ 1,639	$ 6,661	$ 2,020	$ 1,574	$ 17,887	$ 6,838	$ 5,117	$ 18,308	$ 6,059	$ 4,773
Net income	$ 2,071	$ 371	$ 354	$ 2,040	$ 404	$ 365	$ 2,207	$ 373	$ 315	$ 6,343	$ 1,138	$ 1,151	$ 5,944	$ 1,062	$ 909

(1) For further details, refer to Note 30 of our audited 2016 Annual Consolidated Financial Statements.
(2) Amounts have been revised from those previously presented.

Q3 2017 vs. Q3 2016

Net income in Canada was down $136 million or 6% from the prior year, mainly due to the gain on sale of our home and auto insurance manufacturing business in the prior year. Excluding the gain, net income in Canada increased $99 million or 5% from the prior year, primarily due to volume growth, net of lower spreads, and higher fee-based revenue in Canadian Banking, as well as higher average fee-based client assets in Wealth Management. These factors were partially offset by higher staff-related costs including severance, and higher costs in support of business growth.

U.S. net income was relatively flat from the prior year. Wealth Management results reflect higher net interest income reflecting the impact from higher U.S. interest rates and volume growth, and increased average fee-based client assets due to capital appreciation and net sales. These factors were offset by an increase in income taxes due to lower favourable tax adjustments, and higher variable compensation on improved results and increased costs in support of business growth in Wealth Management.

Other International net income was up $39 million or 12% from the prior year, largely due to lower expenses reflecting reduced costs in Capital Markets and increased results from higher foreign exchange market execution in Investor & Treasury Services.

Q3 2017 vs. Q2 2017

Net income in Canada was up $31 million or 2% from the prior quarter, due to the positive impact of additional days in the quarter, volume growth and higher fee-based revenue in Canadian Banking. These factors were partially offset by higher costs in support of business growth and higher staff-related costs.

U.S. net income decreased $33 million or 8% from the prior quarter, reflecting lower equity origination and loan syndication activity in Capital Markets. These factors were partially offset by lower taxes due to lower income and more favourable tax adjustments, as well as growth in average fee-based client assets, higher net interest income reflecting the impact from higher U.S. interest rates, and higher transaction revenue in Wealth Management.

Other International net income was down $11 million or 3% from the prior quarter, due to an increase in claims costs, mainly in International Insurance, and higher staff-related costs in Wealth Management. These factors were partially offset by higher lending revenue and increased M&A activity in Capital Markets and business growth in Insurance.

Q3 2017 vs. Q3 2016 (Nine months ended)

Net income in Canada was up $399 million or 7% from the prior year, mainly due to volume growth partially offset by lower spreads, our share of the gain related to the sale of the U.S. operations of Moneris and fee-based revenue growth in Canadian Banking. Higher fee-based revenue, transaction revenue and net interest income in Wealth Management as well as lower PCL, mainly in Capital Markets, also contributed to the increase. These factors were partially offset by the gain on sale of our home and auto insurance manufacturing business in the prior year, higher staff-related costs, an increase in costs in support of business growth in Canadian Banking and Wealth Management, and higher variable compensation on improved results in Wealth Management.

U.S. net income increased $76 million or 7% from the prior year, reflecting higher net interest income from the impact from higher U.S. interest rates and volume growth, increase in average fee-based client assets, and higher transaction revenue in Wealth Management. An increase in loan syndication, M&A and debt origination activity, as well as lower PCL in Capital Markets also contributed to the increase. These factors were partially offset by higher variable compensation on improved results and higher costs in support of business growth in Wealth Management and Capital Markets, as well as higher taxes as a result of lower favourable tax adjustments.

Other International net income was up $242 million or 27% from the prior year, largely due to higher equity trading revenue and lower costs in Capital Markets as well as increased funding and liquidity earnings in Investor & Treasury Services. These factors were partially offset by lower lending and fixed income trading revenue in Capital Markets.

Results excluding the specified items noted previously are non-GAAP measures. For further details, including a reconciliation, refer to the Key performance and non-GAAP measures section.

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 (1)

	2017			2016				2015
(Millions of Canadian dollars, except per share and percentage amounts)	Q3	Q2	Q1	Q4	Q3	Q2	Q1	Q4
Net interest income	$ 4,257	$ 4,198	$ 4,324	$ 4,187	$ 4,123	$ 4,025	$ 4,196	$ 3,800
Non-interest income	5,729	6,112	5,222	5,078	6,132	5,501	5,163	4,219
Total revenue	$ 9,986	$ 10,310	$ 9,546	$ 9,265	$ 10,255	$ 9,526	$ 9,359	$ 8,019
PCL	320	302	294	358	318	460	410	275
PBCAE	643	1,090	183	397	1,210	988	829	292
Non-interest expense	5,435	5,229	5,215	5,198	5,091	4,887	4,960	4,647
Net income before income taxes	$ 3,588	$ 3,689	$ 3,854	$ 3,312	$ 3,636	$ 3,191	$ 3,160	$ 2,805
Income taxes	792	880	827	769	741	618	713	212
Net income	$ 2,796	$ 2,809	$ 3,027	$ 2,543	$ 2,895	$ 2,573	$ 2,447	$ 2,593
EPS – basic	$ 1.86	$ 1.86	$ 1.98	$ 1.66	$ 1.88	$ 1.67	$ 1.59	$ 1.74
– diluted	1.85	1.85	1.97	1.65	1.88	1.66	1.58	1.74
Segments – net income (loss)								
Personal & Commercial Banking	$ 1,399	$ 1,360	$ 1,592	$ 1,275	$ 1,322	$ 1,297	$ 1,290	$ 1,270
Wealth Management	486	431	430	396	388	386	303	255
Insurance	161	166	134	228	364	177	131	225
Investor & Treasury Services	178	193	214	174	157	139	143	88
Capital Markets	611	668	662	482	635	583	570	555
Corporate Support	(39)	(9)	(5)	(12)	29	(9)	10	200
Net income	$ 2,796	$ 2,809	$ 3,027	$ 2,543	$ 2,895	$ 2,573	$ 2,447	$ 2,593
Effective income tax rate	22.1%	23.9%	21.5%	23.2%	20.4%	19.4%	22.6%	7.6%
Period average US$ equivalent of C$1.00	$ 0.770	$ 0.746	$ 0.752	$ 0.757	$ 0.768	$ 0.768	$ 0.728	$ 0.758

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

Seasonality

Seasonal factors may impact our results in certain quarters. The first quarter has historically been seasonally 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's investment management business.

Specified items affecting our consolidated results

- In the first quarter of 2017, our results included our share of a gain related to the sale of the U.S. operations of Moneris of $212 million (before- and after-tax).
- In the third quarter of 2016, our results included a gain of $287 million ($235 million after-tax) related to the sale of RBC General Insurance Company to Aviva.

Trend analysis

The Canadian economy has generally improved over the period, expanding since the second calendar quarter of 2016 as the manufacturing and mining sectors have been boosted by improving oil prices and positive results from the energy sector, after the impact of the Alberta wildfires which temporarily halted oil production in the region in May 2016. This led to the BoC raising its overnight rate by 25 bps in July 2017. The U.S. economy also experienced growth over the period due to higher household wages, strong job growth, continued consumer confidence, and wealth accumulation from rising equity markets and home prices. As a result of improving economic conditions, in June 2017 the Fed raised its funds target range for the third time over the period. Global markets were given a boost since the beginning of 2017 as equity markets continued to rebound from the setbacks seen in 2016, particularly in the energy sector. In addition, unemployment rates in both Canada and the U.S. reached their lowest levels over the period in July 2017. For further details, refer to the Economic and market review and outlook section.

Earnings have generally trended upwards over the period, driven by volume growth partially offset by lower spreads, and higher fee-based revenue in Canadian Banking. Growth in average fee-based client assets in Wealth Management mainly due to strong capital appreciation and net sales, volume growth, and the impact from higher U.S. interest rates since the first quarter 2017 also contributed to the increase in earnings over the period. Results of our acquisition of City National have been reflected in our Wealth Management segment since the first quarter of 2016 and have trended higher since the acquisition. Capital Markets results have trended upwards over the period, driven by higher results in Corporate and Investment Banking and Global Markets driven by increased client activity and generally improved market conditions. The decline in the fourth quarter of 2016 was primarily due to lower trading revenue largely in the U.S. and Europe, and lower equity origination activity in Canada. Results in our Insurance segment were impacted by the gain on the sale of RBC General Insurance Company in the third quarter of 2016 as noted previously. Investor & Treasury Services results have generally trended higher over the period due to higher funding and liquidity earnings since the first quarter of 2016, reflecting tightening credit spreads and favourable interest and foreign exchange rates movements.

Revenue has generally increased over the period reflecting solid volume and fee-based revenue growth in our Canadian Banking businesses. The first quarter of 2017 benefited from the gain on sale of the U.S. operations of Moneris as noted previously. Wealth Management revenue has generally trended upwards primarily due to growth in average fee-based client assets and the inclusion of City National which has resulted in higher net interest income reflecting volume growth and the impact from higher U.S. interest rates since the first quarter of 2017. Capital Markets benefitted from stabilizing credit spreads since the first quarter of 2016, resulting in higher fixed income trading over the period except in the current quarter which was impacted by reduced market volatility. The impact of foreign exchange translation due to a generally weaker Canadian dollar also contributed to the increase in revenue over the period; however the Canadian dollar strengthened during the current quarter. Insurance revenue was primarily impacted by changes in the fair value of investments backing our policyholder liabilities, which is largely offset in PBCAE and benefitted from the gain on sale of RBC General Insurance Company in the third quarter of 2016, as noted previously.

The credit quality of our portfolios has generally remained stable over the period. Higher PCL related to our Capital Markets and Canadian Banking businesses was recorded in the first two quarters of 2016, mainly reflecting the impact of the sustained low oil price environment. PCL trended lower in 2017 due to recoveries and lower provisions in our Capital Markets and Caribbean Banking portfolios.

PBCAE has fluctuated quarterly as it includes the changes to the fair value of investments backing our policyholder liabilities, which is largely offset in revenue. PBCAE has also increased due to business growth, and has been impacted by actuarial liability adjustments and claims costs over the period.

While we continue to focus on efficiency management activities, non-interest expense has generally trended upwards over the period, mostly to support business growth and due to the inclusion of City National since the first quarter of 2016. Over the period, non-interest expense also increased due to higher compliance costs, technology spend including digital initiatives, higher variable compensation in Wealth Management and Capital Markets on improved results and an impairment related to properties held for sale in the first quarter of 2017. The impact of foreign exchange translation also contributed to the increase over the period due to the weaker Canadian dollar; however the Canadian dollar began to strengthen during the current quarter.

Our effective income tax rate has fluctuated over the period, mostly due to varying levels of income reported in jurisdictions with different tax rates, as well as fluctuating levels of income from tax-advantaged sources, principally Canadian taxable corporate dividends. Our effective income tax rate has generally been impacted over the period by higher earnings before income taxes and by net favourable tax adjustments.

Financial condition

Condensed balance sheets

The following table shows our condensed balance sheet:

	As at			
(Millions of Canadian dollars)	July 31 2017	April 30 2017	October 31 2016	July 31 2016
Assets (1)				
Cash and due from banks	$ 24,302	$ 30,518	$ 14,929	$ 19,501
Interest-bearing deposits with banks	36,098	25,875	27,851	22,008
Securities	214,170	219,405	236,093	233,998
Assets purchased under reverse repurchase agreements and securities borrowed	208,669	216,931	186,302	200,430
Loans				
Retail	379,869	374,168	369,470	364,476
Wholesale	156,401	160,352	154,369	153,521
Allowance for loan losses	(2,236)	(2,258)	(2,235)	(2,177)
Other – Derivatives	105,833	100,763	118,944	130,462
– Other (2)	77,941	77,165	74,535	76,656
Total assets	$ 1,201,047	$ 1,202,919	$ 1,180,258	$ 1,198,875
Liabilities (1)				
Deposits	$ 778,618	$ 785,583	$ 757,589	$ 754,415
Other – Derivatives	104,203	99,031	116,550	128,533
– Other (2)	236,165	235,491	224,745	236,326
Subordinated debentures	9,200	9,646	9,762	9,765
Total liabilities	1,128,186	1,129,751	1,108,646	1,129,039
Equity attributable to shareholders	72,274	72,570	71,017	69,253
Non-controlling interests	587	598	595	583
Total equity	72,861	73,168	71,612	69,836
Total liabilities and equity	$ 1,201,047	$ 1,202,919	$ 1,180,258	$ 1,198,875

(1) Foreign currency-denominated assets and liabilities are translated to Canadian dollars.
(2) Other – Other assets and liabilities include Segregated fund net assets and liabilities, respectively.

Q3 2017 vs. Q3 2016

Total assets were up $2 billion from last year. Foreign exchange translation decreased total assets by $26 billion.

Cash and due from banks was up $5 billion, as a result of our management of liquidity and funding risk.

Interest-bearing deposits with banks increased $14 billion, largely reflecting higher deposits with central banks.

Securities were down $20 billion or 8% compared to last year, largely driven by the impact of foreign exchange translation and lower equity trading positions, partially offset by an increase in corporate debt securities in support of business activities.

Assets purchased under reverse repurchase agreements (reverse repos) and securities borrowed increased $8 billion or 4%, mainly attributable to higher client and business activities, partially offset by the impact of foreign exchange translation.

Loans were up $18 billion or 4%, largely due to continued volume growth in residential mortgages in Canada reflecting increased client activity, and higher wholesale loans driven by business growth, partially offset by the impact of foreign exchange translation.

Derivative assets were down $25 billion or 19%, mainly attributable to lower fair values on interest rate swaps, partially offset by lower financial netting.

Other assets were up $1 billion or 2%, largely reflecting higher customers' liability under acceptances driven by client demand.

Total liabilities were down $1 billion from last year. Foreign exchange translation decreased total liabilities by $26 billion.

Deposits increased $24 billion or 3%, mainly as a result of higher business and retail deposits largely reflecting increased client demand, partially offset by the impact of foreign exchange translation.

Derivative liabilities were down $24 billion or 19%, mainly attributable to lower fair values on interest rate swaps, partially offset by lower financial netting.

Other liabilities remained relatively flat as the impact of foreign exchange translation and lower obligations related to securities sold short were mostly offset by higher obligations related to repurchase agreements reflecting funding requirements net of financial netting, and increased cash collateral received.

Total equity increased $3 billion or 4%, largely reflecting earnings, net of dividends.

Q3 2017 vs. Q2 2017

Total assets decreased $2 billion from the prior quarter, mainly due to the impact of foreign exchange translation of $50 billion, largely offset by increased interest-bearing deposits with banks driven by higher deposits, higher residential mortgages and wholesale loans reflecting increased client activity and business growth, higher derivative assets primarily attributable to increased fair values on foreign exchange contracts and lower financial netting, higher assets purchased under reverse repos driven by higher cash availability, and increased corporate and government debt securities.

Total liabilities decreased $2 billion from the prior quarter, primarily attributable to the impact of foreign exchange translation of $50 billion, mostly offset by an increase in derivative liabilities due to the reasons noted for derivative assets, higher issuances of fixed-term notes driven by funding requirements, increased business and bank deposits reflecting higher client activity, higher obligations related to securities sold short, increased cash collateral requirements and higher obligations related to repurchase agreements.

Q3 2017 vs. Q4 2016

Total assets increased $21 billion or 2%, mainly attributable to higher reverse repos reflecting increased client activity, continued volume growth in residential mortgages and wholesale loans reflecting increased client activity and business growth, and higher cash and due from banks as a result of our management of liquidity and funding risk. Higher interest-bearing deposits with banks driven by increased deposits with central banks, increased derivative assets reflecting lower financial netting and higher fair values on foreign exchange contracts, partly offset by lower fair values on interest rate swaps, also contributed to the increase. These factors were partially offset by the impact of foreign exchange translation of $55 billion.

Total liabilities increased $20 billion or 2%, mainly attributable to higher obligations related to repurchase agreements driven by our business activity, higher business deposits and higher derivative liabilities due to the drivers noted for derivative assets. Growth in retail deposits, higher issuances of fixed-term deposits driven by funding requirements and client activity, and increased bank deposits reflecting higher deposits from central banks, also contributed to the increase. These factors were partially offset by the impact of foreign exchange translation of $55 billion and lower obligations related to securities sold short.

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, liquidity and funding risk, which are discussed in the Risk management section. Please refer to pages 44 to 46 of our 2016 Annual Report for a more detailed discussion of these types of arrangements.

We use structured entities to securitize our financial assets as well as assist our clients in securitizing their financial assets. These entities are not operating entities, typically have no employees, and may or may not be recorded on our Consolidated Balance Sheets.

In the normal course of business, we engage in a variety of financial transactions that may qualify for derecognition. We apply the derecognition rules to determine whether we have effectively transferred substantially all the risks and rewards or control associated with the financial assets to a third party. If the transaction meets specific criteria, it may qualify for full or partial derecognition from our Consolidated Balance Sheets.

Securitizations of our financial assets

We periodically securitize our credit card receivables, residential and commercial mortgage loans and bond participation certificates primarily to diversify our funding sources, enhance our liquidity position and for capital purposes. We also securitize residential and commercial mortgage loans as part of our sales and trading activities.

We securitize our credit card receivables, on a revolving basis, through a consolidated structured entity. We securitize single and multiple-family residential mortgages through the National Housing Act Mortgage-Backed Securities (NHA MBS) program. The majority of our securitization activities are recorded on our Consolidated Balance Sheets as we do not meet the derecognition criteria. During the current quarter, we derecognized $1.2 billion (April 30, 2017 – $nil; July 31, 2016 – $nil) of mortgages where both the NHA MBS and the residual interests in the mortgages were sold to third parties resulting in the transfer of substantially all of the risks and rewards. For further details, refer to Note 6 and Note 7 of our audited 2016 Annual Consolidated Financial Statements.

Securitized commercial mortgage loans are derecognized from our Consolidated Balance Sheets as we have transferred substantially all of the risks and rewards of ownership of the securitized assets. During the current quarter, we did not securitize any commercial mortgages (April 30, 2017 – $nil; July 31, 2016 – $401 million). Our continuing involvement with the transferred assets is limited to servicing certain of the underlying commercial mortgages sold. As at July 31, 2017, there was $1.0 billion of commercial mortgages outstanding that we continue to service related to these securitization activities (April 30, 2017 – $1.1 billion; July 31, 2016 – $1.1 billion).

Involvement with unconsolidated structured entities

In the normal course of business, we engage in a variety of financial transactions with structured entities to support our customers' financing and investing needs, including securitization of our clients' financial assets, creation of investment products, and other types of structured financing.

We have the ability to use credit mitigation tools such as third party guarantees, credit default swaps, and collateral to mitigate risks assumed through securitization and re-securitization exposures. The process in place to monitor the credit quality of our securitization and re-securitization exposures involves, among other things, reviewing the performance data of the underlying assets. We affirm our ratings each quarter and formally confirm or assign a new rating at least annually. For further details on our activities to manage risks, refer to the Risk management section.

Below is a description of our activities with respect to certain significant unconsolidated structured entities. For a complete discussion of our interests in consolidated and unconsolidated structured entities, refer to Note 7 of our audited 2016 Annual Consolidated Financial Statements.

RBC-administered multi-seller conduits

We administer multi-seller conduits which are used primarily for the securitization of our clients' financial assets. As at July 31, 2017, our maximum exposure to loss from these conduits was $39.6 billion (April 30, 2017 – $42.6 billion; July 31, 2016 – $39.0 billion), primarily representing backstop liquidity and partial credit enhancement facilities extended to the conduits.

As at July 31, 2017, the notional amount of backstop liquidity facilities we provided was $39.6 billion (April 30, 2017 – $42.6 billion; July 31, 2016 – $39.0 billion) and the partial credit enhancement facilities we provided were $2.3 billion (April 30, 2017 – $2.4 billion; July 31, 2016 – $2.3 billion). The fluctuations mostly reflect the impact of foreign exchange translation as well as changes in securitization activities.

Total loans extended to the multi-seller conduits under the backstop liquidity facilities were $359 million (April 30, 2017 – $394 million; July 31, 2016 – $724 million), a decrease of $35 million from the prior quarter mainly due to the impact of foreign exchange translation, and a decrease of $365 million from the prior year mainly due to principal repayments and the impact of foreign exchange translation. Total assets of the multi-seller conduits as at July 31, 2017 were $38.9 billion (April 30, 2017 – $41.8 billion; July 31, 2016 – $38.3 billion). The decrease from the prior quarter was primarily due to decreases in the Credit cards, Student loans, Auto loans and leases, and Transportation finance asset classes. The increase from the prior year was primarily due to increases in the Auto loans and leases, and Transportation finance asset classes offset by decreases in the Student loans, Asset-backed securities, and Consumer loans asset classes.

As at July 31, 2017, the total asset-backed commercial paper (ABCP) issued by the conduits amounted to $25.3 billion (April 30, 2017 – $27.8 billion; July 31, 2016 – $24.5 billion). The fluctuations largely reflect the impact of foreign exchange translation. The rating agencies that rate the ABCP rated 71% of the total amount issued within the top ratings category (April 30, 2017 – 70%; July 31, 2016 – 72%) and the remaining amount in the second highest ratings category.

In October 2014, the U.S. federal regulators adopted regulations related to the credit risk retention requirements of Section 15G of the *Securities Exchange Act of 1934* (as added by Section 941 of the Dodd-Frank Act) for asset-backed securities (the Risk Retention Rules), effective for us on December 24, 2016. To comply with the Risk Retention Rules, on each day between December 24, 2016 and July 31, 2017, we held ABCP from RBC administered U.S. multi-seller conduits in an amount equal to at least 5% of the aggregate principal amount of the then outstanding ABCP and any advances under liquidity loan agreements. As at July 31, 2017, the fair value of the ABCP held was $1.0 billion (April 30, 2017 – $1.2 billion; July 31, 2016 – $nil). This inventory is classified as Securities – Available-for-sale on our Consolidated Balance Sheets.

We also purchase ABCP issued by the multi-seller conduits in our capacity as a placement agent in order to facilitate overall program liquidity. As at July 31, 2017, the fair value of our ABCP inventory was $22 million (April 30, 2017 – $6 million; July 31, 2016 – $12 million). The fluctuations in inventory held reflect normal trading activity. This inventory is classified as Securities – Trading on our Consolidated Balance Sheets.

Structured finance

We invest in auction rate securities of trusts which fund their long-term investments in student loans by issuing short-term senior and subordinated notes. Our maximum exposure to loss in these auction rate securities trusts as at July 31, 2017 was $471 million (April 30, 2017 – $604 million; July 31, 2016 – $538 million). The decrease in our maximum exposure to loss relative to the prior quarter and year are primarily related to the impact of foreign exchange translation and principal repayments.

We also provide liquidity facilities to certain municipal bond Tender Option Bond (TOB) trusts in which we have an interest but do not consolidate because the residual certificates issued by the TOB trusts are held by third parties. As at July 31, 2017, our maximum exposure to loss from these unconsolidated municipal bond TOB trusts was $1.9 billion (April 30, 2017 – $2.0 billion; July 31, 2016 – $1.5 billion). The decrease in our maximum exposure to loss relative to the prior quarter is primarily due to the reduction of outstanding TOB trusts. The increase in our maximum exposure to loss relative to the prior year is primarily related to the addition of new TOB trusts.

We provide senior warehouse financing to discrete unaffiliated structured entities that are established by third parties to acquire loans and issue term collateralized loan obligations. A portion of the proceeds from the issuance of term collateralized loan obligations is used to fully repay the senior warehouse financing that we provide. As at July 31, 2017, our maximum exposure to loss associated with outstanding senior warehouse financing facilities was $729 million (April 30, 2017 – $950 million; July 31, 2016 – $118 million). The decrease in our maximum exposure to loss relative to the prior quarter is primarily due to repayments of the financing facilities. The increase in our maximum exposure to loss relative to the prior year is primarily due to an increase in outstanding financing facilities.

Investment funds

We invest in hedge funds primarily to provide clients with desired exposures to reference funds. As we make investments in the reference funds, exposures to the funds are simultaneously transferred to clients through derivative transactions. Our maximum exposure to loss in the reference funds is limited to our investments in the funds. As at July 31, 2017, our maximum exposure to loss was $2.8 billion (April 30, 2017 – $3.1 billion; July 31, 2016 – $2.6 billion). The decrease in the maximum exposure to loss compared to the prior quarter is primarily due to decreased fund activity. The increase in our maximum exposure compared to the prior year is primarily due to increased fund activity.

We also provide liquidity facilities to certain third party investment funds that issue unsecured variable-rate preferred shares and invest in portfolios of tax exempt bonds. As at July 31, 2017, our maximum exposure to these funds was $259 million (April 30, 2017 – $283 million; July 31, 2016 – $743 million). The decrease in the maximum exposure compared to the prior quarter is primarily due to the impact of foreign exchange translation. The decrease in our maximum exposure compared to the prior year is primarily due to a decrease in commitments entered into during the period.

