UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 40-F

[Check one]

☐ REGISTRATION STATEMENT PURSUANT TO SECTION 12 OF THE SECURITIES EXCHANGE ACT OF 1934

OR

☒ ANNUAL REPORT PURSUANT TO SECTION 13(a) OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the fiscal year ended October 31, 2013 — Commission File Number 001-13928

ROYAL BANK OF CANADA
(Exact name of Registrant as specified in its charter)

Canada	6029	Not Applicable
(Province or other jurisdiction of incorporation or organization)	(Primary Standard Industrial Classification Code Number (if applicable))	(I.R.S. Employer Identification Number (if applicable))

200 Bay Street
Royal Bank Plaza
Toronto, Ontario
Canada M5J 2J5
Attention: Carol J. McNamara
Vice-President, Associate General Counsel & Secretary
(416) 974-5151
(Address and telephone number of Registrant's principal executive offices)

Royal Bank of Canada
3 World Financial Center
200 Vesey Street
New York, New York 10281-8098
Attention: Daniel L. Torbenson
Chief Counsel, U.S. Regulatory and Corporate Services
(212) 437-9264
(Name, address (including zip code) and telephone number (including area code) of agent for service in the United States)

copies of all correspondence should be sent to:

Paul Guthrie
Senior Counsel
Royal Bank of Canada
200 Bay Street
Toronto, Ontario
Canada M5J 2J5
Tel: (416) 974-5151

Donald R. Crawshaw
Sullivan & Cromwell LLP
125 Broad Street
New York, New York
10004-2498
Tel: (212) 558-4000

Securities registered or to be registered pursuant to Section 12(b) of the Act.

Title of each class	Name of each exchange on which registered
Common Shares	New York Stock Exchange

Securities registered or to be registered pursuant to Section 12(g) of the Act.

Not Applicable
(Title of Class)

Securities for which there is a reporting obligation pursuant to Section 15(d) of the Act.

Not Applicable
(Title of Class)

For annual reports, indicate by check mark the information filed with this Form:

☒ Annual information form ☒ Audited annual financial statements

Indicate the number of outstanding shares of each of the issuer's classes of capital or common stock as of the close of the period covered by the annual report.

Common Shares	1,441,011,832
First Preferred Shares	
Series W	12,000,000
Series AA	12,000,000
Series AB	12,000,000
Series AC	8,000,000
Series AD	10,000,000
Series AE	10,000,000
Series AF	8,000,000
Series AG	10,000,000
Series AJ	16,000,000
Series AL	12,000,000
Series AN	9,000,000
Series AP	11,000,000
Series AR	14,000,000
Series AT	11,000,000
Series AV	16,000,000
Series AX	13,000,000

Indicate by check mark whether the Registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Exchange Act during the preceding 12 months (or for such shorter period that the Registrant was required to file such reports) and (2) has been subject to such filing requirements for the past 90 days.

Yes ☒ No ☐

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the Registrant was required to submit and post such files).

Yes ☐ No ☐

Not applicable

CONTROLS AND PROCEDURES

Information about disclosure controls and procedures and internal control over financial reporting can be found under "Controls and procedures" on page 90 of our Management's Discussion and Analysis set forth in Exhibit 2, and in "Management's Report on Internal Control over Financial Reporting" which can be found on page 101 of our Financial Review set forth in Exhibit 2, which sections are incorporated by reference.

AUDIT COMMITTEE FINANCIAL EXPERTS

The Registrant's board of directors has determined that it has five audit committee financial experts serving on its audit committee. David F. Denison, Timothy J. Hearn, Alice D. Laberge, J. Pedro Reinhard and Victor L. Young have been determined to be such audit committee financial experts and are independent, as that term is defined by the New York Stock Exchange's listing standards applicable to the Registrant. The SEC has indicated that the designation of David F. Denison, Timothy J. Hearn, Alice D. Laberge, J. Pedro Reinhard and Victor L. Young as audit committee financial experts does not make any of them an "expert" for any purpose, impose any duties, obligations or liability on David F. Denison, Timothy J. Hearn, Alice D. Laberge, J. Pedro Reinhard and Victor L. Young that are greater than those imposed on members of the audit committee and board of directors who do not carry this designation or affect the duties, obligations or liability of any other member of the audit committee.

CODE OF ETHICS

The Registrant has adopted a code of ethics (the "Code of Conduct") that applies to all employees and officers, including its principal executive officer, principal financial officer and principal accounting officer. The full text of the Code of Conduct is set forth in Exhibit 4 and is also available on our website at rbc.com.

PRINCIPAL ACCOUNTANT FEES AND SERVICES

Information about principal accountant fees and services and a brief description of our pre-approval policies and procedures can be found under "Audit Committee" beginning on page 20 of our Annual Information Form set forth in Exhibit 1, which section is incorporated by reference. A copy of our pre-approval policies and procedures can be found in Appendix D of our Annual Information Form, which section is incorporated by reference.

OFF-BALANCE SHEET ARRANGEMENTS

Information about off-balance sheet arrangements can be found under "Off-balance sheet arrangements" beginning on page 41 of our Management's Discussion and Analysis set forth in Exhibit 2, which section is incorporated by reference.

TABULAR DISCLOSURE OF CONTRACTUAL OBLIGATIONS

Tabular disclosure of contractual obligations can be found under "Risk management – Liquidity and funding management" beginning on page 64 of our Management's Discussion and Analysis set forth in Exhibit 2, which section is incorporated by reference.

IDENTIFICATION OF THE AUDIT COMMITTEE

The Registrant has a separately-designated standing audit committee. Information about identification of the audit committee can be found under "Audit Committee" beginning on page 20 of our Annual Information Form set forth in Exhibit 1, which section is incorporated by reference.

UNDERTAKING

Registrant undertakes to make available, in person or by telephone, representatives to respond to inquiries made by the Commission staff, and to furnish promptly, when requested to do so by the Commission staff, information relating to: the securities in relation to which the obligation to file an annual report on Form 40-F arises; or transactions in said securities.

SUMMARY OF SIGNIFICANT DIFFERENCES FROM NYSE CORPORATE GOVERNANCE RULES

A summary of significant ways corporate governance practices followed by Royal Bank of Canada differ from corporate governance practices required to be followed by U.S. Domestic Companies under the New York Stock Exchange's listing standards (disclosure required by section 303A.11 of the NYSE Listed Company Manual) is available on the Registrant's corporate governance website at rbc.com/governance.

DISCLOSURE PURSUANT TO SECTION 13(r) OF THE SECURITIES EXCHANGE ACT OF 1934

In accordance with section 13(r) of the U.S. Securities Exchange Act of 1934, we are required to disclose certain Iran-related activities. We maintain a robust economic sanctions compliance program which monitors compliance with economic sanctions requirements in the jurisdictions in which we operate and we believe we have been in compliance with relevant economic sanctions legislation throughout fiscal 2013.

We currently maintain certain non-U.S. dollar denominated accounts for the Embassy of the Islamic Republic of Iran in Canada (the "Iranian Embassy"). The funds in these accounts are used solely for the maintenance of the property of the Iranian Embassy as permitted by Canadian law.

