

# Royal Bank of Canada Annual Report 2017

Annual Report - Part I of IV

To view full Annual Report in PDF, please see the link below:

[http://www.rns-pdf.londonstockexchange.com/rns/0698Y\\_-2017-11-30.pdf](http://www.rns-pdf.londonstockexchange.com/rns/0698Y_-2017-11-30.pdf)

## 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 2017 Annual Report, in other filings with Canadian regulators or the SEC, in other reports to shareholders and in other communications. Forward-looking statements in this document include, but are not limited to, statements relating to our financial performance objectives, vision and strategic goals, the Economic, market, and regulatory review and outlook for Canadian, U.S., European and global economies, the regulatory environment in which we operate, the Strategic priorities and Outlook sections for each of our business segments, and the risk environment including our liquidity and funding risk, and includes our President and Chief Executive Officer's statements. The forward-looking information contained in this document is presented for the purpose of assisting the holders of our securities and financial analysts in understanding our financial position and results of operations as at and for the periods ended on the dates presented, as well as our financial performance objectives, vision and strategic goals, and may not be appropriate for other purposes. Forward-looking statements are typically identified by words such as "believe", "expect", "foresee", "forecast", "anticipate", "intend", "estimate", "goal", "plan" and "project" and similar expressions of future or conditional verbs such as "will", "may", "should", "could" or "would".

By their very nature, forward-looking statements require us to make assumptions and are subject to inherent risks and uncertainties, which give rise to the possibility that our predictions, forecasts, projections, expectations or conclusions will not prove to be accurate, that our assumptions may not be correct and that our financial performance objectives, vision and strategic goals will not be achieved. We caution readers not to place undue reliance on these statements as a number of risk factors could cause our actual results to differ materially from the expectations expressed in such forward-looking statements. These factors - many of which are beyond our control and the effects of which can be difficult to predict - include: credit, market, liquidity and funding, insurance, operational, regulatory compliance, strategic, reputation, legal and regulatory environment, competitive and systemic risks and other risks discussed in the risks sections of our 2017 Annual Report; including global uncertainty and volatility, elevated Canadian housing prices and household indebtedness, information technology and cyber risk, regulatory change, technological innovation and new entrants, global environmental policy and climate change, changes in consumer behaviour, the end of quantitative easing, the business and economic conditions in the geographic regions in which we operate, the effects of changes in government fiscal, monetary and other policies, tax risk and transparency and environmental and social risk.

We caution that the foregoing list of risk factors is not exhaustive and other factors could also adversely affect our results. When relying on our forward-looking statements to make decisions with respect to us, investors and others should carefully consider the foregoing factors and other uncertainties and potential events. Material economic assumptions underlying the forward-looking statements contained in this 2017 Annual Report are set out in the Economic, market, and regulatory review and outlook section and for each business segment under the Strategic priorities and Outlook headings. 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 risks sections of our 2017 Annual Report.

# 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 fiscal year ended October 31, 2017, compared to the preceding fiscal year. This MD&A should be read in conjunction with our 2017 Annual Consolidated Financial Statements and related notes and is dated November 28, 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 2017 Annual Information Form, is available free of charge on our website at [rbc.com/investorrelations](http://rbc.com/investorrelations), on the Canadian Securities Administrators' website at [sedar.com](http://sedar.com) and on the EDGAR section of the United States (U.S.) Securities and Exchange Commission's (SEC) website at [sec.gov](http://sec.gov).

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

## Table of contents

<b>Caution regarding forward-looking statements</b>	<b>11</b>
<b>Overview and outlook</b>	<b>12</b>
Selected financial and other highlights	12
About Royal Bank of Canada	13
Vision and strategic goals	13
Economic, market and regulatory review and outlook	14
Defining and measuring success through total shareholder returns	15
<b>Key corporate events of 2017</b>	<b>15</b>
<b>Financial performance</b>	<b>16</b>
Overview	16
Impact of foreign currency translation	16

Total revenue	17
Provision for credit losses	18
Insurance policyholder benefits, claims and acquisition expense	18
Non-interest expense	19
Income and other taxes	19
Client assets	20
<b>Business segment results</b>	<b>21</b>
Results by business segment	21
How we measure and report our business segments	21
Key performance and non-GAAP measures	22
Personal & Commercial Banking	25
Wealth Management	31
Insurance	36
Investor & Treasury Services	39
Capital Markets	41
Corporate Support	45
<b>Quarterly financial information</b>	<b>45</b>
Fourth quarter performance	45
Quarterly results and trend analysis	46
<b>Financial condition</b>	<b>47</b>
Condensed balance sheets	47
Off-balance sheet arrangements	48
<b>Risk management</b>	<b>51</b>
Overview	51
Top and emerging risks	53
Enterprise risk management	54
<b>Transactional/positional risk drivers</b>	<b>58</b>
Credit risk	58
Market risk	68
Liquidity and funding risk	74
Insurance risk	84

<b>Execution risk drivers</b>	<b>84</b>
Operational risk	84
Regulatory compliance risk	87
<b>Strategic risk drivers</b>	<b>87</b>
Strategic risk	87
Reputation risk	87
Legal and regulatory environment risk	87
Competitive risk	89
<b>Macroeconomic risk drivers</b>	<b>89</b>
Systemic risk	89
<b>Overview of other risks</b>	<b>90</b>
<b>Capital management</b>	<b>91</b>
<b>Accounting and control matters</b>	<b>101</b>
Critical accounting policies and estimates	101
Regulatory developments	107
Controls and procedures	107
<b>Related party transactions</b>	<b>108</b>
<b>Supplementary information</b>	<b>108</b>
<b>Enhanced Disclosure Task Force recommendation index</b>	<b>116</b>

### 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 2017 Annual Report, in other filings with Canadian regulators or the SEC, in other reports to shareholders and in other communications. Forward-looking statements in this document include, but are not limited to, statements relating to our financial performance objectives, vision and strategic goals, the Economic, market, and regulatory review and outlook for Canadian, U.S., European and global economies, the regulatory environment in which we operate, the Strategic priorities and Outlook sections for each of our business segments, and the risk environment including our liquidity and funding risk, and includes our President and Chief Executive Officer's statements. The forward-looking information contained in this document is presented for the purpose of assisting the holders of our securities and financial analysts in understanding our financial position and results of operations as at and for the periods ended on the dates presented, as well as our financial performance objectives, vision and strategic goals, and may not be appropriate for other purposes. Forward-looking statements are typically identified by words such as "believe", "expect", "foresee", "forecast", "anticipate", "intend", "estimate", "goal", "plan" and "project" and similar expressions of future or conditional verbs such as "will", "may", "should", "could" or "would".

By their very nature, forward-looking statements require us to make assumptions and are subject to inherent risks and uncertainties, which give rise to the possibility that our predictions, forecasts, projections, expectations or conclusions will not prove to be accurate, that our assumptions may not be correct and that our financial performance objectives, vision and strategic goals will not be achieved. We caution readers not to place undue reliance on these statements as a number of risk factors could cause our actual results to differ materially from the expectations expressed in such forward-looking statements. These factors - many of which are beyond our control and the effects of which can be difficult to predict - include: credit, market, liquidity and funding, insurance, operational, regulatory compliance, strategic,

reputation, legal and regulatory environment, competitive and systemic risks and other risks discussed in the risks sections of our 2017 Annual Report; including global uncertainty and volatility, elevated Canadian housing prices and household indebtedness, information technology and cyber risk, regulatory change, technological innovation and new entrants, global environmental policy and climate change, changes in consumer behaviour, the end of quantitative easing, the business and economic conditions in the geographic regions in which we operate, the effects of changes in government fiscal, monetary and other policies, tax risk and transparency and environmental and social risk.

We caution that the foregoing list of risk factors is not exhaustive and other factors could also adversely affect our results. When relying on our forward-looking statements to make decisions with respect to us, investors and others should carefully consider the foregoing factors and other uncertainties and potential events. Material economic assumptions underlying the forward-looking statements contained in this 2017 Annual Report are set out in the Economic, market, and regulatory review and outlook section and for each business segment under the Strategic priorities and Outlook headings. 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 risks sections of our 2017 Annual Report.

## Overview and outlook

### Selected financial and other highlights

Table 1

(Millions of Canadian dollars, except per share, number of and percentage amounts)	2017	2016	2017 vs. 2016 Increase (decrease)	
Total revenue (1)	\$ 40,669	\$ 38,795	\$ 1,874	4.8%
Provision for credit losses (PCL)	1,150	1,546	(396)	(25.6)%
Insurance policyholder benefits, claims and acquisition expense (PBCAE)	3,053	3,424	(371)	(10.8)%
Non-interest expense (1)	21,794	20,526	1,268	6.2%
Income before income taxes	14,672	13,299	1,373	10.3%
<b>Net income</b>	<b>\$ 11,469</b>	<b>\$ 10,458</b>	<b>\$ 1,011</b>	<b>9.7%</b>
<b>Segments - net income</b>				
Personal & Commercial Banking	\$ 5,755	\$ 5,184	\$ 571	11.0%
Wealth Management	1,838	1,473	365	24.8%
Insurance	726	900	(174)	(19.3)%
Investor & Treasury Services	741	613	128	20.9%
Capital Markets	2,525	2,270	255	11.2%
Corporate Support	(116)	18	(134)	(744.4)%
<b>Net income</b>	<b>\$ 11,469</b>	<b>\$ 10,458</b>	<b>\$ 1,011</b>	<b>9.7%</b>
<b>Selected information</b>				
Earnings per share (EPS) - basic	\$ 7.59	\$ 6.80	\$ 0.79	11.6%
- diluted	7.56	6.78	0.78	11.5%
Return on common equity (ROE) (2), (3)	17.0%	16.3%	n.m.	70 bps
Average common equity (2)	\$ 65,300	\$ 62,200	\$ 3,100	5.0%
Net interest margin (NIM) - on average earning assets (2)	1.72%	1.70%	n.m.	2 bps
Total PCL as a % of average net loans and acceptances (2)	0.21%	0.29%	n.m.	(8) bps
PCL on impaired loans as a % of average net loans and acceptances (2)	0.21%	0.28%	n.m.	(7) bps

Gross impaired loans (GIL) as a % of loans and acceptances (4)	0.46%	0.73%	n.m.	(27) bps
Liquidity coverage ratio (LCR) (5)	122%	127%	n.m.	(500) bps
<b>Capital ratios and Leverage ratio (6)</b>				
Common Equity Tier 1 (CET1) ratio	10.9%	10.8%	n.m.	10 bps
Tier 1 capital ratio	12.3%	12.3%	n.m.	- bps
Total capital ratio	14.2%	14.4%	n.m.	(20) bps
Leverage ratio	4.4%	4.4%	n.m.	- bps
<b>Selected balance sheet and other information (7)</b>				
Total assets	\$ 1,212,853	\$ 1,180,258	\$ 32,595	2.8%
Securities	218,379	236,093	(17,714)	(7.5)%
Loans (net of allowance for loan losses)	542,617	521,604	21,013	4.0%
Derivative related assets	95,023	118,944	(23,921)	(20.1)%
Deposits	789,635	757,589	32,046	4.2%
Common equity	67,416	64,304	3,112	4.8%
Total capital risk-weighted assets	474,478	449,712	24,766	5.5%
Assets under management (AUM)	639,900	586,300	53,600	9.1%
Assets under administration (AUA) (8)	5,473,300	5,058,900	414,400	8.2%
<b>Common share information</b>				
Shares outstanding (000s) - average basic	1,466,988	1,485,876	(18,888)	(1.3)%
- average diluted	1,474,421	1,494,137	(19,716)	(1.3)%
- end of period	1,452,898	1,485,394	(32,496)	(2.2)%
Dividends declared per common share	\$ 3.48	\$ 3.24	\$ 0.24	7.4%
Dividend yield (9)	3.8%	4.3%	n.m.	(50) bps
Common share price (RY on TSX) (10)	\$ 100.87	\$ 83.80	\$ 17.07	20.4%
Market capitalization (TSX) (10)	146,554	124,476	22,078	17.7%
<b>Business information (number of)</b>				
Employees (full-time equivalent) (FTE) (11)	78,210	77,825	385	0.5%
Bank branches	1,376	1,419	(43)	(3.0)%
Automated teller machines (ATMs)	4,630	4,905	(275)	(5.6)%
Period average US\$ equivalent of C\$1.00 (12)	\$ 0.765	\$ 0.755	\$ 0.010	1.3%
Period-end US\$ equivalent of C\$1.00	\$ 0.775	\$ 0.746	\$ 0.029	3.9%

(1) Effective Q4 2017, service fees and other costs incurred in association with certain commissions and fees earned are presented on a gross basis in non-interest expense. Comparative amounts have been reclassified to conform with this presentation.

- (2) 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.
  - (3) 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.
  - (4) GIL includes \$256 million (2016 - \$418 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 2017 GIL ratio (2016 - 8 bps). For further details, refer to Note 2 and 5 of our 2017 Annual Consolidated 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 \$8.4 billion (2016 - \$18.6 billion and \$9.6 billion) of securitized residential mortgages and credit card loans, respectively.
  - (9) Defined as dividends per common share divided by the average of the high and low share price in the relevant period.
  - (10) Based on TSX closing market price at period-end.
  - (11) Amounts have been revised from those previously reported.
  - (12) Average amounts are calculated using month-end spot rates for the period.
- n.m. not meaningful

## About Royal Bank of Canada

Royal Bank of Canada is a global financial institution with a purpose-driven, principles-led approach to delivering leading performance. Our success comes from the 80,000+ employees who bring our vision, values and strategy to life so we can help our clients thrive and communities prosper. As Canada's biggest bank, and one of the largest in the world based on market capitalization, we have a diversified business model with a focus on innovation and providing exceptional experiences to our 16 million clients in Canada, the U.S. and 35 other countries. Learn more at [rbc.com](http://rbc.com).

Our business segments are described below.

**Personal & Commercial Banking** operates in Canada, the Caribbean and the U.S., and comprises our personal and business banking operations, as well as our auto financing and retail investment businesses.

**Wealth Management** serves high net worth (HNW) and ultra-high net worth clients (UHNW) from our offices in key financial centres mainly in Canada, the U.S., the U.K., the Channel Islands and Asia with a comprehensive suite of investment, trust, banking, credit and other wealth management solutions. We also provide asset management products and services directly to institutional and individual clients through our distribution channels and third-party distributors.

**Insurance** provides a wide range of life, health, home, auto, travel, wealth, group and reinsurance products and solutions. In Canada, we offer insurance products and services through our proprietary distribution channels, comprised of the field sales force which includes retail insurance branches, our field sales representatives, advice centres and online, as well as through independent insurance advisors and affinity relationships. Outside Canada, we operate in reinsurance markets globally offering life, accident and annuity reinsurance products.

**Investor & Treasury Services** serves the needs of institutional investing clients by providing asset services, custodial, advisory, financing and other services to safeguard assets, maximize liquidity and manage risk in multiple jurisdictions around the world. We also provide short-term funding and liquidity management for RBC.

**Capital Markets** provides public and private companies, institutional investors, governments and central banks with a wide range of products and services. In North America, we offer a full suite of products and services which include corporate and investment banking, equity and debt origination and distribution, and structuring and trading. Outside North America, we offer a diversified set of capabilities in our key sectors of expertise such as energy, mining and infrastructure, and we have expanded into industrial, consumer and healthcare in Europe.

Our business segments are supported by Corporate Support, which consists of Technology & Operations and Functions. Technology & Operations provides the technological and operational foundation required to effectively deliver products and services to our clients, while Functions includes our finance, human resources, risk management, internal audit and other functional groups.

The following chart presents our business segments and respective lines of business:

**ROYAL BANK OF CANADA**

**Personal & Commercial Banking**

- Canadian Banking
- Caribbean & U.S. Banking

**Wealth Management**

- Canadian Wealth Management
- U.S. Wealth Management (including City National)
- Global Asset Management
- International Wealth Management

**Insurance**

- Canadian Insurance
- International Insurance

**Investor & Treasury Services**

**Capital Markets**

- Corporate and Investment Banking
- Global Markets
- Other

**Corporate Support**

- Technology & Operations

- Functions

**Vision and strategic goals**

Our business strategies and actions are guided by our vision, "**To be among the world's most trusted and successful financial institutions.**" Our three strategic goals are:

- In Canada, to be the undisputed leader in financial services;
- In the U.S., to be the preferred partner to corporate, institutional and high net worth clients and their businesses; and
- In select global financial centres, to be a leading financial services partner valued for our expertise.

For our progress in 2017 against our business strategies and strategic goals, refer to the Business segment results section.

## **Economic, market and regulatory review and outlook - data as at November 28, 2017**

The predictions and forecasts in this section are based on information and assumptions from sources we consider reliable. If this information or these assumptions are not accurate, actual economic outcomes may differ materially from the outlook presented in this section. For details on risk factors from general business and economic conditions that may affect our business and financial results, refer to the Macroeconomic risk drivers and Overview of other risks sections.

### **Canada**

The Canadian economy is expected to grow by 3.0% during calendar 2017, which is above both our estimates of 1.8% as at November 29, 2016 and 2.9% as at August 22, 2017. Growth has been broad-based across regions and sectors. In particular, strong growth earlier this year reflected a robust increase in consumer spending amid strong employment growth, low interest rates, and wealth accumulation from rising home prices. Business investment has also improved alongside growing corporate profits and improving business sentiment. The unemployment rate of 6.3% in October is down from 7.0% a year ago and indicates the labour market is close to full employment. Growth is expected to slow to a more moderate rate towards the end of 2017 as the economy nears capacity limits and consumer spending returns to a more sustainable trend. The housing sector is expected to slow as rising interest rates and recent policy changes weigh on activity. Business investment is expected to continue rising although uncertainty surrounding U.S. trade policy could impact business sentiment. With strong growth over the first half of the year pushing the Canadian economy close to full capacity, the Bank of Canada (BoC) raised rates, once in July and again in September. The overnight rate was then left unchanged at 1.00% in October 2017.