Third-party securitization vehicles

We hold interests in certain unconsolidated third-party securitization vehicles, which are structured entities. We, as well as other financial institutions, are obligated to provide funding to these entities up to our maximum commitment level and are exposed to credit losses on the underlying assets after various credit enhancements. As at July 31, 2017, our maximum exposure to loss in these entities was $5.9 billion (April 30, 2017 – $7.0 billion; July 31, 2016 – $9.6 billion). The decrease in our maximum exposure to loss compared to the prior quarter and prior year are due to principal repayments and amortization, and the impact of foreign exchange translation, which was partially offset by new investments in securitization vehicles.

Guarantees, retail and commercial commitments

We provide our clients with guarantees and commitments that expose us to liquidity and funding risks. Our maximum potential amount of future payments in relation to our commitments and guarantee products as at July 31, 2017 was $341.7 billion (April 30, 2017 – $363.4 billion; July 31, 2016 – $333.5 billion). The decrease compared to the prior quarter relates primarily to the impact of foreign exchange translation in both other credit-related commitments and backstop liquidity facilities, and decreased business growth in securities lending indemnifications. The increase compared to the prior year relates primarily to business growth in both securities lending indemnifications and in other credit-related commitments, partially offset by the impact of foreign exchange translation. Refer to Liquidity and funding risk and Note 26 of our audited 2016 Annual Consolidated Financial Statements for details regarding our guarantees and commitments.

Risk management

Credit risk

Gross credit risk exposure by portfolio and geography

	As at							
	July 31 2017						April 30 2017	October 31 2016
	Lending-related and other			Trading-related				
	Loans and acceptances							
(Millions of Canadian dollars)	Outstanding	Undrawn commitments (1)	Other (2)	Repo-style transactions	Derivatives (3)	Total exposure (4)	Total exposure (4)	Total exposure (4)
By portfolio								
Residential mortgages	$ 264,583	$ 1,092	$ 188	$ –	$ –	$ 265,863	$ 261,155	$ 256,275
Personal	93,087	86,596	230	–	–	179,913	178,563	176,138
Credit cards	17,789	22,242	–	–	–	40,031	41,945	41,699
Small business (5)	4,410	6,919	5	–	–	11,334	11,029	10,071
Retail	$ 379,869	$ 116,849	$ 423	$ –	$ –	$ 497,141	$ 492,692	$ 484,183
Business (5)								
Agriculture	$ 7,141	$ 1,323	$ 71	$ –	$ 61	$ 8,596	$ 8,343	$ 8,008
Automotive	8,316	5,663	342	–	589	14,910	15,198	14,128
Consumer goods	10,955	8,816	636	–	723	21,130	21,183	20,921
Energy								
Oil & Gas	6,722	10,419	1,858	–	783	19,782	19,816	19,860
Utilities	5,532	13,765	3,275	25	1,143	23,740	25,889	26,618
Financing products	6,952	1,921	456	627	780	10,736	12,470	13,015
Forest products	1,014	582	82	–	8	1,686	1,774	1,772
Health services	6,507	4,608	1,720	–	637	13,472	14,332	14,001
Holding and investments	8,585	883	854	–	230	10,552	11,713	10,381
Industrial products	5,731	6,374	479	–	776	13,360	14,615	14,443
Mining & metals	1,168	3,546	1,102	–	138	5,954	6,486	6,374
Non-bank financial services	10,428	13,238	15,112	298,374	36,507	373,659	405,210	328,500
Other services	14,639	7,206	3,931	881	873	27,530	29,895	34,414
Real estate & related	43,583	11,056	1,684	3	479	56,805	56,787	53,984
Technology & media	9,019	14,704	570	317	2,334	26,944	25,369	28,952
Transportation & environment	5,486	5,225	3,282	–	860	14,853	17,586	15,693
Other sectors	4,041	38	1,409	3,038	1,075	9,601	9,463	15,568
Sovereign (5)	11,543	9,881	110,811	27,958	16,267	176,460	183,280	157,596
Bank (5)	4,285	1,579	123,562	114,666	23,179	267,271	265,545	252,983
Wholesale	$ 171,647	$ 120,827	$ 271,236	$ 445,889	$ 87,442	$ 1,097,041	$ 1,144,954	$ 1,037,211
Total exposure	$ 551,516	$ 237,676	$ 271,659	$ 445,889	$ 87,442	$ 1,594,182	$ 1,637,646	$ 1,521,394
By geography (6)								
Canada	$ 449,975	$ 155,011	$ 93,244	$ 67,738	$ 20,856	$ 786,824	$ 783,172	$ 767,638
U.S.	72,412	61,612	79,056	237,573	14,633	465,286	494,538	449,729
Europe	14,354	16,548	80,446	86,803	44,738	242,889	264,564	224,840
Other International	14,775	4,505	18,913	53,775	7,215	99,183	95,372	79,187
Total Exposure	$ 551,516	$ 237,676	$ 271,659	$ 445,889	$ 87,442	$ 1,594,182	$ 1,637,646	$ 1,521,394

(1) Undrawn commitments represent an estimate of the contractual amount that may be drawn upon at the time of default of an obligor.
(2) Includes credit equivalent amounts for contingent liabilities such as letters of credit and guarantees, outstanding amounts for AFS debt securities, deposits with financial institutions and other assets.
(3) Credit equivalent amount after factoring in master netting agreements.
(4) Gross credit risk exposure is before allowance for loan losses. Exposures under Basel III asset classes of qualifying revolving retail and other retail are largely included within Personal and Credit cards, while home equity lines of credit are included in Personal.
(5) For further information, refer to Note 5 of our audited 2016 Annual Consolidated Financial Statements.
(6) Geographic profile is based on country of residence of the borrower.

Q3 2017 vs. Q2 2017

Total gross credit risk exposure decreased $43 billion or 3% from last quarter, primarily due to the impact of foreign exchange translation, partially offset by increased interest-bearing deposits primarily with central banks and higher residential mortgages reflecting increased client activity and volume growth.

Retail exposure increased $4 billion or 1%, largely driven by volume growth in our residential mortgages and personal lending portfolios, partially offset by a decrease in credit cards related to undrawn commitments.

Wholesale exposure decreased $48 billion or 4%, primarily attributable to the impact of foreign exchange translation, partially offset by increased interest-bearing deposits primarily with central banks. Wholesale loan utilization remained stable compared to the prior quarter at 40%. Our AFS securities (banking book) exposures are rated 96% investment grade and 4% non-investment grade.

As at July 31, 2017, our loans and acceptances exposure to oil & gas was $17.1 billion (April 30, 2017 – $16.8 billion); which is comprised of outstanding loans of $6.7 billion (April 30, 2017 – $6.0 billion), and undrawn commitments of $10.4 billion (April 30, 2017 – $10.8 billion). The oil & gas portfolio represents 2.2% (April 30, 2017 – 2.1%) of our total loan and acceptances portfolio. Of the $17.1 billion exposure to oil & gas, 42% was to investment grade while 58% was to non-investment grade counterparties (April 30, 2017 – 41% and 59%, respectively).

The geographic mix of our gross credit risk exposure remained relatively unchanged from the prior quarter. Our exposure in Canada, the U.S., Europe and Other International were 50%, 29%, 15% and 6%, respectively (April 30, 2017 – 48%, 30%, 16% and 6%, respectively). The decrease in U.S. was largely driven by the impact of foreign exchange translation.

Net European exposure by country, asset type and client type (1), (2)

	As at									
	July 31 2017								April 30 2017	October 31 2016
	Asset type				Client type					
(Millions of Canadian dollars)	Loans Outstanding	Securities (3)	Repo-style transactions	Derivatives	Financials	Sovereign	Corporate	Total	Total	Total
U.K.	$ 8,112	$ 9,620	$ 845	$ 1,258	$ 6,725	$ 5,467	$ 7,643	$ 19,835	$ 25,334	$ 17,956
Germany	1,747	11,264	–	220	9,027	2,262	1,942	13,231	12,015	11,273
France	394	7,125	11	409	952	6,519	468	7,939	7,728	8,398
Total U.K., Germany, France	$ 10,253	$ 28,009	$ 856	$ 1,887	$ 16,704	$ 14,248	$ 10,053	$ 41,005	$ 45,077	$ 37,627
Ireland	$ 430	$ 70	$ 83	$ 121	$ 166	$ 7	$ 531	$ 704	$ 691	$ 880
Italy	24	82	–	–	23	11	72	106	71	120
Portugal	–	–	–	–	–	–	–	–	–	16
Spain	310	268	–	26	274	–	330	604	396	446
Total Peripheral (4)	$ 764	$ 420	$ 83	$ 147	$ 463	$ 18	$ 933	$ 1,414	$ 1,158	$ 1,462
Luxembourg	$ 932	$ 9,427	$ 1	$ 107	$ 794	$ 8,918	$ 755	$ 10,467	$ 10,534	$ 6,054
Netherlands	823	2,341	22	183	2,340	25	1,004	3,369	3,090	3,904
Norway	233	4,169	–	22	3,910	269	245	4,424	4,918	3,945
Sweden	128	5,232	1	12	3,393	1,789	191	5,373	4,343	4,168
Switzerland	385	2,317	92	52	665	2,064	117	2,846	2,765	2,271
Other	1,392	1,883	11	110	659	1,455	1,282	3,396	3,232	2,982
Total Other Europe	$ 3,893	$ 25,369	$ 127	$ 486	$ 11,761	$ 14,520	$ 3,594	$ 29,875	$ 28,882	$ 23,324
Net exposure to Europe (5), (6)	$ 14,910	$ 53,798	$ 1,066	$ 2,520	$ 28,928	$ 28,786	$ 14,580	$ 72,294	$ 75,117	$ 62,413

(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 $77.9 billion against repo-style transactions (April 30, 2017 – $86.2 billion) and $13.8 billion against derivatives (April 30, 2017 – $12.7 billion).
(3) Securities include $16.5 billion of trading securities (April 30, 2017 – $13.2 billion), $23 billion of deposits (April 30, 2017 – $27.1 billion), and $14.3 billion of AFS securities (April 30, 2017 – $15.4 billion).
(4) Gross credit risk exposure to peripheral Europe is comprised of Greece $ nil (April 30, 2017 – $ nil), Ireland $19.9 billion (April 30, 2017 – $18.9 billion), Italy $0.3 billion (April 30, 2017 – $0.2 billion), Portugal $ nil (April 30, 2017 – $0.1 billion), and Spain $1.3 billion (April 30, 2017 – $0.9 billion).
(5) Excludes $2.7 billion (April 30, 2017 – $2.2 billion) of exposures to supranational agencies.
(6) Reflects $1.7 billion of mitigation through credit default swaps, which are largely used to hedge single name exposures and market risk (April 30, 2017 – $1.5 billion).

Q3 2017 vs. Q2 2017

Net credit risk exposure to Europe decreased $2.8 billion from last quarter, largely driven by decreased exposure in the U.K., primarily due to lower deposits with central banks. Our net exposure to peripheral Europe, which includes Greece, Ireland, Italy, Portugal and Spain remained minimal, with total outstanding exposure increasing $0.3 billion during the quarter to $1.4 billion.

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. During the quarter, PCL taken on this portfolio was not material. The gross impaired loans ratio of this loan book was 0.9%, slightly down from 1% last quarter.

Residential mortgages and home equity lines of credit (insured vs. uninsured)

Residential mortgages and home equity lines of credit are secured by residential properties. The following table presents a breakdown by geographic region:

	As at July 31, 2017					
	Residential mortgages (1)					Home equity lines of credit (2)
(Millions of Canadian dollars, except percentage amounts)	Insured (3)		Uninsured		Total	Total
Region (4)						
Canada						
Atlantic provinces	$ 7,706	58%	$ 5,618	42%	$ 13,324	$ 2,031
Quebec	15,227	50	15,491	50	30,718	4,002
Ontario	44,176	41	62,724	59	106,900	17,102
Alberta	21,966	59	15,228	41	37,194	7,018
Saskatchewan and Manitoba	9,324	55	7,668	45	16,992	2,684
B.C. and territories	17,706	39	28,121	61	45,827	8,891
Total Canada (5)	$ 116,105	46%	$ 134,850	54%	$ 250,955	$ 41,728
U.S.	2	–	10,616	100	10,618	1,479
Other International	9	–	2,958	100	2,967	1,966
Total International	$ 11	–%	$ 13,574	100%	$ 13,585	$ 3,445
Total	$ 116,116	44%	$ 148,424	56%	$ 264,540	$ 45,173

(Millions of Canadian dollars, except percentage amounts)	As at April 30, 2017 Residential mortgages (1) Insured (3)		Uninsured		Total	Home equity lines of credit (2) Total
Region (4)						
Canada						
Atlantic provinces	$ 7,708	59%	$ 5,466	41%	$ 13,174	$ 2,026
Quebec	15,087	51	14,602	49	29,689	4,063
Ontario	45,204	44	58,629	56	103,833	16,673
Alberta	22,098	60	14,956	40	37,054	7,019
Saskatchewan and Manitoba	9,307	56	7,414	44	16,721	2,663
B.C. and territories	18,099	40	26,984	60	45,083	8,770
Total Canada (5)	$ 117,503	48%	$ 128,051	52%	$ 245,554	$ 41,214
U.S.	2	–	11,145	100	11,147	1,557
Other International	12	–	3,213	100	3,225	2,277
Total International	$ 14	–%	$ 14,358	100%	$ 14,372	$ 3,834
Total	$ 117,517	45%	$ 142,409	55%	$ 259,926	$ 45,048

(1) The residential mortgages amounts exclude our third-party mortgage-backed securities (MBS) of $43 million (April 30, 2017 – $47 million).
(2) Home equity lines of credit include revolving and non-revolving loans.
(3) Insured residential mortgages are mortgages whereby our exposure to default is mitigated by insurance through the Canada Mortgage and Housing Corporation (CMHC) or other private mortgage default insurers.
(4) 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.
(5) Total consolidated residential mortgages in Canada of $251 billion (April 30, 2017 – $246 billion) is largely comprised of $227 billion (April 30, 2017 – $221 billion) of residential mortgages and $6 billion (April 30, 2017 – $6 billion) of mortgages with commercial clients, of which $4 billion (April 30, 2017 – $3 billion) are insured mortgages, both in Canadian Banking, and $18 billion (April 30, 2017 – $19 billion) of residential mortgages in Capital Markets held for securitization purposes.

Home equity lines of credit are uninsured and reported within the personal loan category. As at July 31, 2017, home equity lines of credit in Canadian Banking were $42 billion (April 30, 2017 – $41 billion). Approximately 98% of these home equity lines of credit (April 30, 2017 – 98%) are secured by a first lien on real estate, and only 7% (April 30, 2017 – 7%) of the total homeline clients pay the scheduled interest payment only.

Residential mortgages portfolio by amortization period

The following table provides a summary of the percentage of residential mortgages that fall within the remaining amortization periods based upon current customer payment amounts, which incorporate payments larger than the minimum contractual amount and/or higher frequency of payments:

	As at July 31 2017 Canada	U.S. and Other International	Total	April 30 2017 Canada	U.S. and Other International	Total
Amortization period						
≤ 25 years	73%	44%	72%	74%	43%	72%
> 25 years ≤ 30 years	25	56	26	25	57	27
> 30 years ≤ 35 years	2	–	2	1	–	1
Total	100%	100%	100%	100%	100%	100%

Average loan-to-value (LTV) ratio for newly originated and acquired uninsured residential mortgages and homeline products

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 July 31 2017 Uninsured Residential mortgages (1)	Homeline products (2)	April 30 2017 Uninsured Residential mortgages (1)	Homeline products (2)	For the nine months ended July 31 2017 Uninsured Residential mortgages (1)	Homeline products (2)
Region (3)						
Atlantic provinces	74%	74%	73%	74%	73%	74%
Quebec	73	74	71	73	72	74
Ontario	70	67	69	67	70	67
Alberta	73	72	73	72	73	72
Saskatchewan and Manitoba	74	75	74	74	74	74
B.C. and territories	69	66	69	65	68	65
U.S.	73	n.m.	70	n.m.	72	n.m.
Other International	63	n.m.	63	n.m.	63	n.m.
Average of newly originated and acquired for the quarter (4), (5)	70%	68%	70%	68%	70%	68%
Total Canadian Banking residential mortgages portfolio (6)	52%	49%	54%	50%	52%	49%

(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

We employ a risk-based approach to property valuation. Property valuation methods include automated valuation models (AVM) and appraisals. An AVM is a tool that estimates the value of a property by reference to market data including sales of comparable properties and price trends specific to the Metropolitan Statistical Area in which the property being valued is located. Using a risk-based approach, we also employ appraisals which can include drive-by or full on-site appraisals.

We continue to actively manage our entire mortgage portfolio and perform stress testing, based on a combination of increasing unemployment, rising interest rates and a downturn in real estate markets.

Credit quality performance

Provision for (recovery of) credit loss

	For the three months ended			For the nine months ended	
(Millions of Canadian dollars, except percentage amounts)	**July 31 2017**	April 30 2017	July 31 2016	**July 31 2017**	July 31 2016
Personal & Commercial Banking	**$ 273**	$ 262	$ 271	**$ 784**	$ 834
Wealth Management	**6**	15	14	**34**	26
Capital Markets	**44**	24	33	**100**	276
Corporate Support and Other (1)	**(3)**	1	–	**(2)**	52
Total PCL	**$ 320**	$ 302	$ 318	**$ 916**	$ 1,188
Canada (2)					
Residential mortgages	**$ 7**	$ 9	$ 7	**$ 22**	$ 26
Personal	**101**	100	110	**310**	343
Credit cards	**107**	109	114	**324**	330
Small business	**7**	8	8	**22**	25
Retail	**222**	226	239	**678**	724
Wholesale	**37**	28	20	**76**	182
PCL on impaired loans	**259**	254	259	**754**	906
U.S. (2), (3)					
Retail	**$ –**	$ 1	$ 1	**$ 1**	$ 1
Wholesale	**67**	42	57	**151**	207
PCL on impaired loans	**67**	43	58	**152**	208
Other International (2), (3)					
Retail	**$ 4**	$ 8	$ 5	**$ 14**	$ 24
Wholesale	**(10)**	(3)	(4)	**(4)**	–
PCL on impaired loans	**(6)**	5	1	**10**	24
PCL on loans not yet identified as impaired	**–**	–	–	**–**	50
Total PCL	**$ 320**	$ 302	$ 318	**$ 916**	$ 1,188
PCL ratio					
Total PCL ratio	**0.23%**	0.23%	0.24%	**0.23%**	0.30%
PCL on impaired loans ratio	**0.23%**	0.23%	0.24%	**0.23%**	0.29%
Personal & Commercial Banking	**0.27%**	0.27%	0.28%	**0.26%**	0.29%
Canadian Banking	**0.26%**	0.27%	0.28%	**0.26%**	0.29%
Caribbean Banking	**0.63%**	0.31%	0.29%	**0.29%**	0.51%
Wealth Management	**0.04%**	0.12%	0.11%	**0.09%**	0.07%
PCL ratio – loans	**0.04%**	0.11%	0.06%	**0.08%**	0.04%
PCL ratio – acquired credit-impaired loans	**–%**	0.01%	0.05%	**0.01%**	0.03%
Capital Markets	**0.21%**	0.12%	0.15%	**0.16%**	0.41%

(1) PCL in Corporate Support and Other primarily comprised of PCL for loans not yet identified as impaired. For further information, refer to the How we measure and report our business segments section.
(2) Geographic information is based on residence of borrower.
(3) Includes acquired credit-impaired loans.

Q3 2017 vs. Q3 2016

Total PCL increased $2 million, or 1% from the prior year. The PCL ratio of 23 bps improved 1 bp.

PCL in Personal & Commercial Banking increased $2 million or 1% as higher provisions in our Canadian and Caribbean commercial lending portfolios were largely offset by lower provisions and write-offs in our Canadian personal lending and our credit cards portfolio respectively. The PCL ratio of 27 bps improved 1 bp.

PCL in Wealth Management decreased $8 million or 57%, mainly reflecting a recovery in one account in International Wealth Management, partially offset by higher provisions in U.S. Wealth Management (including City National).

PCL in Capital Markets increased $11 million or 33%, primarily due to higher provisions in the real estate & related sector, partially offset by lower provisions in the oil & gas sector.

Q3 2017 vs. Q2 2017

Total PCL increased $18 million, or 6% from last quarter and the PCL ratio of 23 bps remained flat.

PCL in Personal & Commercial Banking increased $11 million or 4%, and the PCL ratio of 27 bps remained flat mainly due to higher provisions in our Caribbean and Canadian commercial lending portfolios, partially offset by lower provisions in our personal lending portfolios as well as lower write-offs in our Canadian credit cards portfolio.

PCL in Wealth Management decreased $9 million or 60%, mainly reflecting a recovery in one account in International Wealth Management.

PCL in Capital Markets increased $20 million or 83% primarily due to higher provisions in the real estate & related sector, partially offset by lower provisions in the oil & gas sector.

Q3 2017 vs. Q3 2016 (Nine months ended)

Total PCL decreased $272 million, or 23% from the prior year. The total PCL ratio of 23 bps improved 7 bps.

PCL in Personal & Commercial Banking decreased $50 million or 6%, and the PCL ratio of 26 bps improved 3 bps, largely due to lower provisions in our Canadian and Caribbean personal lending portfolios, partially offset by higher provisions in our Canadian commercial lending portfolios.

PCL in Wealth Management increased $8 million or 31%, reflecting higher provisions in U.S. Wealth Management (including City National), partially offset by a recovery in International Wealth Management.

PCL in Capital Markets decreased $176 million or 64%, primarily due to lower provisions and higher recoveries in the oil & gas sector, partially offset by higher provisions in the real estate & related sector.

PCL in Corporate Support and Other decreased $54 million, as the prior year included an increase in PCL for loans not yet identified as impaired.

Gross impaired loans (GIL)

	As at		
(Millions of Canadian dollars, except percentage amounts)	July 31 2017	April 30 2017	July 31 2016
Personal & Commercial Banking	**$ 1,511**	$ 1,543	$ 1,652
Wealth Management (1)	**601**	706	706
Capital Markets	**784**	984	1,339
Investor & Treasury Services	**–**	–	2
Corporate Support and Other	**–**	16	17
Total GIL	**$ 2,896**	$ 3,249	$ 3,716
Canada (2)			
Retail	**$ 563**	$ 611	$ 644
Wholesale	**467**	405	502
GIL	**1,030**	1,016	1,146
U.S. (1), (2)			
Retail	**$ 61**	$ 76	$ 43
Wholesale	**978**	1,243	1,746
GIL	**1,039**	1,319	1,789
Other International (2)			
Retail	**$ 335**	$ 373	$ 348
Wholesale	**492**	541	433
GIL	**827**	914	781
Total GIL	**$ 2,896**	$ 3,249	$ 3,716
Impaired loans, beginning balance	**$ 3,249**	$ 3,559	$ 3,703
Classified as impaired during the period (new impaired) (3)	**494**	601	834
Net repayments (3)	**(225)**	(220)	(348)
Amounts written off	**(351)**	(354)	(477)
Other (3), (4)	**(271)**	(337)	4
Impaired loans, balance at end of period	**$ 2,896**	$ 3,249	$ 3,716
GIL ratio (5)			
Total GIL ratio	**0.53%**	0.59%	0.70%
Personal & Commercial Banking	**0.37%**	0.39%	0.43%
Canadian Banking	**0.25%**	0.25%	0.28%
Caribbean Banking	**6.28%**	6.87%	7.48%
Wealth Management	**1.17%**	1.36%	1.44%
GIL ratio – loans	**0.65%**	0.72%	0.40%
GIL ratio – acquired credit-impaired loans	**0.52%**	0.64%	1.04%
Capital Markets	**0.94%**	1.18%	1.53%

(1) Includes $268 million (April 30, 2017 – $331 million; July 31, 2016 – $508 million) related to acquired credit-impaired loans. For further details refer to Note 5 of our Condensed Financial Statements.
(2) Geographic information is based on residence of borrower.
(3) 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 Exchange and other movements amounts are not reasonably determinable.
(4) Includes Return to performing status during the year, Recoveries of loans and advances previously written off, Sold, and Exchange and other movements.
(5) GIL as a % of loans and acceptances.

Q3 2017 vs. Q3 2016

Total GIL decreased $820 million or 22% from the prior year, and the total GIL ratio of 53 bps improved 17 bps, largely reflecting lower impaired loans in our Capital Markets, Personal & Commercial Banking and Wealth Management portfolios. Total GIL also includes acquired credit-impaired loans (ACI) of $268 million related to City National, which contributed 5 bps to the GIL ratio. For further details on ACI loans, refer to Note 5 of our Condensed Financial Statements.

GIL in Personal & Commercial Banking decreased $141 million or 9%, and the GIL ratio of 37 bps improved 6 bps, mainly due to repayments in our Caribbean lending portfolios and the impact of foreign exchange translation. These factors were partially offset by higher impaired loans in our Canadian commercial lending portfolios.

GIL in Wealth Management decreased $105 million or 15%, mainly reflecting lower impaired loans in U.S. Wealth Management (including City National) and the impact of foreign exchange translation.