In fiscal 2013, these accounts generated less than $7,000 in gross revenues and less than $4,000 in net income.

Certain of these accounts are frozen by Ontario court order in connection with civil litigation. Subject to any obligations under the court order, we are considering options for discontinuing the accounts.

SIGNATURES

Pursuant to the requirements of the Exchange Act, the Registrant certifies that it meets all of the requirements for filing on Form 40-F and has duly caused this annual report to be signed on its behalf by the undersigned, thereto duly authorized.

ROYAL BANK OF CANADA

By: /s/ Gordon M. Nixon
Name: Gordon M. Nixon
Title: President and Chief Executive Officer

Date: December 5, 2013

EXHIBITS

INDEX TO EXHIBITS

Exhibit 1

ROYAL BANK OF CANADA

ANNUAL INFORMATION FORM

December 4, 2013

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 Annual Information Form and in the documents incorporated by reference herein, in other filings with Canadian regulators or the United States (U.S.) Securities and Exchange Commission (SEC), in reports to shareholders and in other communications. Forward-looking statements in this document and in the documents incorporated by reference herein include, but are not limited to, statements relating to our financial performance objectives, vision and strategic goals, the economic and market review and outlook for Canadian, U.S., European and global economies, the regulatory environment in which we operate, the outlook and priorities for each of our business segments, and the risk environment including our liquidity and funding management as set out in the 2013 Management's Discussion and Analysis. The forward-looking information contained in this Annual Information Form and in the documents incorporated by reference 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, 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, regulatory compliance, operational, strategic, reputation and competitive risks and other risks discussed in the Risk management and Overview of other risks sections of our 2013 Management's Discussion and Analysis; the impact of regulatory reforms, including relating to the Basel Committee on Banking Supervision's (BCBS) global standards for capital and liquidity reform, the *Dodd-Frank Wall Street Reform and Consumer Protection Act* (Dodd-Frank) and the regulations issued and to be issued thereunder, over-the-counter derivatives reform, the payments system in Canada, the U.S. *Foreign Account Tax Compliance Act* (FATCA), and regulatory reforms in the United Kingdom (U.K.) and Europe; the high levels of Canadian household debt; cybersecurity; the business and economic conditions in Canada, the U.S. and certain other countries in which we operate; the effects of changes in government fiscal, monetary and other policies; our ability to attract and retain employees; the accuracy and completeness of information concerning our clients and counterparties; the development and integration of our distribution networks; model, information technology and social media risk; and the impact of environmental issues.

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 Annual Information Form are set out in our 2013 Management's Discussion and Analysis under the heading Overview and outlook and for each business segment under the heading Outlook and priorities. Except as required by law, we do not undertake to update any forward-looking statement, whether written or oral, that may be made from time to time by us or on our behalf.

Additional information about these and other factors can be found in the Risk management and Overview of other risks sections of our 2013 Management's Discussion and Analysis.

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*Notes 19, 21 and 26 to the 2013 Annual Consolidated Financial Statements for Royal Bank of Canada are incorporated by reference herein.

INFORMATION IS AT OCTOBER 31, 2013, UNLESS OTHERWISE NOTED.

CORPORATE STRUCTURE

Name, Address and Incorporation[1]

Royal Bank of Canada is a Schedule I Bank under the *Bank Act* (Canada), which constitutes its charter. The Bank was created as Merchants Bank in 1864 and was incorporated under the "Act to Incorporate the Merchants' Bank of Halifax" assented to June 22, 1869. The Bank changed its name to The Royal Bank of Canada in 1901 and to Royal Bank of Canada in 1990.

The Bank's corporate headquarters are located at Royal Bank Plaza, 200 Bay Street, Toronto, Ontario, Canada and its head office is located at 1 Place Ville-Marie, Montreal, Quebec, Canada.

Intercorporate Relationships

Information about intercorporate relationships with principal subsidiaries, including place of incorporation and percentage of securities owned by the Bank, is provided in Appendix A.

GENERAL DEVELOPMENT OF THE BUSINESS

Three Year History

Over the last three years, through our business strategies and actions we have continued to pursue our vision of "Always earning the right to be our clients' first choice." We continue to aspire to be a top performing diversified financial institution that delivers sustainable, profitable growth and top quartile results for our shareholders. Our strategic goals, which have remained consistent, reflect this aspiration:

- In Canada, to be the undisputed leader in financial services;
- Globally, to be a leading provider of capital markets, investor, and wealth management solutions; and
- In targeted markets, to be a leading provider of select financial services complementary to our core strengths.

While Canada's economy grew in 2011, global capital markets continued to have difficulty as a result of a weakening economic environment, particularly in the U.S. and Europe. To better reflect how we manage our business, in 2011, we realigned our Capital Markets segment into three lines of business, realigned our Insurance segment into two lines of business, and completed a number of organizational changes in our Wealth Management segment. We also acquired BlueBay Asset Management plc (BlueBay) in December 2010, sold our U.S. life insurance business in April 2011 and announced the sale of our U.S. regional retail banking operations which closed in March 2012.

While the Canadian economy slowed in the fourth calendar quarter of 2011, it showed moderate improvement in 2012. Global capital markets strengthened in the first half of the year but lost momentum in the third fiscal quarter in response to fresh concerns over the European sovereign debt crisis. Over the course of 2012 we made a number of strategic acquisitions, including the acquisition of the remaining 50 per cent stake in RBC Dexia Investor Services Limited (RBC Dexia) that RBC did not already own from Banque Internationale à Luxembourg S.A. and the acquisition of the Latin American, Caribbean and African private banking business of Coutts, the wealth division of The Royal Bank of Scotland Group.

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[1] When we say "we", "us", "our", or "RBC", we mean Royal Bank of Canada and its subsidiaries, as applicable. References to "the Bank" mean Royal Bank of Canada without its subsidiaries.

To better serve and grow our global institutional client base and to leverage our domestic banking expertise across our international operations, in October 2012, we strategically realigned certain business segments. Effective October 31, 2012 our five business segments are Personal & Commercial Banking, Wealth Management, Insurance, Investor & Treasury Services, and Capital Markets.

The Canadian economy continued to grow in the first three calendar quarters of 2013 driven by consumer spending and business investment, moderated by weak net exports. Capital markets in Canada and the U.S. gradually improved during 2013, resulting from modest economic growth in both countries as well as maintenance of stimulative monetary policy by the Bank of Canada and the Federal Reserve. Equity markets also improved throughout the year, despite some uncertainty regarding the outcome of the U.S. government's efforts to avoid hitting the debt ceiling.

RBC continued to deliver solid performance through fiscal 2013. Our results, which were underpinned by the strength and diversity of our business, were driven by record earnings in Personal & Commercial Banking, Wealth Management and Capital Markets, as well as higher earnings in Investor & Treasury Services.

In February 2013, we completed the acquisition of the Canadian auto finance and deposit business of Ally Financial Inc. (Ally Canada). Ally Canada's operations provide financial services, including floor plan financing, directly to auto dealers and also offer financing for consumers through dealerships. The acquisition allowed us to add scale to our existing consumer and commercial auto financing businesses.