In calendar 2018, we expect the Canadian economy will grow at a rate of 2.1% as stronger business investment, exports and government spending offset slower consumer spending growth and further moderation in the housing sector. Uncertainty relating to NAFTA negotiations remains a downside risk to the outlook for exports and business investment. That risk, along with uncertainty about how highly-indebted households will respond to higher interest rates, is keeping the BoC cautious in raising interest rates. We expect a pause in the current tightening cycle until the second calendar quarter of 2018.

### **U.S.**

The U.S. economy is expected to grow by 2.2% in calendar 2017, which is consistent with our estimate as at November 29, 2016 and slightly above our estimate of 2.1% as at August 22, 2017. Growth this year has been supported by consumer spending, reflecting a strong labour market and elevated consumer confidence, as well as rising business investment. Economic activity remained strong in the third calendar quarter of 2017 despite a negative impact from severe weather conditions. The labour market is close to full capacity with October's unemployment rate of 4.1% well below the Federal Reserve's (Fed) longer run estimate of 4.6%. Inflation remains below the Fed's 2% target but is expected to increase over the medium term amid tight economic conditions. We expect the Fed will raise the federal funds target range by 25 basis points to 1.25% to 1.50% in December 2017.

In calendar 2018, we expect the U.S. economy will grow at a rate of 2.5%, largely reflecting continued strength in consumer spending amid a solid job market and elevated consumer confidence. Business investment is also expected to continue rising as a result of strong business confidence, accommodative fiscal policies and stronger global growth support investment. The release of the Tax Reform Framework by the U.S. administration in the fourth quarter of 2017, including corporate tax reform, if or when enacted, could have significant implications for both corporations and individuals. As inflation reaches its target, we expect the Fed will continue with steady, gradual rate hikes next year.

### **Europe**

The Eurozone economy is expected to grow by 2.3% in calendar 2017, which is well above our estimate of 1.3% as at November 29, 2016 and above our estimate of 2.0% as at August 22, 2017. Despite a politically unstable environment, including the Catalanian referendum, Brexit negotiations, and the success of populist parties seen in recent elections, the Eurozone has experienced positive growth. Improving labour market conditions, stronger business and consumer confidence, and accommodative financial conditions have supported a broad-based recovery. The unemployment rate of 8.9% in September was the lowest since January 2009. In October, the European Central Bank (ECB) announced its asset purchase program would be extended at least through September 2018, although with net monthly purchases being reduced beginning in January 2018.

In calendar 2018, we expect the Eurozone economy will grow at a rate of 1.9%. Growth will continue to be driven by improving labour market conditions, accommodative monetary policy and a stronger global backdrop. However, with inflationary pressure and wage growth remaining muted, we expect the ECB will hold its deposit rate at -0.4% throughout 2018 and maintain asset purchases as planned.

### **Financial markets**

A strengthening global economic outlook has contributed to equity markets rising to record highs. Some central banks have begun scaling back accommodation but monetary policy remains stimulative. Government bond yields have increased modestly as markets anticipate further monetary policy tightening will be gradual. Geopolitical and trade risks remain a source of uncertainty and have the potential to weigh on global markets.

The macroeconomic headwinds discussed above, such as the potential for greater uncertainty or financial market volatility related to proposed policies by the U.S. administration, including the Tax Reform Framework and NAFTA negotiations, Brexit, high household indebtedness, and possible further cuts by the BoC and the Fed to their respective stimulus measures may alter our outlook and results for fiscal 2018 and future periods as these continuing pressures may lead to higher PCL in our wholesale and retail loan portfolios, slower volume growth, and impact the general business and economic conditions in the regions we operate.

### Regulatory environment

We continue to monitor and prepare for regulatory developments in a manner that seeks to ensure compliance with new requirements while mitigating any adverse business or economic impacts. Such impacts could result from new or amended regulations and the expectations of those who enforce them. Significant developments include continuing changes to global and domestic standards for capital and liquidity, changes to federal mortgage rules, over-the-counter (OTC) derivatives reform, and initiatives to enhance requirements for institutions deemed systemically important to the financial sector. We also continue to monitor changes to resolution regimes addressing government bail-in and total loss-absorbing capacity.

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 section. For further details on our framework and activities to manage risks, refer to the Risk management and Capital management sections.

### Defining and measuring success through total shareholder returns

Our focus is to maximize total shareholder returns (TSR) through the achievement of top half performance compared to our global peer group over the medium-term (3-5 years), which we believe reflects a longer-term view of strong and consistent financial performance.

Maximizing TSR is aligned with our three strategic goals discussed earlier and we believe represents the most appropriate measure of shareholder value creation. TSR is a concept used to compare the performance of our common shares over a period of time, reflecting share price appreciation and dividends paid to common shareholders. The absolute size of TSR will vary depending on market conditions, and the relative position reflects the market's perception over a period of time of our overall performance relative to our peers.

Financial performance objectives are used to measure progress against our medium-term TSR objectives. We review and revise these financial performance objectives as economic, market and regulatory environments change. By focusing on our medium-term objectives in our decision-making, we believe we will be well-positioned to provide sustainable earnings growth and solid returns to our common shareholders.

The following table provides a summary of our 2017 performance against our medium-term financial performance objectives:

#### 2017 Financial performance compared to our medium-term objectives

Table 2

	2017 results
Diluted EPS growth of 7% +	11.5%
ROE of 16% +	17.0%
Strong capital ratios (CET1) (1)	10.9%
Dividend payout ratio 40% - 50%	46%

(1) For further details on the CET1 ratio, refer to the Capital management section.

For 2018, our medium-term financial performance objectives will remain unchanged.

We compare our TSR to that of a global peer group approved by our Board of Directors. The global peer group remains unchanged from last year and consists of the following 10 financial institutions:

- **Canadian financial institutions:** Bank of Montreal, Canadian Imperial Bank of Commerce, Manulife Financial Corporation, National Bank of Canada, Power Financial Corporation, The Bank of Nova Scotia, and Toronto-Dominion Bank.
- **U.S. banks:** JPMorgan Chase & Co. and Wells Fargo & Company.
- **International banks:** Westpac Banking Corporation.

**Medium-term objectives - three and five year TSR vs. peer group average****Table 3**

	Three year TSR (1)	Five year TSR (1)
Royal Bank of Canada	12%	17%
	Top half	Top half
Peer group average (excluding RBC)	10%	15%

(1) The three and the five year annualized TSR are calculated based on our common share price appreciation as per the TSX closing market price plus reinvested dividends for the period October 31, 2014 to October 31, 2017 and October 31, 2012 to October 31, 2017, respectively.

**Common share and dividend information****Table 4**

For the year ended October 31	2017	2016	2015	2014	2013
Common share price (RY on TSX) - close, end of period	\$ 100.87	\$ 83.80	\$ 74.77	\$ 80.01	\$ 70.02
Dividends paid per share	3.40	3.20	3.04	2.76	2.46
Increase (decrease) in share price	20.4%	12.1%	(6.5)%	14.3%	23.0%
Total shareholder return	25.0%	16.8%	(3.0)%	19.0%	28.0%

**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 11 of our Annual Consolidated 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 12 of our Annual Consolidated Financial Statements.

## Financial performance

### Overview

#### 2017 vs. 2016

Net income of \$11,469 million was up \$1,011 million or 10% from a year ago. Diluted earnings per share (EPS) of \$7.56 was up \$0.78 or 12% and return on common equity (ROE) of 17.0% was up 70 bps from 16.3% last year. Our Common Equity Tier 1 (CET1) ratio was 10.9%, up 10 bps from a year ago.

Our results reflected strong earnings in Personal & Commercial Banking, Capital Markets, Wealth Management and Investor & Treasury Services, partially offset by lower earnings in Insurance. Our results include our share of the gain related to the sale of the U.S. operations of Moneris in 2017. Our results in 2016 included the gain on sale of our home and auto insurance manufacturing business.

Personal & Commercial Banking results were higher mainly reflecting volume growth of 6%, and our share of the gain related to the sale of the U.S. operations of Moneris in the current year. 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 reflecting ongoing investments in technology, including digital initiatives and higher marketing costs.

Capital Markets results were up largely driven by higher results in Corporate and Investment Banking and Global Markets reflecting increased fee-based revenue, lower PCL and a lower effective tax rate due to changes in earnings mix. These factors were partially offset by higher costs related to changes in the timing of deferred compensation, increased variable compensation on improved results and the impact of foreign exchange translation.

Wealth Management earnings increased mainly due to growth in average fee-based client assets, higher net interest income and increased transaction revenue. These factors were partially offset by higher variable compensation on improved results and increased costs in support of business growth, mainly reflecting higher staff-related costs in the U.S. and ongoing investments in technology, including digital initiatives.

Investor & Treasury Services results increased primarily due to higher earnings across all major businesses driven by funding and liquidity and increased results from our asset services business. These factors were partially offset by higher investment in technology initiatives.

Insurance results decreased primarily due to the gain on sale as noted above, which was a specified item in the prior year and is described further below. Excluding the gain on sale, Insurance earnings were up mainly due to higher favourable annual actuarial assumption updates largely reflecting changes in credit and discount rates and favourable mortality experience, mainly in the U.K. These factors were partially offset by lower earnings from new U.K. annuity contracts and reduced earnings associated with the sale of our home and auto insurance manufacturing business, which was sold on July 1, 2016.

Corporate Support net loss was \$116 million in the current year, largely reflecting severance and related charges, net unfavourable tax adjustments and legal costs, partially offset by asset/liability management activities. Corporate Support net income was \$18 million in the prior year, largely reflecting asset/liability management activities, partially offset by net unfavourable tax adjustments and a \$50 million (\$37 million after-tax) increase in the provision for loans not yet identified as impaired.

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

Results excluding 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

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

Table 5

(Millions of Canadian dollars, except per share amounts)	2017 vs. 2016
<i>Increase (decrease):</i>	
Total revenue	\$ (360)

**Table 5**

(Millions of Canadian dollars, except per share amounts)	<b>2017 vs. 2016</b>	
PCL		<b>(3)</b>
PBCAE		-
Non-interest expense		<b>(270)</b>
Income taxes		<b>(15)</b>
Net income		<b>(72)</b>
Impact on EPS		
Basic	\$	<b>(0.05)</b>
Diluted		<b>(0.05)</b>

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

**Table 6**

(Average foreign currency equivalent of C\$1.00) (1)	<b>2017</b>	2016
U.S. dollar	<b>0.765</b>	0.755
British pound	<b>0.596</b>	0.544
Euro	<b>0.686</b>	0.683

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

## Total revenue

Table 7

(Millions of Canadian dollars)	2017	2016
Interest income	\$26,904	\$ 24,452
Interest expense	9,764	7,921
<b>Net interest income</b>	<b>\$17,140</b>	<b>\$ 16,531</b>
<b>NIM</b>	<b>1.72%</b>	<b>1.70%</b>
Investments (1), (2)	\$ 9,558	\$ 8,946
Insurance (3)	4,566	4,868
Trading	806	701
Banking (4)	5,110	4,848
Underwriting and other advisory	2,093	1,876
Other (5)	1,396	1,025
<b>Non-interest income (1)</b>	<b>\$23,529</b>	<b>\$ 22,264</b>
<b>Total revenue (1)</b>	<b>\$40,669</b>	<b>\$ 38,795</b>

- (1) Effective Q4 2017, service fees and other costs incurred in association with certain commissions and fees earned are presented on a gross basis in non-interest expense. Comparative amounts have been reclassified to conform with this presentation.
- (2) Includes securities brokerage commissions, investment management and custodial fees, and mutual fund revenue.
- (3) Includes premiums and investment and fee income. Investment income includes the change in fair value of investments backing policyholder liabilities, which is largely offset in PBCAE.
- (4) Includes service charges, foreign exchange revenue other than trading, card service revenue and credit fees.
- (5) Includes other non-interest income, net gain (loss) on available-for-sale (AFS) securities and share of profit in joint ventures and associates.

### 2017 vs. 2016

Total revenue increased \$1,874 million or 5% from last year, mainly due to higher investment revenue and higher net interest income. Higher banking and underwriting revenue, as well as our share of the gain related to the sale of the U.S. operations of Moneris in the current year also contributed to the increase. These factors were partially offset by lower insurance revenue and the gain from the sale of our home and auto insurance manufacturing business in the prior year. The impact of foreign exchange translation also decreased our total revenue by \$360 million.

Net interest income increased \$609 million or 4%, 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 Canadian Banking.

NIM was up 2 bps compared to last year largely due to the impact of higher U.S. interest rates.

Investments revenue increased \$612 million or 7%, mainly due to growth in average fee-based client assets, which benefitted from capital appreciation and net sales in Wealth Management, and higher balances driving higher mutual fund distribution fees in Canadian Banking.

Insurance revenue decreased \$302 million or 6%, 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 higher revenues from group annuity sales in Canadian Insurance, and the impact of restructured international life contracts, both of which are largely offset in PBCAE.

Banking revenue increased \$262 million or 5%, primarily due to increased loan syndication activity mainly in the U.S. and Canada, and higher card service revenue.

Underwriting and other advisory revenue increased \$217 million or 12%, primarily reflecting increased debt origination activity mainly in the U.S. and Canada. Higher mergers and acquisitions (M&A) activity, largely in the U.S. and Europe also contributed to the increase.

Other revenue increased \$371 million from last year largely reflecting the change in fair value of our U.S. share-based compensation plan, which is largely offset in non-interest expense, and a gain from the disposition of certain securities. Our results also include our share of the gain from the sale of the U.S. operations of Moneris in the current year which was more than offset by the gain from the sale of our home and auto insurance manufacturing business in the prior year.

## Additional trading information

**Table 8**

(Millions of Canadian dollars)	2017	2016
Total trading revenue (1)		
Net interest income	\$2,370	\$ 2,376
Non-interest income	806	701
<b>Total trading revenue</b>	<b>\$3,176</b>	<b>\$ 3,077</b>
Total trading revenue by product		
Interest rate and credit <sup>(2)</sup>	\$1,796	\$ 1,830
Equities	895	684
Foreign exchange and commodities <sup>(2)</sup>	485	563
<b>Total trading revenue</b>	<b>\$3,176</b>	<b>\$ 3,077</b>
Trading revenue (teb) by product		
Interest rate and credit <sup>(2)</sup>	\$1,796	\$ 1,830
Equities	1,221	1,166
Foreign exchange and commodities <sup>(2)</sup>	485	564
<b>Total trading revenue (teb)</b>	<b>\$3,502</b>	<b>\$ 3,560</b>
Trading revenue (teb) by product - Capital Markets		
Interest rate and credit	\$1,466	\$ 1,473
Equities	1,251	1,205
Foreign exchange and commodities	331	402
<b>Total Capital Markets trading revenue (teb)</b>	<b>\$3,048</b>	<b>\$ 3,080</b>

(1) Includes a gain of \$170 million (2016 - \$49 million gain) related to a funding valuation adjustment on uncollateralized OTC derivatives.

(2) Amounts have been revised from previously reported.

### 2017 vs. 2016

Total trading revenue of \$3,176 million, which comprises trading-related revenue recorded in Net interest income and Non-interest income, was up \$99 million, or 3%, mainly due to higher equity trading revenue in Europe and Asia & other international, partially offset by lower fixed income trading revenue mainly in the U.S., and lower foreign exchange trading revenue across all regions.

### **Provision for credit losses (PCL)**

#### **2017 vs. 2016**

Total PCL of \$1,150 million decreased \$396 million or 26% from a year ago, mainly due to lower PCL in Capital Markets, Personal & Commercial Banking, and Wealth Management. The total PCL ratio of 21 bps improved 8 bps.

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

### **Insurance policyholder benefits, claims and acquisition expense (PBCAE)**

#### **2017 vs. 2016**

PBCAE of \$3,053 million decreased \$371 million or 11% from the prior year, mainly due to a change in the fair value of investments backing our policyholder liabilities, largely offset in revenue. Lower claims reflecting the impact from the sale of our home and auto insurance manufacturing business in the prior year and higher favourable annual actuarial assumption updates largely reflecting changes in credit and discount rates and favourable mortality experience, mainly in the U.K., also contributed to the decrease. These factors were partially offset by the impact from group annuity sales and restructured international life contracts, both of which are largely offset in revenue.

## Non-interest expense

**Table 9**

(Millions of Canadian dollars, except percentage amounts) (1)	2017	2016
Salaries	\$ 5,936	\$ 5,865
Variable compensation	5,203	4,583
Benefits and retention compensation	1,792	1,674
Share-based compensation	399	255
Human resources	\$13,330	\$ 12,377
Equipment	1,434	1,438
Occupancy	1,588	1,568
Communications	1,011	945
Professional fees	1,214	1,078
Amortization of other intangibles	1,015	970
Other	2,202	2,150
<b>Non-interest expense</b>	<b>\$21,794</b>	<b>\$ 20,526</b>
<b>Efficiency ratio (2)</b>	<b>53.6%</b>	<b>52.9%</b>
<b>Efficiency ratio adjusted (3)</b>	<b>53.5%</b>	<b>53.8%</b>

(1) Effective Q4 2017, service fees and other costs incurred in association with certain commissions and fees earned are presented on a gross basis in non-interest expense. Comparative amounts have been reclassified to conform with this presentation.

(2) Efficiency ratio is calculated as non-interest expense divided by total revenue.

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

### 2017 vs. 2016

Non-interest expense increased \$1,268 million or 6%, largely 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 increased marketing costs. The change in fair value of our U.S. share-based compensation plan, which is largely offset in revenue, 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 53.6% increased 70 bps from 52.9% last year. Excluding the change in fair value of investments backing our policyholder liabilities, our efficiency ratio of 53.5% decreased 30 bps from last year mainly driven by the impact of foreign exchange translation and continued benefits from our efficiency management activities. These factors were partially offset by increased staff-related costs including severance and higher costs in support of business growth as noted above.