GIL in Capital Markets decreased $555 million, primarily due to lower impaired loans and repayments in the oil & gas sector. The impact of foreign exchange translation also contributed to the decrease.

Q3 2017 vs. Q2 2017

Total GIL decreased $353 million or 11% from the prior quarter, while the GIL ratio of 53 bps improved 6 bps.

GIL in Personal & Commercial Banking decreased $32 million, and the GIL ratio of 37 bps improved 2 bps compared to the prior quarter, mainly due to the impact of foreign exchange translation as well as repayments in our Caribbean commercial lending portfolios. These factors were partially offset by higher impaired loans in our Canadian commercial lending portfolios.

GIL in Wealth Management decreased $105 million or 15%, mainly due to lower impaired loans in U.S. Wealth Management (including City National). The impact of foreign exchange translation also contributed to the decrease.

GIL in Capital Markets decreased $200 million or 20%, mainly due to the impact of foreign exchange translation as well as lower impaired loans in the oil & gas sector.

Allowance for credit losses (ACL)

	As at		
(Millions of Canadian dollars)	July 31 2017	April 30 2017	July 31 2016
Allowance for impaired loans			
Personal & Commercial Banking	$ 484	$ 494	$ 513
Wealth Management (1)	91	93	65
Capital Markets	243	241	173
Investor & Treasury Services	–	–	2
Corporate Support and Other	–	1	–
Total allowance for impaired loans	$ 818	$ 829	$ 753
Canada (2)			
Retail	$ 143	$ 145	$ 151
Wholesale	128	121	127
Allowance for impaired loans	271	266	278
U.S. (1),(2)			
Retail	$ 1	$ 1	$ 1
Wholesale	238	209	177
Allowance for impaired loans	239	210	178
Other International (2)			
Retail	$ 163	$ 180	$ 168
Wholesale	145	173	129
Allowance for impaired loans	308	353	297
Total allowance for impaired loans	$ 818	$ 829	$ 753
Allowance for loans not yet identified as impaired	1,509	1,520	1,515
Total ACL	$ 2,327	$ 2,349	$ 2,268

(1) Effective Q1 2016, includes ACL related to acquired credit-impaired loans from our acquisition of City National.
(2) Geographic information is based on residence of borrower.

Q3 2017 vs. Q3 2016

Total ACL increased $59 million or 3% from a year ago, largely due to higher ACL in Capital Markets and Wealth Management, partially offset by lower ACL in Personal & Commercial Banking. For further details, refer to Note 5 of our Condensed Financial Statements.

Q3 2017 vs. Q2 2017

Total ACL decreased $22 million or 1% from last quarter as lower ACL in Personal & Commercial Banking and Wealth Management was partially offset by higher ACL in Capital Markets.

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 2016 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). For further details of our approach to the management of market risk, refer to the Market risk section of our 2016 Annual Report.

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, the Bank assesses two primary financial metrics, 12-month Net Interest Income (NII) risk and Economic Value of Equity (EVE) risk, under a range of market shocks and scenarios. There has been no material change to the SIRR measurement methodology, controls, or limits from those described in our 2016 Annual Report.

Market risk measures – FVTPL positions

VaR and SVaR

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

	July 31, 2017				April 30, 2017		July 31, 2016	
		For the three months ended				For the three months ended		For the three months ended
(Millions of Canadian dollars)	As at	Average	High	Low	As at	Average	As at	Average
Equity	$ 8	$ 14	$ 26	$ 7	$ 13	$ 13	$ 11	$ 14
Foreign exchange	4	5	6	3	4	4	4	4
Commodities	2	3	6	2	3	4	3	3
Interest rate (1)	16	18	25	15	18	18	22	19
Credit specific (2)	4	4	5	4	4	4	4	5
Diversification (3)	(17)	(20)	(27)	(13)	(15)	(18)	(19)	(16)
Market risk VaR	$ 17	$ 24	$ 35	$ 17	$ 27	$ 25	$ 25	$ 29
Market risk Stressed VaR	$ 53	$ 59	$ 95	$ 40	$ 47	$ 50	$ 56	$ 70

	July 31, 2017				July 31, 2016	
		For the nine months ended				For the nine months ended
(Millions of Canadian dollars)	As at	Average	High	Low	As at	Average
Equity	$ 8	$ 13	$ 26	$ 7	$ 11	$ 18
Foreign exchange	4	4	6	3	4	5
Commodities	2	3	6	2	3	3
Interest rate (1)	16	17	25	13	22	22
Credit specific (2)	4	4	5	4	4	5
Diversification (3)	(17)	(17)	(27)	(12)	(19)	(18)
Market risk VaR	$ 17	$ 24	$ 35	$ 17	$ 25	$ 35
Market risk Stressed VaR	$ 53	$ 55	$ 95	$ 38	$ 56	$ 93

(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. Diversification is not meaningful when applied to quarterly highs and lows.

Q3 2017 vs. Q3 2016

Average market risk VaR of $24 million decreased $5 million, as the prior year reflected higher client-driven activity due to volatile markets as a result of the U.K.'s vote to leave the EU. The low of $17 million for VaR as at July 31, 2017 compared to the prior year was driven by less volatile markets as noted previously, as well as the impact of foreign exchange translation.

Average SVaR of $59 million decreased $11 million compared to last year, mainly due to reductions in securitized product inventories in certain legacy trading portfolios, and less volatile markets as noted previously.

Q3 2017 vs. Q2 2017

Average market risk VaR of $24 million remained relatively unchanged, as low market risk exposures have been maintained from the prior quarter. VaR of $17 million as at Q3 2017 was the low for 2017, partially due to the impact of foreign exchange translation as noted previously. This also coincided with equity exposure nearing its low for the quarter.

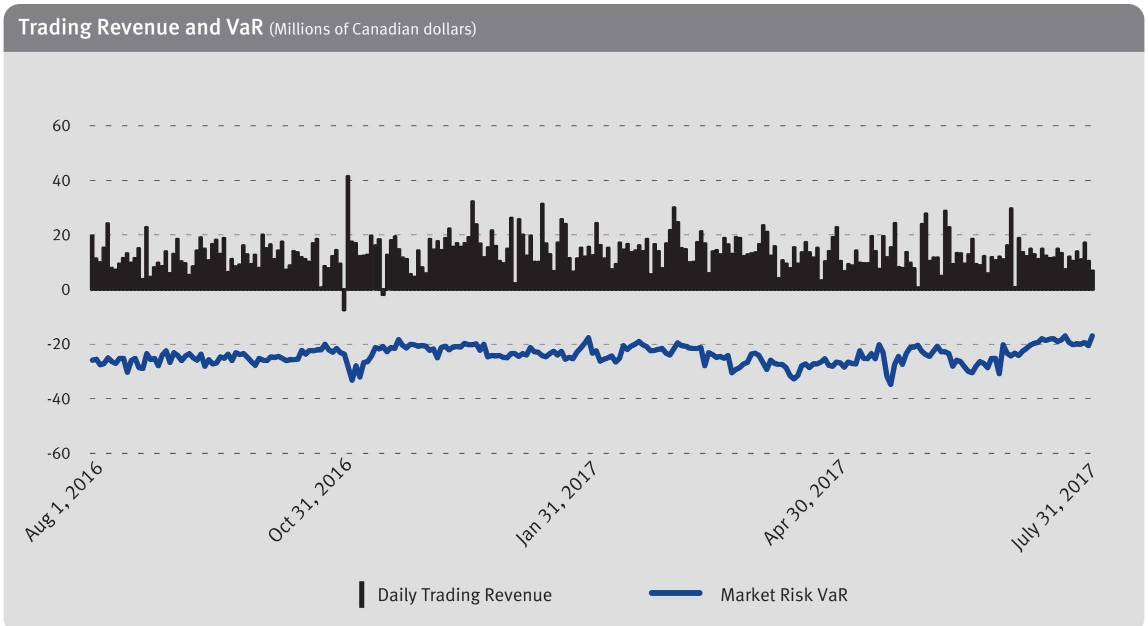
Average SVaR of $59 million increased $9 million from the prior quarter, largely due to client-driven activity in equity-derivative portfolios.

Q3 2017 vs. Q3 2016 (Nine months ended)

Average market risk VaR of $24 million decreased $11 million compared to the prior year, as fixed income and securitized product portfolio levels were reduced over the course of 2016 and lower levels persisted through 2017. Reductions in equity exposures also contributed to the decrease.

Average SVaR of $55 million decreased $38 million compared to the prior year, mainly reflecting the factors noted previously under Average market risk VaR, as well as hedging activity in equity portfolios.

The following chart graphically 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 during the quarter, consistent with the second quarter of 2017. In the third quarter of 2016, we incurred net trading losses on 1 day during the quarter totalling $4 million.



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 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 and claims. As at July 31, 2017, we had liabilities with respect to insurance obligations of $9.3 billion, which remained unchanged from the prior quarter, and trading securities of $7.3 billion in support of the liabilities, up from $7.1 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 global rate movement experience. Interest rate risk measures are based upon interest rate exposures at a specific time and continuously change as a result of business activities and risk management actions.

	July 31 2017						April 30 2017		July 31 2016	
	EVE risk			NII risk (1)						
(Millions of Canadian dollars)	Canadian dollar impact	U.S. dollar impact (2)	Total	Canadian dollar impact	U.S. dollar impact (2)	Total	EVE risk	NII risk (1)	EVE risk	NII risk (1)
Before-tax impact of:										
100bps increase in rates	$ (1,271)	$ (54)	$ (1,325)	$ 208	$ 171	$ 379	$ (1,208)	$ 471	$ (1,187)	$ 449
100bps decrease in rates	1,038	(285)	753	(345)	(201)	(546)	655	(577)	496	(450)

(1) Represents the 12-month Net interest income 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, 2017, an immediate and sustained -100 bps shock would have had a negative impact to our NII of $546 million, down from $577 million last quarter. An immediate and sustained +100 bps shock at the end of July 31, 2017 would have had a negative impact to the Bank's EVE of $1,325 million, up from $1,208 million reported last quarter. The quarter-over-quarter changes in risk profile were largely due to an increase in fixed-rate assets. During the third quarter of 2017, NII and EVE risks remained well within approved limits.

Market risk measures for other material non-trading portfolios

AFS securities

We held $71 billion of securities classified as AFS as at July 31, 2017, compared to $72 billion as at April 30, 2017. We hold debt securities designated as AFS primarily as investments, as well as to manage liquidity risk and hedge interest rate risk in our non-trading banking balance sheet. Certain legacy debt portfolios are also classified as AFS. Changes in the value of these securities are reported in other comprehensive income. As at July 31, 2017, our portfolio of AFS securities exposes us to interest rate risk of a pre-tax change in value of $11.4 million 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 $24.9 million, as measured by the change in value for a one basis point widening of credit spreads. The value of the AFS securities included in our SIRR measure as at July 31, 2017 was $49.3 billion. Our AFS securities also include equity exposures of $1.3 billion as at July 31, 2017, down from $1.5 billion in the prior 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 $2.5 billion as at July 31, 2017 were down from $4.3 billion last quarter, and derivative liabilities of $2.9 billion as at July 31, 2017 were down from $3.3 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 $1.8 billion as at July 31, 2017, up from $1.5 billion as at April 30, 2017, and derivative liabilities of $1.3 billion as at July 31, 2017, down from $1.7 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 AFS securities and structural interest rate risk. To the extent these swaps are considered effective hedges, changes in their fair value are recognized in other comprehensive income. The interest rate risk for the designated cash flow hedges, measured as the change in the fair value of the derivatives for a one basis point parallel increase in yields, was $8.0 million as of July 31, 2017 compared to $6.1 million as of April 30, 2017.

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

Derivatives, including interest rate swaps and foreign exchange derivatives, that are not in designated hedge accounting relationships are used to manage other non-trading exposures. Changes in the fair value of these derivatives are reflected in income. Derivative assets of $0.7 billion as at July 31, 2017 on these trades were down from $2.8 billion as at April 30, 2017, and derivative liabilities of $1.6 billion as at July 31, 2017 were unchanged from the prior 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 value of the average Canadian dollar relative to the average value of those currencies. Our most significant exposure is to the U.S. dollar, due to our level of 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 earnings 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.

Our overall trading and non-trading market risk objectives, policies and methodologies have not changed significantly from 2016.

Linkage of market risk to selected balance sheet items

The following table provides 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:

	As at July 31, 2017			
		Market risk measure		
(Millions of Canadian dollars)	Balance sheet amount	Traded risk (1)	Non-traded risk (2)	Non-traded risk primary risk sensitivity
Assets subject to market risk				
Cash and due from banks (3)	$ 24,302	$ 15,719	$ 8,583	Interest rate
Interest-bearing deposits with banks (4)	36,098	21,270	14,828	Interest rate
Securities				
Trading (5)	128,740	121,354	7,386	Interest rate, credit spread
Available-for-sale (6)	85,430	–	85,430	Interest rate, credit spread, equity
Assets purchased under reverse repurchase agreements and securities borrowed (7)	208,669	204,600	4,069	Interest rate
Loans				
Retail (8)	379,869	7,131	372,738	Interest rate
Wholesale (9)	156,401	4,413	151,988	Interest rate
Allowance for loan losses	(2,236)	–	(2,236)	Interest rate
Segregated fund net assets (10)	1,077	–	1,077	Interest rate
Derivatives	105,833	103,304	2,529	Interest rate, foreign exchange
Other assets (11)	71,123	22,509	48,614	Interest rate
Assets not subject to market risk (12)	5,741			
Total assets	$ 1,201,047	$ 500,300	$ 695,006	
Liabilities subject to market risk				
Deposits (13)	$ 778,618	$ 75,265	$ 703,353	Interest rate
Segregated fund liabilities (14)	1,077	–	1,077	Interest rate
Other				
Obligations related to securities sold short	40,512	40,512	–	
Obligations related to assets sold under repurchase agreements and securities loaned	121,980	121,980	–	Interest rate
Derivatives	104,203	101,265	2,938	Interest rate, foreign exchange
Other liabilities (15)	65,186	22,407	42,779	Interest rate
Subordinated debentures	9,200	–	9,200	Interest rate
Liabilities not subject to market risk (16)	7,410			
Total liabilities	$ 1,128,186	$ 361,429	$ 759,347	
Total equity	$ 72,861			
Total liabilities and equity	$ 1,201,047			

(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 our Insurance business and AFS securities not included in SIRR.

The following footnotes provide additional information on the Non-traded risk amounts:

(3) Cash and due from banks includes $7,068 million included in SIRR. An additional $1,515 million is included in other risk controls.
(4) Interest-bearing deposits with banks of $14,828 million are included in SIRR.
(5) Trading securities include $7,386 million in securities used in the management of the SIRR of RBC Insurance, which is not included in our disclosed SIRR measure.
(6) Includes AFS securities of $70,622 million and held-to-maturity securities of $14,808 million. $64,129 million of the total AFS securities are included in SIRR. An additional $1,977 million are held by RBC Insurance that do not contribute to our disclosed SIRR measures. The remaining $19,324 million are captured in other internal non-trading market risk reporting.
(7) Assets purchased under reverse repurchase agreements include $4,069 million reflected in SIRR.
(8) Retail loans include $372,488 million reflected in SIRR. An additional $250 million is used in the management of the SIRR of RBC Insurance.
(9) Wholesale loans include $150,490 million reflected in SIRR. An additional $1,498 million is used in the management of the SIRR of RBC Insurance.
(10) Investments for the account of segregated fund holders are included in the management of the SIRR of RBC Insurance.
(11) Other assets include $46,171 million reflected in SIRR. An additional $2,443 million is used in the management of the SIRR of RBC Insurance.
(12) Assets not subject to market risk include $5,741 million of premises and equipment.
(13) Deposits include $627,297 million reflected in SIRR. The remaining $76,056 million are captured in other risk controls.
(14) Insurance and investment contracts for the account of segregated fund holders are included in the management of the SIRR of RBC Insurance.
(15) Other liabilities include $9,965 million used in the management of the SIRR of RBC Insurance and $32,814 million contribute to our SIRR measure.
(16) Liabilities not subject to market risk include $7,410 million of payroll related and other liabilities.

(Millions of Canadian dollars)	As at April 30, 2017			
		Market risk measure		
	Balance sheet amount	Traded risk (1)	Non-traded risk (2)	Non-traded risk primary risk sensitivity
Assets subject to market risk				
Cash and due from banks (3)	$ 30,518	$ 21,499	$ 9,019	Interest rate
Interest-bearing deposits with banks (4)	25,875	12,686	13,189	Interest rate
Securities				
Trading (5)	132,370	125,226	7,144	Interest rate, credit spread
Available-for-sale (6)	87,035	–	87,035	Interest rate, credit spread, equity
Assets purchased under reverse repurchase agreements and securities borrowed (7)	216,931	216,658	273	Interest rate
Loans				
Retail (8)	374,168	10,375	363,793	Interest rate
Wholesale (9)	160,352	4,404	155,948	Interest rate
Allowance for loan losses	(2,258)	–	(2,258)	Interest rate
Segregated fund net assets (10)	1,096	–	1,096	Interest rate
Derivatives	100,763	96,422	4,341	Interest rate, foreign exchange
Other assets (11)	69,755	23,801	45,954	Interest rate
Assets not subject to market risk (12)	6,314			
Total assets	$ 1,202,919	$ 511,071	$ 685,534	
Liabilities subject to market risk				
Deposits (13)	$ 785,583	$ 77,213	$ 708,370	Interest rate
Segregated fund liabilities (14)	1,096	–	1,096	Interest rate
Other				
Obligations related to securities sold short	37,331	37,331	–	
Obligations related to assets sold under repurchase agreements and securities loaned	127,955	127,955	–	Interest rate
Derivatives	99,031	95,682	3,349	Interest rate, foreign exchange
Other liabilities (15)	59,938	19,813	40,125	Interest rate
Subordinated debentures	9,646	–	9,646	Interest rate
Liabilities not subject to market risk (16)	9,171			
Total liabilities	$ 1,129,751	$ 357,994	$ 762,586	
Total equity	$ 73,168			
Total liabilities and equity	$ 1,202,919			

(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 our Insurance business and AFS securities not included in SIRR.
The following footnotes provide additional information on the Non-traded risk amounts:
(3) Cash and due from banks includes $7,497 million included in SIRR. An additional $1,522 million is included in other risk controls.
(4) Interest-bearing deposits with banks of $13,189 million are included in SIRR.
(5) Trading securities include $7,144 million in securities used in the management of the SIRR of RBC Insurance, which is not included in our disclosed SIRR measure.
(6) Includes AFS securities of $71,683 million and held-to-maturity securities of $15,352 million. $64,482 million of the total AFS securities are included in SIRR. An additional $1,896 million are held by RBC Insurance that do not contribute to our disclosed SIRR measures. The remaining $20,657 million are captured in other internal non-trading market risk reporting.
(7) Assets purchased under reverse repurchase agreements include $273 million reflected in SIRR.
(8) Retail loans include $363,514 million reflected in SIRR. An additional $279 million is used in the management of the SIRR of RBC Insurance.
(9) Wholesale loans include $154,466 million reflected in SIRR. An additional $1,482 million is used in the management of the SIRR of RBC Insurance.
(10) Investments for the account of segregated fund holders are included in the management of the SIRR of RBC Insurance.
(11) Other assets include $43,516 million reflected in SIRR. An additional $2,438 million is used in the management of the SIRR of RBC Insurance.
(12) Assets not subject to market risk include $6,314 million of premises and equipment.
(13) Deposits include $651,222 million reflected in SIRR. The remaining $57,148 million are captured in other risk controls.
(14) Insurance and investment contracts for the account of segregated fund holders are included in the management of the SIRR of RBC Insurance.
(15) Other liabilities include $9,921 million used in the management of the SIRR of RBC Insurance and $30,204 million contribute to our SIRR measure.
(16) Liabilities not subject to market risk include $9,171 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 sufficient liquidity resources to satisfy current and prospective commitments in both business-as-usual and stressed conditions. There have been no material changes to our LRMF as described in our 2016 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 our liquidity reserve.

Liquidity reserve

	As at July 31, 2017				
(Millions of Canadian dollars)	Bank-owned liquid assets (1)	Securities received as collateral from securities financing and derivative transactions	Total liquid assets	Encumbered liquid assets	Unencumbered liquid assets
Cash and holding at central banks	$ 43,517	$ –	$ 43,517	$ 1,576	$ 41,941
Deposits in other banks available overnight	2,472	–	2,472	123	2,349
Securities issued or guaranteed by sovereigns, central banks or multilateral development banks (2)	319,135	27,915	347,050	197,463	149,587
Other securities	136,398	40,481	176,879	71,650	105,229
Liquidity assets eligible at central banks (not included above) (3)	452	–	452	–	452
Undrawn credit lines granted by central banks (4)	11,915	–	11,915	–	11,915
Other assets eligible as collateral for discount (5)	92,378	–	92,378	–	92,378
Other liquid assets (6)	20,378	–	20,378	20,378	–
Total liquid assets	$ 626,645	$ 68,396	$ 695,041	$ 291,190	$ 403,851

	As at April 30, 2017				
(Millions of Canadian dollars)	Bank-owned liquid assets (1)	Securities received as collateral from securities financing and derivative transactions	Total liquid assets	Encumbered liquid assets	Unencumbered liquid assets
Cash and holding at central banks	$ 39,388	$ –	$ 39,388	$ 2,175	$ 37,213
Deposits in other banks available overnight	2,495	–	2,495	261	2,234
Securities issued or guaranteed by sovereigns, central banks or multilateral development banks (2)	319,742	26,437	346,179	202,457	143,722
Other securities	145,968	42,672	188,640	68,225	120,415
Liquidity assets eligible at central banks (not included above) (3)	583	–	583	–	583
Undrawn credit lines granted by central banks (4)	13,993	–	13,993	–	13,993
Other assets eligible as collateral for discount (5)	90,989	–	90,989	–	90,989
Other liquid assets (6)	22,369	–	22,369	22,369	–
Total liquid assets	$ 635,527	$ 69,109	$ 704,636	$ 295,487	$ 409,149

	As at	
(Millions of Canadian dollars)	July 31 2017	April 30 2017
Royal Bank of Canada	$ 205,610	$ 206,435
Foreign branches	65,130	63,929
Subsidiaries	133,111	138,785
Total unencumbered liquid assets	$ 403,851	$ 409,149

(1) The Bank-owned liquid assets amount includes securities owned outright by the Bank as well as collateral received through reverse repurchase transactions.
(2) 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).
(3) Includes Auction Rate Securities.
(4) Includes loans that qualify as eligible collateral for the discount window facility available to us at the Federal Reserve Bank of New York (Federal Reserve Bank). Amounts are face value and would be subject to collateral margin requirements applied by the Federal Reserve Bank to determine collateral value/borrowing capacity. Access to the discount window borrowing program is conditional on meeting requirements set by the Federal Reserve Bank and borrowings are typically expected to be infrequent and due to uncommon occurrences requiring temporary accommodation.
(5) 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 Bank of Canada for advances under its Emergency Lending Assistance (ELA) program. ELA and other central bank facilities are not considered sources 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 central bank collateral to meet requirements and mitigate further market liquidity disruption.
(6) Represents pledges related to 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 2017 vs. Q2 2017
Total liquid assets decreased $10 billion or 1%, primarily due to changes in foreign exchange during the quarter.

Asset Encumbrance
The table below provides a summary of cash, securities and other assets, distinguishing between those that are encumbered assets and those available for sale or use as collateral in secured funding transactions. Other assets, such as mortgages and credit card receivables can also be monetized, although over a longer timeframe than that required for marketable securities. As at July 31, 2017, our Unencumbered assets available as collateral comprised 33% of our total assets (April 30, 2017 – 34%).

Asset encumbrance

	As at									
	July 31 2017					April 30 2017				
	Encumbered		Unencumbered			Encumbered		Unencumbered		
(Millions of Canadian dollars)	Pledged as collateral	Other (1)	Available as collateral (2)	Other (3)	Total (4)	Pledged as collateral	Other (1)	Available as collateral (2)	Other (3)	Total (4)
Cash and due from banks	$ –	$ 1,576	$ 22,726	$ –	$ 24,302	$ –	$ 2,175	$ 28,343	$ –	$ 30,518
Interest-bearing deposits with banks	–	123	35,975	–	36,098	–	261	25,614	–	25,875
Securities										
Trading	57,605	–	69,723	1,412	128,740	53,063	–	78,383	924	132,370
Available-for-sale	2,333	–	80,013	3,084	85,430	3,309	–	79,954	3,772	87,035
Assets purchased under reverse repurchase agreements and securities borrowed	218,315	–	93,541	14,017	325,873	223,039	–	94,416	15,850	333,305
Loans										
Retail										
Mortgage securities	34,006	–	32,767	–	66,773	35,585	–	34,746	–	70,331
Mortgage loans	41,150	–	13,080	143,580	197,810	41,094	–	14,312	134,236	189,642
Non-mortgage loans	8,590	–	65,339	41,357	115,286	10,315	–	65,569	38,311	114,195
Wholesale	3,689	–	27,857	124,855	156,401	3,705	–	25,984	130,663	160,352
Allowance for loan losses	–	–	–	(2,236)	(2,236)	–	–	–	(2,258)	(2,258)
Segregated fund net assets	–	–	–	1,077	1,077	–	–	–	1,096	1,096
Other – Derivatives	–	–	–	105,833	105,833	–	–	–	100,763	100,763
– Others (5)	20,378	–	–	56,486	76,864	22,369	–	–	53,700	76,069
Total assets	$ 386,066	$ 1,699	$ 441,021	$ 489,465	$ 1,318,251	$ 392,479	$ 2,436	$ 447,321	$ 477,057	$ 1,319,293

(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 Bank of Canada for advances under its ELA program. We also lodge loans that qualify as eligible collateral for the discount window facility available to us at the Federal Reserve Bank of New York. 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 central bank 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 and derivative transactions.
(5) The Pledged as collateral amounts relate 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, 2017, relationship-based deposits, which are the primary source of funding for retail loans and mortgages, were $516 billion or 55% of our total funding (April 30, 2017 – $520 billion or 54%). 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.