Throughout 2013 we continued to monitor and prepare for global regulatory developments including prohibitions on proprietary trading and certain investment in hedge and other investment funds under Dodd-Frank, the Federal Reserve's proposal for Enhanced Supervision of Foreign Banking Organizations, and other Dodd-Frank initiatives, changes to capital and liquidity rules under the BCBS's global standards (Basel III), over-the-counter derivatives reform, FATCA, enhanced risk disclosures recommended by the Enhanced Disclosure Task Force of the Financial Stability Board and other reforms. We will continue to monitor these and other developments and are working to ensure business impacts, if any, are minimized.

Our acquisitions and dispositions that have influenced the general development of our business over the past three years are summarized in the following table:

BUSINESS SEGMENT	**ACQUISITION/DISPOSITION**	**KEY CHARACTERISTICS**
Personal & Commercial Banking	The Canadian automotive finance and deposit business of Ally Financial Inc. (2013)	• Acquisition positions RBC as a leader in the Canadian automotive financing business.
	U.S. regional banking operations (2012)	• Sold to PNC Financial Services Group, Inc. • Disposition allowed us to refocus our U.S. efforts on continuing to grow our largest U.S. businesses, RBC Wealth Management and RBC Capital Markets.
Wealth Management	Latin American, Caribbean and African private banking business of RBS Coutts, the wealth division of The Royal Bank of Scotland Group (2012)	• Acquisition increased our market share with high net worth and ultra high net worth clients in key high growth markets.
	BlueBay Asset Management plc (2011) (U.K.)	• Acquisition furthered our strategy to leverage our position as a top 10 global wealth manager, and to continue to expand our asset management solutions globally.
	Fortis Wealth Management Hong Kong Limited's wealth management business (2011)	• Acquisition expanded Wealth Management's presence in Asia.
Insurance	Liberty Life Insurance Company (2011) (U.S.)	• As a result of the divestiture, we realigned Insurance into two lines of business, Canadian Insurance and International & Other.

BUSINESS SEGMENT	ACQUISITION/DISPOSITION	KEY CHARACTERISTICS
Investor & Treasury Services	RBC Dexia Investor Services Limited (2012)	• Acquisition of the remaining 50 per cent stake in the joint venture RBC Dexia making RBC the sole owner of a top 10 global custodian by client assets under administration, which was rebranded RBC Investor Services.

Additional information about our three year history can also be found under the "Overview and outlook" section beginning on page 11 of our 2013 Management's Discussion and Analysis, which section is incorporated by reference herein.

DESCRIPTION OF THE BUSINESS

General Summary

We are Canada's largest bank as measured by assets and market capitalization, and are among the largest banks in the world, based on market capitalization. We are one of North America's leading diversified financial services companies, and provide personal and commercial banking, wealth management services, insurance, investor services and capital markets products and services on a global basis. We employ approximately 79,000 full- and part-time employees who serve more than 15 million personal, business, public sector and institutional clients through offices in Canada, the U.S. and 44 other countries.

Our reporting segments are Personal & Commercial Banking, Wealth Management, Insurance, Investor & Treasury Services, Capital Markets and Corporate Support. Additional information about our business and each segment (including segment results) can be found under "Overview and outlook" beginning on page 11 and under "Business segment results" beginning on page 18 of our 2013 Management's Discussion and Analysis, which sections are incorporated by reference herein.

Seasonality

Information about seasonality is provided under "Quarterly financial information" beginning on page 37 of our 2013 Management's Discussion and Analysis, which section is incorporated by reference herein.

Competition

As we expand into new lines of business, our competition has grown to include other Canadian banks, trust companies, foreign banks, auto financing companies, credit unions, caisses populaires and companies that offer products and services traditionally offered by financial institutions, investment counselling firms, brokerages, investment dealers, self-directed brokers, mutual fund companies, global private banks, wealth managers, asset managers, custody service providers, insurance companies, virtual banks and specialty financial service providers. Key competitive factors include the range and features of financial products and services offered, pricing, distribution, and service quality. Additional information about our competition can be found under "Business segment results" beginning on page 18 of our 2013 Management's Discussion and Analysis, which section is incorporated by reference herein.

Government Regulation and Supervision – Canada

The Bank is a "Schedule I" Bank under the *Bank Act* (Canada) (Bank Act), and, as such, is a federally regulated financial institution. Its Canadian trust, loan and insurance subsidiaries are also federally regulated financial institutions governed by (respectively) the *Trust and Loan Companies Act* (Canada) and the *Insurance Companies Act* (Canada). The activities of the Bank's Canadian trust, loan and insurance subsidiaries are also regulated under provincial and territorial laws in respect of their activities in the provinces and territories. In certain provinces, some of the Bank's capital markets activities are regulated under provincial securities laws (which are administered and enforced by securities regulatory authorities).

The Office of the Superintendent of Financial Institutions (OSFI) reports to the Minister of Finance (the Minister) for the supervision of the Bank, as well as its Canadian federally regulated trust, loan and insurance subsidiaries. OSFI is required, at least once a year, to examine the affairs and business of each institution for the purpose of determining whether statutory requirements are duly observed and the institution is in sound financial condition, and report to the Minister. The Bank is also required to make periodic reports to OSFI.

The Bank and its Canadian trust, loan and insurance subsidiaries are also subject to regulation under the *Financial Consumer Agency of Canada Act* (FCAC Act).[2] The Financial Consumer Agency of Canada (Agency), among other things, enforces consumer-related provisions of the federal statutes which govern these financial institutions. The Commissioner of the Agency must report to the Minister on all matters connected with the administration of the FCAC Act and consumer provisions of other federal statutes, including the Bank Act, *Trust and Loan Companies Act* and *Insurance Companies Act*.

The Bank and its subsidiaries, Royal Trust Corporation of Canada, The Royal Trust Company, Royal Bank Mortgage Corporation and RBC Investor Services Trust are member institutions of the Canada Deposit Insurance Corporation (CDIC). CDIC insures certain deposits held at the member institutions.

Under the Bank Act, the Bank is prohibited from engaging in or carrying on any business other than the business of banking, except as permitted. The Bank can provide, amongst other services, any financial services, investment counselling services and portfolio management services, act as a financial agent and issue and operate payment, credit or charge card plans.

The Bank has broad powers to invest in securities, but is limited in making "substantial investments" or in controlling certain types of entities. A "substantial investment" will arise through direct or indirect beneficial ownership of voting shares carrying more than 10 per cent of the voting rights attached to all outstanding voting shares of a corporation, shares representing more than 25 per cent of the shareholders' equity in a corporation, or interests representing more than 25 per cent of the ownership interests in any unincorporated entity.

The Bank can, however, make controlling, and in certain circumstances, non-controlling substantial investments in Canadian banks, trust or loan companies, insurance companies, cooperative credit societies and entities primarily engaged in dealing in securities; in foreign regulated entities which are primarily engaged outside Canada in a business that if carried on in Canada would be the business of banking, the business of a cooperative credit society, the business of insurance, the business of providing fiduciary services or the business of dealing in securities; and in factoring, finance, financial leasing, specialized financing and financial holding entities. Certain substantial investments may be made only with the prior approval of the Minister or the Superintendent of Financial Institutions (the Superintendent).