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

## Income and other taxes

**Table 10**

(Millions of Canadian dollars, except percentage amounts)	2017	2016
<b>Income taxes</b>	<b>\$ 3,203</b>	<b>\$ 2,841</b>
<b>Other taxes</b>		
Goods and services sales taxes	\$ 446	\$ 442
Payroll taxes	643	627
Capital taxes	88	106
Property taxes	140	134
Insurance premium taxes	30	45
Business taxes	46	69
	<b>\$ 1,393</b>	<b>\$ 1,423</b>
<b>Total income and other taxes</b>	<b>\$ 4,596</b>	<b>\$ 4,264</b>
<b>Income before income taxes</b>	<b>\$14,672</b>	<b>\$ 13,299</b>
Canadian statutory income tax rate (1)	26.5%	26.5%
Lower average tax rate applicable to subsidiaries	(3.5)%	(2.6)%
Tax-exempt income from securities	(2.0)%	(3.1)%
Tax rate change	(0.1)%	-%
Effect of previously unrecognized tax loss, tax credit or temporary differences	-%	(0.4)%
Other	0.9%	1.0%
<b>Effective income tax rate</b>	<b>21.8%</b>	<b>21.4%</b>

**Effective total tax rate (2)****28.6%**      29.0%

- (1) Blended Federal and Provincial statutory income tax rate.  
(2) Total income and other taxes as a percentage of income before income taxes and other taxes.

**2017 vs. 2016**

Income tax expense increased \$362 million or 13% from last year, mainly due to higher Income before income taxes. The effective tax rate of 21.8% increased 40 bps, mainly due to lower tax-exempt income and the impact from the gain on sale of our home and auto insurance manufacturing business of \$287 million (\$235 million after-tax) in 2016. These factors were partially offset by our share of a gain related to the sale of our U.S. operations of Moneris of \$212 million (before- and after-tax) in the current year.

Other taxes decreased \$30 million or 2% from 2016, mainly due to lower business taxes, capital taxes and insurance premiums, partially offset by an increase in payroll taxes. In addition to the income and other taxes reported in our Consolidated Statement of Income, we recorded income taxes of \$469 million (2016: recovery of \$438 million) in our Consolidated Statement of Comprehensive Income, primarily reflecting the remeasurement of employee benefit plans, net gains on derivatives designated as cash flow hedges, and net foreign currency translation gains from hedging activities.

**Client assets****Assets under administration**

Assets under administration (AUA) are assets administered by us which are beneficially owned by our clients. We provide services that are administrative in nature, including safekeeping, collecting investment income, settling purchase and sale transactions, and record keeping. Underlying investment strategies within AUA are determined by our clients and generally do not impact the administrative fees that we receive. Administrative fees can be impacted by factors such as asset valuation level changes from market movements, types of services administered, transaction volumes, geography and client relationship pricing based on volumes or multiple services.

Our Investor & Treasury Services business is the primary business segment that has AUA with approximately 78% of total AUA, as at October 31, 2017, followed by our Wealth Management and Personal & Commercial Banking businesses with approximately 17% and 5% of total AUA, respectively.

**2017 vs. 2016**

AUA increased \$414 billion or 8% compared to last year, mainly reflecting capital appreciation.

The following table summarizes AUA by geography and asset class:

<b>AUA by geographic mix and asset class</b>	<b>Table 11</b>	
(Millions of Canadian dollars)	<b>2017</b>	2016
<b>Canada (1)</b>		
Money market	\$ 33,100	\$ 33,000
Fixed income	730,100	731,200
Equity	765,800	705,900
Multi-asset and other	774,900	733,800
<b>Total Canada</b>	<b>\$2,303,900</b>	<b>\$2,203,900</b>
<b>U.S. (1)</b>		
Money market	\$ 35,400	\$ 36,400
Fixed income	124,500	126,800

**AUA by geographic mix and asset class**

**Table 11**

(Millions of Canadian dollars)	2017	2016
Equity	238,100	200,800
Multi-asset and other	57,500	44,800
<b>Total U.S.</b>	<b>\$ 455,500</b>	<b>\$ 408,800</b>
<b>Other International</b> (1)		
Money market	\$ 43,300	\$ 50,300
Fixed income	387,500	426,200
Equity (2)	867,600	836,300
Multi-asset and other (2)	1,415,500	1,133,400
<b>Total International</b>	<b>\$2,713,900</b>	<b>\$2,446,200</b>
<b>Total AUA</b>	<b>\$5,473,300</b>	<b>\$5,058,900</b>

(1) Geographic information is based on the location from where our clients are serviced.

(2) Amounts have been revised from those previously presented.

**Assets under management**

Assets under management (AUM) are assets managed by us which are beneficially owned by our clients. Management fees are paid by the investment funds for the investment capabilities of an investment manager and can also cover administrative services. Management fees may be calculated daily, monthly or quarterly as a percentage of the AUM, depending on the distribution channel, product and investment strategies. In general, equity strategies carry a higher fee rate than fixed income or money market strategies. Fees are also impacted by asset mix and relationship pricing for clients using multiple services. Higher risk assets generally produce higher fees, while clients using multiple services can take advantage of synergies which reduce the fees they are charged. Certain funds may have performance fee arrangements. Performance fees are recorded when certain benchmarks or performance targets are achieved. These factors could lead to differences on fees earned by products and therefore net return by asset class may vary despite similar average AUM. Our Wealth Management segment is the primary business segment with approximately 99% of total AUM.

**2017 vs. 2016**

AUM increased \$54 billion or 9% compared to last year, primarily due to capital appreciation and net sales, partially offset by the impact of foreign exchange translation.

The following table presents the change in AUM for the year ended October 31, 2017:

**Client assets - AUM**

**Table 12**

(Millions of Canadian dollars)	2017					2016
	Money market	Fixed income	Equity	Multi-asset and other	Total	Total
AUM, beginning balance	\$ 47,900	\$ 198,700	\$100,800	\$ 238,900	\$586,300	\$ 498,400
Institutional inflows	27,200	31,500	6,600	4,000	69,300	55,200
Institutional outflows	(37,900)	(32,800)	(4,800)	(2,300)	(77,800)	(72,100)
Personal flows, net	800	2,100	10,300	18,400	31,600	21,600
Total net flows	(9,900)	800	12,100	20,100	23,100	4,700
Market impact	-	3,600	18,200	20,600	42,400	21,500
Acquisitions/dispositions	-	-	-	(4,000)	(4,000)	58,100
Foreign exchange	(1,100)	(2,200)	(2,400)	(2,200)	(7,900)	3,600
Total market, acquisitions/dispositions and foreign exchange impact	(1,100)	1,400	15,800	14,400	30,500	83,200
<b>AUM, balance at end of year</b>	<b>\$ 36,900</b>	<b>\$ 200,900</b>	<b>\$128,700</b>	<b>\$ 273,400</b>	<b>\$639,900</b>	<b>\$ 586,300</b>

**Business segment results**

**Results by business segments**

**Table 13**

	2017	2016
--	------	------

(Millions of Canadian dollars, except percentage amounts)	Personal & Commercial Banking	Wealth Management	Insurance	Investor & Treasury Services	Capital Markets (1)	Corporate Support (1)	Total	Total
Net interest income	\$ 10,787	\$ 2,248	\$ -	\$ 679	\$ 3,565	\$ (139)	\$ 17,140	\$ 16,531
Non-interest income (2)	5,076	7,827	4,566	1,756	4,617	(313)	23,529	22,264
<b>Total revenue (2)</b>	<b>\$ 15,863</b>	<b>\$ 10,075</b>	<b>\$ 4,566</b>	<b>\$ 2,435</b>	<b>\$ 8,182</b>	<b>\$ (452)</b>	<b>\$ 40,669</b>	<b>\$ 38,795</b>
PCL	1,054	34	-	-	62	-	1,150	1,546
PBCAE	-	-	3,053	-	-	-	3,053	3,424
Non-interest expense (2)	7,176	7,611	584	1,466	4,719	238	21,794	20,526
Net income before income taxes	\$ 7,633	\$ 2,430	\$ 929	\$ 969	\$ 3,401	\$ (690)	\$ 14,672	\$ 13,299
Income tax	1,878	592	203	228	876	(574)	3,203	2,841
Net income	\$ 5,755	\$ 1,838	\$ 726	\$ 741	\$ 2,525	\$ (116)	\$ 11,469	\$ 10,458
ROE (3)	28.3%	13.2%	41.8%	22.7%	12.9%	n.m.	17.0%	16.3%
Average assets	\$ 421,100	\$ 88,100	\$ 14,300	\$ 138,100	\$ 494,400	\$ 30,600	\$ 1,186,600	\$ 1,176,400

- (1) Net interest income, total revenue and net income before income taxes are presented in Capital Markets on a taxable equivalent basis (teb). The teb adjustment is eliminated in the Corporate Support segment. For a further discussion, refer to the How we measure and report our business segments section.
- (2) Effective Q4 2017, service fees and other costs incurred in association with certain commissions and fees earned are presented on a gross basis in non-interest expense. Comparative amounts have been reclassified to conform with this presentation.
- (3) This measure may 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.
- n.m. not meaningful

### How we measure and report our business segments

Our management reporting framework is intended to measure the performance of each business segment as if it were a stand-alone business and reflects the way that the business segment is managed. This approach is intended to ensure that our business segments' results include all applicable revenue and expenses associated with the conduct of their business and depicts how management views those results.

#### Key methodologies

The following outlines the key methodologies and assumptions used in our management reporting framework. These are periodically reviewed by management to ensure they remain valid.

##### Expense allocation

To ensure that our business segments' results include expenses associated with the conduct of their business, we allocate costs incurred or services provided by Technology & Operations and Functions, which are directly undertaken or provided on the business segments' behalf. For other costs not directly attributable to our business segments, including overhead costs and other indirect expenses, we use our management reporting framework for allocating these costs to each business segment in a manner that is intended to reflect the underlying benefits. In 2017, we maintained some of our severance and related costs in Corporate Support.

##### Capital attribution

Our management reporting framework also determines the attribution of capital to our business segments in a manner that is intended to consistently measure and align economic costs with the underlying benefits and risks associated with the activities of each business segment. The amount of capital assigned to each business segment is referred to as attributed capital. Unattributed capital and associated net charges are reported in Corporate Support. For further information, refer to the Capital management section.

#### *Funds transfer pricing*

Funds transfer pricing refers to the pricing of intra-company borrowing or lending for management reporting purposes. We employ a funds transfer pricing process to enable risk-adjusted management reporting of segment results. This process determines the costs and revenue for intra-company borrowing and lending of funds after taking into consideration our interest rate risk and liquidity risk management objectives, as well as applicable regulatory requirements.

#### *Provisions for credit losses*

PCL are recorded to recognize estimated losses on impaired loans and losses that have been incurred but not yet identified in our total loans portfolio. This credit portfolio includes on-balance sheet exposures, such as loans and acceptances, and off-balance sheet items such as letters of credit, guarantees and unfunded commitments. PCL on impaired loans are included in the results of each business segment to fully reflect the appropriate expenses related to the conduct of each business segment. PCL on loans not yet identified as impaired are included in Corporate Support, as Group Risk Management (GRM) effectively controls this through its monitoring and oversight of various lending portfolios throughout the enterprise. For details on our accounting policy on Allowance for credit losses, refer to Note 2 of our 2017 Annual Consolidated Financial Statements.

In addition to the key methodologies described above, the following highlights the key aspects of how some of our business segments are managed and reported:

- Wealth Management reported results also include disclosure in U.S. dollars, primarily for U.S. Wealth Management (including City National) as we review and manage the results of this business largely in this currency.
- Capital Markets results are reported on a taxable equivalent basis (teb), which grosses up total revenue from certain tax-advantaged sources (Canadian taxable corporate dividends and the U.S. tax credit investment business) to their effective taxable equivalent value with a corresponding offset recorded in the provision for income taxes. We record the elimination of the teb adjustments in Corporate Support. We believe these adjustments are useful and reflect how Capital Markets manages its business, since it enhances the comparability of revenue and related ratios across taxable revenue and our principal tax-advantaged source of revenue. The use of teb adjustments and measures may not be comparable to similar generally accepted accounting principles (GAAP) measures or similarly adjusted amounts disclosed by other financial institutions.
- Corporate Support results include all enterprise level activities that are undertaken for the benefit of the organization that are not allocated to our five business segments, such as enterprise funding, securitizations, net charges associated with unattributed capital, and consolidation adjustments, including the elimination of the teb gross-up amounts.

### **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.

Our consolidated ROE calculation is based on net income available to common shareholders divided by total average common equity for the period. Business segment ROE calculations are based on net income available to common shareholders divided by average attributed capital for the period. For each segment, average attributed capital includes the capital required to underpin various risks as described in the Capital management section and amounts invested in goodwill and intangibles.

The attribution of capital involves the use of assumptions, judgments and methodologies that are regularly reviewed and revised by management as deemed necessary. Changes to such assumptions, judgments and methodologies can have a material effect on the business segment ROE information that we report. Other companies that disclose information on similar attributions and related return measures may use different assumptions, judgments and methodologies.

The following table provides a summary of our ROE calculations:

#### **Calculation of ROE**

**Table 14**

---

2017

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	\$ 5,659	\$ 1,775	\$ 718	\$ 725	\$ 2,438	\$ (187)	\$ 11,128	\$ 10,111
Total average common equity (1), (2)	20,000	13,450	1,700	3,200	18,850	8,100	65,300	62,200
ROE (3)	28.3%	13.2%	41.8%	22.7%	12.9%	n.m.	17.0%	16.3%

(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

#### *Embedded value for Insurance operations*

Embedded value is a measure of shareholder value embedded in the balance sheet of our Insurance segment, excluding any value from future new sales. We use the change in embedded value between reporting periods as a measure of the value created by the insurance operations during the period.

We define embedded value as the value of equity held in our Insurance segment and the value of in-force business (existing policies). The value of in-force business is calculated as the present value of future expected earnings on in-force business less the cost of capital required to support in-force business. We use discount rates equal to long-term risk free rates plus a spread. Required capital uses the capital frameworks in the jurisdictions in which we operate.

Key drivers affecting the change in embedded value from period to period are new sales, investment performance, claims and policyholder experience, change in actuarial assumptions, changes in foreign exchange rates and changes in shareholder equity arising from transfers in capital.

Embedded value does not have a standardized meaning under GAAP and may not be directly comparable to similar measures disclosed by other companies. Given that this measure is specifically used for our Insurance segment and involves the use of discount rates to determine the present value of the future expected earnings and capital required for the in-force business, reconciliation to financial statements information is not applicable.

#### **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 year ended October 31, 2017 with results from last year 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% for 2016, largely as a result of lower long-term interest rates.

The following table provides a summary of our Economic profit:

**Economic Profit**

**Table 15**

**2017**

(Millions of Canadian dollars)	Personal & Commercial Banking	Wealth Management	Insurance	Investor & Treasury Services	Capital Markets	Corporate Support	Total
Net income	\$ 5,755	\$ 1,838	\$ 726	\$ 741	\$ 2,525	\$ (116)	\$ 11,469
add: Non-controlling interests	(5)	-	-	(1)	-	(35)	(41)
After-tax effect of amortization of other intangibles	11	179	-	15	-	1	206
Adjusted net income (loss)	\$ 5,761	\$ 2,017	\$ 726	\$ 755	\$ 2,525	\$ (150)	\$ 11,634
less: Capital charge	1,791	1,206	154	286	1,690	722	5,849
Economic profit (loss)	\$ 3,970	\$ 811	\$ 572	\$ 469	\$ 835	\$ (872)	\$ 5,785

(Millions of Canadian dollars)	2016							Total
	Personal & Commercial Banking	Wealth Management	Insurance	Investor & Treasury Services	Capital Markets	Corporate Support		
Net income	\$ 5,184	\$ 1,473	\$ 900	\$ 613	\$ 2,270	\$ 18	\$ 10,458	
add: Non-controlling interests	(8)	-	-	(1)	-	(44)	(53)	
After-tax effect of amortization of other intangibles	12	183	-	16	-	1	212	
Adjusted net income (loss)	\$ 5,188	\$ 1,656	\$ 900	\$ 628	\$ 2,270	\$ (25)	\$ 10,617	
less: Capital charge	1,756	1,229	160	316	1,694	738	5,893	
Economic profit (loss)	\$ 3,432	\$ 427	\$ 740	\$ 312	\$ 576	\$ (763)	\$ 4,724	

*Results excluding specified items*

Our results were impacted by the following specified items:

- For the year ended October 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 year ended October 31, 2016, a gain from the sale of our home and auto insurance manufacturing business, RBC General Insurance Company, to Aviva Canada Inc. (Aviva), which was \$287 million (\$235 million after-tax) and recorded in Insurance.

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

**Personal & Commercial Banking**

**Table 16**

**2017**

(Millions of Canadian dollars, except percentage amounts) (1)	As reported	Item excluded	
		Gain related to the sale by Moneris (2)	Adjusted
Total revenue	\$ 15,863	\$ (212)	\$ 15,651
PCL	1,054	-	1,054
Non-interest expense	7,176	-	7,176
Net income before income taxes	\$ 7,633	\$ (212)	\$ 7,421
<b>Net income</b>	<b>\$ 5,755</b>	<b>\$ (212)</b>	<b>\$ 5,543</b>
<b>Other information</b>			
Non-interest expense	\$ 7,176	\$ -	\$ 7,176
Total revenue	15,863	(212)	15,651
Efficiency ratio	45.2%		45.9%
Revenue growth rate	5.7%		4.3%
Non-interest expense growth rate	3.5%		3.5%
Operating leverage	2.2%		0.8%

(1) Effective Q4 2017, service fees and other costs incurred in association with certain commissions and fees earned are presented on a gross basis in non-interest expense. Comparative amounts have been reclassified to conform with this presentation.