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.

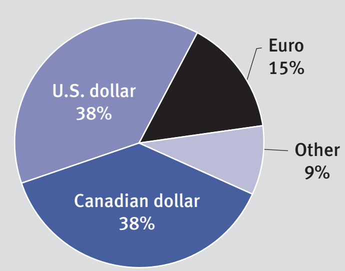
Programs by geography

Canada	U.S.	Europe/Asia
• Canadian Shelf – $25 billion	• SEC Shelf Program – US$40 billion • SEC Registered Covered Bond Program – US$15 billion (1)	• European Debt Issuance Program – US$40 billion • Global Covered Bond Program – €32 billion • Japanese Issuance Programs – ¥1 trillion

(1) Subject to the €32 billion Global Covered Bond Program limit. Upon the enactment of U.S. SEC Regulation AB II on November 23, 2016, we are not currently able to issue new series of SEC-registered covered bonds under the existing program.

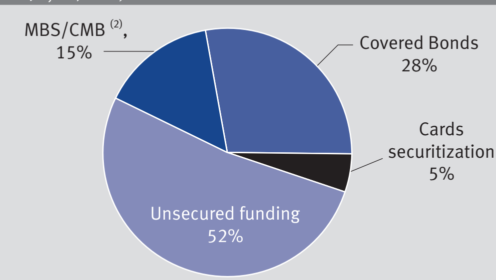
We also raise long-term funding using Canadian Deposit Notes, Canadian NHA MBS, Canada Mortgage Bonds, credit card receivable-backed securities, Kangaroo Bonds (issued in the Australian domestic market by foreign firms) and Yankee Certificates of Deposit (issued in the U.S. domestic market by foreign 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.

Long-term debt[1] – funding mix by currency of issuance
($140 billion as at July 31, 2017)



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

Long-term debt[1] – funding mix by product
($140 billion as at July 31, 2017)



(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 (1)

	As at July 31, 2017							
(Millions of Canadian dollars)	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 (2)	$ 3,015	$ 71	$ –	$ 25	$ 3,111	$ –	$ –	$ 3,111
Certificates of deposit and commercial paper	4,083	8,107	8,450	15,240	35,880	418	–	36,298
Asset-backed commercial paper (3)	1,545	1,881	2,307	4,777	10,510	–	–	10,510
Senior unsecured medium-term notes (4)	32	4,206	2,552	13,533	20,323	21,815	34,794	76,932
Senior unsecured structured notes (5)	58	252	365	1,302	1,977	1,927	6,243	10,147
Mortgage securitization	–	783	571	1,868	3,222	4,500	12,675	20,397
Covered bonds/asset-backed securities (6)	–	3,743	2,626	3,037	9,406	10,748	26,583	46,737
Subordinated liabilities	–	–	–	–	–	1,000	8,272	9,272
Other (7)	4,259	1,523	930	33	6,745	12	5,189	11,946
Total	$ 12,992	$ 20,566	$ 17,801	$ 39,815	$ 91,174	$ 40,420	$ 93,756	$ 225,350
Of which:								
– Secured	$ 3,894	$ 7,575	$ 5,504	$ 9,682	$ 26,655	$ 15,248	$ 39,258	$ 81,161
– Unsecured	9,098	12,991	12,297	30,133	64,519	25,172	54,498	144,189

(Millions of Canadian dollars)	As at April 30, 2017 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 (2)	$ 7,349	$ 173	$ 48	$ 14	$ 7,584	$ –	$ –	$ 7,584
Certificates of deposit and commercial paper	1,100	6,876	13,145	10,726	31,847	639	–	32,486
Asset-backed commercial paper (3)	1,211	2,319	3,904	3,015	10,449	–	–	10,449
Senior unsecured medium-term notes (4)	44	2,307	4,458	6,218	13,027	26,356	40,488	79,871
Senior unsecured structured notes (5)	115	240	338	1,246	1,939	2,112	7,124	11,175
Mortgage securitization	–	651	783	1,881	3,315	4,545	12,546	20,406
Covered bonds/asset-backed securities (6)	–	1,843	4,095	4,529	10,467	11,121	29,386	50,974
Subordinated liabilities	–	123	–	–	123	–	9,509	9,632
Other (7)	2,344	1,432	1,432	914	6,122	12	5,079	11,213
Total	$ 12,163	$ 15,964	$ 28,203	$ 28,543	$ 84,873	$ 44,785	$ 104,132	$ 233,790
Of which:								
– Secured	$ 2,793	$ 6,081	$ 8,782	$ 9,425	$ 27,081	$ 15,666	$ 41,931	$ 84,678
– Unsecured	9,370	9,883	19,421	19,118	57,792	29,119	62,201	149,112

(1) Excludes bankers' acceptances and repos.
(2) Only includes deposits raised by treasury. Excludes deposits associated with services we provide to these 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, auto and mortgage loans.
(7) Includes tender option bonds (secured) of $3,518 million (April 30, 2017 – $2,850 million), bearer deposit notes (unsecured) of $3,403 million (April 30, 2017 – $3,483 million) and other long-term structured deposits (unsecured) of $5,025 million (April 30, 2017 – $4,880 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.

The following table presents our major credit ratings(1):

Credit ratings

	As at August 22, 2017 Short-term debt	Senior long-term debt	Outlook
Moody's (2)	P-1	A1	negative
Standard & Poor's (3)	A-1+	AA-	negative
Fitch Ratings (4)	F1+	AA	negative
DBRS (5)	R-1(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) On May 10, 2017, Moody's lowered our senior long-term debt rating one notch, along with our large Canadian peers, due to Moody's change to Canada's macroeconomic profile. Moody's also affirmed our negative outlook.
(3) On June 6, 2016, S&P revised our outlook to negative from stable.
(4) On January 25, 2016, Fitch Ratings revised our outlook to negative from stable.
(5) On July 31, 2017, DBRS revised our outlook to stable from negative.

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 presents 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 2017			April 30 2017		
(Millions of Canadian dollars)	One-notch downgrade	Two-notch downgrade	Three-notch downgrade	One-notch downgrade	Two-notch downgrade	Three-notch downgrade
Contractual derivatives funding or margin requirements	$ 81	$ 96	$ 277	$ 307	$ 119	$ 306
Other contractual funding or margin requirements (1)	245	69	–	276	65	–

(1) Includes 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 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 2017		April 30 2017	
(Millions of Canadian dollars, except percentage amounts)	Total unweighted value (average) (2)	Total weighted value (average)	Total unweighted value (average) (2)	Total weighted value (average)
High-quality liquid assets				
Total high-quality liquid assets (HQLA)		204,460		197,162
Cash outflows		–		–
Retail deposits and deposits from small business customers, of which:	233,326	18,192	231,401	18,162
Stable deposits (3)	73,440	2,203	71,116	2,133
Less stable deposits	159,885	15,989	160,285	16,028
Unsecured wholesale funding, of which:	246,929	105,432	240,059	102,723
Operational deposits (all counterparties) and deposits in networks of cooperative banks (4)	109,122	26,354	106,249	25,601
Non-operational deposits	122,362	63,633	118,011	61,323
Unsecured debt	15,445	15,445	15,799	15,799
Secured wholesale funding		21,972		24,104
Additional requirements, of which:	234,702	72,463	228,674	68,832
Outflows related to derivative exposures and other collateral requirements	63,137	39,326	60,723	37,195
Outflows related to loss of funding on debt products	6,600	6,600	6,144	6,144
Credit and liquidity facilities	164,965	26,537	161,807	25,492
Other contractual funding obligations (5)	36,770	36,770	31,689	31,689
Other contingent funding obligations (6)	444,920	6,928	445,906	6,904
Total cash outflows		261,758		252,414
Cash inflows				–
Secured lending (e.g., reverse repos)	140,635	31,772	137,709	36,084
Inflows from fully performing exposures	11,293	7,375	10,421	6,957
Other cash inflows	53,210	53,210	49,133	49,133
Total cash inflows		92,356		92,174
		Total adjusted value		Total adjusted value
Total HQLA		204,460		197,162
Total net cash outflows		169,401		160,239
Liquidity coverage ratio		121%		123%

(1) LCR is calculated in accordance with OSFI's LAR guideline, which, in turn, reflects liquidity-related requirements issued by the BCBS. The LCR for the quarter ended July 31, 2017 is calculated as an average of 64 daily positions (April 30, 2017 – 61 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 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 non-retail and non-small and medium-sized enterprise customers 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%).

We manage our LCR position within a target range that reflects management's 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 81% 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 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 management believes would be available in a stress situation. All maturing wholesale debt is assigned 100% outflow in the LCR calculation.

Q3 2017 vs. Q2 2017

The average LCR of 121% for the quarter ended July 31, 2017 decreased compared to the previous quarter, and translates into a surplus of approximately $35 billion. The change was mainly due to expected balance sheet growth and optimization of surplus liquidity.

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.

	As at July 31, 2017									
(Millions of Canadian dollars)	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
Assets										
Cash and deposits with banks	$ 58,314	$ 7	$ 210	$ –	$ –	$ –	$ –	$ –	$ 1,869	$ 60,400
Securities										
Trading (1)	93,389	31	15	22	3	89	53	6,058	29,080	128,740
Available-for-sale	2,104	3,849	1,609	3,848	1,287	8,811	24,437	38,053	1,432	85,430
Assets purchased under reverse repurchase agreements and securities borrowed	103,773	47,641	13,377	13,700	15,507	8,021	23	–	6,627	208,669
Loans (net of allowance for loan losses)	13,497	15,484	21,322	23,767	29,343	103,006	201,068	39,710	86,837	534,034
Other										
Customers' liability under acceptances	10,034	5,161	44	–	–	1	5	–	1	15,246
Derivatives	7,494	9,546	6,390	4,076	2,782	9,720	22,089	43,732	4	105,833
Other financial assets	30,264	658	525	155	47	138	109	1,311	1,509	34,716
Total financial assets	$ 318,869	$ 82,377	$ 43,492	$ 45,568	$ 48,969	$ 129,786	$ 247,784	$ 128,864	$ 127,359	$ 1,173,068
Other non-financial assets	1,710	1,045	460	459	112	773	3,857	836	18,727	27,979
Total assets	$ 320,579	$ 83,422	$ 43,952	$ 46,027	$ 49,081	$ 130,559	$ 251,641	$ 129,700	$ 146,086	$ 1,201,047
Liabilities and equity										
Deposits (2)										
Unsecured borrowing	$ 45,790	$ 25,041	$ 25,481	$ 28,983	$ 36,180	$ 36,881	$ 45,036	$ 13,643	$ 426,905	$ 683,940
Secured borrowing	1,677	3,413	4,559	4,554	3,623	9,465	20,331	7,379	–	55,001
Covered bonds	–	3,116	1,887	1,111	1,284	8,814	22,271	1,194	–	39,677
Other										
Acceptances	10,034	5,161	44	–	–	1	5	–	1	15,246
Obligations related to securities sold short	40,512	–	–	–	–	–	–	–	–	40,512
Obligations related to assets sold under repurchase agreements and securities loaned	76,540	26,900	11,008	–	15	–	12	–	7,505	121,980
Derivatives	8,059	9,464	6,353	4,002	3,919	10,712	19,315	42,366	13	104,203
Other financial liabilities	27,447	1,028	408	218	246	133	1,246	2,593	452	33,771
Subordinated debentures	–	–	–	–	–	–	305	8,895	–	9,200
Total financial liabilities	$ 210,059	$ 74,123	$ 49,740	$ 38,868	$ 45,267	$ 66,006	$ 108,521	$ 76,070	$ 434,876	$ 1,103,530
Other non-financial liabilities	842	699	2,963	239	279	2,482	859	8,740	7,553	24,656
Equity	–	–	–	–	–	–	–	–	72,861	72,861
Total liabilities and equity	$ 210,901	$ 74,822	$ 52,703	$ 39,107	$ 45,546	$ 68,488	$ 109,380	$ 84,810	$ 515,290	$ 1,201,047
Off-balance sheet items										
Financial guarantees	$ 240	$ 854	$ 3,551	$ 1,495	$ 2,801	$ 1,810	$ 5,569	$ 1,555	$ 45	$ 17,920
Lease commitments	61	122	181	175	173	694	1,474	2,755	–	5,635
Commitments to extend credit	3,563	3,132	10,288	9,696	11,620	28,744	132,859	15,616	4,828	220,346
Other credit-related commitments	702	676	1,196	1,356	1,507	479	669	213	95,654	102,452
Other commitments	300	237	–	–	–	–	–	–	438	975
Total off-balance sheet items	$ 4,866	$ 5,021	$ 15,216	$ 12,722	$ 16,101	$ 31,727	$ 140,571	$ 20,139	$ 100,965	$ 347,328

(1) Trading debt securities classified as fair value through profit or loss 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 discussion.

	As at April 30, 2017									
(Millions of Canadian dollars)	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
Assets										
Cash and deposits with banks	$ 54,372	$ 13	$ 23	$ 200	$ –	$ –	$ –	$ –	$ 1,785	$ 56,393
Securities										
Trading (1)	96,293	–	25	12	20	62	56	5,969	29,933	132,370
Available-for-sale	1,864	2,799	1,771	1,953	4,121	8,480	25,081	39,366	1,600	87,035
Assets purchased under reverse repurchase agreements and securities borrowed	91,678	54,200	25,567	14,477	15,648	7,999	36	–	7,326	216,931
Loans (net of allowance for loan losses)	15,261	18,250	21,575	21,379	24,727	107,157	197,165	40,701	86,047	532,262
Other										
Customers' liability under acceptances	9,350	5,120	23	–	–	–	6	–	–	14,499
Derivatives	5,832	7,920	4,839	5,050	3,528	10,240	21,919	41,435	–	100,763
Other financial assets	28,544	830	454	226	67	99	146	180	1,732	32,278
Total financial assets	$ 303,194	$ 89,132	$ 54,277	$ 43,297	$ 48,111	$ 134,037	$ 244,409	$ 127,651	$ 128,423	$ 1,172,531
Other non-financial assets	1,663	1,071	136	968	75	1,198	3,550	2,148	19,579	30,388
Total assets	$ 304,857	$ 90,203	$ 54,413	$ 44,265	$ 48,186	$ 135,235	$ 247,959	$ 129,799	$ 148,002	$ 1,202,919
Liabilities and equity										
Deposits (2)										
Unsecured borrowing	$ 37,401	$ 24,355	$ 31,866	$ 25,251	$ 28,232	$ 44,808	$ 51,692	$ 14,712	$ 427,516	$ 685,833
Secured borrowing	1,229	6,302	5,178	3,862	3,902	9,315	21,333	7,078	–	58,199
Covered bonds	–	–	3,407	1,923	1,119	9,012	23,322	2,768	–	41,551
Other										
Acceptances	9,350	5,120	23	–	–	–	6	–	–	14,499
Obligations related to securities sold short	37,331	–	–	–	–	–	–	–	–	37,331
Obligations related to assets sold under repurchase agreements and securities loaned	73,424	45,487	1,201	–	245	9	13	–	7,576	127,955
Derivatives	7,105	8,327	4,408	5,073	3,478	10,771	21,720	38,132	17	99,031
Other financial liabilities	24,033	1,176	446	199	243	148	1,097	3,738	422	31,502
Subordinated debentures	–	–	–	–	–	–	115	9,531	–	9,646
Total financial liabilities	$ 189,873	$ 90,767	$ 46,529	$ 36,308	$ 37,219	$ 74,063	$ 119,298	$ 75,959	$ 435,531	$ 1,105,547
Other non-financial liabilities	773	655	140	2,043	258	2,492	816	8,711	8,316	24,204
Equity	–	–	–	–	–	–	–	–	73,168	73,168
Total liabilities and equity	$ 190,646	$ 91,422	$ 46,669	$ 38,351	$ 37,477	$ 76,555	$ 120,114	$ 84,670	$ 517,015	$ 1,202,919
Off-balance sheet items										
Financial guarantees	$ 723	$ 2,413	$ 1,142	$ 3,720	$ 1,828	$ 1,597	$ 6,244	$ 974	$ 65	$ 18,706
Lease commitments	63	126	188	184	179	709	1,574	2,957	–	5,980
Commitments to extend credit	2,664	5,339	11,046	8,965	11,425	32,307	140,087	16,582	6,944	235,359
Other credit-related commitments	379	884	1,094	1,178	1,459	795	733	285	101,178	107,985
Other commitments	694	–	237	–	–	–	–	–	428	1,359
Total off-balance sheet items	$ 4,523	$ 8,762	$ 13,707	$ 14,047	$ 14,891	$ 35,408	$ 148,638	$ 20,798	$ 108,615	$ 369,389

(1) Trading debt securities classified as fair value through profit or loss 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 discussion.

Capital management

We continue to manage our capital in accordance with our Capital Management Framework as described in our 2016 Annual Report. In addition, we continue to monitor and prepare for new regulatory capital developments 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 Economic, market and regulatory review and outlook section of this Q3 2017 Report to Shareholders.

OSFI expects Canadian banks to currently meet the Basel III "all-in" targets (BCBS January 1, 2019 requirements – minimum ratios plus the capital conservation buffer) for CET1, Tier 1 and Total capital ratios. To ensure consistent implementation similar to that in other countries, 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. In 2017, the CVA scalars are 72%, 77%, and 81% for CET1, Tier 1 and Total capital respectively, and will reach 100% for each tier of capital by 2019.

We are required to include an additional 1% risk-weighted capital surcharge given our designation as a D-SIB by OSFI, effective 2013, (along with five other Canadian banks) as referenced in the following table. In addition, effective the first quarter of 2017, OSFI has implemented the BCBS requirements for a countercyclical capital buffer, which is calculated as the weighted average of the buffers in effect in the jurisdictions to which banks have a credit exposure. As at July 31, 2017, the impact of the countercyclical buffer on our regulatory target requirements was immaterial.

The following table provides a summary of OSFI regulatory target ratios under Basel III:

Basel III Capital ratios and leverage	OSFI regulatory target requirements for large banks under Basel III					RBC capital and leverage ratios as at July 31, 2017	Meet or exceed OSFI regulatory target ratios
	Minimum	Capital Buffers (1)	Minimum including Capital Buffers	D-SIB Surcharge (2)	Minimum including Capital Buffers and D-SIB surcharge (2)		
Common Equity Tier 1	> 4.5%	2.5%	> 7.0%	1.0%	> 8.0%	10.9%	✓
Tier 1 capital	> 6.0%	2.5%	> 8.5%	1.0%	> 9.5%	12.4%	✓
Total capital	> 8.0%	2.5%	> 10.5%	1.0%	> 11.5%	14.4%	✓
Leverage ratio	> 3.0%	n.a.	> 3.0%	n.a.	> 3.0%	4.4%	✓

(1) The capital buffers include the capital conservation buffer and the countercyclical capital buffer as prescribed by OSFI.
(2) Effective January 1, 2016, the D-SIBs surcharge is applicable to risk-weighted capital.

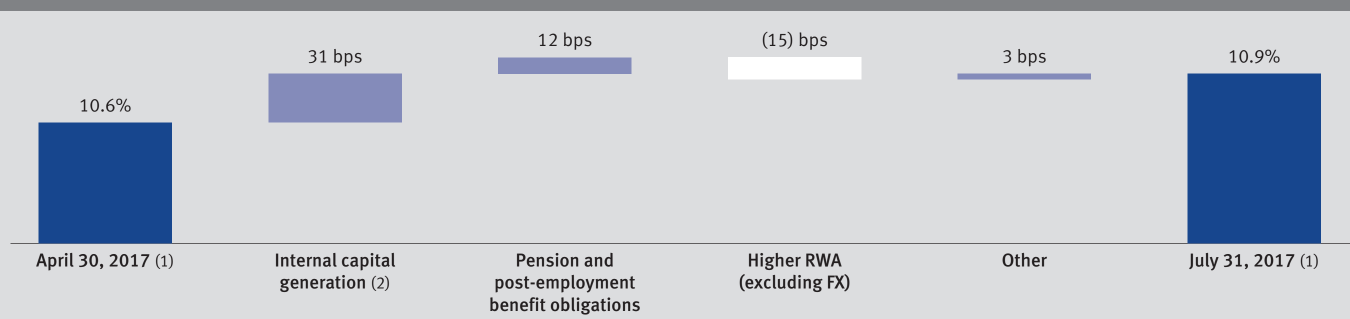
The following tables provide details on our regulatory capital, RWA and capital ratios. Our capital position remains strong and our capital ratios remain well above OSFI regulatory targets:

(Millions of Canadian dollars, except percentage amounts and as otherwise noted)	As at July 31 2017	April 30 2017	October 31 2016	July 31 2016
Capital (1)				
CET1 capital	**$ 49,608**	$ 49,598	$ 48,181	$ 46,425
Tier 1 capital	**56,687**	56,686	55,270	53,505
Total capital	**65,820**	66,235	64,950	63,205
Risk-weighted Assets (RWA) used in calculation of capital ratios (1), (2)				
CET1 capital RWA	**456,739**	469,718	447,436	442,581
Tier 1 capital RWA	**457,515**	470,528	448,662	443,945
Total capital RWA	**458,136**	471,176	449,712	445,114
Total capital RWA consisting of: (1)				
Credit risk	**$ 372,568**	$ 385,065	$ 369,751	$ 363,546
Market risk	**27,437**	28,429	23,964	26,438
Operational risk	**58,131**	57,682	55,997	55,130
Total capital RWA	**$ 458,136**	$ 471,176	$ 449,712	$ 445,114
Capital ratios and Leverage ratio (1), (3)				
CET1 ratio	**10.9%**	10.6%	10.8%	10.5%
Tier 1 capital ratio	**12.4%**	12.0%	12.3%	12.1%
Total capital ratio	**14.4%**	14.1%	14.4%	14.2%
Leverage ratio	**4.4%**	4.3%	4.4%	4.2%
Leverage ratio exposure (billions)	**$ 1,286.6**	$ 1,311.7	$ 1,265.1	$ 1,270.4

(1) Capital, RWA, and capital ratios are calculated using OSFI Capital Adequacy Requirements based on the Basel III framework ("all-in" basis). Leverage ratios are calculated using OSFI Leverage Requirements Guideline based on the Basel III framework.
(2) In fiscal 2017, the CVA scalars are 72%, 77% and 81%, respectively. In 2016, the CVA scalars of 64%, 71% and 77% were applied to CET1, Tier 1 and Total Capital, respectively.
(3) To enhance comparability among other global financial institutions, our transitional CET1, Tier 1, Total capital and leverage ratios as at July 31, 2017 were 11.4%, 12.5%, 14.4%, and 4.5%, respectively. Transitional is defined as capital calculated according to the current year's phase-in of regulatory adjustments and phase-out of non-qualifying capital instruments.

Q3 2017 vs. Q2 2017

Continuity of CET1 ratio (Basel III)



(1) Represents rounded figures.
(2) Internal capital generation includes $1.4 billion which represents Net income available to shareholders, less common and preferred shares dividends.

Our CET1 ratio was 10.9%, up 30 bps from last quarter, mainly reflecting internal capital generation and the impact of higher discount rates in determining our pension and other post-employment benefit obligations, partially offset by higher RWA, largely reflecting business growth.

CET1 capital RWA decreased $13 billion, due to the impact of foreign exchange translation, partially offset by RWA growth, primarily in loans.

Our Tier 1 capital ratio of 12.4% was up 40 bps, mainly reflecting the factors noted previously under CET1 ratio.

Our Total capital ratio of 14.4% was up 30 bps, mainly reflecting the factors noted previously under CET1 ratio.

Our Leverage ratio of 4.4% was up 10 bps from last quarter, mainly reflecting internal capital generation, the impact of foreign exchange translation, and the impact of higher discount rates in determining our pension and other post-employment benefit obligations. These factors were partially offset by higher leverage ratio exposures (excluding the impact of foreign exchange translation) primarily in loans, cash and deposits, securities, and repo-style transactions.

Q3 2017 vs. Q4 2016

Our CET1 ratio was up 10 bps from October 31, 2016, mainly due to internal capital generation and the impact of higher discount rates in determining our pension and other post-employment benefit obligations, partially offset by share repurchases, an update to our corporate and business lending risk parameters, and higher RWA, largely reflecting business growth.