The Bank and its Canadian trust, loan and insurance subsidiaries are also required to maintain, in relation to operations, adequate capital and liquidity and OSFI may direct financial institutions to increase capital and/or to provide additional liquidity.

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[2] For the Bank's trust subsidiaries, only their retail deposit taking activities are subject to regulation under the FCAC Act.

The *Proceeds of Crime (Money Laundering) and Terrorist Financing Act* (the Act) is applicable to all of our businesses in Canada. The Act implements specific measures designed to detect and deter money laundering and the financing of terrorist activities. Further, the Act sets out obligations related to deterring and detecting money laundering and terrorist financing from a global perspective, in order to minimize the possibility that RBC could become a party to these activities. RBC has enterprise-wide anti-money laundering policies and procedures which assist in reducing the risk of facilitating money laundering and terrorist financing activities.

Broker-Dealer/Investment Management Subsidiaries

The activities of the Bank's subsidiaries, such as RBC Dominion Securities Inc. (RBC DS), RBC Direct Investing Inc. (RBC DI), Royal Mutual Funds Inc., RBC Global Asset Management Inc., Phillips, Hager & North Investment Funds Ltd., and RBC Phillips, Hager & North Investment Counsel Inc., which act as securities dealers (including investment dealers, mutual fund dealers and exempt market dealers), advisors (investment counsel/portfolio manager) or investment fund managers are regulated in Canada under provincial and territorial securities laws (which are administered and enforced by securities regulatory authorities) and, in some cases, by the rules of the applicable self-regulatory organization (the Investment Industry Regulatory Organization of Canada for investment dealers and the Mutual Fund Dealers Association of Canada for mutual fund dealers). Each of RBC DS and RBC DI are members of the Canadian Investor Protection Fund. Customers' accounts are protected by the Canadian Investor Protection Fund within specified limits. A brochure describing the nature and limits of coverage is available upon request.

Insurance

The activities of the Bank's regulated Canadian insurance subsidiaries, RBC Life Insurance Company (RBC Life), RBC General Insurance Company (RBC General) and RBC Insurance Company of Canada (RICC), are federally governed by the *Insurance Companies Act* and by provincial legislation in each province and territory in which they carry on business. In addition, the Bank is federally governed by the Bank Act for any insurance activities it is permitted to carry out. The Bank may administer, promote and provide advice in relation to certain authorized types of insurance and is also permitted to conduct any aspect of the business of insurance, other than the underwriting of insurance, outside Canada and in respect of risks outside Canada. However, in Canada, the Bank may not act as agent for any person in the placing of insurance. The Bank can promote an insurance company, agent or broker or non-authorized types of insurance (e.g. life and home and automobile insurance) to certain prescribed groups where the promotion takes place outside bank branches. Additionally, and subject to applicable restrictions under the Bank Act, RBC Wealth Management Finance Services Inc., a wholly owned indirect subsidiary of the Bank, is licensed under applicable provincial and territorial laws to sell insurance products, including life and benefits insurance along with money products such as annuities and segregated funds, on both an individual and group basis, for both related and independent insurance companies in Canada.

RBC Life, RBC General and RICC are also subject to regulation under the FCAC Act. The Agency, among other things, enforces consumer-related provisions of the federal statutes which govern financial institutions.

RBC Life is a member of Assuris which is a not-for-profit organization that protects Canadian life insurance policyholders against loss of benefits due to the financial failure of a member company. RICC and RBC General are members of the Property and Casualty Insurance Compensation Corporation which is the corporation protecting Canadian property and casualty policyholders against loss of benefits due to the financial failure of a member company.

Government Regulation and Supervision – United States

Banking

In the U.S., the Bank is characterized as a foreign banking organization (FBO). Generally, the operations of an FBO and its U.S. subsidiaries and offices are subject to the same comprehensive regulatory regime that governs the operations of U.S. domestic banking organizations. The Bank's U.S. businesses are subject to supervision and oversight by various U.S. authorities, including federal and state regulators, as well as self-regulatory organizations.

In 2000, the Bank became a U.S. "financial holding company" (FHC), as authorized by the Board of Governors of the Federal Reserve System (Federal Reserve). Pursuant to the *Gramm-Leach-Bliley Act*, an FHC may engage in, or acquire companies engaged in, a broader range of financial and related activities than are permitted to banking organizations that do not maintain FHC status. To qualify as an FHC, an FBO must meet certain capital requirements and must be deemed to be "well managed" for U.S. bank regulatory purposes. In addition, any U.S. depository institution subsidiaries of the FBO must also meet certain capital requirements and be deemed to be "well managed" and must have at least a "satisfactory" rating under the *Community Reinvestment Act of 1977*.

In order to maintain "well managed" status for U.S. bank regulatory purposes, an FBO must have received at least a "satisfactory" composite regulatory rating of its U.S. branch, agency and commercial lending company operations in its last examination, the FBO's home country supervisor must consent to it expanding its activities in the U.S. to include activities permissible for an FHC and the FBO's management must meet standards comparable to those required of a U.S. bank subsidiary of an FHC. In addition, each U.S. depository institution subsidiary of the FBO must be deemed to be "well managed", which requires both a "satisfactory" composite regulatory rating and a "satisfactory" rating on the "management" component in its last examination.

Under the *International Banking Act of 1978* (IBA) and the *Bank Holding Company Act of 1956* (BHCA), all of the Bank's U.S. banking operations are subject to supervision and regulation by the Federal Reserve. Under the IBA, the BHCA, and related regulations of the Federal Reserve, the Bank generally may not open a branch, agency or representative office in the U.S., nor acquire five per cent or more of the voting stock of any U.S. bank or bank holding company, without notice to or prior approval of the Federal Reserve.

The Federal Reserve is the U.S. "umbrella regulator" responsible for regulatory oversight of the whole of the Bank's U.S. activities. The Federal Reserve consults with and obtains information from other functional U.S. regulators that exercise supervisory authority over the Bank's various U.S. operations. Reports of financial condition and other information relevant to the Bank's U.S. businesses are regularly filed with the Federal Reserve.

On July 21, 2010, the *Dodd-Frank Wall Street Reform and Consumer Protection Act* (Dodd-Frank) was enacted. The statute requires significant changes to U.S. financial regulations, with material cross-border implications. Some provisions of Dodd-Frank have taken effect automatically. Other provisions require adoption of rules by one or more U.S. regulatory authorities to become operative and are in various stages of completion.

Under Dodd-Frank, the Bank is registered as a "Swap Dealer" with the U.S. Commodity Futures Trading Commission (CFTC) and the National Futures Association (NFA).

For further information on certain developments relating to Dodd-Frank, see the "Risk management" section beginning on page 44 of our 2013 Management's Discussion and Analysis, which section is incorporated by reference herein.

The Bank maintains branches in New York (three) and Miami (one), which are licensed and supervised as federal branches by the Office of the Comptroller of the Currency (OCC), the U.S. supervisor of national banks. In general, the Bank's branches may exercise the same rights and privileges, and are subject to the same restrictions, as would apply to a U.S. national bank at the same location(s). However, the Bank's branches may not take U.S. domestic retail deposits, unless an exemption applies, but may accept wholesale deposits. Deposits in the Bank's branches are not insured by the Federal Deposit Insurance Corporation (FDIC).