(2) Includes foreign currency translation.

## Canadian Banking

Table 17

(Millions of Canadian dollars, except percentage amounts) (1)	2017		
	As reported	Item excluded Gain related to the sale by Moneris (2)	Adjusted
<b>Total revenue</b>	<b>\$ 14,877</b>	<b>\$ (212)</b>	<b>\$ 14,665</b>
PCL	1,016	-	1,016
Non-interest expense	6,423	-	6,423
Net income before income taxes	\$ 7,438	\$ (212)	\$ 7,226
<b>Net income</b>	<b>\$ 5,571</b>	<b>\$ (212)</b>	<b>\$ 5,359</b>
<b>Other information</b>			
Non-interest expense	\$ 6,423	\$ -	\$ 6,423
Total revenue	14,877	(212)	14,665

Efficiency ratio	<b>43.2%</b>	<b>43.8%</b>
Revenue growth rate	<b>6.2%</b>	<b>4.7%</b>
Non-interest expense growth rate	<b>3.8%</b>	<b>3.8%</b>
Operating leverage	<b>2.4%</b>	<b>0.9%</b>

(1) Effective Q4 2017, service fees and other costs incurred in association with certain commissions and fees earned are presented on a gross basis in non-interest expense. Comparative amounts have been reclassified to conform with this presentation.

(2) Includes foreign currency translation.

## Insurance

**Table 18**

	2016		
	As reported	Item excluded Gain related to the sale of RBC General Insurance Company	Adjusted
(Millions of Canadian dollars, except percentage amounts)			
Total revenue	\$ 5,151	\$ (287)	\$ 4,864
PBCAE	3,424	-	3,424
Non-interest expense (1)	623	-	623
<b>Net income before income taxes</b>	<b>\$ 1,104</b>	<b>\$ (287)</b>	<b>\$ 817</b>
<b>Net income</b>	<b>\$ 900</b>	<b>\$ (235)</b>	<b>\$ 665</b>
<b>Other information</b>			
ROE	52.8%		41.0%

(1) Includes Provision for credit losses of \$1 million.

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

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

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

## Consolidated non-GAAP efficiency ratio

**Table 19**

2017	2016
------	------

(Millions of Canadian dollars, except percentage amounts) (1)	Items excluded			Items excluded		
	As reported	Change in fair value of investments backing policyholder liabilities	Adjusted	As reported	Change in fair value of investments backing policyholder liabilities	Adjusted
Total revenue	\$ 40,669	\$ 58	\$ 40,727	\$ 38,795	\$ (633)	\$ 38,162
Non-interest expense	21,794	-	21,794	20,526	-	20,526
Efficiency ratio	53.6%		53.5%	52.9%		53.8%

(1) Effective Q4 2017, service fees and other costs incurred in association with certain commissions and fees earned are presented on a gross basis in non-interest expense. Comparative amounts have been reclassified to conform with this presentation.

## Personal & Commercial Banking

Personal & Commercial Banking provides a broad suite of financial products and services, and aims to provide an exceptional client experience to individuals and businesses for their day-to-day banking, purchase of a home and investment needs. We have meaningful relationships with many of our clients underscored by the breadth of our products and depth of expertise across our businesses.

**> 13 million**

Number of clients

**> 6 million**

Active digital users

**34,773**

Employees

---

### Revenue by business lines

Please see the PDF to view this chart

We operate through two businesses - Canadian Banking and Caribbean & U.S. Banking. Canadian Banking serves our home market in Canada, where we maintain top (#1 or #2) rankings in market share in this competitive environment for all key retail and business financial product categories. We have the largest branch network, the most ATMs and one of the largest mobile sales networks across Canada. In Caribbean & U.S. Banking, we offer a broad range of financial products and services in targeted markets.

In Canada, we compete with other Schedule 1 banks, independent trust companies, foreign banks, credit unions, caisses populaires and auto financing companies.

In the Caribbean, our competition includes banks, trust companies and investment management companies serving retail and corporate customers, as well as public institutions. In the U.S., we compete primarily with other Canadian banking institutions with U.S. operations.

## 2017 Operating environment

- › Strong employment growth in Canada boosted consumer confidence which resulted in strong volume growth across most of our Canadian Banking lending and deposit products.
- › Continued strong demand for housing in Canada resulted in solid growth in client mortgage balances.
- › Growth in our investment product balances, driven by solid equity market returns and increased client confidence.
- › A low interest rate environment coupled with competitive pressures persisted for most of 2017. This was partially offset by the Bank of Canada rate increases in July and September.
- › Improved credit conditions due to lower national unemployment and improved economic conditions, especially in oil exposed provinces.
- › In the Caribbean, the region continued to experience underlying economic challenges which has negatively impacted growth in our loan and deposit balances.
- › Technology is transforming the way we operate and interact with our clients. Therefore, we continued to invest in digital solutions to improve the client experience and deliver personalized advice.

## Strategic priorities

OUR STRATEGY	PROGRESS IN 2017	PRIORITIES IN 2018
<b>Transform how we serve our clients</b>	<p>Continued to provide exceptional and secure client experiences via mobile platforms, releasing more mobile functionality than our competitors</p> <p>Focused on innovating our branch network, including the opening of new alternative branch formats</p>	<p>Deliver anytime, anywhere solutions to our clients across distribution channels, integrating mobile and digital devices and capabilities into our clients' lives</p> <p>Continue to reimagine our branch network to meet the evolving needs of our clients</p>
<b>Accelerate our growth in key segments</b>	<p>Targeted high-growth client segments to increase our presence in and deliver customized advice to underserved groups, including retirees, youth, newcomers and business owners</p>	<p>Focus on engaging key segments to build new and deeper relationships and achieve industry leading volume growth</p>
<b>Rapidly deliver digital solutions to our clients</b>	<p>Leveraged artificial intelligence to create NOMI Insights™ and NOMI Find &amp; Save™, becoming the first bank in Canada to offer clients personalized digital financial insights and a fully automated savings service</p> <p>Introduced Interac E-transfers with iMessage and Siripay</p> <p>Launched MyAdvisor, an online advice platform to remotely connect a client to an advisor</p> <p>Introduced CreditView Dashboard to provide clients with online access to their credit score</p>	<p>Introduce more personalized insights to improve the customer experience while continuing to simplify and digitize everyday banking</p> <p>Enhance the digital experience for our small business and commercial clients and make it easier to do business with us</p>
<b>Innovate to become a more agile and efficient bank</b>	<p>Accelerated our investments to simplify, digitize and automate activities and processes for both clients and employees</p>	<p>Continue to invest in new tools and capabilities and proactively seek ways to simplify internal processes and the client experience</p>
<b>In the Caribbean</b>	<p>Continued to streamline our branch network and invest in our mobile banking platform</p> <p>Rolled out voice enabled ATMs in the Trinidad market - a first of its kind</p>	<p>Continue to transform our business by investing in our distribution network supported by digital innovations, self-serve channels, redesigned branches and a proactive mobile sales force to grow and retain our target retail, business and corporate client base</p>
<b>In the U.S.</b>	<p>Continued strong growth in our U.S. cross-border client base supported by significant enhancements to our online banking capabilities, driving increased client engagement</p>	<p>Strive to fully digitize our account opening processes, deliver on targeted marketing, content and service partnerships and further enhancements to the digital banking experience to drive client acquisition and volume growth</p>

## Outlook

The Canadian economy is expected to grow by 2.1% in calendar 2018, driven by stronger business investment, exports and government spending, offset by slower consumer spending growth. Given recent regulatory measures implemented by the Federal government in 2017, we expect the housing market to moderate, which could impact demand for mortgage products. Although the BoC raised its overnight rate twice in 2017, we expect a pause until the second calendar quarter of 2018 as the BoC remains cautious regarding future rate increases. The rate increases in 2017, as well as any future increases, will continue to have an impact on our net interest margins, partially offset by ongoing competitive pressures. We continue to maintain our focus on strengthening business performance by pursuing industry leading volume growth, operational efficiency efforts and channel transformation to achieve our vision of being a Digitally Enabled Relationship Bank.

In the Caribbean, we are focused on transforming our business in order to be the best bank for our target retail, business and corporate clients, by building an organization with a multi-channel distribution network supported by digital innovations.

For further details on our general economic review and outlook, refer to the Economic, market and regulatory review and outlook section.

**Personal & Commercial Banking**

**Table 20**

(Millions of Canadian dollars, except percentage amounts and as otherwise noted) (1)	2017	2016
Net interest income	\$ 10,787	\$ 10,337
Non-interest income	5,076	4,675
<b>Total revenue</b>	<b>15,863</b>	15,012
PCL	1,054	1,122
Non-interest expense	7,176	6,933
<b>Income before income taxes</b>	<b>7,633</b>	6,957
<b>Net income</b>	<b>\$ 5,755</b>	\$ 5,184
<b>Revenue by business</b>		
Canadian Banking	\$ 14,877	\$ 14,009
Caribbean & U.S. Banking	986	1,003
<b>Key ratios</b>		
ROE	28.3%	27.5%
NIM	2.68%	2.68%
Efficiency ratio	45.2%	46.2%
Efficiency ratio adjusted (2)	45.9%	n.a.
Operating leverage	2.2%	1.3%
Operating leverage adjusted (2)	0.8%	n.a.
<b>Selected average balance sheet information</b>		
Total assets	\$ 421,100	\$ 403,800
Total earning assets	403,100	385,400
Loans and acceptances	402,500	383,900
Deposits	344,400	320,100
<b>Other information</b>		
AUA (3)	\$ 264,800	\$ 239,600
AUM	4,600	4,600
Number of employees (FTE) (4)	34,773	35,362

Effective income tax rate	24.6%	25.5%
<b>Credit information</b>		
Gross impaired loans as a % of related loans and acceptances	0.36%	0.43%
PCL on impaired loans as a % of average net loans and acceptances	0.26%	0.29%

- (1) Effective Q4 2017, service fees and other costs incurred in association with certain commissions and fees earned are presented on a gross basis in non-interest expense. Comparative amounts have been reclassified to conform with this presentation.
  - (2) 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.
  - (3) AUA includes \$18.4 billion and \$8.4 billion (2016 - \$18.6 billion and \$9.6 billion) of securitized residential mortgages and credit card loans, respectively.
  - (4) Amounts have been revised from previously reported.
- n.a. not applicable

### Financial performance 2017 vs. 2016

Net income increased \$571 million or 11% from the prior year. 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 \$359 million or 7%, mainly due to volume growth of 6%. Higher fee-based revenue in Canada and lower PCL also contributed to the increase. These factors were partially offset by higher costs, including costs in support of business growth.

Total revenue increased \$851 million or 6% from the prior year. Excluding our share of the gain noted previously, revenue increased \$639 million or 4% mainly due to volume growth of 6%, and higher fee-based revenue in Canada primarily attributable to higher balances driving higher mutual fund distribution fees. Higher card service revenue due to higher purchase volumes also contributed to the increase.

NIM was flat.

PCL decreased \$68 million or 6%, with the PCL ratio improving 3 bps, largely due to lower provisions in our Canadian lending portfolios. For further details, refer to Credit quality performance in the Credit Risk section.

Non-interest expense increased \$243 million or 4%, primarily attributable to higher costs in support of business growth reflecting ongoing investments in technology, including digital initiatives, and higher marketing costs. Higher staff-related costs, including severance, and an impairment related to properties held for sale in the Caribbean also contributed to the increase. These factors were partially offset by the continued benefits from our efficiency management activities.

Average loans and acceptances increased \$19 billion or 5%, largely due to growth in Canadian residential mortgages and business loans.

Average deposits increased \$24 billion or 8%, reflecting growth in business and personal deposits.

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.

In Canada, we operate through three business lines: Personal Financial Services, Business Financial Services, and Cards and Payment Solutions. The following provides a discussion of our consolidated Canadian Banking results.

**Canadian Banking financial highlights**

**Table 21**

(Millions of Canadian dollars, except percentage amounts and as otherwise noted) (1)

	2017	2016
Net interest income	\$ 10,128	\$ 9,683
Non-interest income	4,749	4,326
<b>Total revenue</b>	<b>14,877</b>	14,009
PCL	1,016	1,080
Non-interest expense	6,423	6,186
<b>Net income before income taxes</b>	<b>7,438</b>	6,743
<b>Net income</b>	<b>\$ 5,571</b>	\$ 5,002
<b>Revenue by business</b>		
Personal Financial Services	\$ 8,331	\$ 7,986
Business Financial Services	3,357	3,190
Cards and Payment Solutions	3,189	2,833
<b>Key Ratios</b>		
ROE	32.9%	32.6%
NIM	2.62%	2.63%
Efficiency ratio	43.2%	44.2%
Efficiency ratio adjusted (2)	43.8%	n.a.
Operating leverage	2.4%	1.2%
Operating leverage adjusted (2)	0.9%	n.a.
<b>Selected average balance sheet information</b>		
Total assets	\$ 398,500	\$ 381,000
Total earning assets	386,000	368,100
Loans and acceptances	393,400	374,600
Deposits	326,100	301,400
<b>Other information</b>		
AUA (3)	\$ 256,400	\$ 231,400
Number of employees (FTE) (4)	31,902	32,297

Effective income tax rate	25.1%	25.8%
<b>Credit information</b>		
Gross impaired loans as a % of related loans and acceptances	0.24%	0.27%
PCL on impaired loans as a % of average net loans and acceptances	0.26%	0.29%

- (1) Effective Q4 2017, service fees and other costs incurred in association with certain commissions and fees earned are presented on a gross basis in non-interest expense. Comparative amounts have been reclassified to conform with this presentation.
  - (2) 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.
  - (3) AUA includes \$18.4 billion and \$8.4 billion (2016 - \$18.6 billion and \$9.6 billion) of securitized residential mortgages and credit card loans, respectively.
  - (4) Amounts have been revised from previously reported.
- n.a. not applicable

### Financial performance

#### 2017 vs. 2016

Net income increased \$569 million or 11% compared to last year. 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 \$357 million or 7%, 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, including costs in support of business growth.

Total revenue increased \$868 million or 6% compared to last year. Excluding our share of the gain noted previously, revenue increased \$656 million or 5%, mainly due to volume growth of 6%, partially offset by lower spreads, and higher fee-based revenue primarily attributable to higher balances driving higher mutual fund distribution fees. Increased card service revenue due to higher purchase volumes and higher foreign exchange revenue also contributed to the increase.

Net interest margin decreased 1 bp compared to last year.

PCL decreased \$64 million or 6%, with the PCL ratio improving 3 bps, largely due to lower provisions in our personal lending portfolios. For further details, refer to Credit quality performance in the Credit Risk section.

Non-interest expense increased \$237 million or 4%, primarily attributable to higher costs in support of business growth reflecting ongoing investments in technology, including digital initiatives, and higher marketing costs. Higher staff-related costs, including severance, also contributed to the increase. These factors were partially offset by continued benefits from our efficiency management activities.

Average loans and acceptances increased \$19 billion or 5%, largely due to growth in residential mortgages and business loans.

Average deposits increased \$25 billion or 8%, reflecting growth in business and personal deposits.

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.

## Business line review

### Personal Financial Services

Personal Financial Services offers a full range of products focused on meeting the needs of our individual Canadian clients at every stage of their lives through a wide range of financing and investment products and services, including home equity financing, personal lending, deposit accounts, Canadian private banking, indirect lending (including auto financing), mutual funds distribution and self-directed brokerage accounts, and Guaranteed Investment Certificates (GICs). We rank #1 or #2 in market share for all key personal banking products in Canada and our retail banking network is the largest in Canada with 1,235 branches and 4,290 ATMs.

#### Financial performance

Total revenue increased \$345 million or 4% compared to last year, primarily reflecting volume growth of 5% largely in residential mortgages and deposits, partially offset by lower spreads. Increased fee-based revenue primarily attributable to higher balances driving higher mutual fund distribution fees also contributed to the increase.

Average residential mortgages increased 6% compared to last year mainly due to solid housing market activity. Average deposits increased 5% from last year largely reflecting the acquisition of new clients and deepening of our existing relationships. Strong market appreciation and net sales resulted in continued growth in client mutual fund balances.

#### Selected highlights

Table 22

(Millions of Canadian dollars, except number of)	2017	2016
<b>Total revenue (1)</b>	<b>\$ 8,331</b>	<b>\$ 7,986</b>
<b>Other information (average)</b>		
Residential mortgages	<b>222,500</b>	210,400
Other loans and acceptances	<b>81,400</b>	81,800
Deposits (2)	<b>195,700</b>	185,600
Branch mutual fund balances (3)	<b>148,400</b>	132,100
AUA - Self-directed brokerage (3)	<b>79,600</b>	69,700
<b>Number of:</b>		
New deposit accounts opened (thousands)	<b>1,306</b>	1,346
Branches	<b>1,235</b>	1,268
ATM	<b>4,290</b>	4,555

(1) Effective Q4 2017, service fees and other costs incurred in association with certain commissions and fees earned are presented on a gross basis in non-interest expense. Comparative amounts have been reclassified to conform with this presentation.

(2) Includes GIC balances.

(3) Represents year-end spot balances.

Please see the PDF to view this chart

### **Business Financial Services**

Business Financial Services offers a wide range of lending, leasing, deposit, investment, foreign exchange, cash management, auto dealer financing (floor plan), trade products and services to small and medium-sized commercial businesses, as well as agriculture and agribusiness clients across Canada. Our business banking network has the largest team of relationship managers and specialists in the industry. Our strong commitment to our clients has resulted in our leading market share in business loans and deposits.