CET1 capital RWA increased $9 billion, primarily due to an update to our corporate and business lending risk parameters, and higher RWA, mainly in loans and market risk portfolios. These factors were partially offset by the impact of foreign exchange translation.

Our Tier 1 capital ratio was up 10 bps, mainly reflecting the factors noted previously under CET1 ratio.

Our Total capital ratio was flat from the prior year, mainly due to internal capital generation and the impact of higher discount rates in determining our pension and other post-employment benefit obligations, offset by share repurchases, an update to our corporate and business lending risk parameters, and higher RWA, largely reflecting business growth.

Our Leverage ratio was flat, mainly reflecting internal capital generation, and the impact of higher discount rates in determining our pension and other post-employment benefit obligations. These factors were offset by share repurchases and higher leverage ratio exposures (excluding the impact of foreign exchange translation), primarily in repo-style transactions, loans, and cash and deposits.

Selected capital management activity

The following table provides our selected capital management activity:

	For the three months ended July 31, 2017		For the nine months ended July 31, 2017	
(Millions of Canadian dollars, except number of shares)	Number of shares (000s)	Amount	Number of shares (000s)	Amount
Tier 1 capital				
Common shares activity				
Issued in connection with share-based compensation plans (1)	643	$ 42	2,861	$ 188
Purchased for cancellation (2)	–	–	(30,321)	(368)
Tier 2 capital				
Redemption of June 26, 2037 subordinated debentures		119		119

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

On March 9, 2017, we announced that the TSX approved our normal course issuer bid (NCIB) to purchase up to 30 million of our common shares, commencing on March 14, 2017 and continuing until March 10, 2018, or such earlier date as we complete the repurchase of all shares permitted under the bid. 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 such repurchased shares will be the prevailing market price at the time of acquisition. Purchases may also be made through other means permitted by the TSX and applicable securities laws, including under specific share repurchase programs pursuant to issuer bid exemption orders issued by applicable securities regulatory authorities. Any purchases made under an exemption order will generally be at a discount to the prevailing market price. There were no shares repurchased for the three months ended July 31, 2017. For the nine months ended July 31, 2017, the total number of common shares repurchased under our NCIB programs was approximately 30.3 million. The total cost of the shares repurchased was $2,588 million, comprised of a book value of $368 million and an additional premium paid on repurchase of $2,220 million.

On June 26, 2017, we redeemed all ¥10,000 million outstanding 2.86% subordinated debentures due June 26, 2037 for 100% of their principal amount plus accrued interest to the redemption date. The redemption was completed on June 26, 2017.

Selected share data (1)

	As at July 31, 2017		
(Millions of Canadian dollars, except number of shares and as otherwise noted)	Number of shares (000s)	Amount	Dividends declared per share
Common shares outstanding (1)	1,457,934	$17,759	$ 0.87
First preferred shares outstanding			
Non-cumulative Series W (2)	12,000	300	0.31
Non-cumulative Series AA	12,000	300	0.28
Non-cumulative Series AB	12,000	300	0.29
Non-cumulative Series AC	8,000	200	0.29
Non-cumulative Series AD	10,000	250	0.28
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 AJ (3)	13,579	339	0.22
Non-cumulative Series AK (3)	2,421	61	0.16
Non-cumulative Series AL (3)	12,000	300	0.27
Non-cumulative Series AZ (3), (4)	20,000	500	0.25
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 C-1 (5)	82	107	US$ 13.75
Non-cumulative Series C-2 (5)	20	31	US$ 16.88
Treasury shares held – preferred	3	–	
Treasury shares held – common	1,091	112	
Stock options			
Outstanding	9,932		
Exercisable	4,952		
Dividends			
Common		1,269	
Preferred		76	

(1) For further details about our capital management activity, refer to Note 10 of our Condensed Financial Statements.
(2) Effective February 24, 2010, we have the right to convert into common shares at our option, subject to certain restrictions.
(3) Dividend rate will reset every five years.
(4) Non-viable contingent capital (NVCC) instruments.
(5) Represents 3,282,000 and 815,400 depositary shares relating to preferred shares Series C-1 and Series C-2, respectively. Each depositary share represents one-fortieth interest in a share of Series C-1 and Series C-2, respectively.

As at August 18, 2017, the number of outstanding common shares and stock options and awards was 1,457,948,827 and 9,916,636, respectively, and the number of Treasury shares – preferred and Treasury shares – common was 10,423 and 1,110,906, respectively.

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, preferred shares Series BB, preferred shares Series BD, preferred shares Series BF, preferred shares Series BH, preferred shares Series BI, preferred shares Series BJ, preferred shares Series BK, preferred shares Series BM, subordinated debentures due on July 17, 2024, subordinated debentures due on September 29, 2026, subordinated debentures due on June 4, 2025, subordinated debentures due on January 20, 2026 and subordinated debentures due on January 27, 2026, 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 2,719 million RBC common shares, in aggregate, which would represent a dilution impact of 65.10% based on the number of RBC common shares outstanding as at July 31, 2017.

Attributed capital

Our methodology for allocating capital to our business segments is based on the higher of fully diversified economic capital and the Basel III regulatory capital requirements. Risk-based capital attribution provides a uniform base for performance measurement among business segments, which compares to our overall corporate return objective and facilitates management decisions in resource allocation in conjunction with other factors.

The following outlines our attributed capital:

(Millions of Canadian dollars)	For the three months ended July 31 2017	April 30 2017	October 31 2016	July 31 2016
Credit risk	$ 22,250	$ 21,000	$ 20,500	$ 20,550
Market risk (trading and non-trading)	3,100	3,100	3,000	3,200
Operational risk	5,150	5,300	5,000	5,100
Business and fixed asset risk	3,200	3,250	3,100	3,200
Insurance risk	650	650	600	650
Goodwill and other intangibles	15,500	15,800	15,750	15,900
Regulatory capital allocation	11,450	10,800	8,800	8,200
Attributed capital	$ 61,300	$ 59,900	$ 56,750	$ 56,800
Unattributed capital	4,450	4,900	6,350	5,000
Average common equity	$ 65,750	$ 64,800	$ 63,100	$ 61,800

Q3 2017 vs. Q2 2017

Attributed capital increased $1.4 billion from last quarter, mainly reflecting higher Credit risk from an update to our corporate and business lending risk parameters.

We remain well capitalized with current levels of available capital exceeding the attributed capital required to underpin all of our material risks.

Additional financial information

Exposure to U.S. subprime and Alt-A through RMBS, CDOs and mortgages

Certain activities and transactions we enter into expose us to the risk of default of U.S. subprime and Alt-A residential mortgages. Our exposures to U.S. subprime and Alt-A residential mortgages of $73 million represented less than 0.1% of our total assets as at July 31, 2017, compared to $175 million or less than 0.1% last year. The decrease of $102 million was primarily due to the sale of certain securities.

Commercial mortgage-backed securities

The fair value of our total direct holdings of Canadian and U.S. commercial mortgage-backed securities was $537 million as at July 31, 2017.

Assets and liabilities measured at fair value

Our financial instruments carried at fair value are classified as Level 1, 2 or 3, in accordance with the fair value hierarchy set out in International Financial Reporting Standards (IFRS) 13, *Fair Value Measurement*. For further details on the fair value of our financial instruments and transfers between levels of the fair value hierarchy, refer to Note 3 of our Condensed Financial Statements.

The following table presents the total fair value of each major class of financial assets and financial liabilities measured at fair value and the percentage of the fair value of each class categorized as Level 1, 2 or 3:

	As at July 31, 2017				
(Millions of Canadian dollars, except percentage amounts)	Fair value	Level 1	Level 2	Level 3	Total
Financial assets					
Securities at FVTPL	$ 128,740	32%	68%	–%	100%
Available-for-sale (1)	70,526	1	96	3	100
Assets purchased under reverse repurchase agreements and securities borrowed	130,591	–	100	–	100
Loans	4,588	–	85	15	100
Derivatives (2)	177,658	2	98	–	100
Financial liabilities					
Deposits	$ 104,105	–%	100%	–%	100%
Obligations related to securities sold short	40,512	54	46	–	100
Obligations related to assets sold under repurchase agreements and securities loaned	115,657	–	100	–	100
Derivatives (2)	176,006	2	97	1	100

(1) Excludes $96 million of available-for-sale securities that are carried at cost.
(2) The derivative assets and liabilities presented in the table above do not reflect the impact of netting.

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*. The significant accounting policies are described in Note 2 of our audited 2016 Annual Consolidated Financial Statements.

Changes in accounting policies and disclosures

Future changes in accounting policies and disclosures

IFRS 17 *Insurance Contracts* (IFRS 17)
In May 2017, the IASB issued IFRS 17 to establish a comprehensive global insurance standard which provides guidance on the recognition, measurement, presentation and disclosures of insurance contracts. This new standard will be effective for us on November 1, 2021. We are currently assessing the impact of adopting this standard on our Consolidated Financial Statements.

Regulatory developments

BCBS Pillar 3 disclosure requirements
On March 29, 2017, the BCBS issued its Pillar 3 disclosure requirements standard entitled *Pillar 3 disclosure requirements – consolidated and enhanced framework*. The enhancements include the addition of a dashboard of key metrics and a draft disclosure requirement of hypothetical RWA calculated based on the Basel framework's standardized approaches. The standard also includes enhanced granularity for disclosure of prudent valuation adjustments and incorporates additions to the Pillar 3 framework to reflect ongoing reforms to the regulatory environment such as the total loss-absorbing capacity regime for global systemically important banks, the proposed operational risk requirements, and the final standard for market risk. The standard also consolidates all existing Pillar 3 disclosure requirements of the Basel framework, including the leverage and liquidity ratios disclosure templates. Together with the *Revised Pillar 3 disclosure requirements* issued in January 2015, these disclosure requirements comprise the single Pillar 3 framework.

In April 2017, OSFI issued a guideline indicating that all domestic systemically important banks are expected to implement the *Revised Pillar 3 disclosure requirements* for the reporting period ending October 31, 2018. OSFI's guideline on the implementation of the *Pillar 3 disclosure requirements – consolidated and enhanced framework* has not yet been issued. We expect the guidance from OSFI to be issued in 2017.

Capital treatment proposed or issued in connection with accounting changes
On March 29, 2017, the BCBS issued a standard with details on the interim regulatory treatment of accounting provisions under the Basel III regulatory capital framework. The standard addresses the impact of new expected credit loss accounting requirements under IFRS 9 *Financial Instruments* (IFRS 9) that will replace the current incurred loss models used for accounting purposes. IFRS 9 will be effective for us on November 1, 2017. For further details on the adoption of IFRS 9, including applicable regulatory guidance, refer to the Critical accounting policies and estimates section of our 2016 Annual Report.

The standard retains the current regulatory treatment of accounting provisions under the standardized and the internal ratings-based approaches until a longer-term solution is developed. It also sets out transitional arrangements which allow for a phase-in of the impact of the new expected credit loss accounting standard on regulatory capital for up to five years, should individual jurisdictions choose to provide capital relief.

On August 21, 2017, OSFI released for public consultation revisions to the Capital Adequacy Requirements (CAR) to be implemented in the first quarter of 2018. The proposed CAR Guideline retains the current regulatory treatment of accounting provisions, consistent with the BCBS standard. It provides no explicit transitional arrangements to phase-in the impact of the new expected credit loss accounting standard on regulatory capital; however, OSFI will consider potential mitigants for banks whose capital position may be materially impacted upon the adoption of IFRS 9.

The proposed CAR Guideline also clarifies that if, and when, a Canadian bank is designated a G-SIB, the higher of the D-SIB and G-SIB surcharges will apply.

Controls and procedures

Disclosure controls and procedures

As of July 31, 2017, 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, 2017.

Internal control over financial reporting

No changes were made in our internal control over financial reporting during the quarter ended July 31, 2017 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 Note 29 of our audited 2016 Annual Consolidated Financial Statements.

EDTF recommendations index

On October 29, 2012, the Enhanced Disclosure Task Force (EDTF), established by the FSB, issued its report Enhancing the Risk Disclosures of Banks, which included 32 recommendations aimed at achieving transparent, high-quality risk disclosures. As a result, our enhanced disclosures have been provided in our 2016 Annual Report, Q3 2017 Report to Shareholders (RTS) and Supplementary Financial Information package (SFI).

The following index summarizes our disclosure by EDTF recommendation:

Interim Condensed Consolidated Financial Statements (unaudited)

Interim Condensed Consolidated Balance Sheets (unaudited)

	As at	
(Millions of Canadian dollars)	July 31 2017	October 31 2016
Assets		
Cash and due from banks	$ 24,302	$ 14,929
Interest-bearing deposits with banks	36,098	27,851
Securities		
Trading	128,740	151,292
Available-for-sale (Note 4)	85,430	84,801
	214,170	236,093
Assets purchased under reverse repurchase agreements and securities borrowed	208,669	186,302
Loans (Note 5)		
Retail	379,869	369,470
Wholesale	156,401	154,369
	536,270	523,839
Allowance for loan losses (Note 5)	(2,236)	(2,235)
	534,034	521,604
Segregated fund net assets	1,077	981
Other		
Customers' liability under acceptances	15,246	12,843
Derivatives	105,833	118,944
Premises and equipment, net	2,646	2,836
Goodwill	10,733	11,156
Other intangibles	4,421	4,648
Other assets	43,818	42,071
	182,697	192,498
Total assets	$ 1,201,047	$ 1,180,258
Liabilities and equity		
Deposits (Note 7)		
Personal	$ 254,559	$ 250,550
Business and government	501,282	488,007
Bank	22,777	19,032
	778,618	757,589
Segregated fund net liabilities	1,077	981
Other		
Acceptances	15,246	12,843
Obligations related to securities sold short	40,512	50,369
Obligations related to assets sold under repurchase agreements and securities loaned	121,980	103,441
Derivatives	104,203	116,550
Insurance claims and policy benefit liabilities	9,331	9,164
Other liabilities	48,019	47,947
	339,291	340,314
Subordinated debentures (Note 10)	9,200	9,762
Total liabilities	1,128,186	1,108,646
Equity attributable to shareholders		
Preferred shares	6,713	6,713
Common shares (shares issued – 1,459,025,180 and 1,484,234,375) (Note 10)	17,871	17,859
Retained earnings	44,479	41,519
Other components of equity	3,211	4,926
	72,274	71,017
Non-controlling interests	587	595
Total equity	72,861	71,612
Total liabilities and equity	$ 1,201,047	$ 1,180,258

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

Interim Condensed Consolidated Statements of Income (unaudited)

	For the three months ended		For the nine months ended	
(Millions of Canadian dollars, except per share amounts)	July 31 2017	July 31 2016	July 31 2017	July 31 2016
Interest income				
Loans	$ 4,691	$ 4,494	$ 13,769	$ 13,302
Securities	1,207	1,180	3,658	3,502
Assets purchased under reverse repurchase agreements and securities borrowed	829	464	2,130	1,314
Deposits and other	81	46	201	123
	6,808	6,184	19,758	18,241
Interest expense				
Deposits and other	1,672	1,385	4,689	4,046
Other liabilities	811	612	2,091	1,689
Subordinated debentures	68	64	199	162
	2,551	2,061	6,979	5,897
Net interest income	4,257	4,123	12,779	12,344
Non-interest income				
Insurance premiums, investment and fee income	1,009	1,534	2,954	4,044
Trading revenue	216	311	660	582
Investment management and custodial fees	1,194	1,053	3,480	3,138
Mutual fund revenue	788	728	2,282	2,142
Securities brokerage commissions	330	352	1,089	1,079
Service charges	450	443	1,325	1,309
Underwriting and other advisory fees	537	524	1,595	1,367
Foreign exchange revenue, other than trading	281	189	744	747
Card service revenue	245	227	722	669
Credit fees	355	285	1,069	855
Net gains on available-for-sale securities (Note 4)	44	7	125	74
Share of profit in joint ventures and associates (Note 6)	33	44	325	132
Other	247	435	693	658
	5,729	6,132	17,063	16,796
Total revenue	9,986	10,255	29,842	29,140
Provision for credit losses (Note 5)	320	318	916	1,188
Insurance policyholder benefits, claims and acquisition expense	643	1,210	1,916	3,027
Non-interest expense				
Human resources (Note 8)	3,385	3,079	9,889	9,169
Equipment	361	346	1,061	1,060
Occupancy	383	387	1,186	1,162
Communications	250	240	712	667
Professional fees	326	279	846	766
Amortization of other intangibles	255	250	758	713
Other	475	510	1,427	1,401
	5,435	5,091	15,879	14,938
Income before income taxes	3,588	3,636	11,131	9,987
Income taxes	792	741	2,499	2,072
Net income	$ 2,796	$ 2,895	$ 8,632	$ 7,915
Net income attributable to:				
Shareholders	$ 2,783	$ 2,886	$ 8,599	$ 7,872
Non-controlling interests	13	9	33	43
	$ 2,796	$ 2,895	$ 8,632	$ 7,915
Basic earnings per share (in dollars) (Note 11)	$ 1.86	$ 1.88	$ 5.69	$ 5.15
Diluted earnings per share (in dollars) (Note 11)	1.85	1.88	5.67	5.13
Dividends per common share (in dollars)	0.87	0.81	2.57	2.41

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

Interim Condensed Consolidated Statements of Comprehensive Income (unaudited)

(Millions of Canadian dollars)	For the three months ended July 31 2017	For the three months ended July 31 2016	For the nine months ended July 31 2017	For the nine months ended July 31 2016
Net income	$ 2,796	$ 2,895	$ 8,632	$ 7,915
Other comprehensive income (loss), net of taxes				
Items that will be reclassified subsequently to income:				
Net change in unrealized gains (losses) on available-for-sale securities				
Net unrealized gains (losses) on available-for-sale securities	67	96	66	165
Reclassification of net losses (gains) on available-for-sale securities to income	(27)	5	(76)	(48)
	40	101	(10)	117
Foreign currency translation adjustments				
Unrealized foreign currency translation gains (losses)	(4,405)	1,301	(3,272)	(832)
Net foreign currency translation gains (losses) from hedging activities	1,538	(426)	1,076	418
Reclassification of losses (gains) on foreign currency translation to income	–	–	(10)	–
	(2,867)	875	(2,206)	(414)
Net change in cash flow hedges				
Net gains (losses) on derivatives designated as cash flow hedges	585	(120)	595	21
Reclassification of losses (gains) on derivatives designated as cash flow hedges to income	(167)	50	(99)	(8)
	418	(70)	496	13
Items that will not be reclassified subsequently to income:				
Remeasurements of employee benefit plans (Note 8)	510	(432)	832	(1,102)
Net fair value change due to credit risk on financial liabilities designated as at fair value through profit or loss	(20)	(87)	(265)	(232)
	490	(519)	567	(1,334)
Total other comprehensive income (loss), net of taxes	(1,919)	387	(1,153)	(1,618)
Total comprehensive income (loss)	$ 877	$ 3,282	$ 7,479	$ 6,297
Total comprehensive income attributable to:				
Shareholders	$ 871	$ 3,270	$ 7,451	$ 6,254
Non-controlling interests	6	12	28	43
	$ 877	$ 3,282	$ 7,479	$ 6,297

The income tax effect on the Interim Condensed Consolidated Statements of Comprehensive Income is shown in the table below.

(Millions of Canadian dollars)	For the three months ended July 31 2017	For the three months ended July 31 2016	For the nine months ended July 31 2017	For the nine months ended July 31 2016
Income taxes on other comprehensive income				
Net unrealized gains (losses) on available-for-sale securities	$ 50	$ 36	$ 39	$ 81
Reclassification of net losses (gains) on available-for-sale securities to income	(9)	2	(29)	(19)
Unrealized foreign currency translation gains (losses)	(9)	3	(7)	1
Net foreign currency translation gains (losses) from hedging activities	518	(138)	359	150
Net gains (losses) on derivatives designated as cash flow hedges	211	(44)	215	7
Reclassification of losses (gains) on derivatives designated as cash flow hedges to income	(60)	18	(36)	(3)
Remeasurements of employee benefit plans	186	(156)	292	(397)
Net fair value change due to credit risk on financial liabilities designated as at fair value through profit or loss	(8)	(33)	(102)	(89)
Total income tax expenses (recoveries)	$ 879	$ (312)	$ 731	$ (269)

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

Interim Condensed Consolidated Statements of Changes in Equity (unaudited)

(Millions of Canadian dollars)	Preferred shares	Common shares	Treasury shares – preferred	Treasury shares – common	Retained earnings	Other components of equity: Available-for-sale securities	Other components of equity: Foreign currency translation	Other components of equity: Cash flow hedges	Other components of equity: Total other components of equity	Equity attributable to shareholders	Non-controlling interests	Total equity
Balance at April 30, 2016	$ 6,713	$ 17,883	$ –	$ (87)	$ 39,590	$ 331	$ 3,141	$ (33)	$ 3,439	$ 67,538	$ 588	$ 68,126
Changes in equity												
Issues of share capital	–	38	–	–	–	–	–	–	–	38	–	38
Common shares purchased for cancellation	–	(45)	–	–	(247)	–	–	–	–	(292)	–	(292)
Sales of treasury shares	–	–	40	1,503	–	–	–	–	–	1,543	–	1,543
Purchases of treasury shares	–	–	(41)	(1,517)	–	–	–	–	–	(1,558)	–	(1,558)
Share-based compensation awards	–	–	–	–	(10)	–	–	–	–	(10)	–	(10)
Dividends on common shares	–	–	–	–	(1,202)	–	–	–	–	(1,202)	–	(1,202)
Dividends on preferred shares and other	–	–	–	–	(85)	–	–	–	–	(85)	(17)	(102)
Other	–	–	–	–	11	–	–	–	–	11	–	11
Net income	–	–	–	–	2,886	–	–	–	–	2,886	9	2,895
Total other comprehensive income (loss), net of taxes	–	–	–	–	(519)	101	872	(70)	903	384	3	387
Balance at July 31, 2016	$ 6,713	$ 17,876	$ (1)	$ (101)	$ 40,424	$ 432	$ 4,013	$ (103)	$ 4,342	$ 69,253	$ 583	$ 69,836
Balance at April 30, 2017	$ 6,713	$ 17,717	$ (1)	$ (10)	$ 42,538	$ 290	$ 5,344	$ (21)	$ 5,613	$ 72,570	$ 598	$ 73,168
Changes in equity												
Issues of share capital	–	42	–	–	–	–	–	–	–	42	–	42
Common shares purchased for cancellation	–	–	–	–	–	–	–	–	–	–	–	–
Sales of treasury shares	–	–	38	1,099	–	–	–	–	–	1,137	–	1,137
Purchases of treasury shares	–	–	(37)	(977)	–	–	–	–	–	(1,014)	–	(1,014)
Share-based compensation awards	–	–	–	–	(6)	–	–	–	–	(6)	–	(6)
Dividends on common shares	–	–	–	–	(1,269)	–	–	–	–	(1,269)	–	(1,269)
Dividends on preferred shares and other	–	–	–	–	(76)	–	–	–	–	(76)	(17)	(93)
Other	–	–	–	–	19	–	–	–	–	19	–	19
Net income	–	–	–	–	2,783	–	–	–	–	2,783	13	2,796
Total other comprehensive income (loss), net of taxes	–	–	–	–	490	40	(2,860)	418	(2,402)	(1,912)	(7)	(1,919)
Balance at July 31, 2017	$ 6,713	$ 17,759	$ –	$ 112	$ 44,479	$ 330	$ 2,484	$ 397	$ 3,211	$ 72,274	$ 587	$ 72,861