The OCC examines and supervises the Bank's U.S. branch office activities and annually examines and assesses their operations. In addition, the Bank's U.S. branches are required to maintain certain liquid assets on deposit in their state(s) of residence, which deposits are pledged to the OCC. Furthermore, the Bank is subject to supervisory guidance based on the examiners' assessment of risk management, operational controls, compliance and asset quality.

The Bank also maintains two state-licensed agencies in Texas and state-licensed representative offices in California, Delaware, Texas and Washington (where it is called an alien bureau). In general, the activities conducted at the Bank's agencies include a broad range of banking powers, including lending and maintaining credit balances, but agencies are limited in their ability to accept deposits from citizens or residents of the United States. Agencies may have further limitations on activities based on state laws. The activities conducted at the Bank's representative offices are limited to representational and administrative functions; such representative offices do not have authority to make credit decisions and may not solicit or contract for any deposit or deposit-like liability. The Bank's representative offices are examined and assessed by both the Federal Reserve and state regulators and are required to adhere to any applicable state regulations.

Banking activities are also conducted at RBC Bank (Georgia), National Association (RBC Bank), a national banking association chartered by the OCC. RBC Bank is a member of the Federal Reserve System. The primary federal regulator of RBC Bank is the OCC. As a U.S. bank, RBC Bank is allowed to take retail deposits, and it conducts retail banking, including credit card and mortgage lending, primarily to Canadian cross-border clients across the U.S. and to U.S. Wealth Management clients. RBC Bank is subject to capital requirements, dividend restrictions, limitations on investments and subsidiaries, limitations on transactions with affiliates (including the Bank and its branches), deposit reserve requirements and other requirements administered by the OCC and the Federal Reserve. Deposits at RBC Bank are FDIC-insured to the extent permissible.

Trust company activities are conducted at RBC Trust Company (Delaware) Limited (RBC Trust), the Bank's U.S. trust company subsidiary. RBC Trust is a Delaware trust company chartered and supervised by the Delaware State Banking Commission and, as a subsidiary of a bank holding company, is subject to oversight by the Federal Reserve. RBC Trust is subject to dividend restrictions, limitations on investments and other applicable state banking law requirements.

The *USA PATRIOT Act*, which amended the *Bank Secrecy Act*, requires U.S. banks and foreign banks with U.S. operations to maintain appropriate policies, procedures and controls relating to anti-money laundering compliance, suspicious activity and currency transaction reporting and due diligence on customers to prevent, detect and report individuals and entities involved in money laundering and the financing of terrorism.

Broker-Dealer Activities and Broker-Dealer Subsidiaries

The principal securities brokerage, trading, advisory and investment banking activities are conducted in the following two U.S.-registered broker-dealer subsidiaries:

- RBC Capital Markets, LLC (RBC CM LLC), and
- RBC Capital Markets Arbitrage S.A. (RBC CMA).

The SEC, state securities regulators, the Financial Industry Regulatory Authority (FINRA) and other self-regulatory organizations regulate these broker-dealer subsidiaries. Certain activities of RBC CM LLC and RBC CMA are also subject to regulation by the CFTC and the NFA. Pursuant to Dodd-Frank, RBC CM LLC is registered as a "Swaps Firm" with the NFA. Certain activities of RBC CM LLC are subject to regulation by the Municipal Securities Rulemaking Board.

Investment Management and Other Fiduciary Activities

The Bank's New York branches have fiduciary powers, and certain branches conduct investment management and custody activities for certain customers. In addition, other affiliates are involved in the business of investment management. In many cases, these activities require that the affiliates be registered with the SEC as investment advisers under the *U.S. Investment Advisers Act of 1940* (Advisers Act). The Advisers Act and related rules regulate the registration and activities of investment advisers. Although the regulatory regime for investment advisers is similar to that for broker-dealers, the standard of conduct is higher due to the advisers' status as fiduciaries. This status as a fiduciary limits the investment adviser's ability to make use of affiliates and requires that it avoid or manage and disclose conflicts of interests with respect to the conduct of its business.

The following entities are the Bank's subsidiaries that are registered as "investment advisers" with the SEC:

- RBC CM LLC,
- RBC Alternative Asset Management Inc.,
- RBC Global Asset Management (U.S.) Inc. (GAMS),
- RBC Global Asset Management (UK) Limited,
- Royal Bank of Canada Investment Management (USA) Limited,
- RBC Private Counsel (USA), Inc.,
- BlueBay Asset Management LLP,
- BlueBay Asset Management USA LLC, and
- RBC Investment Advisors SA.

GAMS is also the adviser to several U.S. mutual funds sponsored by it. The *U.S. Investment Company Act of 1940* and related rules regulate the registration of mutual funds and the activities of the funds' advisers and certain other service providers, and their affiliates.

ERISA and the Internal Revenue Code

The *U.S. Employee Retirement Income Security Act of 1974*, as amended (ERISA), and the related rules regulate the activities of the financial services industry with respect to pension plan clients. Similarly, the U.S. Internal Revenue Code and the regulations thereunder impose requirements with respect to such clients and also individual retirement accounts (IRAs). Brokers, dealers and investment advisers to pension plans and IRAs must conduct their business in compliance with both ERISA and applicable tax regulations.

Risk Factors

A discussion of risks affecting us and our businesses appears under the headings "Risk management" and "Overview of other risks" beginning on pages 44 and 74, respectively, of our 2013 Management's Discussion and Analysis for the year ended October 31, 2013, which discussions are incorporated by reference herein.

Environmental Policies

Our first corporate environmental policy was developed in 1991 and since then we have been committed to environmental management and continuous improvement. In 2007, we published the RBC Environmental Blueprint that articulates our corporate environmental policy, priorities and objectives. It establishes our approach to environmental matters pertaining to operations, business activities, products and services, employees, compliance, reporting transparency and partnerships. In 2013, we updated the RBC Environmental Blueprint with a number of new environmental commitments and targets that we plan to operationalize and achieve over the next five years. Underpinning the RBC Environmental Blueprint is our Enterprise-wide Environmental & Social Risk Management Policy, which applies to all of our activities, including those outside of our primary business of financing. The purpose of the policy is to ensure that the impact of environmental and social factors is considered in all RBC activities. The Enterprise-wide Environmental & Social Risk Management Policy is complemented by a suite of policies that require enhanced due diligence on transactions and business activities where environmental and social issues may give rise to credit, legal or reputational risk. We regularly update these policies and procedures to address regulatory changes, emerging and evolving issues, and international best practices. Environmental and social risk management policies have been established for:

- Residential mortgage lending in Canada,
- Small business and commercial loans and mortgages for Canada and the U.S.,
- Agriculture lending in Canada,
- Corporate lending and investment banking globally,
- Project financing (in accordance with the Equator Principles) globally,
- Public sector lending in Canada, and
- Environmental investigations (use of third party consultants) in Canada and the U.S.

We also have an enterprise-wide supplier management policy that includes requirements that we gather the appropriate environmental and social information regarding prospective suppliers and the products and services they offer, and incorporate that information in procurement decisions. Additional information about our environmental policies and environmental risks can be found under "Overview of other risks – Environmental risk" on pages 75-76 of our 2013 Management's Discussion and Analysis, which section is incorporated by reference herein.