**Financial performance**

Total revenue increased \$167 million or 5% compared to last year, largely reflecting volume growth of 11%, partially offset by lower spreads.

Average loans and acceptances increased 9% and average deposits were up 13%, mainly due to our strategy of new client acquisition in select business segments and markets, as well as increased activity from existing clients.

<b>Selected highlights</b>	<b>Table 23</b>	
(Millions of Canadian dollars)	<b>2017</b>	2016
<b>Total revenue</b>	<b>\$ 3,357</b>	\$ 3,190
<b>Other information (average)</b>		
Loans and acceptances	<b>72,500</b>	66,400
Deposits (1)	<b>130,400</b>	115,800

(1) Includes GIC balances.

Please see the PDF to view this chart

**Cards and Payment Solutions**

Cards and Payment Solutions provides a wide array of credit cards with loyalty and reward benefits, and payment products and solutions within Canada. We have over 7 million credit card accounts and have approximately 23% market share of Canada's credit card purchase volume. In addition, this business line includes our 50% interest in Moneris, our payment processing joint venture which sold its U.S. operations to Vantiv, Inc. during the year.

**Financial performance**

Total revenue increased \$356 million or 13% compared to last year. Excluding our share of the gain noted previously, revenue increased \$144 million or 5% mainly driven by higher loan balances and increased purchase volumes.

Average credit card balances increased 6% and net purchase volumes increased 9% reflecting higher client activity, underscored by the strength of our proprietary rewards program and our co-brand relationships.

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.

**Selected highlights****Table 24**

(Millions of Canadian dollars)	2017	2016
<b>Total revenue</b>	<b>\$ 3,189</b>	<b>\$ 2,833</b>
<b>Other information</b>		
Average credit card balances	17,000	16,000
Net purchase volumes	106,600	97,400

Please see the PDF to view this chart

### Caribbean & U.S. Banking

Our Caribbean Banking business offers a comprehensive suite of banking products and services, as well as international financing and trade promotion services through extensive branch, ATM, online and mobile banking networks.

Our U.S. cross-border banking business serves the needs of our Canadian clients within the U.S., and offers a broad range of financial products and services to individual and business clients across all 50 states.

### Financial performance

Total revenue was down \$17 million or 2% from last year, primarily due to lower volumes and the impact of foreign exchange translation.

Average loans and acceptances decreased 2%, and average deposits decreased 2%, mostly due to lower client activity and the impact of foreign exchange translation.

### Selected highlights

Table 25

(Millions of Canadian dollars, number of and percentage amounts)

	2017	2016
<b>Total revenue</b>	<b>\$ 986</b>	<b>\$ 1,003</b>
<b>Other information</b>		
Net interest margin	3.85%	3.78%
Average loans and acceptances	\$ 9,100	\$ 9,300
Average deposits	18,300	18,700
AUA	8,400	8,200
AUM	4,600	4,600
<b>Number of:</b>		
Branches	67	77
ATM	266	276

Please see the PDF to view this chart

## Wealth Management

Wealth Management is a global business serving clients in key financial centres. We serve high net worth (HNW) and ultra-high net worth (UHNW) individual and institutional clients with a comprehensive suite of advice-based solutions and strategies to help them achieve their financial goals.

**\$10.1 billion**

Total revenue

**> 4,800**

Client-facing advisors

**> \$19 billion**

AUA net flows

---

### Asset under Administration

Please see the PDF to view this chart

### Asset under Management

Please see the PDF to view this chart

Our lines of businesses are comprised of Canadian Wealth Management, U.S. Wealth Management (including City National), Global Asset Management (GAM) and International Wealth Management.

- Canadian Wealth Management is the largest full-service wealth advisory business in Canada as measured by AUA
- U.S. Wealth Management (including City National) is among the top 10 full-service brokerage firms in terms of AUA and number of advisors
- GAM is the largest retail fund company in Canada as well as a leading institutional asset manager
- International Wealth Management serves HNW and UHNW clients primarily through key financial centres in Europe and Asia.

---

## 2017 Operating environment

- › In 2017, the Canadian and U.S. economies continued to expand and respective central banks increased core interest rates. The strong economic performance resulted in improved investor confidence and stronger equity markets driving higher assets under management and assets under administration.
- › Net sales and net new assets also benefitted from strong equity markets, offsetting the negative returns of the bond market as interest rates increased and are anticipated to continue rising in 2018.
- › Strong loan growth and increased spreads due to the rising interest rate environment, mainly in the U.S., contributed to net interest income growth.
- › Technology is transforming the way we operate and interact with our clients. Therefore, we continue to invest in digital solutions to anticipate and meet changing client preferences and increase efficiencies.

## Strategic priorities

OUR STRATEGY	PROGRESS IN 2017	PRIORITIES IN 2018
<b>In select global financial centres, become the most trusted regional private bank</b>	Continued to deliver comprehensive value to key HNW and UHNW client segments by providing a more integrated and tailored proposition across multiple solutions, including investments, deposits, credit and trust services	Continue to leverage our global strengths and capabilities to drive growth in HNW and UHNW client segments  Continue to enhance our product offering and distribution capabilities
<b>In Canada, be the premier service provider for HNW and UHNW clients</b>	Maintained our position as industry leader in our full-service private wealth business  Improved client experience and advisor productivity through enhanced digital engagement (e.g., launch of the Advisor's Virtual Assistant application)  Launched the Money in Motion initiative to further solidify our expertise around business owners, succession and wealth planning	Continue to differentiate client experience that is digitally-enabled and supported by data-driven insights  Deepen client relationships jointly with our partners (e.g., Private Banking and Commercial Banking in Personal & Commercial Banking)
<b>In the U.S., become the leading private and commercial bank and wealth manager in our key markets</b>	Invested in capabilities, technology and talent to grow our full-service brokerage business  Expanded City National business model to select high growth markets with strong RBC Wealth Management and Capital Markets presence, including Washington, D.C. and Minneapolis	Continue to strive to deliver an exceptional client experience for targeted HNW, UHNW, middle market and business banking segments  Leverage the combined strengths within U.S. Wealth Management (including City National) and Capital Markets with a view to accelerating growth in the U.S.
<b>In asset management, be a leading, diversified asset manager focused on global institutional and North American retail clients</b>	Maintained #1 market share in Canadian mutual fund assets under management  Continued to drive growth in U.S. and international institutional clients in select investment capabilities	Strengthen our partnerships with Personal & Commercial Banking, other Wealth Management businesses and third-party distributors to defend and grow our distribution reach  Grow our global institutional asset management business, particularly in relevant markets

## Outlook

Our diversified businesses are positioned to benefit from our focus on our clients, continued investments in people and technology, volume growth, and rising interest rates. Despite continued geopolitical and regulatory uncertainty in the major global economies, we expect global private wealth accumulation to continue to drive growth in the HNW and UHNW client segments. We will continue to leverage our brand, reputation and financial strength to increase our market share of the HNW and UHNW client segments globally. In addition, changing demographics and rapid advancements in digitization are expected to drive change in client preferences, needs and service models, requiring a continued focus on delivering a digitally-integrated, multi-channel experience for our clients and client-facing professionals.

For further details on our general economic review and outlook, refer to the Economic, market and regulatory review and outlook section.

(Millions of Canadian dollars, except number of and percentage amounts and as otherwise noted) (1)	2017	2016
Net interest income	\$ 2,248	\$ 1,955
Non-interest income		
Fee-based revenue	5,799	5,323
Transaction and other revenue	2,028	1,725
<b>Total revenue</b>	<b>10,075</b>	<b>9,003</b>
PCL	34	48
Non-interest expense	7,611	7,015
<b>Income before income taxes</b>	<b>2,430</b>	<b>1,940</b>
<b>Net income</b>	<b>\$ 1,838</b>	<b>\$ 1,473</b>
<b>Revenue by business</b>		
Canadian Wealth Management	\$ 2,815	\$ 2,506
U.S. Wealth Management (including City National)	4,891	4,173
U.S. Wealth Management (including City National) (US\$ millions)	3,744	3,155
Global Asset Management	1,994	1,894
International Wealth Management	375	430
<b>Key Ratios</b>		
ROE	13.2%	10.9%
NIM	3.02%	2.84%
Pre-tax margin (2)	24.1%	21.5%
<b>Selected average balance sheet information</b>		
Total assets	\$ 88,100	\$ 83,200
Loans and acceptances	51,500	49,200
Deposits	93,100	85,400
Attributed capital	13,450	12,950
<b>Other information</b>		
Revenue per advisor (000s) (3)	\$ 1,353	\$ 1,184
AUA (4), (5)	929,200	875,300
AUM (4)	634,100	580,700
Average AUA	898,500	845,800
Average AUM	600,400	560,800
Number of employees (FTE)	16,962	16,385

Number of advisors (6)

4,884

4,780

**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)

	2017 vs. 2016
<i>Increase (decrease):</i>	
Total revenue (1)	\$ (124)
PCL	1
Non-interest expense (1)	(102)
Net income	(17)
Percentage change in average US\$ equivalent of C\$1.00	1%
Percentage change in average British pound equivalent of C\$1.00	10%
Percentage change in average Euro equivalent of C\$1.00	-%

(1) Effective Q4 2017, service fees and other costs incurred in association with certain commissions and fees earned are presented on a gross basis in non-interest expense. Comparative amounts have been reclassified to conform with this presentation.

(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 year-end spot balances.

(5) In addition to Canadian Wealth Management, U.S. Wealth Managements (including City National), and International Wealth Management, amounts also include AUA of \$6,600 million (2016: \$6,200 million) related to Global Asset Management (GAM).

(6) Represents client-facing advisors across all our wealth management businesses.

**Client assets - AUA**

**Table 27**

(Millions of Canadian dollars)	2017	2016
AUA, beginning balance	\$ 875,300	\$ 823,700
Asset inflows	274,300	251,000
Asset outflows	(254,800)	(257,500)
<b>Total net flows</b>	<b>19,500</b>	<b>(6,500)</b>
Market impact	82,700	31,100
Acquisitions/dispositions	(28,200)	17,800
Foreign exchange	(20,100)	9,200
<b>Total market, acquisition/dispositions and foreign exchange impact</b>	<b>34,400</b>	<b>58,100</b>
<b>AUA, balance at end of year</b>	<b>\$ 929,200</b>	<b>\$ 875,300</b>

**Client assets - AUM**

**Table 28**

(Millions of Canadian dollars)	2017					2016
	Money market	Fixed income	Equity	Multi-asset and other	Total	Total
AUM, beginning balance	\$ 48,000	\$ 196,800	\$ 100,800	\$ 235,100	\$ 580,700	\$ 492,800
Institutional inflows	27,200	31,100	6,600	4,000	68,900	54,700
Institutional outflows	(37,800)	(32,400)	(4,800)	(2,300)	(77,300)	(71,600)
Personal flows, net	700	2,100	10,300	18,300	31,400	21,500
<b>Total net flows</b>	<b>(9,900)</b>	<b>800</b>	<b>12,100</b>	<b>20,000</b>	<b>23,000</b>	<b>4,600</b>
Market impact	-	3,500	18,200	20,400	42,100	21,600
Acquisition/dispositions	-	-	-	(4,000)	(4,000)	58,100
Foreign exchange	(1,100)	(2,200)	(2,400)	(2,000)	(7,700)	3,600
<b>Total market, acquisition/dispositions and foreign exchange impact</b>	<b>(1,100)</b>	<b>1,300</b>	<b>15,800</b>	<b>14,400</b>	<b>30,400</b>	<b>83,300</b>

<b>AUM, balance at end of year</b>	<b>\$</b>	<b>37,000</b>	<b>\$</b>	<b>198,900</b>	<b>\$</b>	<b>128,700</b>	<b>\$</b>	<b>269,500</b>	<b>\$</b>	<b>634,100</b>	<b>\$</b>	<b>580,700</b>
------------------------------------	-----------	---------------	-----------	----------------	-----------	----------------	-----------	----------------	-----------	----------------	-----------	----------------

**AUA by geographic mix and asset class**

**Table 29**

(Millions of Canadian dollars)	2017	2016
<b>Canada (1)</b>		
Money market	\$ 21,600	\$ 21,600
Fixed income	35,700	36,300
Equity	94,300	89,100
Multi-asset and other	208,700	180,700
<b>Total Canada</b>	<b>\$360,300</b>	<b>\$ 327,700</b>
<b>U.S. (1)</b>		
Money market	\$ 35,100	\$ 36,100
Fixed income	124,500	126,800
Equity	238,100	200,800
Multi-asset and other	45,000	30,500
<b>Total U.S.</b>	<b>\$442,700</b>	<b>\$ 394,200</b>
<b>Other International (1)</b>		
Money market	\$ 17,000	\$ 23,300
Fixed income	11,400	21,400
Equity (2)	50,100	69,500
Multi-asset and other (2)	47,700	39,200
<b>Total International</b>	<b>\$126,200</b>	<b>\$ 153,400</b>
<b>Total AUA</b>	<b>\$929,200</b>	<b>\$ 875,300</b>

(1) Geographic information is based on the location from where our clients are served.

(2) Amounts have been revised from those previously presented.

**Financial performance  
2017 vs. 2016**

Net income increased \$365 million or 25% from a year ago, mainly due to growth in average fee-based client assets and higher net interest income and transaction revenue. These factors were partially offset by higher variable compensation on improved results and increased costs in support of business growth.

Total revenue increased \$1,072 million or 12%, reflecting growth in average fee-based client assets which benefitted from capital appreciation and net sales, higher net interest income, mainly in the U.S. resulting from the impact of higher interest rates and volume growth, and higher transaction revenue.

PCL decreased \$14 million largely reflecting a recovery in one account in International Wealth Management.

Non-interest expense increased \$596 million or 8%, largely due to higher variable compensation on improved results and higher costs in support of business growth, mainly reflecting higher staff-related costs in the U.S. and ongoing investments in technology, including digital initiatives.

Assets under administration increased \$54 billion or 6%, largely due to capital appreciation and net sales, partially offset by the impacts from the exit of certain international businesses and foreign exchange translation.

Assets under management increased \$53 billion or 9%, primarily reflecting capital appreciation and net sales, partially offset by the impact from foreign exchange translation.

## Business line review

### Canadian Wealth Management

Canadian Wealth Management includes our full service Canadian wealth advisory business, which is the largest in Canada as measured by AUA, with over 1,700 investment advisors providing comprehensive advice-based financial solutions to HNW and UHNW clients. Additionally, we provide discretionary investment management and estate and trust services to our clients through approximately 78 investment counsellors and 103 trust professionals across Canada.

We compete with domestic banks and trust companies, investment counselling firms, bank-owned full service brokerages and boutique brokerages, mutual fund companies and global private banks. In Canada, bank-owned wealth managers continue to be the major players.

### Financial performance

Revenue increased \$309 million or 12% from a year ago, primarily due to higher average fee-based client assets reflecting capital appreciation and net sales.

### Selected highlights

Table 30

(Millions of Canadian dollars)	2017	2016
<b>Total revenue (1)</b>	<b>\$ 2,815</b>	<b>\$ 2,506</b>
<b>Other information</b>		
Average loans and acceptances	<b>3,300</b>	3,200
Average deposits	<b>17,400</b>	16,300
AUA	<b>359,600</b>	326,600
AUM	<b>90,400</b>	76,000
Average AUA	<b>344,900</b>	309,100
Average AUM	<b>83,700</b>	69,400

(1) Effective Q4 2017, service fees and other costs incurred in association with certain commissions and fees earned are presented on a gross basis in non-interest expense. Comparative amounts have been reclassified to conform with this presentation.

Please see the PDF to view this chart

#### **U.S. Wealth Management (including City National)**

U.S. Wealth Management (including City National) includes our private client group and City National. Our private client group is the 7th largest full-service wealth advisory firm in the U.S., as measured by number of advisors, with over 1,800 financial advisors. Additionally, our correspondent and advisor services businesses deliver clearing and execution services for small to mid-sized independent broker-dealers and registered investment advisor firms. City National provides comprehensive financial solutions to affluent individuals, entrepreneurs, professionals, their businesses and their families and provides a premier banking and financial experience through a high-touch service model, proactive advice and financial solutions. City National offers a broad range of lending, deposit, cash management, international banking, equipment financing, and other products and services. In the U.S., we operate in a fragmented and highly competitive industry and our competition includes other broker-dealers, commercial banks and other financial institutions that service HNW individuals, entrepreneurs and their businesses.

#### **Financial performance**

Revenue increased \$718 million or 17% from a year ago, mainly due to increased net interest income from higher U.S. interest rates and volume growth of 13% in loans and deposits, higher average fee-based client assets reflecting capital appreciation and net sales, and higher transaction revenue.

**Selected highlights****Table 31**

(Millions of Canadian dollars, except as otherwise noted)	2017	2016
<b>Total revenue (1)</b>	<b>\$ 4,891</b>	<b>\$ 4,173</b>
<b>Other information (Millions of U.S. dollars)</b>		
Total revenue (1)	3,744	3,155
Average loans, guarantees and letters of credit	33,500	29,900
Average deposits	47,500	41,200
AUA	343,200	293,900
AUM	92,200	76,700
Average AUA	319,100	289,200
Average AUM	83,500	74,200

(1) Effective Q4 2017, service fees and other costs incurred in association with certain commissions and fees earned are presented on a gross basis in non-interest expense. Comparative amounts have been reclassified to conform with this presentation.

Please see the PDF to view this chart

**Global Asset Management**

Global Asset Management provides global investment management services and solutions for individual and institutional investors in Canada, the U.S., the U.K., Europe and Asia. We provide a broad range of investment management services through mutual, pooled and private funds, fee-based accounts and separately managed portfolios. We distribute our investment solutions through a broad network of bank branches, our self-directed and full-service wealth advisory businesses, independent third-party advisors and private banks, and directly to individual clients. We also provide investment solutions directly to institutional clients, including pension plans, insurance companies, corporations, and endowments and foundations.