(Millions of Canadian dollars)	Preferred shares	Common shares	Treasury shares – preferred	Treasury shares – common	Retained earnings	Other components of equity: Available–for-sale securities	Foreign currency translation	Cash flow hedges	Total other components of equity	Equity attributable to shareholders	Non-controlling interests	Total equity
Balance at October 31, 2015	$ 5,100	$ 14,573	$ (2)	$ 38	$ 37,811	$ 315	$ 4,427	$ (116)	$ 4,626	$ 62,146	$ 1,798	$ 63,944
Changes in equity												
Issues of share capital	1,855	3,348	–	–	(16)	–	–	–	–	5,187	–	5,187
Common shares purchased for cancellation	–	(45)	–	–	(247)	–	–	–	–	(292)	–	(292)
Preferred shares purchased for cancellation	(242)	–	–	–	(22)	–	–	–	–	(264)	–	(264)
Redemption of trust capital securities	–	–	–	–	–	–	–	–	–	–	(1,200)	(1,200)
Sales of treasury shares	–	–	144	3,917	–	–	–	–	–	4,061	–	4,061
Purchases of treasury shares	–	–	(143)	(4,056)	–	–	–	–	–	(4,199)	–	(4,199)
Share-based compensation awards	–	–	–	–	(42)	–	–	–	–	(42)	–	(42)
Dividends on common shares	–	–	–	–	(3,583)	–	–	–	–	(3,583)	–	(3,583)
Dividends on preferred shares and other	–	–	–	–	(219)	–	–	–	–	(219)	(63)	(282)
Other	–	–	–	–	204	–	–	–	–	204	5	209
Net income	–	–	–	–	7,872	–	–	–	–	7,872	43	7,915
Total other comprehensive income (loss), net of taxes	–	–	–	–	(1,334)	117	(414)	13	(284)	(1,618)	–	(1,618)
Balance at July 31, 2016	$ 6,713	$ 17,876	$ (1)	$ (101)	$ 40,424	$ 432	$ 4,013	$ (103)	$ 4,342	$ 69,253	$ 583	$ 69,836
Balance at October 31, 2016	$ 6,713	$ 17,939	$ –	$ (80)	$ 41,519	$ 340	$ 4,685	$ (99)	$ 4,926	$ 71,017	$ 595	$ 71,612
Changes in equity												
Issues of share capital	–	188	–	–	(1)	–	–	–	–	187	–	187
Common shares purchased for cancellation	–	(368)	–	–	(2,220)	–	–	–	–	(2,588)	–	(2,588)
Sales of treasury shares	–	–	82	3,414	–	–	–	–	–	3,496	–	3,496
Purchases of treasury shares	–	–	(82)	(3,222)	–	–	–	–	–	(3,304)	–	(3,304)
Share-based compensation awards	–	–	–	–	(31)	–	–	–	–	(31)	–	(31)
Dividends on common shares	–	–	–	–	(3,772)	–	–	–	–	(3,772)	–	(3,772)
Dividends on preferred shares and other	–	–	–	–	(228)	–	–	–	–	(228)	(34)	(262)
Other	–	–	–	–	46	–	–	–	–	46	(2)	44
Net income	–	–	–	–	8,599	–	–	–	–	8,599	33	8,632
Total other comprehensive income (loss), net of taxes	–	–	–	–	567	(10)	(2,201)	496	(1,715)	(1,148)	(5)	(1,153)
Balance at July 31, 2017	$ 6,713	$ 17,759	$ –	$ 112	$ 44,479	$ 330	$ 2,484	$ 397	$ 3,211	$ 72,274	$ 587	$ 72,861

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

Interim Condensed Consolidated Statements of Cash Flows (unaudited)

(Millions of Canadian dollars)	For the three months ended July 31 2017	For the three months ended July 31 2016	For the nine months ended July 31 2017	For the nine months ended July 31 2016
Cash flows from operating activities				
Net income	$ 2,796	$ 2,895	$ 8,632	$ 7,915
Adjustments for non-cash items and others				
Provision for credit losses	320	318	916	1,188
Depreciation	141	132	449	420
Deferred income taxes	153	(298)	183	(395)
Amortization and impairment of other intangibles	257	250	760	716
Net changes in investments in joint ventures and associates	(33)	(39)	(323)	(117)
Losses (Gains) on sale of premises and equipment	3	–	(4)	3
Losses (Gains) on available-for-sale securities	(66)	(38)	(189)	(145)
Losses (Gains) on disposition of business	–	(283)	2	(269)
Impairment of available-for-sale securities	12	27	43	65
Adjustments for net changes in operating assets and liabilities				
Insurance claims and policy benefit liabilities	69	661	167	1,181
Net change in accrued interest receivable and payable	92	(78)	(99)	(151)
Current income taxes	823	507	(711)	1,384
Derivative assets	(5,070)	(15,164)	13,111	(24,742)
Derivative liabilities	5,172	12,054	(12,347)	20,576
Trading securities	3,661	(5,509)	22,555	658
Loans, net of securitizations	(3,009)	(7,933)	(13,695)	(14,054)
Assets purchased under reverse repurchase agreements and securities borrowed	8,262	(15,605)	(22,367)	(25,497)
Deposits, net of securitizations	(5,715)	12,961	22,279	15,757
Obligations related to assets sold under repurchase agreements and securities loaned	(5,975)	21,709	18,539	34,995
Obligations related to securities sold short	3,181	(442)	(9,857)	(979)
Brokers and dealers receivable and payable	(537)	43	(355)	248
Other	5,844	(5,941)	3,726	(2,594)
Net cash from (used in) operating activities	10,381	227	31,415	16,163
Cash flows from investing activities				
Change in interest-bearing deposits with banks	(10,223)	7,221	(8,247)	2,734
Proceeds from sale of available-for-sale securities	2,501	3,018	7,773	6,984
Proceeds from maturity of available-for-sale securities	9,058	10,354	29,586	24,169
Purchases of available-for-sale securities	(16,009)	(14,645)	(43,158)	(37,545)
Proceeds from maturity of held-to-maturity securities	239	438	713	1,514
Purchases of held-to-maturity securities	(309)	(773)	(1,195)	(1,940)
Net acquisitions of premises and equipment and other intangibles	(228)	(305)	(899)	(862)
Proceeds from dispositions	–	584	–	584
Cash used in acquisitions	–	–	–	(2,964)
Net cash from (used in) investing activities	(14,971)	5,892	(15,427)	(7,326)
Cash flows from financing activities				
Redemption of trust capital securities	–	–	–	(1,200)
Issue of subordinated debentures	–	–	–	3,606
Repayment of subordinated debentures	(119)	–	(119)	(1,500)
Issue of common shares	35	38	169	233
Common shares purchased for cancellation	–	(292)	(2,588)	(292)
Issue of preferred shares	–	–	–	1,475
Preferred shares purchased for cancellation	–	–	–	(264)
Sales of treasury shares	1,137	1,543	3,496	4,061
Purchases of treasury shares	(1,014)	(1,558)	(3,304)	(4,199)
Dividends paid	(1,348)	(1,280)	(3,964)	(3,710)
Issuance costs	–	–	(1)	(16)
Dividends/distributions paid to non-controlling interests	(17)	(17)	(34)	(63)
Change in short-term borrowings of subsidiaries	(13)	1	(30)	(8)
Net cash from (used in) financing activities	(1,339)	(1,565)	(6,375)	(1,877)
Effect of exchange rate changes on cash and due from banks	(287)	102	(240)	89
Net change in cash and due from banks	(6,216)	4,656	9,373	7,049
Cash and due from banks at beginning of period (1)	30,518	14,845	14,929	12,452
Cash and due from banks at end of period (1)	$ 24,302	$ 19,501	$ 24,302	$ 19,501
Cash flows from operating activities include:				
Amount of interest paid	$ 2,343	$ 1,900	$ 6,337	$ 5,357
Amount of interest received	6,654	5,869	18,796	17,325
Amount of dividend received	411	454	1,358	1,260
Amount of income taxes paid	768	162	3,815	786

(1) We are required to maintain balances with central banks and other regulatory authorities. The total balances were $1.8 billion as at July 31, 2017 (April 30, 2017 – $1.8 billion; October 31, 2016 – $3.3 billion; July 31, 2016 – $2.8 billion; April 30, 2016 – $2.0 billion; October 31, 2015 – $2.6 billion).

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

Note 1 General information

Our unaudited Interim Condensed Consolidated Financial Statements (Condensed Financial Statements) are presented in compliance with International Accounting Standard (IAS) 34 *Interim Financial Reporting*. The Condensed Financial Statements do not include all the information and disclosures required in the annual financial statements and should be read in conjunction with our audited 2016 Annual Consolidated Financial Statements and the accompanying notes included on pages 116 to 205 in our 2016 Annual Report. Tabular information is stated in millions of Canadian dollars, except per share amounts and percentages. On August 22, 2017, the Board of Directors authorized the Condensed Financial Statements for issue.

Note 2 Summary of significant accounting policies, estimates and judgments

These Condensed Financial Statements have been prepared using the same accounting policies and methods used in the preparation of our audited 2016 Annual Consolidated Financial Statements. Significant accounting policies are described in Note 2 of our audited 2016 Annual Consolidated Financial Statements. Future changes in accounting policies and disclosures that are not yet effective for us are described in Note 2 of our audited 2016 Annual Consolidated Financial Statements and an update is provided in the Accounting and control matters section of Management's Discussion and Analysis.

Note 3 Fair value of financial instruments

Carrying value and fair value of financial instruments

The following tables provide a comparison of the carrying and fair values for each classification of financial instruments. Refer to Note 2 and Note 3 of our audited 2016 Annual Consolidated Financial Statements for a description of the valuation techniques and inputs used in the fair value measurement of our financial instruments. Embedded derivatives are presented on a combined basis with the host contracts. For measurement purposes, they are carried at fair value when conditions requiring separation are met. There have been no significant changes to our determination of fair value during the quarter.

	As at July 31, 2017						
	Carrying value and fair value			Carrying value	Fair value		
(Millions of Canadian dollars)	Financial instruments classified as at FVTPL	Financial instruments designated as at FVTPL	Available-for-sale instruments measured at fair value	Financial instruments measured at amortized cost	Financial instruments measured at amortized cost	Total carrying amount	Total fair value
Financial assets							
Interest-bearing deposits with banks	$ –	$ 21,203	$ –	$ 14,895	$ 14,895	$ 36,098	$ 36,098
Securities							
Trading	118,413	10,327	–	–	–	128,740	128,740
Available-for-sale (1)	–	–	70,622	14,808	14,732	85,430	85,354
	118,413	10,327	70,622	14,808	14,732	214,170	214,094
Assets purchased under reverse repurchase agreements and securities borrowed	–	130,591	–	78,078	77,872	208,669	208,463
Loans							
Retail	175	–	–	378,491	377,213	378,666	377,388
Wholesale	1,563	2,850	–	150,955	150,958	155,368	155,371
	1,738	2,850	–	529,446	528,171	534,034	532,759
Other							
Derivatives	105,833	–	–	–	–	105,833	105,833
Other assets (2)	–	1,125	–	48,837	48,837	49,962	49,962
Financial liabilities							
Deposits							
Personal	$ 150	$ 12,951		$ 241,458	$ 241,561	$ 254,559	$ 254,662
Business and government (3)	–	89,940		411,342	412,524	501,282	502,464
Bank (4)	–	1,064		21,713	21,723	22,777	22,787
	150	103,955		674,513	675,808	778,618	779,913
Other							
Obligations related to securities sold short	40,512	–		–	–	40,512	40,512
Obligations related to assets sold under repurchase agreements and securities loaned	–	115,657		6,323	6,323	121,980	121,980
Derivatives	104,203	–		–	–	104,203	104,203
Other liabilities (5)	(1,042)	5		50,054	50,036	49,017	48,999
Subordinated debentures	–	–		9,200	9,462	9,200	9,462

Note 3 Fair value of financial instruments (continued)

	As at October 31, 2016						
	Carrying value and fair value			Carrying value	Fair value		
(Millions of Canadian dollars)	Financial instruments classified as at FVTPL	Financial instruments designated as at FVTPL	Available-for-sale instruments measured at fair value	Financial instruments measured at amortized cost	Financial instruments measured at amortized cost	Total carrying amount	Total fair value
Financial assets							
Interest-bearing deposits with banks	$ –	$ 15,967	$ –	$ 11,884	$ 11,884	$ 27,851	$ 27,851
Securities							
Trading	141,265	10,027	–	–	–	151,292	151,292
Available-for-sale (1)	–	–	69,922	14,879	15,207	84,801	85,129
	141,265	10,027	69,922	14,879	15,207	236,093	236,421
Assets purchased under reverse repurchase agreements and securities borrowed	–	121,692	–	64,610	64,498	186,302	186,190
Loans							
Retail	71	–	–	368,145	369,012	368,216	369,083
Wholesale	1,437	904	–	151,047	150,720	153,388	153,061
	1,508	904	–	519,192	519,732	521,604	522,144
Other							
Derivatives	118,944	–	–	–	–	118,944	118,944
Other assets (2)	–	894	–	43,981	43,979	44,875	44,873
Financial liabilities							
Deposits							
Personal	$ 113	$ 15,142		$ 235,295	$ 235,490	$ 250,550	$ 250,745
Business and government (3)	–	82,871		405,136	406,881	488,007	489,752
Bank (4)	–	730		18,302	18,312	19,032	19,042
	113	98,743		658,733	660,683	757,589	759,539
Other							
Obligations related to securities sold short	50,369	–		–	–	50,369	50,369
Obligations related to assets sold under repurchase agreements and securities loaned	–	88,863		14,578	14,583	103,441	103,446
Derivatives	116,550	–		–	–	116,550	116,550
Other liabilities (5)	282	10		43,865	43,838	44,157	44,130
Subordinated debentures	–	131		9,631	9,700	9,762	9,831

(1) Available-for-sale (AFS) securities include held-to-maturity securities that are recorded at amortized cost.
(2) Includes Customers' liability under acceptances and financial instruments recognized in Other assets.
(3) Business and government deposits include deposits from regulated deposit-taking institutions other than banks.
(4) Bank deposits refer to deposits from regulated deposit-taking institutions.
(5) Includes Acceptances and financial instruments recognized in Other liabilities.

Fair value of assets and liabilities measured at fair value on a recurring basis and classified using the fair value hierarchy

	As at											
	July 31, 2017						October 31, 2016					
	Fair value measurements using			Total gross fair value	Netting adjustments	Assets/liabilities at fair value	Fair value measurements using			Total gross fair value	Netting adjustments	Assets/liabilities at fair value
(Millions of Canadian dollars)	Level 1	Level 2	Level 3				Level 1	Level 2	Level 3			
Financial assets												
Interest-bearing deposits with banks	$ –	$ 21,203	$ –	$ 21,203	$	$ 21,203	$ –	$ 15,967	$ –	$ 15,967	$	$ 15,967
Securities												
Trading												
Canadian government debt (1)												
Federal	11,819	8,315	–	20,134		20,134	13,072	10,214	–	23,286		23,286
Provincial and municipal	–	11,282	–	11,282		11,282	–	11,928	–	11,928		11,928
U.S. state, municipal and agencies debt (1)	1,879	31,549	–	33,428		33,428	3,358	37,002	1	40,361		40,361
Other OECD government debt (2)	1,354	10,200	–	11,554		11,554	1,390	5,530	–	6,920		6,920
Mortgage-backed securities (1)	–	1,395	–	1,395		1,395	–	1,457	–	1,457		1,457
Asset-backed securities												
Non-CDO securities (3)	–	747	–	747		747	–	557	4	561		561
Corporate debt and other debt	10	21,052	58	21,120		21,120	25	20,630	62	20,717		20,717
Equities	25,953	2,742	385	29,080		29,080	43,155	2,531	376	46,062		46,062
	41,015	87,282	443	128,740		128,740	61,000	89,849	443	151,292		151,292
Available-for-sale (4)												
Canadian government debt (1)												
Federal	475	668	–	1,143		1,143	44	378	–	422		422
Provincial and municipal	–	2,747	–	2,747		2,747	–	2,364	–	2,364		2,364
U.S. state, municipal and agencies debt (1)	7	24,804	562	25,373		25,373	1	24,668	747	25,416		25,416
Other OECD government debt	–	10,565	–	10,565		10,565	3,416	10,484	–	13,900		13,900
Mortgage-backed securities (1)	–	637	–	637		637	–	395	–	395		395
Asset-backed securities												
CDO	–	3,074	–	3,074		3,074	–	1,630	–	1,630		1,630
Non-CDO securities	–	2,659	202	2,861		2,861	–	1,886	217	2,103		2,103
Corporate debt and other debt	–	22,068	723	22,791		22,791	–	21,110	956	22,066		22,066
Equities	299	318	631	1,248		1,248	376	331	756	1,463		1,463
Loan substitute securities	62	25	–	87		87	49	25	–	74		74
	843	67,565	2,118	70,526		70,526	3,886	63,271	2,676	69,833		69,833
Assets purchased under reverse repurchase agreements and securities borrowed	–	130,591	–	130,591		130,591	–	121,692	–	121,692		121,692
Loans	–	3,920	668	4,588		4,588	–	2,083	329	2,412		2,412
Other												
Derivatives												
Interest rate contracts	–	111,628	358	111,986		111,986	3	153,216	555	153,774		153,774
Foreign exchange contracts	–	53,454	61	53,515		53,515	–	56,752	26	56,778		56,778
Credit derivatives	–	81	–	81		81	–	191	–	191		191
Other contracts	2,815	9,798	287	12,900		12,900	2,855	3,613	307	6,775		6,775
Valuation adjustments	–	(820)	(4)	(824)		(824)	–	(1,429)	(3)	(1,432)		(1,432)
Total gross derivatives	2,815	174,141	702	177,658		177,658	2,858	212,343	885	216,086		216,086
Netting adjustments					(71,825)	(71,825)					(97,142)	(97,142)
Total derivatives						105,833						118,944
Other assets	914	211	–	1,125		1,125	762	132	–	894		894
	$45,587	$484,913	$3,931	$534,431	$ (71,825)	$462,606	$ 68,506	$ 505,337	$ 4,333	$ 578,176	$ (97,142)	$ 481,034
Financial Liabilities												
Deposits												
Personal	$ –	$ 12,667	$ 434	$ 13,101	$	$ 13,101	$ –	$ 14,830	$ 425	$ 15,255	$	$ 15,255
Business and government	–	89,940	–	89,940		89,940	–	82,869	2	82,871		82,871
Bank	–	1,064	–	1,064		1,064	–	730	–	730		730
Other												
Obligations related to securities sold short	21,777	18,735	–	40,512		40,512	32,672	17,696	1	50,369		50,369
Obligations related to assets sold under repurchase agreements and securities loaned	–	115,657	–	115,657		115,657	–	88,863	–	88,863		88,863
Derivatives												
Interest rate contracts	–	106,138	788	106,926		106,926	–	145,055	1,003	146,058		146,058
Foreign exchange contracts	–	52,345	35	52,380		52,380	–	57,438	41	57,479		57,479
Credit derivatives	–	187	–	187		187	–	263	–	263		263
Other contracts	2,711	13,370	400	16,481		16,481	3,135	5,543	429	9,107		9,107
Valuation adjustments	–	21	11	32		32	–	(133)	7	(126)		(126)
Total gross derivatives	2,711	172,061	1,234	176,006		176,006	3,135	208,166	1,480	212,781		212,781
Netting adjustments					(71,803)	(71,803)					(96,231)	(96,231)
Total derivatives						104,203						116,550
Other liabilities	136	(1,197)	24	(1,037)		(1,037)	124	80	88	292		292
Subordinated debentures	–	–	–	–		–	–	131	–	131		131
	$24,624	$408,927	$1,692	$435,243	$ (71,803)	$363,440	$ 35,931	$ 413,365	$ 1,996	$ 451,292	$ (96,231)	$ 355,061

(1) As at July 31, 2017, residential and commercial mortgage-backed securities (MBS) included in all fair value levels of trading securities were $18,950 million and $9 million (October 31, 2016 – $14,987 million and $10 million), respectively, and in all fair value levels of AFS securities were $11,599 million and $528 million (October 31, 2016 – $13,212 million and $346 million), respectively.

(2) OECD stands for Organisation for Economic Co-operation and Development.

(3) CDO stands for collateralized debt obligations.

(4) Excludes $96 million of available-for-sale securities (October 31, 2016 – $89 million) that are carried at cost.

Note 3 Fair value of financial instruments (continued)

Quantitative information about fair value measurements using significant unobservable inputs (Level 3 Instruments)

During the nine months ended July 31, 2017, there were no significant changes made to the valuation techniques, sensitivities to, and interrelationships between unobservable inputs used in the determination of fair value of Level 3 financial instruments. During the three months and nine months ended July 31, 2017, changes in the ranges and weighted averages of unobservable inputs did not have a significant impact on the unrealized gains (losses) included in earnings for Level 3 financial instruments. Refer to Note 3 of our audited 2016 Annual Consolidated Financial Statements for quantitative information about fair value measurements using significant unobservable inputs.

Changes in fair value measurement for instruments measured on a recurring basis and categorized in Level 3

The following tables present the changes in fair value measurements on a recurring basis for instruments included in Level 3 of the fair value hierarchy.

	For the three months ended July 31, 2017								
(Millions of Canadian dollars)	Fair value at beginning of period	Total realized/ unrealized gains (losses) included in earnings	Total unrealized gains (losses) included in other comprehensive income (1)	Purchases of assets/ issuances of liabilities	Sales of assets/ settlements of liabilities and other (2)	Transfers into Level 3	Transfers out of Level 3	Fair value at end of period	Changes in unrealized gains (losses) included in earnings for assets and liabilities for positions still held
Assets									
Securities									
Trading									
Canadian government debt									
Provincial and municipal	$ –	$ –	$ –	$ –	$ –	$ –	$ –	$ –	$ –
U.S. state, municipal and agencies debt	1	–	–	–	(1)	–	–	–	–
Mortgage-backed securities	–	–	–	–	–	–	–	–	–
Asset-backed securities									
CDO	–	–	–	–	–	–	–	–	–
Non-CDO securities	6	–		–	(6)	–	–	–	–
Corporate debt and other debt	59	(2)	–	32	(29)	–	(2)	58	(1)
Equities	440	(24)	(37)	28	(22)	–	–	385	(23)
	506	(26)	(37)	60	(58)	–	(2)	443	(24)
Available-for-sale									
U.S. state, municipal and agencies debt	699	–	(33)	–	(104)	–	–	562	n.a.
Asset-backed securities									
Non-CDO securities	217	–	(6)	–	(9)	–	–	202	n.a.
Corporate debt and other debt	927	–	(73)	28	(1)	–	(158)	723	n.a.
Equities	721	31	(60)	9	(70)	–	–	631	n.a.
	2,564	31	(172)	37	(184)	–	(158)	2,118	n.a.
Loans	504	(11)	(12)	202	(15)	–	–	668	(11)
Other									
Net derivative balances (3)									
Interest rate contracts	(425)	63	(20)	(8)	(2)	1	(39)	(430)	64
Foreign exchange contracts	54	(23)	(1)	(2)	(2)	2	(2)	26	(23)
Credit derivatives	–	–	–	–	–	–	–	–	–
Other contracts	(264)	51	12	(32)	(1)	19	102	(113)	51
Valuation adjustments	(14)	–	–	–	(1)	–	–	(15)	–
Other assets	–	–	–	–	–	–	–	–	–
	$ 2,925	$ 85	$ (230)	$ 257	$ (263)	$ 22	$ (99)	$ 2,697	$ 57
Liabilities									
Deposits									
Personal	$ (343)	$ 21	$ 17	$ (190)	$ 27	$ (75)	$ 109	$ (434)	$ 21
Business and government	(2)	–	–	–	–	–	2	–	–
Other									
Obligations related to securities sold short	–	–	–	–	–	–	–	–	–
Other liabilities	(26)	–	2	–	–	–	–	(24)	–
	$ (371)	$ 21	$ 19	$ (190)	$ 27	$ (75)	$ 111	$ (458)	$ 21

(Millions of Canadian dollars)	For the three months ended July 31, 2016 Fair value at beginning of period	Total realized/ unrealized gains (losses) included in earnings	Total unrealized gains (losses) included in other comprehensive income (1)	Purchases of assets/ issuances of liabilities	Sales of assets/ settlements of liabilities and other (2)	Transfers into Level 3	Transfers out of Level 3	Fair value at end of period	Changes in unrealized gains (losses) included in earnings for assets and liabilities for positions still held
Assets									
Securities									
Trading									
Canadian government debt									
Provincial and municipal	$ –	$ –	$ –	$ –	$ –	$ –	$ –	$ –	$ –
U.S. state, municipal and agencies debt	4	–	–	13	(4)	–	–	13	–
Mortgage-backed securities	–	–	–	–	–	–	–	–	–
Asset-backed securities									
CDO	–	–	–	–	–	–	–	–	–
Non-CDO securities	9	–	–	5	(11)	1	–	4	–
Corporate debt and other debt	145	4	1	36	(26)	–	(46)	114	3
Equities	367	(105)	15	136	(28)	–	–	385	(105)
	525	(101)	16	190	(69)	1	(46)	516	(102)
Available-for-sale									
U.S. state, municipal and agencies debt	713	(12)	25	–	(6)	–	–	720	n.a.
Asset-backed securities									
Non-CDO securities	191	–	7	19	4	–	–	221	n.a.
Corporate debt and other debt	1,664	–	37	988	(656)	–	(9)	2,024	n.a.
Equities	893	16	(4)	17	(152)	–	–	770	n.a.
	3,461	4	65	1,024	(810)	–	(9)	3,735	n.a.
Loans	394	–	5	–	(238)	396	–	557	–
Other									
Net derivative balances (3)									
Interest rate contracts	(422)	5	1	9	(4)	–	(17)	(428)	7
Foreign exchange contracts	6	12	(2)	–	–	22	10	48	12
Credit derivatives	–	–	–	–	1	–	–	1	(1)
Other contracts	(283)	4	(11)	(5)	9	91	24	(171)	2
Valuation adjustments	(40)	–	–	–	1	–	–	(39)	–
Other assets	2	(1)	–	–	–	–	–	1	–
	$ 3,643	$ (77)	$ 74	$ 1,218	$ (1,110)	$ 510	$ (38)	$ 4,220	$ (82)
Liabilities									
Deposits									
Personal	$ (502)	$ (12)	$ (3)	$ (26)	$ 26	$ (142)	$ 164	$ (495)	$ (12)
Business and government	(2)	(1)	–	–	(10)	–	–	(13)	(1)
Other									
Obligations related to securities sold short	–	–	–	–	–	–	–	–	–
Other liabilities	(144)	(36)	(6)	–	–	–	–	(186)	(32)
	$ (648)	$ (49)	$ (9)	$ (26)	$ 16	$ (142)	$ 164	$ (694)	$ (45)