DESCRIPTION OF CAPITAL STRUCTURE

General Description

The Bank's authorized share capital consists of an unlimited number of common shares without nominal or par value and an unlimited number of first preferred shares and second preferred shares without nominal or par value, issuable in series, which classes may be issued for a maximum consideration of $20 billion and $5 billion, respectively. The following summary of share capital is qualified in its entirety by the Bank's by-laws and the actual terms and conditions of such shares.

Common Shares

The holders of the Bank's common shares are entitled to vote at all meetings of shareholders, except meetings at which only holders of a specified class, other than common shares, or series of shares are entitled to vote. The holders of common shares are entitled to receive dividends as and when declared by the board of directors, subject to the preference of the preferred shares. After payment to the holders of the preferred shares of the amount or amounts to which they may be entitled, and after payment of all outstanding debts, the holders of the common shares will be entitled to receive any remaining property upon liquidation, dissolution or winding-up.

Preferred Shares

First preferred shares may be issued, from time to time, in one or more series with such rights, privileges, restrictions and conditions as the board of directors may determine, subject to the Bank Act and to the Bank's by-laws. Currently, Non-Cumulative First Preferred Shares Series W, AA, AB, AC, AD, AE, AF, AG, AJ, AL, AN, AP, AR, AT, AV and AX are outstanding. We redeemed all of our issued and outstanding Non-Cumulative First Preferred Shares Series AH on July 2, 2013.

The Non-Cumulative First Preferred Shares Series W are, subject to the consent of the Superintendent, the requirements of the Bank Act and the approval of the Toronto Stock Exchange, redeemable or exchangeable by the Bank into common shares. The first preferred shares are entitled to preference over the second preferred shares and common shares and over any other shares ranking junior to the first preferred shares with respect to the payment of dividends and in the distribution of property in the event of liquidation, dissolution or winding-up.

Second preferred shares may be issued, from time to time, in one or more series with such rights, privileges, restrictions and conditions as the board of directors may determine, subject to the Bank Act and to the Bank's by-laws. There are no second preferred shares currently outstanding. Second preferred shares would rank junior to the first preferred shares. Second preferred shares would be entitled to preference over the common shares and over any other shares ranking junior to the second preferred shares with respect to the payment of dividends and in the distribution of property in the event of our liquidation, dissolution or winding-up.

Holders of the first and second preferred shares are not entitled to any voting rights as a class except as provided under the Bank Act or the Bank's by-laws. Under the Bank Act, the Bank may not create any other class of shares ranking equal with or superior to a particular class of preferred shares, increase the authorized number of, or amend the rights, privileges, restrictions or conditions attaching to such class of preferred shares, without the approval of the holders of that class of preferred shares.

Any approval to be given by the holders of the first and second preferred shares may be given in writing by the holders of not less than all of the outstanding preferred shares of each class or by a resolution carried by the affirmative vote of not less than $66\,^2/_3$ per cent of the votes cast at a meeting of holders of each class of preferred shares at which a quorum is represented. A quorum at any meeting of holders of each class of preferred shares is 51 per cent of the shares entitled to vote at such meeting, except that at an adjourned meeting there is no quorum requirement.

Effective January 1, 2013, in accordance with capital adequacy requirements adopted by OSFI, non-common capital instruments issued after January 1, 2013, including first preferred shares, must include terms providing for the full and permanent conversion of such securities into common shares upon the occurrence of certain trigger events relating to financial viability (the Non-Viability Contingent Capital or NVCC requirements) in order to qualify as regulatory capital. As of January 1, 2013, all outstanding capital instruments that do not meet the NVCC requirement will be considered non-qualifying capital instruments and will be phased out beginning January 1, 2013 at the rate of 10 per cent each year for 10 years.

Additional information about the Bank's share capital can be found under the "Capital management" section beginning on page 76 of our 2013 Management's Discussion and Analysis, which section is incorporated by reference herein.

Prior Sales

For information about the Bank's issuances of subordinated debentures since October 31, 2012, see the "Capital management" section beginning on page 76 of our 2013 Management's Discussion and Analysis and "Subordinated debentures" in Note 19 on page 158 of our 2013 Annual Consolidated Financial Statements for the year ended October 31, 2013, which section and note are incorporated by reference herein.

Constraints

The Bank Act contains restrictions (which are subject to any orders that may be issued by the Governor in Council) on the issue, transfer, acquisition, beneficial ownership and voting of all shares of a chartered bank. The following is a summary of such restrictions.

Subject to certain exceptions contained in the Bank Act, no person may be a major shareholder of a bank having equity of $12 billion or more (which includes the Bank). A person is a major shareholder if:

(a) the aggregate of the shares of any class of voting shares of the bank beneficially owned by that person, by entities controlled by that person and by any person associated or acting jointly or in concert with that person is more than 20 per cent of that class of voting shares, or
(b) the aggregate of shares of any class of non-voting shares of the bank beneficially owned by that person, by entities controlled by that person and by any person associated or acting jointly or in concert with that person is more than 30 per cent of that class of non-voting shares.

Additionally, no person may have a significant interest in any class of shares of a bank (including the Bank) unless the person first receives the approval of the Minister of Finance. For purposes of the Bank Act, a person has a significant interest in a class of shares of a bank where the aggregate of any shares of the class beneficially owned by that person, by entities controlled by that person and by any person associated or acting jointly or in concert with that person exceeds 10 per cent of all of the outstanding shares of that class of shares of such bank.

In addition, the Bank Act prohibits a bank from purchasing or redeeming any of its shares or paying any dividends if there are reasonable grounds for believing the bank is, or the payment would cause the bank to be, in contravention of the Bank Act requirement to maintain, in relation to its operations, adequate capital and appropriate forms of liquidity and to comply with any regulations or directions of the Superintendent in relation thereto.

Subject to any orders that may be issued by the Governor in Council, the Bank Act also prohibits the registration of a transfer or issue of any shares of a Canadian bank to any government or governmental agency of Canada or any province of Canada, or to any government of any foreign country, or any political subdivision, or agency of any foreign country. Under the Bank Act, the Bank cannot redeem or purchase any shares for cancellation unless the prior consent of the Superintendent has been obtained.

Ratings

Each of our debt and preferred share ratings as at December 4, 2013 received from an approved rating agency are listed below:

RATING AGENCY	LONG-TERM RATING		SHORT-TERM RATING		OUTLOOK	RANK[1]
Moody's Investors Service (New York)	Long-term Senior Debt Bank Subordinated Debt	Aa3 A3	Short-term Debt	P-1	Stable Stable	4 of 21 5 of 20
Standard & Poor's (New York)	Long-term Senior Debt Bank Subordinated Debt Preferred Stock	AA- A A-	Short-term Debt	A-1+	Stable Stable Stable	4 of 22 6 of 22 4 of 20

RATING AGENCY	LONG-TERM RATING	SHORT-TERM RATING	OUTLOOK	RANK[1]
Fitch Ratings (New York)	Long-term Senior Debt AA Bank Subordinated Debt AA-	Short-term Debt F1+	Stable Stable	3 of 24 3 of 23
DBRS (Toronto)	Long-term Senior Debt AA Bank Subordinated Debt AA (low) Preferred Stock Pfd-1 (low)	Short-term Debt R-1 (high)	Stable Stable Stable	3 of 26 3 of 26 3 of 16

[1] Rank out of all assignable ratings for each debt/share class (in descending order beginning with 1 as the highest).