We are the largest retail fund company in Canada as well as a leading institutional asset manager. We face competition in Canada from banks, insurance companies, and asset management organizations. The Canadian fund management industry is large and mature, but remains a relatively fragmented industry.

In the U.S., our asset management business offers investment management solutions and services primarily to institutional investors and competes with independent asset management firms, as well as those that are part of national and international banks, and insurance companies.

Internationally, through our global capabilities of BlueBay and RBC Global Asset Management®, we offer investment management solutions for institutions and, through private banks including RBC Wealth Management®, to HNW and UHNW investors. We face competition from asset managers that are part of international banks as well as national and regional asset managers in the geographies where we serve clients.

**Financial performance**

Revenue increased \$100 million or 5% from a year ago, reflecting higher average fee-based client assets due to capital appreciation and net sales.

**Selected highlights****Table 32**

(Millions of Canadian dollars)	2017	2016
<b>Total revenue (1)</b>	<b>\$ 1,994</b>	<b>\$ 1,894</b>
<b>Other information</b>		
Canadian net long-term mutual fund sales (2)	<b>10,689</b>	7,868
Canadian net money market mutual fund sales (redemptions) (2)	<b>240</b>	(439)
AUM	<b>415,200</b>	392,600
Average AUM	<b>398,300</b>	383,400

(1) Effective Q4 2017, service fees and other costs incurred in association with certain commissions and fees earned are presented on a gross basis in non-interest expense. Comparative amounts have been reclassified to conform with this presentation.

(2) As reported to the Investment Funds Institute of Canada. Includes all prospectus-based mutual funds across our Canadian Global Asset Management businesses.

Please see the PDF to view this chart

### International Wealth Management

International Wealth Management includes operations in Europe and Asia. We provide customized and integrated trust, banking, credit and investment solutions to HNW and UHNW clients and corporate clients in key financial centres in Europe and Asia. Competitors to our International Wealth Management business comprise global wealth managers, traditional offshore private banks, domestic wealth managers and U.S. investment-led private client operations.

#### Financial performance

Revenue decreased \$55 million or 13% from a year ago, mainly reflecting the impact of foreign exchange translation, the exit of certain international businesses, and lower transaction revenue.

#### Selected highlights

Table 33

(Millions of Canadian dollars)	2017	2016
<b>Total revenue</b>	<b>\$ 375</b>	<b>\$ 430</b>
<b>Other information</b>		
Average loans, guarantees and letters of credit	5,300	7,200
Average deposits	13,700	14,600
AUA (1)	120,300	148,300
AUM	9,400	9,100
Average AUA (1)	130,500	147,700
Average AUM	9,300	9,700

(1) Amounts have been revised from those previously presented.

Please see the PDF to view this chart

## Insurance

RBC Insurance® offers a wide range of life, health, home, auto, travel, wealth and reinsurance advice and solutions, as well as creditor and business insurance services to individual, business and group clients.

**\$4.6 billion**

Total revenue

**> 4 million**

Number of clients

**2,691**

Employees

---

### Premiums and Deposits

Please see the PDF to view  
this chart

Insurance has operations in Canada and globally, operating under two business lines: Canadian Insurance and International Insurance.

In Canada, we offer our products and services through our proprietary distribution channels, comprised of the field sales force, which includes retail insurance stores, our field sales representatives, advice centres and online, as well as through independent insurance advisors and affinity relationships.

Outside Canada, we operate in reinsurance markets globally offering life, accident and annuity reinsurance products. The competitive environment for each business is discussed below.

---

## 2017 Operating environment

- › The insurance industry continues to face a number of challenges and opportunities, including regulatory changes, changing customer preferences and expectations, and increasing technological, digital and mobile transformation in every aspect of the business. Insurers are also refining product and distribution capacities in order to enhance operational efficiencies and manage expenses. To overcome these challenges and take advantage of these opportunities, we have and continue to invest in digitization to enhance access and convenience, reduce costs, and deliver value to clients beyond traditional insurance products.
- › Our International Insurance business continues to be impacted by market conditions in a post-Brexit environment and industry adjustments on new mortality data.
- › Businesses have been revisiting their pension de-risking strategies and have looked to insurance companies to transfer their longevity risk.

## Strategic priorities

OUR STRATEGY

PROGRESS IN 2017

PRIORITIES IN 2018

<b>Improve distribution efficiency</b>	We experienced solid sales growth in our Canadian Insurance business, maintaining our #1 ranking in individual disability sales and outpacing industry growth in our individual term life insurance product	Continue to improve our distribution efficiency by expanding our proprietary distribution channels and focusing on the delivery of technology and operational solutions
	Our Pension De-risking business achieved record growth and is among the leaders in Canada	
	Our RBC Guaranteed Investment Fund recently reached \$1 billion in AUM and we continue to be one of the fastest growing segregated fund providers in Canada	
<b>Deepen client relationships</b>	July 1, 2017 marked the one year anniversary of our Aviva relationship. With this relationship, our advisors have benefitted from access to a new set of solutions for automobiles and expanded home coverage as well as access to new technology and tools to offer insurance solutions to our clients	Deepen client relationships by continuing to be an innovative, client-focused provider of a full suite of insurance products
<b>Simplify.Agile.Innovate</b>	We continued our focus on investments to enhance our client experience and our cost effectiveness through ongoing transformation of our legacy business and improving our digital capabilities	Simplify and innovate by accelerating our digital initiatives' time-to-market, improving quality and cost effectiveness
	We launched two apps: RBC Insurance My Benefits, which gives our clients fast and easy access to their group benefits plan; and PATH, a travel mobile app that provides clients with access to emergency medical assistance and up-to-date travel information	
<b>Pursue select international opportunities to grow our reinsurance business</b>	There has been a general slowdown in UK longevity transactions as the market adjusted its pricing to reflect emerging mortality trends in the UK. As such, growth in the UK annuity market slowed in 2017	Pursue select international opportunities, within our risk appetite, with the aim of continuing to grow our core reinsurance business

## Outlook

The insurance industry is expected to continue experiencing tremendous change and disruption in the coming year. Traditional market incumbents will see their market share erode if they do not adapt to forces of change that include: evolving customer preferences and expectations, changing demographics and customer profiles, technological transformation in every area of the business, new distribution models, and the emergence of non-traditional competitors. We believe that execution of our business strategy will allow us to continue to thrive in this changing environment.

There was a general slowdown in U.K. longevity transactions during 2017 as the market adjusted its pricing to reflect emerging mortality trends. We believe that the U.K. pension risk transfer (annuity) business offers opportunities for growth in 2018 as the market rebounds. We will continue to build on our capabilities, expand our portfolio of solutions in the annuity business and diversify our sources of longevity risk.

For further details on our general economic review and outlook, refer to the Economic, market and regulatory review and outlook section.

(Millions of Canadian dollars, except percentage amounts and as otherwise noted)	2017	2016
<b>Non-interest income</b>		
Net earned premiums	\$ 3,875	\$ 3,175
Investment income (1)	453	1,422
Fee income	238	554
<b>Total revenue</b>	<b>4,566</b>	<b>5,151</b>
Insurance policyholder benefits and claims (1)	2,787	3,208
Insurance policyholder acquisition expense	266	216
Non-interest expense (2)	584	623
<b>Income before income taxes</b>	<b>929</b>	<b>1,104</b>
<b>Net income</b>	<b>\$ 726</b>	<b>\$ 900</b>
<b>Revenue by business</b>		
Canadian Insurance	\$ 2,569	\$ 3,373
International Insurance	1,997	1,778
<b>Key ratios</b>		
ROE	41.8%	52.8%
<b>Selected balances and other information</b>		
Total assets	\$ 14,300	\$ 14,400
Attributed capital	1,700	1,700
<b>Other information</b>		
Premiums and deposits (3)	\$ 4,546	\$ 4,594
Canadian Insurance	2,496	2,424
International Insurance	2,050	2,170
Insurance claims and policy benefit liabilities	9,676	9,164
Fair value changes on investments backing policyholder liabilities (1)	(58)	633
Embedded value (4)	7,320	6,886
Number of employees (FTE)	2,691	2,657

(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) Amount includes PCL of \$nil (2016 - \$1 million).

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

(4) Embedded value is defined as the sum of value of equity held in our Insurance segment and the value of in-force business (existing policies). For further details, refer to the Key performance and non-GAAP measures section.

## Financial performance

### 2017 vs. 2016

Net income decreased \$174 million or 19% from a year ago, primarily due to the gain on sale of our home and auto insurance manufacturing business, which was sold on July 1, 2016. Excluding the after-tax gain of \$235 million on the sale of RBC General Insurance Company to Aviva Canada Inc., net income increased \$61 million or 9%, mainly due to higher favourable annual actuarial assumption updates, and business growth mainly in Canadian Insurance. These factors were partially offset by lower earnings from new U.K. annuity contracts and reduced earnings associated with the sale of our home and auto insurance manufacturing business, as noted previously.

Total revenue decreased \$585 million or 11%, mainly due to a change of \$691 million related to the fair value of investments backing our policyholder liabilities resulting from changes in long-term interest rates, 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 noted previously. These factors were partially offset by higher revenues from group annuity sales in Canadian Insurance and the impact of restructured international life contracts, both of which are largely offset in PBCAE.

PBCAE decreased \$371 million or 11%, mainly due to a change in the fair value of investments backing our policyholder liabilities, largely offset in revenue. Lower claims reflecting the impact from the sale of our home and auto insurance manufacturing business in the prior year and higher favourable annual actuarial assumption updates largely reflecting changes in credit and discount rates and favourable mortality experience, mainly in the U.K., also contributed to the decrease. These factors were partially offset by the impact from group annuity sales and restructured international life contracts, both of which are largely offset in revenue.

Non-interest expense decreased \$39 million or 6%, largely reflecting the impact of the sale of our home and auto insurance manufacturing business in the prior year.

Premiums and deposits were down \$48 million or 1%, reflecting the impact of the sale of our home and auto insurance manufacturing business in the prior year, the impact of foreign exchange translation, and lower premiums from new U.K. annuity contracts, largely offset by business growth, including group annuity sales.

Embedded value increased \$434 million, reflecting the impact of favourable actuarial assumption updates, improved experience and product updates.

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.

## Business line review

### Canadian Insurance

We offer life, health, property and casualty insurance products, as well as wealth accumulation solutions, to individual and group clients across Canada. Our life and health portfolio includes universal life, term life, critical illness, disability, long-term care insurance and group benefits. We offer a wide range of property and casualty products including home, auto and travel insurance. Our travel products include out-of-province/country medical coverage, and trip cancellation and interruption insurance.

In Canada, the majority of our competitors specialize in life and health or property and casualty products. We hold a leading market position in disability insurance products, have a significant presence in life and travel products, and have a growing presence in wealth solutions as well as in home and auto through our distribution agreement with Aviva.

### Financial performance

Total revenue decreased \$804 million or 24% from last year, mainly due to a change in the fair value of investments backing our policyholder liabilities resulting from changes in long-term interest rates, largely offset in PBCAE. The prior year also included the associated premiums and the gain on sale relating to our home and auto insurance manufacturing business, as noted previously. These factors were partially offset by business growth, primarily reflecting higher revenue from group annuity sales, largely offset in PBCAE.

Premiums and deposits increased \$72 million or 3%, as sales growth, primarily related to our group annuity business, more than offset the impact of the sale of our home and auto insurance manufacturing business in the prior year.

Selected highlights

Table 35

Please see the PDF to view this chart

(Millions of Canadian dollars)	2017	2016
<b>Total revenue</b>	<b>\$2,569</b>	\$ 3,373
<b>Other information</b>		
Premiums and deposits		
Life and health	<b>2,016</b>	1,438
Property and casualty	<b>119</b>	674
Annuity and segregated fund deposits	<b>361</b>	312
Fair value changes on investments backing policyholder liabilities	<b>(63)</b>	575

### International Insurance

International Insurance is primarily comprised of our reinsurance businesses which insure risks of other insurance and reinsurance companies. We offer life and health, accident and annuity reinsurance products. The global reinsurance market is dominated by a few large players, with significant presence in the U.S., the U.K. and Europe. The reinsurance industry is competitive but barriers to entry remain high.

### Financial performance

Total revenue increased \$219 million or 12%, mainly due to the impact of restructured international life contracts, partially offset by a change in the fair value of investments backing our policyholder liabilities resulting from changes in long-term interest rates, both of which are largely offset in PBCAE.

Premiums and deposits decreased \$120 million or 6%, due to the impact of foreign exchange translation and lower premiums from new U.K. annuity contracts, partially offset by volume growth in international life.

### Selected highlights

Table 36

(Millions of Canadian dollars)	2017	2016
<b>Total revenue</b>	<b>\$1,997</b>	\$ 1,778
<b>Other information</b>		
Premiums and deposits		
Life and health	<b>1,276</b>	1,335
Property and casualty	<b>(1)</b>	-
Annuity	<b>775</b>	835
Fair value changes on investments backing policyholder liabilities	<b>5</b>	58

## Investor & Treasury Services

RBC Investor & Treasury Services is a specialist provider of asset services, custody, payments and treasury services for financial and other institutional investors worldwide.

**\$4.3 trillion**

Assets under administration

**23%**

Return on equity

**4,771**

Employees

---

### Revenue by Geography

Please see the PDF to view  
this chart

We deliver custodial, advisory, financing and other services to safeguard client assets, maximize liquidity, and manage risk across multiple jurisdictions. We rank among the world's leading global custodians with a network of offices across North America, Europe, U.K., and the Asia-Pacific region. Our team of approximately 5,000 employees serves almost 10 million investors and administers over 6,700 funds.

We have one of the widest transfer agency networks in the market, we are a top-ranked international securities lending service, and we provide short-term funding and liquidity management for RBC. Our transaction banking business is a leading provider of Canadian dollar cash management, correspondent banking, and trade finance for financial institutions globally.

---

### 2017 Operating environment

- › The highly competitive environment in the global asset services industry continued to pressure margins.
- › Continued increases in financial services regulations have driven up compliance and technology costs; however, tightening credit spreads, increased FX volumes and interest rate volatility benefitted our funding and liquidity business.

### Strategic priorities

OUR STRATEGY	PROGRESS IN 2017	PRIORITIES IN 2018
<b>In Canada, maintain position as the #1 provider of domestic custody, asset services and cash management</b>	Custody revenue relatively flat compared to prior year due to fee pressure and competitive environment	Continue to win new business and deepen relationships with existing clients and onboarding clients without delay
<b>Compete as a leading provider of asset services in the major offshore fund domicile markets of Luxembourg and Ireland</b>	Increased revenue, AUA and profit while continuing to invest in technology to better serve our clients and reduce costs	Capitalize on trading opportunities through strategic positioning of our portfolio and drive client deposit growth

<b>Continue to deliver a high-level of investment in client-centered technology solutions</b>	Continued investment in client-focused technology solutions to develop client-centered digital applications and launched robotics processing automation (RPA) labs in Canada, Luxembourg and Malaysia	Continue to execute on Advanced Client Experience (ACE) program, our multi-year strategic technology program, and our RPA initiatives
<b>Enhance our client centric service offering and improve efficiency</b>	Continued to invest in technology solutions via ACE and RPA while improving efficiency ratio compared to prior year	Prudently manage expenses and execute cost management initiatives

## Outlook

In 2018, our aim is to continue to be the leading provider of asset services and cash management in Canada and a leading provider of fund services to asset managers in the key offshore markets of Luxembourg and Ireland. Our focus is to drive top-line growth by continuing to leverage our leadership position in Canada and recognized capabilities in offshore fund services markets to win new business and deepen existing client relationships. We will continue to execute on our strategic and transformational technology initiatives to enhance the client experience. While we expect the global asset services industry to remain challenging in the near-term, we are well-positioned to compete and grow in the continuously changing operating environment.

For further details on our general economic review and outlook, refer to the Economic, market and regulatory review and outlook section.

**Investor & Treasury Services**
**Table 37**

(Millions of Canadian dollars, except percentage amounts and as otherwise noted)	2017	2016
Net interest income	\$ 679	\$ 825
Non-interest income	1,756	1,446
<b>Total revenue</b>	<b>2,435</b>	<b>2,271</b>
Non-interest expense	1,466	1,457
<b>Net income before income taxes</b>	<b>969</b>	<b>814</b>
<b>Net income</b>	<b>\$ 741</b>	<b>\$ 613</b>
<b>Key Ratios</b>		
ROE	22.7%	17.9%
<b>Selected average balance sheet information</b>		
Total assets	\$ 138,100	\$ 142,500
Deposits	132,800	134,300
Client deposits	54,400	52,800
Wholesale funding deposits	78,400	81,500
Attributed capital	3,200	3,350
<b>Other Information</b>		
AUA (1)	4,266,600	3,929,400
Average AUA	4,044,800	3,770,200
Number of employees (FTE)	4,771	4,776

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

(Millions of Canadian dollars, except percentage amounts)	2017 vs. 2016
<i>Increase (decrease):</i>	
Total revenue	\$ (43)
Non-interest expense	(24)
Net income	(15)
Percentage change in average US\$ equivalent of C\$1.00	1%
Percentage change in average British pound equivalent of C\$1.00	10%

Percentage change in average Euro equivalent of C\$1.00

-%

---

(1) Represents period-end spot balances.

**Financial performance**

**2017 vs. 2016**

Net income increased \$128 million or 21%, primarily due to higher results across all major businesses driven by funding and liquidity earnings and increased results from our asset services business. These factors were partially offset by higher investment in technology initiatives.

Total revenue increased \$164 million or 7%, mainly due to higher funding and liquidity revenue reflecting tightening credit spreads, and increased revenue from our asset services business driven by higher client activity and growth in client deposits. These factors were partially offset by the impact of foreign exchange translation.