Note 3 Fair value of financial instruments (continued)

(Millions of Canadian dollars)	Fair value at beginning of period	Total realized/ unrealized gains (losses) included in earnings	Total unrealized gains (losses) included in other comprehensive income (1)	Purchases of assets/ issuances of liabilities	Sales of assets/ settlements of liabilities and other (2)	Transfers into Level 3	Transfers out of Level 3	Fair value at end of period	Changes in unrealized gains (losses) included in earnings for assets and liabilities for positions still held
	For the nine months ended July 31, 2017								
Assets									
Securities									
Trading									
Canadian government debt									
Provincial and municipal	$ –	$ –	$ –	$ –	$ –	$ –	$ –	$ –	$ –
U.S. state, municipal and agencies debt	1	–	–	–	(1)	–	–	–	–
Mortgage-backed securities	–	–	–	–	–	–	–	–	–
Asset-backed securities									
CDO	–	–	–	–	–	–	–	–	–
Non-CDO securities	4	–	–	6	(10)	–	–	–	–
Corporate debt and other debt	62	(4)	1	52	(59)	20	(14)	58	(2)
Equities	376	(66)	(31)	166	(74)	15	(1)	385	(54)
	443	(70)	(30)	224	(144)	35	(15)	443	(56)
Available-for-sale									
U.S. state, municipal and agencies debt	747	(5)	(17)	–	(163)	–	–	562	n.a.
Asset-backed securities									
Non-CDO securities	217	–	9	–	(24)	–	–	202	n.a.
Corporate debt and other debt	956	(1)	(64)	44	(34)	–	(178)	723	n.a.
Equities	756	53	(47)	32	(163)	–	–	631	n.a.
	2,676	47	(119)	76	(384)	–	(178)	2,118	n.a.
Loans	329	(4)	(9)	371	(19)	–	–	668	(4)
Other									
Net derivative balances (3)									
Interest rate contracts	(448)	54	(20)	18	(2)	4	(36)	(430)	80
Foreign exchange contracts	(15)	47	2	(2)	(2)	–	(4)	26	15
Credit derivatives	–	–	–	–	–	–	–	–	–
Other contracts	(122)	63	5	(65)	(5)	(29)	40	(113)	92
Valuation adjustments	(10)	–	–	–	(5)	–	–	(15)	–
Other assets	–	–	–	–	–	–	–	–	–
	$ 2,853	$ 137	$ (171)	$ 622	$ (561)	$ 10	$ (193)	$ 2,697	$ 127
Liabilities									
Deposits									
Personal	$ (425)	$ (1)	$ 17	$ (315)	$ 76	$ (197)	$ 411	$ (434)	$ 18
Business and government	(2)	–	–	–	–	–	2	–	–
Other									
Obligations related to securities sold short	(1)	–	–	–	1	–	–	–	–
Other liabilities	(88)	(2)	3	–	63	–	–	(24)	–
	$ (516)	$ (3)	$ 20	$ (315)	$ 140	$ (197)	$ 413	$ (458)	$ 18

	For the nine months ended July 31, 2016								
(Millions of Canadian dollars)	Fair value at beginning of period	Total realized/ unrealized gains (losses) included in earnings	Total unrealized gains (losses) included in other comprehensive income (1)	Purchases of assets/ issuances of liabilities	Sales of assets/ settlements of liabilities and other (2)	Transfers into Level 3	Transfers out of Level 3	Fair value at end of period	Changes in unrealized gains (losses) included in earnings for assets and liabilities for positions still held
Assets									
Securities									
Trading									
Canadian government debt									
Provincial and municipal	$ 5	$ –	$ –	$ –	$ –	$ –	$ (5)	$ –	$ –
U.S. state, municipal and agencies debt	16	–	–	21	(24)	–	–	13	–
Mortgage-backed securities	15	(1)	–	8	(22)	–	–	–	–
Asset-backed securities									
CDO	5	–	–	–	(5)	1	(1)	–	–
Non-CDO securities	23	(4)	–	23	(39)	1	–	4	–
Corporate debt and other debt	191	2	5	137	(261)	159	(119)	114	4
Equities	123	(145)	(3)	471	(70)	10	(1)	385	(146)
	378	(148)	2	660	(421)	171	(126)	516	(142)
Available-for-sale									
U.S. state, municipal and agencies debt	797	(12)	3	93	(161)	–	–	720	n.a.
Asset-backed securities									
Non-CDO securities	197	–	4	26	(6)	–	–	221	n.a.
Corporate debt and other debt	1,757	–	(39)	2,382	(2,073)	21	(24)	2,024	n.a.
Equities	987	45	(67)	66	(261)	–	–	770	n.a.
	3,738	33	(99)	2,567	(2,501)	21	(24)	3,735	n.a.
Loans	472	17	(17)	–	(307)	396	(4)	557	22
Other									
Net derivative balances (3)									
Interest rate contracts	(446)	(8)	1	32	(18)	30	(19)	(428)	(8)
Foreign exchange contracts	58	(7)	(6)	(19)	(2)	23	1	48	(8)
Credit derivatives	(1)	1	–	–	1	–	–	1	(2)
Other contracts	(313)	(105)	3	(42)	190	26	70	(171)	37
Valuation adjustments	(47)	–	1	–	7	–	–	(39)	–
Other assets	–	(1)	–	2	–	–	–	1	–
	$ 3,839	$ (218)	$ (115)	$ 3,200	$ (3,051)	$ 667	$ (102)	$ 4,220	$ (101)
Liabilities									
Deposits									
Personal	$ (389)	$ (6)	$ 2	$ (165)	$ 48	$ (433)	$ 448	$ (495)	$ (17)
Business and government	(8)	(1)	–	–	(4)	–	–	(13)	(1)
Other									
Obligations related to securities sold short	–	–	–	–	–	–	–	–	–
Other liabilities	(47)	(71)	1	(92)	23	–	–	(186)	(62)
	$ (444)	$ (78)	$ 3	$ (257)	$ 67	$ (433)	$ 448	$ (694)	$ (80)

(1) These amounts include the foreign currency translation gains or losses arising on consolidation of foreign subsidiaries relating to the Level 3 instruments, where applicable. The unrealized gains on AFS securities recognized in OCI were $2 million for the three months ended July 31, 2017 (July 31, 2016 – losses of $14 million) and gains of $22 million for the nine months ended July 31, 2017 (July 31, 2016 – losses of $55 million), excluding the translation gains or losses arising on consolidation.

(2) Other includes amortization of premiums or discounts recognized in net income.

(3) Net derivatives as at July 31, 2017 included derivative assets of $702 million (July 31, 2016 – $980 million) and derivative liabilities of $1,234 million (July 31, 2016 – $1,569 million).

n.a. not applicable

Transfers between fair value hierarchy levels for instruments carried at fair value on a recurring basis

Transfers between Level 1 and Level 2 are dependent on whether fair value is obtained on the basis of quoted market prices in active markets (Level 1).

During the three months ended July 31, 2017, transfers out of Level 1 to Level 2 included Trading U.S. state, municipal and agencies debt and Obligations related to securities sold short of $263 million and $302 million, respectively.

During the three months ended July 31, 2017, transfers out of Level 2 to Level 1 included $27 million of Obligations related to securities sold short.

Transfers between Level 2 and Level 3 are primarily due to either a change in the market observability for an input, or a change in an unobservable input's significance to a financial instrument's fair value.

During the three months ended July 31, 2017, transfers out of Level 3 to Level 2 included $158 million of AFS Corporate debt and other debt due to changes in the significance of unobservable inputs to their fair value.

During the three months ended July 31, 2017, $109 million of equity-linked structured notes in Personal Deposits was transferred out of Level 3 to Level 2 and $75 million was transferred out of Level 2 to Level 3. Level 2 and Level 3 transfers were also due to changes in the significance of unobservable inputs to their fair value.

Note 3 Fair value of financial instruments (continued)

Positive and negative fair value movements of Level 3 financial instruments from using reasonably possible alternative assumptions

A financial instrument is classified as Level 3 in the fair value hierarchy if one or more of its unobservable inputs may significantly affect the measurement of its fair value. In preparing the financial statements, appropriate levels for these unobservable input parameters are chosen so that they are consistent with prevailing market evidence or management judgment. Due to the unobservable nature of the prices or rates, there may be uncertainty about the valuation of these Level 3 financial instruments.

The following table summarizes the impacts to fair values of Level 3 financial instruments using reasonably possible alternative assumptions. This sensitivity disclosure is intended to illustrate the potential impact of the relative uncertainty in the fair value of Level 3 financial instruments. In reporting the sensitivities below, we offset balances in instances where: (i) the move in valuation factor caused an offsetting positive and negative fair value movement, (ii) both offsetting instruments are in Level 3, and (iii) exposures are managed and reported on a net basis. With respect to overall sensitivity, it is unlikely in practice that all reasonably possible alternative assumptions would simultaneously be realized.

	As at					
	July 31, 2017			October 31, 2016		
(Millions of Canadian dollars)	Level 3 fair value	Positive fair value movement from using reasonably possible alternatives	Negative fair value movement from using reasonably possible alternatives	Level 3 fair value	Positive fair value movement from using reasonably possible alternatives	Negative fair value movement from using reasonably possible alternatives
Securities						
Trading						
U.S. state, municipal and agencies debt	$ –	$ –	$ –	$ 1	$ –	$ –
Asset-backed securities	–	–	–	4	–	–
Corporate debt and other debt	58	1	(1)	62	1	(1)
Equities	385	–	–	376	–	–
Available-for-sale						
U.S. state, municipal and agencies debt	562	9	(22)	747	14	(31)
Asset-backed securities	202	14	(20)	217	13	(19)
Corporate debt and other debt	723	6	(6)	956	8	(8)
Equities	631	72	(17)	756	74	(13)
Loans	668	8	(10)	329	9	(10)
Derivatives	702	34	(33)	885	17	(16)
	$ 3,931	$ 144	$ (109)	$ 4,333	$ 136	$ (98)
Deposits	$ (434)	$ 11	$ (11)	$ (427)	$ 13	$ (13)
Derivatives	(1,234)	41	(56)	(1,480)	33	(53)
Other						
Securities sold short and other liabilities	(24)	–	–	(89)	–	–
	$ (1,692)	$ 52	$ (67)	$ (1,996)	$ 46	$ (66)

Note 4 Securities

Unrealized gains and losses on available-for-sale securities (1) (2)

	As at							
	July 31, 2017				October 31, 2016			
(Millions of Canadian dollars)	Cost/ Amortized cost	Gross unrealized gains	Gross unrealized losses	Fair value	Cost/ Amortized cost	Gross unrealized gains	Gross unrealized losses	Fair value
Canadian government debt								
Federal	$ 1,155	$ –	$ (12)	$ 1,143	$ 418	$ 4	$ –	$ 422
Provincial and municipal	2,766	7	(26)	2,747	2,344	22	(2)	2,364
U.S. state, municipal and agencies debt (3)	25,335	198	(160)	25,373	25,489	57	(130)	25,416
Other OECD government debt	10,546	27	(8)	10,565	13,875	35	(10)	13,900
Mortgage-backed securities	635	3	(1)	637	392	5	(2)	395
Asset-backed securities								
CDO	3,068	6	–	3,074	1,628	2	–	1,630
Non-CDO securities	2,888	10	(37)	2,861	2,158	5	(60)	2,103
Corporate debt and other debt	22,743	91	(43)	22,791	22,015	89	(38)	22,066
Equities	1,125	231	(12)	1,344	1,291	273	(12)	1,552
Loan substitute securities	70	17	–	87	70	4	–	74
	$ 70,331	$ 590	$ (299)	$ 70,622	$ 69,680	$ 496	$ (254)	$ 69,922

(1) Excludes $14,808 million of held-to-maturity securities as at July 31, 2017 (October 31, 2016 – $14,879 million) that are carried at amortized cost.
(2) The majority of the MBS are residential. Cost/Amortized cost, gross unrealized gains, gross unrealized losses and fair value related to commercial MBS are $528 million, $1 million, $1 million and $528 million, respectively as at July 31, 2017 (October 31, 2016 – $346 million, $1 million, $1 million and $346 million).
(3) Includes securities issued by U.S. non-agencies backed by government insured assets, MBS and asset-backed securities issued by U.S. government agencies.

Net gains and losses on available-for-sale securities (1)

(Millions of Canadian dollars)	For the three months ended July 31 2017	July 31 2016	For the nine months ended July 31 2017	July 31 2016
Realized gains	$ 63	$ 40	$ 186	$ 143
Realized losses	(7)	(6)	(18)	(8)
Impairment losses	(12)	(27)	(43)	(61)
	$ 44	$ 7	$ 125	$ 74

(1) The following related to our insurance operations are excluded from Net gains and losses on AFS securities and are included in Insurance premiums, investment and fee income in the Consolidated Statements of Income for the three months ended July 31, 2017: Realized gains of $11 million (July 31, 2016 – $4 million), realized losses of $1 million (July 31, 2016 – $nil) and $nil in impairment losses (July 31, 2016 – $nil); for the nine months ended July 31, 2017: Realized gains of $22 million (July 31, 2016 – $10 million), realized losses of $1 million (July 31, 2016 – $nil) and $nil in impairment losses (July 31, 2016 – $4 million).

During the three months ended July 31, 2017, net realized gains of $56 million (July 31, 2016 – $34 million) mainly comprised of distributions from, and gains on sales of, certain Equities and U.S. state, municipal and agencies debt. Also included in the net gains are $12 million of impairment losses primarily on certain Equities.

During the nine months ended July 31, 2017, net realized gains of $168 million (July 31, 2016 – $135 million) mainly comprised of distributions from, and gains on sales of, certain Equities and Other OECD government debt. Also included in the net gains are $43 million of impairment losses primarily on certain Equities and U.S. state, municipal and agencies debt.

Note 5 Allowance for credit losses and impaired loans

Allowance for credit losses

(Millions of Canadian dollars)	For the three months ended July 31, 2017 Balance at beginning of period	Provision for credit losses	Write-offs	Recoveries	Unwind of discount	Exchange rate changes/ other	Balance at end of period
Retail							
Residential mortgages	$ 273	$ 10	$ (13)	$ 2	$ (5)	$ (13)	$ 254
Personal	518	101	(133)	32	(3)	(11)	504
Credit cards	386	108	(143)	35	–	–	386
Small business	63	7	(8)	2	–	(6)	58
	1,240	226	(297)	71	(8)	(30)	1,202
Wholesale							
Business	1,015	93	(54)	20	(16)	(27)	1,031
Bank	–	–	–	–	–	–	–
	1,015	93	(54)	20	(16)	(27)	1,031
Acquired credit-impaired loans	3	1	–	–	–	(1)	3
Total allowance for loan losses	2,258	320	(351)	91	(24)	(58)	2,236
Allowance for off-balance sheet and other items (1)	91	–	–	–	–	–	91
Total allowance for credit losses	$ 2,349	$ 320	$ (351)	$ 91	$ (24)	$ (58)	$ 2,327
Individually assessed	$ 377	$ 62	$ (30)	$ 16	$ (11)	$ (31)	$ 383
Collectively assessed	1,972	258	(321)	75	(13)	(27)	1,944
Total allowance for credit losses	$ 2,349	$ 320	$ (351)	$ 91	$ (24)	$ (58)	$ 2,327

Note 5 Allowance for credit losses and impaired loans (continued)

(Millions of Canadian dollars)	For the three months ended July 31, 2016						
	Balance at beginning of period	Provision for credit losses	Write-offs	Recoveries	Unwind of discount	Exchange rate changes/ other	Balance at end of period
Retail							
Residential mortgages	$ 242	$ 12	$ (10)	$ 1	$ (6)	$ 19	$ 258
Personal	534	110	(140)	27	(3)	(7)	521
Credit cards	386	115	(147)	32	–	(1)	385
Small business	67	8	(11)	2	(1)	–	65
	1,229	245	(308)	62	(10)	11	1,229
Wholesale							
Business	1,036	67	(169)	11	(19)	12	938
Bank	2	–	–	–	–	–	2
	1,038	67	(169)	11	(19)	12	940
Acquired credit-impaired loans	4	6	–	–	–	(2)	8
Total allowance for loan losses	2,271	318	(477)	73	(29)	21	2,177
Allowance for off-balance sheet and other items (1)	91	–	–	–	–	–	91
Total allowance for credit losses	$ 2,362	$ 318	$ (477)	$ 73	$ (29)	$ 21	$ 2,268
Individually assessed	$ 430	$ 38	$ (146)	$ 6	$ (16)	$ 10	$ 322
Collectively assessed	1,932	280	(331)	67	(13)	11	1,946
Total allowance for credit losses	$ 2,362	$ 318	$ (477)	$ 73	$ (29)	$ 21	$ 2,268

(Millions of Canadian dollars)	For the nine months ended July 31, 2017						
	Balance at beginning of period	Provision for credit losses	Write-offs	Recoveries	Unwind of discount	Exchange rate changes/ other	Balance at end of period
Retail							
Residential mortgages	$ 273	$ 36	$ (37)	$ 5	$ (16)	$ (7)	$ 254
Personal	529	307	(407)	88	(8)	(5)	504
Credit cards	386	328	(425)	97	–	–	386
Small business	65	22	(28)	7	(2)	(6)	58
	1,253	693	(897)	197	(26)	(18)	1,202
Wholesale							
Business	979	221	(144)	59	(56)	(28)	1,031
Bank	–	–	–	–	–	–	–
	979	221	(144)	59	(56)	(28)	1,031
Acquired credit-impaired loans	3	2	–	–	–	(2)	3
Total allowance for loan losses	2,235	916	(1,041)	256	(82)	(48)	2,236
Allowance for off-balance sheet and other items (1)	91	–	–	–	–	–	91
Total allowance for credit losses	$ 2,326	$ 916	$ (1,041)	$ 256	$ (82)	$ (48)	$ 2,327
Individually assessed	$ 365	$ 116	$ (73)	$ 44	$ (43)	$ (26)	$ 383
Collectively assessed	1,961	800	(968)	212	(39)	(22)	1,944
Total allowance for credit losses	$ 2,326	$ 916	$ (1,041)	$ 256	$ (82)	$ (48)	$ 2,327

(Millions of Canadian dollars)	For the nine months ended July 31, 2016						
	Balance at beginning of period	Provision for credit losses	Write-offs	Recoveries	Unwind of discount	Exchange rate changes/ other	Balance at end of period
Retail							
Residential mortgages	$ 242	$ 49	$ (31)	$ 4	$ (18)	$ 12	$ 258
Personal	530	340	(414)	81	(9)	(7)	521
Credit cards	386	335	(425)	91	–	(2)	385
Small business	64	25	(29)	7	(2)	–	65
	1,222	749	(899)	183	(29)	3	1,229
Wholesale							
Business	805	429	(270)	30	(40)	(16)	938
Bank	2	–	–	–	–	–	2
	807	429	(270)	30	(40)	(16)	940
Acquired credit-impaired loans	–	10	–	–	–	(2)	8
Total allowance for loan losses	2,029	1,188	(1,169)	213	(69)	(15)	2,177
Allowance for off-balance sheet and other items (1)	91	–	–	–	–	–	91
Total allowance for credit losses	$ 2,120	$ 1,188	$ (1,169)	$ 213	$ (69)	$ (15)	$ 2,268
Individually assessed	$ 252	$ 296	$ (203)	$ 19	$ (32)	$ (10)	$ 322
Collectively assessed	1,868	892	(966)	194	(37)	(5)	1,946
Total allowance for credit losses	$ 2,120	$ 1,188	$ (1,169)	$ 213	$ (69)	$ (15)	$ 2,268

(1) The allowance for off-balance sheet and other items is reported separately in Other liabilities – Provisions.

Loans past due but not impaired

	As at							
	July 31, 2017				October 31, 2016			
(Millions of Canadian dollars)	1 to 29 days (1)	30 to 89 days	90 days and greater	Total	1 to 29 days (1)	30 to 89 days	90 days and greater	Total
Retail	$ 3,718	$ 1,212	$ 305	$ 5,235	$ 3,450	$ 1,296	$ 337	$ 5,083
Wholesale	1,600	431	15	2,046	848	372	–	1,220
	$ 5,318	$ 1,643	$ 320	$ 7,281	$ 4,298	$ 1,668	$ 337	$ 6,303

(1) Amounts presented may include loans past due as a result of administrative processes, such as mortgage loans on which payments are restrained pending payout due to sale or refinancing. Past due loans arising from administrative processes are not representative of the borrowers' ability to meet their payment obligations.

Gross carrying value of loans individually determined to be impaired (1)

	As at	
(Millions of Canadian dollars)	July 31 2017	October 31 2016
Retail (2)	$ –	$ 16
Wholesale (2)		
Business	1,449	2,130
Bank	–	2
Acquired credit-impaired loans	268	418
Total	$ 1,717	$ 2,566

(1) Average balance of gross individually assessed impaired loans for the three months ended July 31, 2017 was $1,892 million (October 31, 2016 – $2,487 million).
(2) Excludes acquired credit-impaired (ACI) loans.

Acquired credit-impaired loans

ACI loans resulting from the acquisition of City National include Retail, Wholesale and Federal Deposit Insurance Corporation (FDIC) covered loans. The following table provides further details of our ACI loans.

	As at	
(Millions of Canadian dollars)	July 31 2017	October 31 2016
City National		
Unpaid principal balance (1)	$ 259	$ 409
Credit-related fair value adjustments	(6)	(12)
Interest rate and other related premium/(discount)	15	21
Carrying value	268	418
Individually assessed allowance	(3)	(3)
Carrying value net of related allowance	$ 265	$ 415

(1) Represents contractual amount owed net of write-offs since the acquisition of the loan.

FDIC covered loans

FDIC covered loans are loans that, as at the reporting date, are subject to loss-share agreements with the FDIC under which the FDIC reimburses us for 80% of the net losses incurred on the underlying loan portfolio. As at July 31, 2017, the balance of FDIC covered loans recorded in Loans on the Consolidated Balance Sheet was $6 million (October 31, 2016 – $374 million). The decrease in FDIC covered loans during the period was primarily due to the expiry of certain loss-share agreements and loan repayments. As at July 31, 2017, the balances for indemnification assets and clawback liabilities were $nil and $25 million (October 31, 2016 – $2 million and $26 million), respectively.

Note 6 Joint ventures and significant disposition

Joint venture

On December 21, 2016, Moneris Solutions Corporation (Moneris) completed the sale of its U.S. operations to Vantiv, Inc. for $576 million (US$430 million). We have a 50% interest in Moneris and account for our interest as a joint venture. Our share of the gain recognized by Moneris was $212 million (before- and after-tax), and was presented in Non-interest income – Share of profit in joint ventures and associates.

Disposition

On May 12, 2017, we completed the previously announced sale of our trust, custody and fund administration business in the Caribbean to SMP Group Limited. The transaction did not have a significant impact on our Condensed Consolidated Statements of Income.

Note 7 Deposits

The following table details our deposit liabilities.

(Millions of Canadian dollars)	As at July 31, 2017 Demand (1)	Notice (2)	Term (3)	Total	October 31, 2016 Demand (1)	Notice (2)	Term (3)	Total
Personal	$ 133,231	$ 45,968	$ 75,360	$ 254,559	$ 128,206	$ 46,096	$ 76,248	$ 250,550
Business and government	228,957	8,582	263,743	501,282	221,506	10,740	255,761	488,007
Bank	10,164	3	12,610	22,777	8,533	49	10,450	19,032
	$ 372,352	$ 54,553	$ 351,713	$ 778,618	$ 358,245	$ 56,885	$ 342,459	$ 757,589
Non-interest-bearing (4)								
Canada	$ 84,294	$ 4,655	$ –	$ 88,949	$ 78,692	$ 4,686	$ –	$ 83,378
United States	32,043	82	–	32,125	34,172	93	–	34,265
Europe (5)	1,008	–	–	1,008	1,009	–	–	1,009
Other International	5,713	5	–	5,718	5,753	4	–	5,757
Interest-bearing (4)								
Canada	213,273	14,880	271,281	499,434	200,911	14,979	272,999	488,889
United States	665	30,310	49,982	80,957	999	32,388	41,427	74,814
Europe (5)	32,099	1,458	20,025	53,582	32,864	1,108	17,966	51,938
Other International	3,257	3,163	10,425	16,845	3,845	3,627	10,067	17,539
	$ 372,352	$ 54,553	$ 351,713	$ 778,618	$ 358,245	$ 56,885	$ 342,459	$ 757,589

(1) Demand deposits are deposits for which we do not have the right to require notice of withdrawal, which includes both savings and chequing accounts.
(2) Notice deposits are deposits for which we can legally require notice of withdrawal. These deposits are primarily savings accounts.
(3) Term deposits are deposits payable on a fixed date, and include term deposits, guaranteed investment certificates and similar instruments.
(4) The geographical splits of the deposits are based on the point of origin of the deposits and where the revenue is recognized. As at July 31, 2017, deposits denominated in U.S. dollars, British pounds, Euro and other foreign currencies were $272 billion, $16 billion, $37 billion and $29 billion, respectively (October 31, 2016 – $264 billion, $16 billion, $37 billion and $29 billion).
(5) Europe includes the United Kingdom, Luxembourg and the Channel Islands.