A definition of the categories of each rating as at December 4, 2013 has been obtained from the respective rating agency's website and is outlined in Appendix B, and a more detailed explanation may be obtained from the applicable rating agency.

On December 13, 2012, Standard & Poor's (S&P) upgraded our outlook to stable from negative and affirmed our long- and short-term issuer credit ratings. The outlook revision followed a review by S&P of banking sector industry and economic risks in Canada, which resulted in a revision to their Banking Industry Country Risk Assessment for Canada to group 2 from 1.

On January 28, 2013, Moody's Investor Services (Moody's) removed systematic support from the subordinated debt ratings of RBC and all other Canadian banks, consistent with their announcement in October 2012. Moody's reaffirmed all our other ratings. On July 22, 2013, Moody's again affirmed our ratings with a stable outlook.

On July 9, 2013, Dominion Bond Rating Services (DBRS) affirmed our ratings with a stable outlook, which are underpinned by our highly diversified business model, strong Canadian retail franchise and well positioned capital markets business.

On October 23, 2013, S&P again affirmed our ratings with a stable outlook reflecting S&P's expectations that RBC will continue to manage its balance sheet prudently, maintain favourable asset quality, and generate consistent though slower earnings growth through its premier Canadian businesses.

On October 23, 2013, Kroll Bond Rating Agency (KBRA), a registered National Recognized Statistical Rating Organization with the SEC, assigned senior long-term and short-term debt and deposit ratings of AA and K1+, respectively, to RBC with a stable outlook. KBRA was requested to rate a commercial mortgage-back securities multi-borrower transaction where RBC was one of four third party interest rate cap providers to this transaction. Given KBRA's policy to rate all parties to a transaction, it was required to issue a rating on RBC. These ratings were unsolicited and RBC did not participate in the ratings process.

Credit ratings, including stability or provisional ratings (collectively, Ratings) are not recommendations to purchase, sell or hold a security in as much as they do not comment on market price or suitability for a particular investor. Ratings may not reflect the potential impact of all risks on the value of securities. In addition, real or anticipated changes in the rating assigned to a security will generally affect the market value of that security. Ratings are subject to revision or withdrawal at any time by the rating organization. Each Rating listed in the chart above should be evaluated independently of any other Rating applicable to our debt and preferred shares. As is customary, RBC pays rating agencies to assign Ratings for both the parent company as well as our subsidiaries, and for certain other services.

Our ability to access unsecured funding markets and to engage in certain collateralized business activities on a cost-effective basis is primarily dependent upon maintaining competitive credit ratings. Our credit ratings are largely determined by the quality of our earnings, the adequacy of our capital and the effectiveness of our risk management programs. There can be no assurance that our credit ratings and rating outlooks will not be lowered or that ratings agencies will not issue adverse commentaries about us, potentially resulting in adverse consequences for our funding capacity or access to capital markets. A lowering of our credit ratings may also affect our ability, and the cost, to enter into normal course derivative or hedging transactions and may require us to post additional collateral under certain contracts. However, we estimate, based on periodic reviews of ratings triggers embedded in our existing businesses and of our funding capacity sensitivity, that a minor downgrade would not materially influence our liability composition, funding access, collateral usage and associated costs.

Additional information about Ratings is provided under "Risk management – Liquidity and funding management – Credit ratings" on pages 72 and 73 of our 2013 Management's Discussion and Analysis, which pages are incorporated by reference herein.

MARKET FOR SECURITIES

Trading Price and Volume

The Bank's common shares are listed on the Toronto Stock Exchange (TSX) in Canada, the New York Stock Exchange (NYSE) in the U.S. and the SIX Swiss Exchange (SIX) in Switzerland. Preferred shares are listed on the TSX. The following table sets out the price range and trading volumes of the common shares on the TSX and the NYSE for the periods indicated. Prices are based on the reported amounts from the TSX Historical Data Access (HDA) and NYSE Euronext.

	Common Shares (TSX)			Common Shares (NYSE)		
Month	**High ($)**	**Low ($)**	**Volume**	**High (US$)**	**Low (US$)**	**Volume**
November 2012	58.90	54.51	39,573,907	59.37	54.41	11,261,977
December 2012	60.85	58.21	47,309,890	61.54	58.70	11,578,302
January 2013	62.86	60.02	39,530,230	62.62	61.00	9,180,533
February 2013	64.92	61.67	45,885,940	64.08	60.94	9,825,861
March 2013	64.18	60.13	56,046,270	62.45	59.09	11,634,725
April 2013	62.31	58.82	54,247,096	61.50	57.71	15,766,704
May 2013	62.24	60.11	56,800,637	62.50	58.79	12,799,502
June 2013	62.07	58.55	63,725,175	60.15	55.49	15,565,546
July 2013	65.66	59.93	55,713,459	63.88	56.95	17,390,784
August 2013	65.59	63.07	42,490,676	62.82	60.65	12,156,477
September 2013	67.00	65.05	39,331,215	65.08	61.81	7,229,919
October 2013	70.75	65.91	44,269,810	68.02	63.75	10,387,860
November 2013	72.04	69.61	46,430,255	68.89	66.30	9,000,754

The following tables provide the price range and trading volumes of the First Preferred Shares on the TSX for the periods indicated. Prices are based on the reported amounts from the TSX HDA.

	Series W			Series AA		
Month	**High ($)**	**Low ($)**	**Volume**	**High ($)**	**Low ($)**	**Volume**
November 2012	25.67	25.45	103,292	25.85	25.50	127,520
December 2012	25.79	25.49	71,518	26.18	25.68	103,503
January 2013	25.88	25.34	161,504	26.10	25.42	356,996
February 2013	25.73	25.42	128,187	25.85	25.48	172,445
March 2013	25.77	25.47	81,402	25.80	25.57	168,233
April 2013	25.77	25.29	180,928	25.86	25.30	246,246
May 2013	25.55	25.34	244,767	25.73	25.44	201,040
June 2013	25.46	24.70	180,792	25.61	24.33	445,946
July 2013	25.25	24.76	185,421	25.36	24.70	161,867
August 2013	24.94	24.02	188,042	24.90	23.37	308,385
September 2013	25.19	24.51	176,790	25.33	24.54	288,425
October 2013	25.22	24.82	171,758	25.48	25.00	237,119
November 2013	25.09	24.93	516,234	25.67	25.25	239,420