Non-interest expense increased \$9 million reflecting higher investment in technology initiatives, largely offset by the impact of foreign exchange translation.

## Capital Markets

RBC Capital Markets® is a premier global investment bank providing expertise in banking, finance and capital markets to corporations, institutional investors, asset managers, governments and central banks around the world. Over 2,800 professionals serve clients from 70 offices in 15 countries across North America, the U.K., Europe and Asia & other international regions.

**> 14,000**

Number of clients

**#9**

Global league rankings<sup>(1)</sup>

**3,970**

Employees

---

### Revenue by Geography

Please see the PDF to view this chart

We operate two main business lines, Corporate and Investment Banking and Global Markets. Our legacy portfolio is grouped under Other.

In North America, we offer a full suite of products and services which include corporate and investment banking, equity and debt origination and distribution, and structuring and trading. In Canada, we compete mainly with Canadian banks where we are a premier global investment bank and market leader with a strategic presence in all lines of capital markets businesses. In the U.S., we have full industry sector coverage and investment banking product range and compete with large U.S. and global investment banks as well as smaller regional firms.

Outside North America, we have a select presence in the U.K. and Europe, and Asia & other international markets, where we offer a diversified set of capabilities in our key sectors of expertise such as energy, mining and infrastructure and we have a growing presence in industrial, consumer, healthcare and technology in Europe. In the U.K. and Europe, we have continued to make experienced hires, and compete in our key sectors of expertise with global and regional investment banks. In our Asia & other international markets, we compete with global and regional investment banks in select products, consisting of fixed income distribution and currencies trading and corporate and investment banking in Australia, Asia and the Caribbean.

## 2017 Operating environment

- › Financial markets started fiscal 2017 very strong with elevated client trading activity following the U.S. election as well as strong investment banking activity, particularly in North America, amidst improving credit and energy markets.
- › Global investment banking fee pool increased by 7%<sup>(1)</sup> in the fiscal year from the same period a year ago.
- › The second half of the year was characterized by lower volatility across a range of asset classes and correspondingly lower levels of client activity, market uncertainty (namely around fiscal policy and proposed tax and regulatory reform in the U.S.), as well as a continued rise in geopolitical tensions. Despite these challenges, our business lines have continued to perform well. Our Fixed Income, Currencies and Commodities business performed particularly well despite these headwinds, with our credit trading performance across numerous products in the U.S. driving higher results.

› Improved credit and energy markets led to lower PCL.

<sup>(1)</sup> Source: Dealogic, based on global investment bank fees, fiscal 2017

Strategic priorities

## OUR STRATEGY

### Maintain our leadership position in Canada

## PROGRESS IN 2017

We deepened our existing client relationships and gained new clients by leveraging our strong global capabilities and improving collaboration with enterprise partners to drive operational efficiencies

We continued to win significant mandates including acting as financial advisor to Cenovus Energy Inc. on its \$17.7 billion acquisition of assets from ConocoPhillips Co. and leading the deal financing, the largest ever oil & gas asset transaction in North America

We also acted as financial advisor to D+H Corporation on its sale to Vista Equity Partners for \$4.8 billion

### Expand and strengthen client relationships in the U.S.

We deepened key client relationships from our corporate and investment banking businesses to generate additional revenue

We continued to win significant mandates including acting as financial advisor to CSC on its US\$8.5 billion merger with the Enterprise Services Segment of Hewlett Packard Enterprise

In our largest left lead high yield transaction in technology, we acted as financial advisor to Novitex, lead left arranger and joint bookrunner on US\$1.45 billion of senior secured credit facilities and joint lead bookrunner on US\$275 million of PIPE (Private Investment in Public Equity) Investment in the US\$2.6 billion combination

## PRIORITIES IN 2018

We will continue to focus on long-term client relationships, leveraging our global capabilities and continuing to improve collaboration with Wealth Management

We will continue to deepen client relationships in the U.S. by building on our momentum through expanded origination, advisory and distribution activity, and driving cross-selling through our diversified loan book

We expect the U.S. to continue to be the world's most attractive market and it will remain Capital Markets' priority growth market

**Build on core strengths and capabilities in U.K./Europe and optimize performance in Asia & other international regions**

In the U.K. and Europe, we maintained momentum throughout the year and improved profitability through repositioning our fixed income business, as well as growing our corporate and investment banking presence in key markets

We acted as joint financial advisor to Quad Gas Group on its acquisition of a 61% stake in the UK gas distribution business of National Grid plc for an enterprise value of £13.8 billion

In Asia and other international regions, we continued to focus on our corporate and investment banking, fixed income trading distribution and foreign exchange trading capabilities

In Europe, we will continue to grow and deepen client relationships in Corporate and Investment Banking and Global Markets

In Asia, we will aim to optimize the performance of our existing footprint

---

**Optimize capital use to earn high risk-adjusted returns on assets and equity**

We continued to focus on the efficient deployment of our capital and growth throughout our businesses by reducing unproductive assets and re-allocating capital to businesses that provide higher returns and increased profitability

Optimize capital use to earn high risk-adjusted returns by maintaining both a balanced approach between investment banking and trading revenue and a disciplined approach to managing the risks and costs of our business

---

## Outlook

Despite geopolitical tensions, market uncertainty surrounding U.S. fiscal policy and tax reform and a historically low volatility environment persisting into fiscal 2018, we remain confident in our franchises' ability to continue to produce strong revenue and earnings growth driven by our diversified geographic and product mix. We remain focused on carrying forward the momentum in our Investment Banking business, with a potential improvement in the underwriting environment particularly for equity origination. Corporate lending continues to be challenged by a lower spread environment. We expect to continue to grow the loan book at a modest pace and with an increased focus on alignment with fee-based business. We remain cautious in our outlook for trading businesses amidst a general market slowdown and uncertainty from lack of volatility. Regulatory headwinds are expected to continue to impact earnings growth in 2018, particularly in our trading businesses, although we will remain diligent in monitoring and managing the impacts of ongoing global trends as a key strategic priority. Capital Markets will strive to maintain its focus on full-service activities in Canada, the U.S. and Europe in 2018, while navigating through significant changes in the regulatory environment.

For further details on our general economic review and outlook, refer to the Economic, market and regulatory review and outlook section.

**Capital Markets financial highlights**
**Table 38**

(Millions of Canadian dollars, except percentage amounts and as otherwise noted)	2017	2016
Net interest income (1)	\$ 3,565	\$ 3,804
Non-interest income (1)	4,617	4,146
<b>Total revenue (1)</b>	<b>8,182</b>	7,950
PCL	62	327
Non-interest expense	4,719	4,466
<b>Net income before income taxes</b>	<b>3,401</b>	3,157
<b>Net income</b>	<b>\$ 2,525</b>	\$ 2,270
<b>Revenue by business</b>		
Corporate and Investment Banking	\$ 4,000	\$ 3,694
Global Markets	4,466	4,361
Other	(284)	(105)
<b>Key ratios</b>		
ROE	12.9%	12.2%
<b>Selected average balance sheet information</b>		
Total assets	\$ 494,400	\$ 508,200
Trading securities	91,800	104,900
Loans and acceptances	83,400	88,100
Deposits	60,200	61,500
Attributed capital	18,850	17,900
<b>Other information</b>		
Number of employees (FTE)	3,970	3,883
<b>Credit information</b>		
Gross impaired loans as a % of related loans and acceptances	0.63%	1.73%
PCL on impaired loans as a % of average net loans and acceptances	0.07%	0.37%

**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)	2017 vs. 2016
<i>Increase (decrease):</i>	
Total revenue	\$ (179)
Non-interest expense	(111)
Net income	(51)
Percentage change in average US\$ equivalent of C\$1.00	1%
Percentage change in average British pound equivalent of C\$1.00	10%
Percentage change in average Euro equivalent of C\$1.00	-%

(1) The taxable equivalent basis (teb) adjustment for 2017 was \$548 million (2016 - \$736 million). For further discussion, refer to the How we measure and report our business segments section.

Please see the PDF to view this chart

### Financial performance 2017 vs. 2016

Net income increased \$255 million or 11%, driven by higher results in Corporate and Investment Banking and Global Markets reflecting increased fee-based revenue, lower PCL and a lower effective tax rate due to changes in earnings mix. These factors were partially offset by higher staff-related costs and the impact of foreign exchange translation.

Total revenue increased \$232 million or 3%, largely reflecting increased loan syndication and debt origination activity mainly in the U.S. and Canada. Higher M&A activity primarily in the U.S. and Europe, higher equity trading revenue in Europe and Asia & other international, and higher investment gains also contributed to the increase. These factors were partially offset by higher residual funding costs and the impact of foreign exchange translation.

PCL decreased \$265 million or 81%, due to lower provisions including higher recoveries primarily in the oil & gas sector, partially offset by higher provisions in the real estate & related sector. For further details, refer to the Credit quality performance section.

Non-interest expense increased \$253 million or 6%, largely reflecting higher costs related to changes in the timing of deferred compensation, increased variable compensation on improved results, and higher compliance costs. These factors were partially offset by the impact of foreign exchange translation.

### Business line review

#### Corporate and Investment Banking

Corporate and Investment Banking comprises our corporate lending, loan syndications, debt and equity origination, mergers and acquisitions (M&A) advisory services, client securitization and the global credit businesses. For debt and equity origination, revenue is allocated between Corporate and Investment Banking and Global Markets based on the contribution of each group in accordance with an established agreement.

#### Financial performance

Corporate and Investment Banking revenue of \$4,000 million increased \$306 million as compared to last year, despite the unfavourable impact of foreign exchange translation.

Investment banking revenue increased \$248 million or 13%, primarily due to increased loan syndication activity driven by increased market share in the U.S., and higher M&A activity mainly in the U.S. and Europe. Higher investment gains and higher debt origination activity largely in North America also contributed to the increase. These factors were partially offset by lower results from Municipal Banking in the U.S.

Lending and other revenue increased \$58 million or 3%, reflecting improving credit conditions.

### Selected highlights

Table 39

(Millions of Canadian dollars)	2017	2016
<b>Total revenue (1)</b>	<b>\$ 4,000</b>	<b>\$ 3,694</b>
<b>Breakdown of revenue (1)</b>		
Investment banking	2,140	1,892
Lending and other (2)	1,860	1,802
<b>Other information</b>		
Average assets	67,900	73,200
Average loans and acceptances	60,500	65,300

(1) The teb adjustment for 2017 was \$229 million (2016 - \$279 million). For further discussion, refer to the How we measure and report our business segments section.

(2) Comprises our corporate lending, client securitization, and global credit businesses.

Please see the PDF to view this chart

### Global Markets

Global Markets comprises our fixed income, foreign exchange, equity sales and trading, repos and secured financing and commodities businesses.

### Financial performance

Total revenue of \$4,466 million increased \$105 million or 2% as compared to last year, despite the unfavourable impact of foreign exchange translation.

Revenue in our Fixed income, currencies and commodities business increased \$140 million or 7%, mainly due to higher fixed income trading revenue in the U.S. and Asia & other international, higher debt origination activity in North America, and a gain from the disposition of certain securities. These factors were partially offset by lower commodities and foreign exchange trading revenue across all regions.

Revenue in our Equities business decreased \$63 million or 5%, primarily due to decreased equity origination activity largely in Canada, and lower volume in our cash equities businesses in the U.S.

Revenue in our Repo and secured financing business increased \$28 million or 3%, mainly due to higher equity trading revenue, partially offset by lower fixed income trading revenue.

## Selected highlights

Table 40

(Millions of Canadian dollars)	2017	2016
<b>Total revenue (1)</b>	<b>\$ 4,466</b>	<b>\$ 4,361</b>
<b>Breakdown of revenue (1)</b>		
Fixed income, currencies and commodities	2,253	2,113
Equities	1,084	1,147
Repo and secured financing (2)	1,129	1,101
<b>Other information</b>		
Average assets	435,500	472,100

(1) The teb adjustment for 2017 was \$319 million (2016 - \$457 million). For further discussion, refer to the How we measure and report our business segments section.

(2) Comprises our secured funding businesses for internal businesses and external clients.

Please see the PDF to view this chart

## Other

Other includes our legacy portfolio, which mainly consists of our U.S. commercial mortgage-backed securities and structured rates in Asia. In recent years, in order to optimize our capital employed to improve our risk-adjusted returns and reduce our liquidity risk on various products, we have significantly reduced several of our legacy portfolios. Our legacy portfolio assets decreased by 28% as compared to last year.

## Financial performance

Revenue decreased \$179 million as compared to last year largely due to higher residual funding costs.

## Corporate Support

Corporate Support comprises Technology & Operations, which provide the technological and operational foundation required to effectively deliver products and services to our clients, and Functions, which includes our finance, human resources, risk management, internal audit and other functional groups. Reported results for Corporate Support mainly reflect certain activities related to monitoring and oversight of enterprise activities which are not allocated to business segments. Corporate Support also includes our Corporate Treasury function. For further details, refer to the How we measure and report our business segments section.

## Corporate Support

Table 41

(Millions of Canadian dollars, except as otherwise noted)	2017	2016
Net interest income (loss) (1)	<b>\$(139)</b>	\$ (390)
Non-interest income (loss) (1)	<b>(313)</b>	(202)
<b>Total revenue (1)</b>	<b>(452)</b>	(592)
PCL	-	51
Non-interest expense	<b>238</b>	30
<b>Net income (loss) before income taxes (1)</b>	<b>(690)</b>	(673)
Income taxes (recoveries) (1)	<b>(574)</b>	(691)
<b>Net income (loss) (2)</b>	<b>\$(116)</b>	\$ 18

(1) Teb adjusted.

(2) Net income reflects income attributable to both shareholders and Non-Controlling Interests (NCI). Net income attributable to NCI for the year ended October 31, 2017 was \$35 million (October 31, 2016 - \$44 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 year ended October 31, 2017 was \$548 million and \$736 million last year.

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

### 2017

Net loss was \$116 million, largely reflecting severance and related charges, net unfavourable tax adjustments, and legal costs. These factors were partially offset by asset/liability management activities.

### 2016

Net income was \$18 million largely reflecting asset/liability management activities, partially offset by net unfavourable tax adjustments and a \$50 million (\$37 million after-tax) increase in the provision for loans not yet identified as impaired.

## Quarterly financial information

### Fourth quarter performance

**Q4 2017 vs. Q4 2016**

Fourth quarter net income of \$2,837 million was up \$294 million or 12% from last year. Diluted EPS of \$1.88 was up \$0.23 and ROE of 16.6% was up 110 bps. Our fourth quarter earnings increased as higher results in Personal & Commercial Banking, Capital Markets, Wealth Management, and Insurance were partially offset by lower earnings in Investment & Treasury Services.

Total revenue increased \$1,159 million or 12%, largely due to the change in the fair value of investments backing our policyholder liabilities, group annuity sales growth and the impact of restructured international life contracts, all of which were largely offset in PBCAE. Volume growth of 6% in Personal & Commercial Banking, growth in average fee-based client assets and higher net interest income reflecting the impact from higher interest rates and volume growth in Wealth Management, and higher equity trading revenue in Capital Markets also contributed to the increase. These factors were partially offset by the impact of foreign exchange translation.

Total PCL decreased \$124 million and the PCL ratio of 17 bps improved 10 bps from last year, mainly reflecting lower provisions and higher recoveries mainly in the oil & gas and real estate & related sectors in Capital Markets. The prior period also included provisions in U.S. Wealth Management (including City National).

PBCAE increased \$740 million, largely reflecting the change in fair value of investments backing our policyholder liabilities, growth in the group annuity business and the impact of restructured international life contracts, all of which are largely offset in revenue. These factors were partially offset by higher favourable annual actuarial assumption updates largely reflecting changes in credit and discount rates and favourable mortality experience, mainly in the U.K.

Non-interest expense increased \$314 million or 6%, primarily reflecting higher variable compensation on improved results in Wealth Management and ongoing investments in technology, including digital initiatives, in Personal & Commercial Banking, Investor & Treasury Services, and Wealth Management. Higher costs related to changes in the timing of deferred compensation in Capital Markets, higher staff-related costs, including severance and other related charges, in Corporate Support, Wealth Management and Personal & Commercial Banking, and charges associated with our real estate portfolio also contributed to the increase. These factors were partially offset by the impact of foreign exchange translation.

Income tax expense decreased \$65 million from last year, and the effective income tax rate decreased from 23.2% last year to 19.9%, due to more favourable tax adjustments and changes in the earnings mix.

**Q4 2017 vs. Q3 2017**

Net income of \$2,837 million was up \$41 million or 1% compared to the prior quarter, due to lower staff-related costs, including severance, favourable annual actuarial assumption updates largely reflecting changes in credit and discount rates and favourable mortality experience, mainly in the U.K., in Insurance, higher earnings in Personal & Commercial Banking due to higher spreads and volume growth of 2%, and lower PCL due to recoveries in the oil & gas and real estate & related sectors. These factors were partially offset by lower earnings in Capital Markets primarily due to lower fixed income and equity trading revenue across most regions, and lower M&A activity largely in Canada. There were also lower fee-based revenue, higher marketing costs in support of business growth in Personal & Commercial Banking, the impact of foreign exchange translation, and unfavourable tax adjustments in the current quarter.