The following table presents the contractual maturities of our term deposit liabilities.

(Millions of Canadian dollars)	As at July 31 2017	October 31 2016
Within 1 year:		
less than 3 months	$ 79,037	$ 72,346
3 to 6 months	31,927	40,487
6 to 12 months	75,735	51,608
1 to 2 years	55,160	50,676
2 to 3 years	31,079	39,499
3 to 4 years	36,735	31,482
4 to 5 years	19,824	29,854
Over 5 years	22,216	26,507
	$ 351,713	$ 342,459
Aggregate amount of term deposits in denominations of one hundred thousand dollars or more	$ 319,000	$ 309,000

Note 8 Employee benefits – Pension and other post-employment benefits

We offer a number of defined benefit and defined contribution plans which provide pension and post-employment benefits to eligible employees. The following tables present the composition of our pension and other post-employment benefit expense and the effects of remeasurements recorded in other comprehensive income.

Pension and other post-employment benefit expense

(Millions of Canadian dollars)	For the three months ended Pension plans July 31 2017	July 31 2016	Other post-employment benefit plans July 31 2017	July 31 2016
Current service costs	$ 95	$ 80	$ 11	$ 9
Past service costs	–	(5)	–	(2)
Net interest expense (income)	11	(1)	17	17
Remeasurements of other long-term benefits	–	–	–	6
Administrative expense	3	3	–	–
Defined benefit pension expense	$ 109	$ 77	$ 28	$ 30
Defined contribution pension expense	45	39	–	–
	$ 154	$ 116	$ 28	$ 30

	For the nine months ended			
	Pension plans		Other post-employment benefit plans	
(Millions of Canadian dollars)	July 31 2017	July 31 2016	July 31 2017	July 31 2016
Current service costs	$ 285	$ 236	$ 31	$ 27
Past service costs	(2)	(5)	–	(2)
Net interest expense (income)	32	(2)	51	53
Remeasurements of other long-term benefits	–	–	(2)	14
Administrative expense	10	9	–	–
Defined benefit pension expense	$ 325	$ 238	$ 80	$ 92
Defined contribution pension expense	129	126	–	–
	$ 454	$ 364	$ 80	$ 92

Remeasurements of employee benefit plans (1)

	For the three months ended			
	Defined benefit pension plans		Other post-employment benefit plans	
(Millions of Canadian dollars)	July 31 2017	July 31 2016	July 31 2017	July 31 2016
Actuarial (gains) losses:				
Changes in financial assumptions	$ (789)	$ 861	$ (91)	$ 113
Experience adjustments	–	–	(3)	(2)
Return on plan assets (excluding interest based on discount rate)	188	(384)	(1)	–
	$ (601)	$ 477	$ (95)	$ 111

	For the nine months ended			
	Defined benefit pension plans		Other post-employment benefit plans	
(Millions of Canadian dollars)	July 31 2017	July 31 2016	July 31 2017	July 31 2016
Actuarial (gains) losses:				
Changes in financial assumptions	$ (756)	$ 1,602	$ (68)	$ 198
Experience adjustments	–	–	(9)	(8)
Return on plan assets (excluding interest based on discount rate)	(290)	(292)	(1)	(1)
	$ (1,046)	$ 1,310	$ (78)	$ 189

(1) Market based assumptions, including Changes in financial assumptions and Return on plan assets, are reviewed on a quarterly basis. All other assumptions are updated during our annual review of plan assumptions.

Note 9 Income taxes

Tax examinations and assessments

During the third quarter, we received proposal letters (the Proposals) from the Canada Revenue Agency (CRA), in respect of the 2012 taxation year, which suggest that Royal Bank of Canada owes additional income taxes of approximately $250 million, excluding interest, as the tax deductibility of certain dividends was denied on the basis that they were part of a “dividend rental arrangement”. The CRA Proposals follow the previously disclosed reassessment relating to a “dividend rental arrangement” of $209 million of additional income tax and interest received in the first quarter in respect of the 2011 taxation year. The dividends to which the Proposals and reassessment relate were received in transactions similar to those addressed in the 2015 Canadian Federal Budget, which disallowed deduction of these dividends from similar arrangements with prospective application effective May 1, 2017. It is possible that the CRA will reassess us for significant additional income tax for subsequent years on the same basis. We are confident that our tax filing position was appropriate and intend to defend ourselves vigorously.

Note 10 Significant capital and funding transactions

Subordinated debentures

On June 26, 2017, we redeemed all ¥10,000 million of our outstanding 2.86% subordinated debentures due on June 26, 2037 for 100% of their principal amount plus interest accrued to the redemption date.

Common shares issued (1)

	For the three months ended			
	July 31, 2017		July 31, 2016	
(Millions of Canadian dollars, except number of shares)	Number of shares (thousands)	Amount	Number of shares (thousands)	Amount
Issued in connection with share-based compensation plans (2)	643	$ 42	631	$ 38
Issued in connection with the acquisition of City National	–	–	–	–
Purchased for cancellation (3)	–	–	(3,765)	(45)
	643	$ 42	(3,134)	$ (7)

	For the nine months ended			
	July 31, 2017		July 31, 2016	
(Millions of Canadian dollars, except number of shares)	Number of shares (thousands)	Amount	Number of shares (thousands)	Amount
Issued in connection with share-based compensation plans (2)	2,861	$ 188	3,808	$ 233
Issued in connection with the acquisition of City National	–	–	41,619	3,115
Purchased for cancellation (3)	(30,321)	(368)	(3,765)	(45)
	(27,460)	$ (180)	41,662	$ 3,303

(1) The requirements of our dividend reinvestment plan (DRIP) are satisfied through either open market share purchases or shares issued from treasury. During the three and nine months ended July 31, 2017 and July 31, 2016, our DRIP's requirements were satisfied through open market share purchases.
(2) Amounts include cash received for stock options exercised during the period and fair value adjustments to stock options.
(3) During the three months ended July 31, 2017, we did not purchase for cancellation any common shares. During the nine months ended July 31, 2017, we purchased for cancellation 30.3 million common shares at a total fair value of $2,588 million (average cost of $85.34 per share), with a book value of $368 million (book value of $12.14 per share). For the three and nine month periods ended July 31, 2016, we purchased for cancellation 3.8 million common shares at a total fair value of $292 million (average cost of $77.44 per share), with a book value of $45 million (book value of $12.02 per share).

Note 11 Earnings per share

	For the three months ended		For the nine months ended	
(Millions of Canadian dollars, except share and per share amounts)	July 31 2017	July 31 2016	July 31 2017	July 31 2016
Basic earnings per share				
Net Income	$ 2,796	$ 2,895	$ 8,632	$ 7,915
Preferred share dividends	(76)	(85)	(228)	(219)
Net income attributable to non-controlling interest	(13)	(9)	(33)	(43)
Net income available to common shareholders	2,707	2,801	8,371	7,653
Weighted average number of common shares (in thousands)	1,457,854	1,485,915	1,470,066	1,486,550
Basic earnings per share (in dollars)	$ 1.86	$ 1.88	$ 5.69	$ 5.15
Diluted earnings per share				
Net income available to common shareholders	$ 2,707	$ 2,801	$ 8,371	$ 7,653
Dilutive impact of exchangeable shares	4	4	11	11
Net income available to common shareholders including dilutive impact of exchangeable shares	2,711	2,805	8,382	7,664
Weighted average number of common shares (in thousands)	1,457,854	1,485,915	1,470,066	1,486,550
Stock options (1)	3,030	3,368	3,376	3,306
Issuable under other share-based compensation plans	746	735	743	728
Exchangeable shares (2)	3,405	4,108	3,430	4,293
Average number of diluted common shares (in thousands)	1,465,035	1,494,126	1,477,615	1,494,877
Diluted earnings per share (in dollars)	$ 1.85	$ 1.88	$ 5.67	$ 5.13

(1) The dilutive effect of stock options was calculated using the treasury stock method. When the exercise price of options outstanding is greater than the average market price of our common shares, the options are excluded from the calculation of diluted earnings per share. For the three months ended July 31, 2017, no outstanding options were excluded from the calculation of diluted earnings per share (July 31, 2016 – 799,372 with an average exercise price of $78.59). For the nine months ended July 31, 2017, no outstanding options were excluded from the calculation of diluted earnings per share (July 31, 2016 – 1,362,403 with an average exercise price of $77.73).
(2) Includes exchangeable preferred shares and trust capital securities.

Note 12 Legal and regulatory matters

We are a large global institution that is subject to many different complex legal and regulatory requirements that continue to evolve. As a result, we are and have been subject to a variety of legal proceedings, including civil claims and lawsuits, regulatory examinations, investigations, audits and requests for information by various governmental regulatory agencies and law enforcement authorities in various jurisdictions. Some of these matters may involve novel legal theories and interpretations and may be advanced under criminal as well as civil statutes, and some proceedings could result in the imposition of civil, regulatory enforcement or criminal penalties. We review the status of all proceedings on an ongoing basis and will exercise judgment in resolving them in such manner as we believe to be in our best interest. This is an area of significant judgment and uncertainty and the extent of our financial and other exposure to these proceedings after taking into account current accruals could be material to our results of operations in any particular period.

Our significant legal proceedings and regulatory matters include the matters disclosed in our audited 2016 Annual Consolidated Financial Statements as updated below:

LIBOR regulatory investigations and litigation

On December 20, 2016, the U.S. District Court for the Southern District of New York dismissed a substantial portion of the consolidated LIBOR class action on jurisdictional grounds and lack of standing. On June 15, 2017, counsel to the plaintiffs in the consolidated LIBOR class action agreed to the dismissal of Royal Bank of Canada, without prejudice, from the action, as there was no suitable class representative. Plaintiff's counsel is seeking to substitute a new class representative that would enable them to reinstitute their claims.

Royal Bank of Canada Trust Company (Bahamas) Limited (RBC Bahamas) proceedings

On April 13, 2015, a French investigating judge notified Royal Bank of Canada Trust Limited (RBC Bahamas) of the issuance of an ordonnance de renvoi referring RBC Bahamas and other unrelated persons to the French tribunal correctionnel to face the charge of complicity in estate tax fraud relating to actions taken relating to a trust for which RBC Bahamas serves as trustee. RBC Bahamas believes that its actions did not violate French law and contested the charge in the French court. On January 12, 2017, the French court acquitted all parties, including RBC Bahamas. The French prosecutor's office has appealed. The French Court of Appeal has announced a scheduling hearing for September 6, 2017. In broadly addressing issues raised at the French trial, RBC Bahamas continues to review the trustee's and the trust's legal obligations, and whether as a result of that review, any tax or other obligations may arise. On October 28, 2016, Royal Bank of Canada was granted an exemption by the U.S. Department of Labor that will allow Royal Bank of Canada and its current and future affiliates to continue to qualify for the Qualified Professional Asset Manager exemption under the Employee Retirement Income Security Act despite any potential conviction of RBC Bahamas in the French proceeding for a temporary one year period from the date of conviction. An application to grant more lengthy exemptive relief is pending. Based on the facts currently known, it is not possible at this time to predict the ultimate outcome of these matters; however, we believe that the ultimate resolution will not have a material effect on our consolidated financial position, although it may be material to our results of operations in the period it occurs.

Wisconsin school districts litigation

In December 2016, this lawsuit was settled for an amount that was not material.

Inquiries on sales practices

We have received inquiries about our sales practices and related compensation arrangements. In addition, in March 2017, the Financial Consumer Agency of Canada announced that it will begin a review of sales practices in the Canadian federally regulated financial sector. The Office of the Superintendent of Financial Institutions is also involved in conducting this joint sales practices review.

Note 13 Results by business segment

The following tables present operating result information for our business segments.

	For the three months ended July 31, 2017						
(Millions of Canadian dollars)	Personal & Commercial Banking	Wealth Management (1)	Insurance	Investor & Treasury Services	Capital Markets (2)	Corporate Support (2)	Total
Net interest income (3) (4)	$ 2,721	$ 578	$ –	$ 141	$ 845	$ (28)	$ 4,257
Non-interest income (3)	1,200	1,916	1,009	453	1,195	(44)	5,729
Total revenue	3,921	2,494	1,009	594	2,040	(72)	9,986
Provision for credit losses	273	6	–	–	44	(3)	320
Insurance policyholder benefits, claims and acquisition expense	–	–	643	–	–	–	643
Non-interest expense	1,777	1,856	147	364	1,199	92	5,435
Net income (loss) before income taxes	1,871	632	219	230	797	(161)	3,588
Income taxes (recoveries)	472	146	58	52	186	(122)	792
Net income	$ 1,399	$ 486	$ 161	$ 178	$ 611	$ (39)	$ 2,796
Non-interest expense includes:							
Depreciation and amortization	$ 84	$ 110	$ 5	$ 13	$ 53	$ 131	$ 396
Restructuring provisions	–	–	–	–	–	–	–

	For the three months ended July 31, 2016						
(Millions of Canadian dollars)	Personal & Commercial Banking	Wealth Management (1)	Insurance	Investor & Treasury Services	Capital Markets (2)	Corporate Support (2)	Total
Net interest income (3) (4)	$ 2,598	$ 496	$ –	$ 195	$ 892	$ (58)	$ 4,123
Non-interest income (3)	1,137	1,739	1,818	382	1,195	(139)	6,132
Total revenue	3,735	2,235	1,818	577	2,087	(197)	10,255
Provision for credit losses	271	14	–	–	33	–	318
Insurance policyholder benefits, claims and acquisition expense	–	–	1,210	–	–	–	1,210
Non-interest expense	1,687	1,717	151	368	1,160	8	5,091
Net income (loss) before income taxes	1,777	504	457	209	894	(205)	3,636
Income taxes (recoveries)	455	116	93	52	259	(234)	741
Net income	$ 1,322	$ 388	$ 364	$ 157	$ 635	$ 29	$ 2,895
Non-interest expense includes:							
Depreciation and amortization	$ 83	$ 107	$ 4	$ 13	$ 5	$ 170	$ 382
Restructuring provisions	–	2	–	–	–	–	2

	For the nine months ended July 31, 2017						
(Millions of Canadian dollars)	Personal & Commercial Banking	Wealth Management (1)	Insurance	Investor & Treasury Services	Capital Markets (2)	Corporate Support (2)	Total
Net interest income (3) (4)	$ 7,967	$ 1,665	$ –	$ 551	$ 2,714	$ (118)	$ 12,779
Non-interest income (3)	3,734	5,687	2,954	1,282	3,514	(108)	17,063
Total revenue	11,701	7,352	2,954	1,833	6,228	(226)	29,842
Provision for credit losses	784	34	–	–	100	(2)	916
Insurance policyholder benefits, claims and acquisition expense	–	–	1,916	–	–	–	1,916
Non-interest expense	5,161	5,549	427	1,069	3,497	176	15,879
Net income (loss) before income taxes	5,756	1,769	611	764	2,631	(400)	11,131
Income taxes (recoveries)	1,405	422	150	179	690	(347)	2,499
Net income	$ 4,351	$ 1,347	$ 461	$ 585	$ 1,941	$ (53)	$ 8,632
Non-interest expense includes:							
Depreciation and amortization	$ 270	$ 329	$ 14	$ 39	$ 63	$ 492	$ 1,207
Restructuring provisions	–	–	–	–	–	–	–

(Millions of Canadian dollars)	For the nine months ended July 31, 2016 Personal & Commercial Banking	Wealth Management (1)	Insurance	Investor & Treasury Services	Capital Markets (2)	Corporate Support (2)	Total
Net interest income (3) (4)	$ 7,697	$ 1,431	$ –	$ 611	$ 2,947	$ (342)	$ 12,344
Non-interest income (3)	3,355	5,071	4,328	1,056	3,110	(124)	16,796
Total revenue	11,052	6,502	4,328	1,667	6,057	(466)	29,140
Provision for credit losses	834	26	–	–	276	52	1,188
Insurance policyholder benefits, claims and acquisition expense	–	–	3,027	–	–	–	3,027
Non-interest expense	4,977	5,065	468	1,081	3,315	32	14,938
Net income (loss) before income taxes	5,241	1,411	833	586	2,466	(550)	9,987
Income taxes (recoveries)	1,332	334	161	147	678	(580)	2,072
Net income	$ 3,909	$ 1,077	$ 672	$ 439	$ 1,788	$ 30	$ 7,915
Non-interest expense includes:							
Depreciation and amortization	$ 247	$ 314	$ 13	$ 39	$ 16	$ 504	$ 1,133
Restructuring provisions	–	10	–	–	–	–	10

(1) In the first quarter of 2016, we changed the organizational structure of our Wealth Management operations resulting in a new operating segment, U.S. Wealth Management (including City National), representing our legacy U.S. Wealth Management operations and City National. This new operating segment is combined with our other Wealth Management operations as a single reportable segment because they have comparable products, regulatory frameworks, processes, customers and distribution channels, and show similar economic characteristics (such as pre-tax margin).
(2) Taxable equivalent basis.
(3) Inter-segment revenue and share of profits in joint ventures and associates are not material except as disclosed in Note 6.
(4) Interest revenue is reported net of interest expense as management relies primarily on net interest income as a performance measure.

The following tables present total assets and total liabilities for our business segments.

(Millions of Canadian dollars)	As at July 31, 2017 Personal & Commercial Banking	Wealth Management	Insurance	Investor & Treasury Services	Capital Markets	Corporate Support	Total
Total assets	$ 427,746	$ 85,377	$ 14,537	$ 150,211	$ 483,047	$ 40,129	$ 1,201,047
Total liabilities	$ 427,790	$ 85,437	$ 14,599	$ 150,090	$ 482,889	$ (32,619)	$ 1,128,186

(Millions of Canadian dollars)	As at October 31, 2016 Personal & Commercial Banking	Wealth Management	Insurance	Investor & Treasury Services	Capital Markets	Corporate Support	Total
Total assets	$ 411,251	$ 91,901	$ 14,245	$ 139,701	$ 492,899	$ 30,261	$ 1,180,258
Total liabilities	$ 411,320	$ 91,908	$ 14,281	$ 139,608	$ 493,044	$ (41,515)	$ 1,108,646

Note 14 Capital management

Regulatory capital and capital ratios

OSFI formally establishes risk-based capital and leverage targets for deposit-taking institutions in Canada. During the third quarter of 2017, we complied with all capital and leverage requirements imposed by OSFI.

	As at	
(Millions of Canadian dollars, except Capital ratios and leverage ratios)	July 31 2017	October 31 2016
Capital (1)		
Common Equity Tier 1 capital	$ 49,608	$ 48,181
Tier 1 capital	56,687	55,270
Total capital	65,820	64,950
Risk-weighted assets used in calculation of capital ratios (1) (2)		
Common Equity Tier 1 capital ratio	456,739	447,436
Tier 1 capital ratio	457,515	448,662
Total capital ratio	458,136	449,712
Total capital risk-weighted assets (1)		
Credit risk	372,568	369,751
Market risk	27,437	23,964
Operational risk	58,131	55,997
	$ 458,136	$ 449,712
Capital ratios and leverage ratios (1) (3)		
Common Equity Tier 1 capital ratio	10.9%	10.8%
Tier 1 capital ratio	12.4%	12.3%
Total capital ratio	14.4%	14.4%
Leverage ratio	4.4%	4.4%
Leverage ratio exposure (billions)	$ 1,286.6	$ 1,265.1

(1) Capital, risk-weighted assets and capital ratios are calculated using OSFI Capital Adequacy Requirements. Leverage ratio is calculated using OSFI Leverage Requirements.

(2) Effective the third quarter of 2014, the credit valuation adjustment to our risk-weighted asset calculation implemented in the first quarter of 2014 must reflect different percentages for each tier of capital. This change reflects a phase-in of credit valuation adjustments ending in the fourth quarter of 2018. During this phase-in period, risk-weighted assets for Common Equity Tier 1, Tier 1 and Total capital ratios will be subject to different annual credit valuation adjustment percentages.

(3) To enhance comparability among other global financial institutions, our transitional Common Equity Tier 1 capital, Tier 1, Total capital and leverage ratios as at July 31, 2017 were 11.4%, 12.5%, 14.4%, and 4.5%, respectively. Transitional is defined as capital calculated according to the current year's phase-in of regulatory adjustments and phase-out of non-qualifying capital instruments.

Shareholder Information

Corporate headquarters
Street address:
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Tel: 1-888-212-5533

Mailing address:
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Royal Bank Plaza
Toronto, Ontario M5J 2J5
Canada
website: rbc.com

Transfer Agent and Registrar
Main Agent:
Computershare Trust Company of Canada
1500 Robert-Bourassa Blvd.
Suite 700
Montreal, Quebec H3A 3S8
Canada
Tel: 1-866-586-7635 (Canada and the U.S.) or 514-982-7555 (International)
Fax: 514-982-7580
website: computershare.com/rbc

Co-Transfer Agent (U.S.):
Computershare Trust Company, N.A.
250 Royall Street
Canton, Massachusetts 02021
U.S.A.

Co-Transfer Agent (U.K.):
Computershare Investor Services PLC
Securities Services – Registrars
P.O. Box 82, The Pavilions,
Bridgwater Road,
Bristol BS99 6ZZ
U.K.

Stock exchange listings
(Symbol: RY)

Common shares are listed on:
Canada – Toronto Stock Exchange (TSX)
U.S. – New York Stock Exchange (NYSE)
Switzerland – Swiss Exchange (SIX)

All preferred shares are listed on the TSX with the exception of the series C-1 and C-2. The related depository shares of the series C-1 and C-2 preferred shares are listed on the NYSE.

Valuation day price
For Canadian income tax purposes, Royal Bank of Canada's common stock was quoted at $29.52 per share on the Valuation Day (December 22, 1971). This is equivalent to $7.38 per share after adjusting for the two-for-one stock split of March 1981 and the two-for-one stock split of February 1990. The one-for-one stock dividends in October 2000 and April 2006 did not affect the Valuation Day amount for our common shares.

Shareholder contacts
For dividend information, change in share registration or address, lost stock certificates, tax forms, estate transfers or dividend reinvestment, please contact:
Computershare Trust Company of Canada
100 University Avenue, 8th Floor
Toronto, Ontario M5J 2Y1
Canada

Tel: 1-866-586-7635 (Canada and the U.S.) or 514-982-7555 (International)
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Financial analysts, portfolio managers, institutional investors
For financial information inquiries, please contact: Investor Relations
Royal Bank of Canada
200 Bay Street
North Tower
Toronto, Ontario M5J 2W7
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Tel: 416-955-7802

or visit our website at rbc.com/investorrelations

Direct deposit service
Shareholders in Canada and the U.S. may have their RBC common share dividends deposited directly to their bank account by electronic funds transfer. To arrange for this service, please contact our Transfer Agent and Registrar, Computershare Trust Company of Canada.

Eligible dividend designation
For purposes of the *Income Tax Act* (Canada) and any corresponding provincial and territorial tax legislation, all dividends (and deemed dividends) paid by RBC to Canadian residents on both its common and preferred shares, are designated as "eligible dividends", unless stated otherwise.

Common share repurchases
We are engaged in a Normal Course Issuer Bid (NCIB) which allows us to repurchase for cancellation, up to 30 million common shares during the period spanning March 14, 2017 to March 10, 2018.

We determine the amount and timing of the purchases under the NCIB, subject to prior consultation with the Office of the Superintendent of Financial Institutions Canada (OSFI).

A copy of our Notice of Intention to file a NCIB may be obtained, without charge, by contacting our Corporate Secretary at our Toronto mailing address.

2017 Quarterly earnings release dates

First quarter	February 24
Second quarter	May 25
Third quarter	August 23
Fourth quarter	November 29

2018 Annual Meeting
The Annual Meeting of Common Shareholders will be held on Friday, April 6, 2018, in Toronto, Ontario, Canada

Dividend dates for 2017
Subject to approval by the Board of Directors

	Ex-dividend Dates	Record dates	Payment dates
Common and preferred shares series W, AA, AC, AD, AE, AF, AG, AJ, AK, AL, AZ, BB, BD, BF, BH, BI, BJ, BK and BM	January 24 April 21 July 24 October 24	January 26 April 25 July 26 October 26	February 24 May 24 August 24 November 24
Preferred shares series C-1 (US$)	February 1 May 3 August 2 November 1	February 3 May 5 August 4 November 3	February 13 May 15 August 14 November 13
Preferred shares series C-2 (US$)	January 25 April 26 July 26 October 25	January 27 April 28 July 28 October 27	February 7 May 8 August 7 November 7

Governance
Summaries of the significant ways in which corporate governance practices followed by RBC differ from corporate governance practices required to be followed by U.S. domestic companies under the NYSE and Nasdaq listing standards are available on our website at rbc.com/governance.

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