### 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)

Table 42

(Millions of Canadian dollars, except per share and percentage amounts)	2017				2016			
	Q4	Q3	Q2	Q1	Q4	Q3	Q2	Q1
Net interest income	\$ 4,361	\$ 4,257	\$ 4,198	\$ 4,324	\$ 4,187	\$ 4,123	\$ 4,025	\$ 4,196
Non-interest income (2)	6,162	5,831	6,214	5,322	5,177	6,229	5,597	5,261
<b>Total revenue (2)</b>	<b>\$10,523</b>	\$10,088	\$10,412	\$ 9,646	\$ 9,364	\$10,352	\$ 9,622	\$ 9,457
PCL	234	320	302	294	358	318	460	410
PBCAE	1,137	643	1,090	183	397	1,210	988	829
Non-interest expense (2)	5,611	5,537	5,331	5,315	5,297	5,188	4,983	5,058
<b>Net income before income taxes</b>	<b>\$ 3,541</b>	\$ 3,588	\$ 3,689	\$ 3,854	\$ 3,312	\$ 3,636	\$ 3,191	\$ 3,160
Income taxes	704	792	880	827	769	741	618	713
<b>Net income</b>	<b>\$ 2,837</b>	\$ 2,796	\$ 2,809	\$ 3,027	\$ 2,543	\$ 2,895	\$ 2,573	\$ 2,447
EPS - basic	\$ 1.89	\$ 1.86	\$ 1.86	\$ 1.98	\$ 1.66	\$ 1.88	\$ 1.67	\$ 1.59
- diluted	1.88	1.85	1.85	1.97	1.65	1.88	1.66	1.58
<b>Segments - net income (loss)</b>								
Personal & Commercial Banking	\$ 1,404	\$ 1,399	\$ 1,360	\$ 1,592	\$ 1,275	\$ 1,322	\$ 1,297	\$ 1,290
Wealth Management	491	486	431	430	396	388	386	303
Insurance	265	161	166	134	228	364	177	131
Investor & Treasury Services	156	178	193	214	174	157	139	143
Capital Markets	584	611	668	662	482	635	583	570
Corporate Support	(63)	(39)	(9)	(5)	(12)	29	(9)	10
<b>Net income</b>	<b>\$ 2,837</b>	\$ 2,796	\$ 2,809	\$ 3,027	\$ 2,543	\$ 2,895	\$ 2,573	\$ 2,447

Effective income tax rate	19.9%	22.1%	23.9%	21.5%	23.2%	20.4%	19.4%	22.6%
Period average US\$ equivalent of C\$1.00	\$ 0.792	\$ 0.770	\$ 0.746	\$ 0.752	\$ 0.757	\$ 0.768	\$ 0.768	\$ 0.728

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

(2) Effective Q4 2017, service fees and other costs incurred in association with certain commissions and fees earned are presented on a gross basis in non-interest expense. Comparative amounts have been reclassified to conform with this presentation.

### Seasonality

Seasonal factors may impact our results in certain quarters. The first quarter has historically been stronger for our Capital Markets businesses. The second quarter has fewer days than the other quarters, which generally results in a decrease in net interest income and certain expense items. The third and fourth quarters include the summer months which results in lower client activity and may negatively impact the results of our Capital Markets' brokerage business and our Wealth Management'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 in May 2016. In particular, strong growth earlier this year reflected robust gains in consumer spending amid strong employment growth, low interest rates, and wealth effects from rising home prices. With strong growth over the first half of 2017, the BoC raised its overnight rate, once in July and again in September. The U.S. economy also experienced growth over the period due to higher household wages, strong job growth, and continued consumer confidence as well as rising business investment. 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. For further details, refer to the Economic and market review and outlook section.

Earnings have generally trended upwards over the period, driven by our Canadian Banking results reflecting solid volume growth, partially offset by lower spreads over a majority of the period, higher fee-based revenue and our share of the gain from the sale of the U.S. operations of Moneris in the first quarter of 2017. Our Wealth Management results reflect growth in average fee-based client assets, mainly due to strong capital appreciation and net sales, volume growth, and the impact from higher U.S. interest rates since the first quarter of 2017. Results from 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 our home and auto insurance manufacturing business 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 benefitted 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 latter half of 2017 which was impacted by reduced market volatility. The favourable impact of foreign exchange translation due to a generally weaker Canadian dollar over the period was partially offset by the strengthening Canadian dollar during the past two quarters. 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 our home and auto insurance manufacturing business in the third quarter of 2016, as noted previously, and the annual favourable actuarial adjustments in the fourth quarter.

The credit quality of our portfolios has generally improved 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 and general economic uncertainty. PCL trended lower in 2017 due to lower provisions and recoveries in our Capital Markets and Canadian 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. Growth in non-interest expense in 2017 mainly reflects higher variable compensation in Wealth Management and Capital Markets on improved results, and was impacted by higher severance in the third quarter of 2017. Higher costs in support of business growth reflecting ongoing investments in technology, including digital initiatives, and an impairment related to properties held for sale in the first quarter of 2017 also contributed to the increase. The unfavourable impact of foreign exchange translation due to a generally weaker Canadian dollar over the period was partially offset by the strengthening Canadian dollar during the past two quarters.

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. Our effective income tax rate has generally been impacted over the period by higher earnings before income taxes and lower tax-exempt income in 2017.

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.

## Financial condition

### Condensed balance sheets

The following table shows our condensed balance sheets:

Table 43

(Millions of Canadian dollars)	2017	2016
<b>Assets (1)</b>		
Cash and due from banks	\$ 28,407	\$ 14,929
Interest-bearing deposits with banks	32,662	27,851
Securities	218,379	236,093
Assets purchased under reverse repurchase agreements and securities borrowed	220,977	186,302
Loans		
Retail	385,170	369,470
Wholesale	159,606	154,369
Allowance for loan losses	(2,159)	(2,235)
Other - Derivatives	95,023	118,944
- Other (2)	74,788	74,535
<b>Total assets</b>	<b>\$1,212,853</b>	<b>\$ 1,180,258</b>
<b>Liabilities (1)</b>		
Deposits	\$ 789,635	\$ 757,589
Other - Derivatives	92,127	116,550
- Other (2)	247,398	224,745
Subordinated debentures	9,265	9,762
<b>Total liabilities</b>	<b>1,138,425</b>	<b>1,108,646</b>

<b>Equity attributable to shareholders</b>	<b>73,829</b>	71,017
Non-controlling interests	<b>599</b>	595
<b>Total equity</b>	<b>74,428</b>	71,612
<b>Total liabilities and equity</b>	<b>\$1,212,853</b>	\$ 1,180,258

- (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.

#### 2017 vs. 2016

Total assets were up \$33 billion or 3% from last year. Foreign exchange translation decreased total assets by \$33 billion.

Cash and due from banks was up \$13 billion, mainly due to higher deposits with central banks reflecting our management of liquidity and funding risk.

Interest-bearing deposits with banks increased \$5 billion or 17%, largely reflecting higher deposits with central banks.

Securities were down \$18 billion or 8%, largely driven by lower equity trading positions, a decrease in government debt securities reflecting our management of liquidity and funding risk, and the impact of foreign exchange translation. These factors were 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 \$35 billion or 19%, mainly attributable to higher client and business activities, partially offset by higher financial netting and the impact of foreign exchange translation.

Loans were up \$21 billion or 4%, largely due to continued volume growth in residential mortgages in Canada reflecting increased client activities, and higher wholesale loans driven by business growth, partially offset by the impact of foreign exchange translation.

Derivative assets were down \$24 billion or 20%, mainly attributable to lower fair values on interest rate swaps and the impact of foreign exchange translation, partially offset by lower financial netting on our interest rate swaps.

Other assets remained relatively flat.

Total liabilities were up \$30 billion or 3%. Foreign exchange translation decreased total liabilities by \$33 billion.

Deposits increased \$32 billion or 4%, mainly as a result of increased business and retail deposits driven by higher client activity, growth in issuances of fixed-term notes driven by funding requirements, and higher bank deposits due to increased client activity. These factors were partially offset by the impact of foreign exchange translation.

Derivative liabilities were down \$24 billion or 21%, mainly attributable to lower fair values on interest rate swaps and the impact of foreign exchange translation, partially offset by lower financial netting on our interest rate swaps.

Other liabilities increased \$23 billion or 10%, mainly attributable to higher repurchase agreements reflecting business and client activities, partially offset by lower obligations related to securities sold short.

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

#### 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.

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 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. As at October 31, 2017, we derecognized \$1.2 billion (October 31, 2016 - \$nil) of mortgages where both the NHA 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 2017 Annual Consolidated Financial Statements.

We periodically securitize residential mortgage loans for the Canadian social housing program through the NHA MBS program, which are derecognized from our Consolidated Balance Sheets when sold to third party investors. During 2017, we securitized \$13 million of residential mortgage loans for the Canadian social housing program (October 31, 2016 - \$nil).

We also periodically securitize commercial mortgage loans by selling them in collateral pools, which meet certain diversification, leverage and debt coverage criteria, to structured entities, one of which is sponsored by us. 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 year ended October 31, 2017, we securitized \$407 million of commercial mortgages (October 31, 2016 - \$700 million). Our continuing involvement with the transferred assets is limited to servicing certain of the underlying commercial mortgages sold. As at October 31, 2017, there was \$1.4 billion of commercial mortgages outstanding that we continue to service related to these securitization activities (October 31, 2016 - \$1.3 billion).

In prior years, we participated in bond securitization activities where we purchased government, government-related and corporate bonds and repackaged those bonds in trusts that issue participation certificates, which were sold to third party investors. Securitized bonds are derecognized from our Consolidated Balance Sheets as we have transferred substantially all of the risk and rewards of ownership of the securitized assets. Our continuing involvement with the transferred assets is limited to servicing the underlying bonds. As at October 31, 2017, there were \$49 million of bond participation certificates outstanding related to these prior period securitization activities (October 31, 2016 - \$81 million).

#### **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 2017 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. Our clients primarily use our multi-seller conduits to diversify their financing sources and to reduce funding costs by leveraging the value of high-quality collateral. The conduits offer us a favourable revenue stream and risk-adjusted return.

We provide services such as transaction structuring, administration, backstop liquidity facilities and partial credit enhancements to the multi-seller conduits. Revenue for all such services amounted to \$287 million during the year (October 31, 2016 - \$252 million).

Our total commitment to the conduits in the form of backstop liquidity and credit enhancement facilities is shown below. The total committed amount of these facilities exceeds the total amount of the maximum assets that may have to be purchased by the conduits under the purchase agreements. As a result, the maximum exposure to loss attributable to our backstop liquidity and credit enhancement facilities is less than the total committed amounts of these facilities.

#### **Liquidity and credit enhancement facilities**

**Table 44**

	2017				2016			
	Notional of committed amounts (1)	Allocable notional amounts	Outstanding loans (2)	Maximum exposure to loss (3)	Notional of committed amounts (1)	Allocable notional amounts	Outstanding loans (2)	Maximum exposure to loss (3)
As at October 31 (Millions of Canadian dollars)								
Backstop liquidity facilities	\$ 38,622	\$ 35,981	\$ 371	\$ 36,352	\$ 39,462	\$ 36,494	\$ 733	\$ 37,227
Credit enhancement facilities	2,270	2,270	-	2,270	2,235	2,235	-	2,235
<b>Total</b>	<b>\$ 40,892</b>	<b>\$ 38,251</b>	<b>\$ 371</b>	<b>\$ 38,622</b>	<b>\$ 41,697</b>	<b>\$ 38,729</b>	<b>\$ 733</b>	<b>\$ 39,462</b>

(1) Based on total committed financing limit.

(2) Net of allowance for loan losses and write-offs.

(3) Not presented in the table above are derivative assets with a fair value of \$17 million (October 31, 2016 - \$11 million) which are a component of our total maximum exposure to loss from our interests in the multi-seller conduits. Refer to Note 7 of our 2017 Annual Consolidated Financial Statements for more details.

As at October 31, 2017, the notional amount of backstop liquidity facilities we provide decreased by \$840 million or 2% from last year. The decrease in the amount of backstop liquidity facilities provided to the multi-seller conduits as compared to last year primarily reflects the impact of foreign exchange translation. The notional amount of partial credit enhancement facilities we provide increased by \$35 million from last year. The increase in the credit enhancement facilities reflects increased client usage. Total loans extended to the multi-seller conduits under the backstop liquidity facilities decreased by \$362 million from last year primarily due to principal repayments and the impact of foreign exchange translation.

**Maximum exposure to loss by client type**

**Table 45**

As at October 31 (Millions of dollars)	2017			2016		
	(US\$)	(C\$)	Total (C\$)	(US\$)	(C\$)	Total (C\$)
<b>Outstanding securitized assets</b>						
Credit cards	\$ 4,058	\$ 510	\$ 5,745	\$ 5,057	\$ 510	\$ 7,292
Auto loans and leases	10,597	3,113	16,783	9,489	2,646	15,372
Student loans	1,747	-	2,253	2,352	-	3,154
Trade receivables	2,358	-	3,042	2,002	51	2,736
Asset-backed securities	287	-	371	547	-	734
Equipment receivables	1,402	-	1,809	1,428	-	1,915
Consumer loans	1,267	-	1,634	1,470	-	1,971
Dealer floor plan receivables	939	852	2,064	760	903	1,922
Fleet finance receivables	766	306	1,294	914	306	1,532
Insurance premiums	134	163	336	-	163	163
Residential mortgages	-	1,377	1,377	-	1,122	1,122
Transportation finance	1,346	179	1,914	1,041	153	1,549
<b>Total</b>	<b>\$ 24,901</b>	<b>\$ 6,500</b>	<b>\$ 38,622</b>	<b>\$ 25,060</b>	<b>\$ 5,854</b>	<b>\$ 39,462</b>
<b>Canadian equivalent</b>	<b>\$ 32,122</b>	<b>\$ 6,500</b>	<b>\$ 38,622</b>	<b>\$ 33,608</b>	<b>\$ 5,854</b>	<b>\$ 39,462</b>

Our overall exposure decreased by 2.1% compared to last year, primarily reflecting the impact of foreign exchange translation. Correspondingly, total assets of the multi-seller conduits decreased by \$831 million or 2.1% over last year, primarily due to decreases in the Credit Card and Student Loans asset classes, which were partially offset by increases in the Auto loans and leases and Transportation finance asset classes. 100% of multi-seller conduits assets were internally rated A or above, consistent with last year. All transactions funded by the unconsolidated multi-seller conduits are internally rated using a rating system which is largely consistent with that of the external rating agencies.

Multiple independent debt rating agencies review all of the transactions in the multi-seller conduits. Transactions financed in two U.S. multi-seller conduits are reviewed by Moody's Investors Service (Moody's), Standard & Poor's (S&P) and Fitch Ratings (Fitch). Transactions in one U.S. multi-seller conduit is reviewed by S&P. Transactions in the Canadian multi-seller conduits are reviewed by DBRS and Moody's. Each applicable rating agency also reviews ongoing transaction performance on a monthly basis and may publish reports detailing portfolio and program information related to the conduits.

As at October 31, 2017, the total asset-backed commercial paper (ABCP) issued by the conduits amounted to \$24.8 billion, an increase of \$44 million or 0.2% from last year. The increase in the amount of ABCP issued by the multi-seller conduits compared to last year is primarily due to an increase in client usage partially offset by foreign exchange translation. The rating agencies that rate the ABCP rated 70% (October 31, 2016 - 67%) of the total amount issued within the top ratings category 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). To comply with the Risk Retention Rules, we hold 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 the liquidity loan agreement. As at October 31, 2017, the fair value of the ABCP purchased to comply with the Risk Retention Rules was \$1 billion (October 31, 2016 - \$670 million). This inventory is classified as Securities - Available-for-sale on our Consolidated Balance Sheet.

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 October 31, 2017, the fair value of our inventory was \$2 million, a decrease of \$3 million from last year. 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 (ARS) of certain 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 ARS trusts as at October 31, 2017 was \$443 million (October 31, 2016 - \$549 million). The decrease in our maximum exposure to loss is primarily related to the impact of foreign exchange translation. Interest income from the ARS investments, which is reported in Net-interest income, was \$9.8 million during the year (October 31, 2016 - \$6.3 million).

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 October 31, 2017, our maximum exposure to loss from these unconsolidated municipal bond TOB trusts was \$1,727 million (October 31, 2016 - \$1,640 million). The increase in our maximum exposure to loss relative to last year is primarily due to additional TOB trusts. Fee revenue from the provision of liquidity facilities to these entities, reported in Non-interest income, was \$5.1 million during the year (October 31, 2016 - \$4.7 million).

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 sale of the term collateralized loan obligations is used to fully repay the senior warehouse financing that we provide. As at October 31, 2017, our maximum exposure to loss associated with the outstanding senior warehouse financing facilities was \$263 million (October 31, 2016 - \$141 million). The increase in our maximum exposure to loss relative to last year is related to the addition of new financing facilities. We provide senior financing to an unaffiliated structured entity to acquire loans. As at October 31, 2017, our maximum exposure to loss associated with the outstanding senior financing facilities was \$1.2 billion (October 31, 2016 - \$1.3 billion).

#### *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 October 31, 2017, our maximum exposure to loss was \$2.9 billion (October 31, 2016 - \$2.6 billion).

We also provide liquidity facilities to certain third party investment funds. The funds issue unsecured variable-rate preferred shares and invest in portfolios of tax exempt bonds. As at October 31, 2017, our maximum exposure to these funds was \$268 million (October 31, 2016 - \$764 million). The decrease in our maximum exposure compared to last year is primarily due to unwinds of several third party investment funds.

#### *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 October 31, 2017, our maximum exposure to loss in these entities was \$6.1 billion (October 31, 2016 - \$9 billion). The decrease in our maximum exposure to loss compared to last year reflects a reduction in the securitized assets in these entities and the impact of foreign currency translation. Interest and non-interest income earned in respect of these investments was \$87 million (October 31, 2016 - \$95 million).

#### **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 October 31, 2017 amounted to \$355.8 billion compared to \$339.8 billion last year. The increase compared to last year relates primarily to the business growth in both securities lending indemnifications and other credit-related commitments, partially offset by the impact of foreign exchange translation. Refer to Liquidity and funding risk and Note 25 to our 2017 Annual Consolidated Financial Statements for details regarding our guarantees and commitments.