Month	Series AB			Series AC			Series AD		
	High ($)	Low ($)	Volume	High ($)	Low ($)	Volume	High ($)	Low ($)	Volume
November 2012	25.83	25.63	148,396	26.09	25.70	29,847	25.93	25.57	135,332
December 2012	26.21	25.75	90,816	26.40	25.70	87,926	26.13	25.72	83,086
January 2013	26.19	25.70	81,217	26.44	25.85	113,844	26.16	25.68	97,391
February 2013	26.23	25.78	74,445	26.48	25.91	92,854	26.05	25.65	93,029
March 2013	26.09	25.78	50,214	26.24	25.75	89,282	25.92	25.71	114,857
April 2013	26.04	25.41	175,797	26.10	25.42	84,177	25.96	25.50	128,101
May 2013	25.78	25.55	125,988	25.92	25.46	146,048	25.76	25.42	160,500
June 2013	25.81	24.91	279,094	25.69	24.73	123,776	25.59	25.00	217,049
July 2013	25.67	25.05	440,121	25.58	25.01	320,627	25.49	24.86	558,720
August 2013	25.13	23.80	323,418	25.13	23.50	128,877	25.00	23.34	356,018
September 2013	25.73	24.81	118,297	25.50	24.74	85,222	25.27	24.75	267,347
October 2013	25.70	25.18	124,663	25.50	25.15	99,699	25.47	25.12	217,980
November 2013	25.82	25.37	106,745	25.75	25.35	117,234	25.70	25.26	246,800

Month	Series AE			Series AF			Series AG		
	High ($)	Low ($)	Volume	High ($)	Low ($)	Volume	High ($)	Low ($)	Volume
November 2012	26.02	25.62	120,839	25.95	25.65	95,217	25.81	25.60	92,977
December 2012	26.22	25.70	64,784	26.45	25.82	82,829	26.16	25.70	55,492
January 2013	26.13	25.71	86,163	26.28	25.63	163,581	26.22	25.68	77,549
February 2013	26.06	25.71	94,822	26.39	25.68	93,582	26.17	25.75	227,289
March 2013	25.97	25.72	54,911	26.29	25.86	94,335	26.10	25.71	57,401
April 2013	25.95	25.50	204,988	26.20	25.56	67,304	25.94	25.50	113,269
May 2013	25.79	25.51	101,359	25.95	25.31	161,134	25.75	25.54	76,187
June 2013	25.66	24.88	296,049	25.88	24.51	125,059	25.70	24.88	125,855
July 2013	25.34	24.78	403,105	25.34	24.68	226,416	25.33	24.89	292,882
August 2013	24.86	23.25	337,421	24.94	23.37	257,514	24.98	23.74	190,465
September 2013	25.29	24.71	192,692	25.48	24.73	187,169	25.34	24.76	135,385
October 2013	25.41	25.10	298,362	25.44	25.10	156,659	25.49	25.15	238,599
November 2013	25.65	25.30	145,696	25.69	25.32	145,025	25.63	25.30	160,328

Month	Series AH*			Series AJ			Series AL		
	High ($)	Low ($)	Volume	High ($)	Low ($)	Volume	High ($)	Low ($)	Volume
November 2012	26.83	26.59	48,790	25.83	25.06	206,456	26.17	25.92	74,530
December 2012	26.82	26.59	109,187	25.72	25.15	217,152	26.29	25.92	228,505
January 2013	26.85	26.35	261,537	26.41	25.50	425,893	26.30	25.70	157,877
February 2013	26.69	26.34	185,865	25.86	25.52	228,963	26.03	25.71	133,721
March 2013	26.53	26.30	156,204	25.83	25.51	147,706	26.20	25.70	152,302
April 2013	26.63	26.00	150,636	25.88	25.40	171,313	26.10	25.62	143,398
May 2013	26.58	26.10	189,868	25.75	25.46	318,212	26.05	25.54	358,451
June 2013	26.16	26.10	507,822	25.74	25.09	192,568	25.78	25.48	114,422
July 2013	26.15	26.14	1,100	25.64	24.88	505,488	25.75	25.25	137,965
August 2013	-	-	-	25.30	24.90	302,013	25.43	25.13	158,453
September 2013	-	-	-	25.45	25.05	251,076	25.52	25.30	159,137
October 2013	-	-	-	25.49	25.04	263,640	25.50	25.09	580,135
November 2013	-	-	-	25.29	25.07	913,822	25.34	25.10	120,536

* We redeemed all of our issued and outstanding Non-Cumulative First Preferred Shares Series AH on July 2, 2013.

Month	Series AN High ($)	Series AN Low ($)	Series AN Volume	Series AP High ($)	Series AP Low ($)	Series AP Volume	Series AR High ($)	Series AR Low ($)	Series AR Volume
November 2012	26.36	26.09	131,227	26.48	26.20	308,028	26.41	26.21	229,229
December 2012	26.52	26.23	199,590	26.50	26.03	65,116	26.48	26.18	244,721
January 2013	26.55	25.95	173,257	26.50	25.95	384,532	26.55	25.94	600,968
February 2013	26.12	25.95	167,730	26.12	25.95	147,630	26.15	25.92	242,453
March 2013	26.18	25.95	181,471	26.19	25.92	192,705	26.17	25.85	315,055
April 2013	26.21	25.68	97,196	26.20	25.60	282,142	26.20	25.60	280,446
May 2013	25.79	25.57	220,843	25.78	25.64	528,691	25.89	25.65	374,491
June 2013	25.77	25.57	92,202	25.78	25.57	407,175	25.79	25.59	180,433
July 2013	25.88	25.32	145,556	25.85	25.27	184,545	25.98	25.03	323,026
August 2013	25.48	25.10	205,929	25.48	25.27	163,856	25.47	25.26	197,087
September 2013	25.73	25.40	113,833	25.58	25.40	194,726	25.64	25.39	150,872
October 2013	25.59	25.11	170,537	25.58	25.12	208,888	25.63	25.11	261,735
November 2013	25.34	25.18	254,002	25.49	25.17	142,016	25.33	25.18	436,661

Month	Series AT High ($)	Series AT Low ($)	Series AT Volume	Series AV High ($)	Series AV Low ($)	Series AV Volume	Series AX High ($)	Series AX Low ($)	Series AX Volume
November 2012	26.90	26.72	179,494	27.17	26.72	403,250	27.13	26.85	298,919
December 2012	27.00	26.73	244,298	26.97	26.73	107,779	27.14	26.85	243,765
January 2013	27.10	26.42	147,314	27.17	26.45	819,609	27.45	26.59	124,619
February 2013	26.76	26.45	182,647	26.80	26.45	396,565	26.92	26.55	169,776
March 2013	26.84	26.48	359,087	26.70	26.45	265,230	27.13	26.63	141,047
April 2013	26.75	26.20	153,813	26.75	26.18	237,126	27.01	26.40	122,120
May 2013	26.34	26.16	193,694	26.30	26.17	506,499	26.69	26.30	208,047
June 2013	26.30	26.11	184,663	26.33	26.05	400,913	26.54	26.25	188,086
July 2013	26.39	25.91	447,170	26.40	25.90	698,832	26.60	26.06	224,514
August 2013	25.97	25.65	299,181	25.99	25.65	247,242	26.20	25.81	615,109
September 2013	26.14	25.85	83,445	26.12	25.80	370,822	26.32	26.06	204,770
October 2013	26.04	25.52	134,849	26.09	25.49	263,859	26.34	25.80	149,642
November 2013	25.89	25.59	143,324	25.84	25.62	151,970	26.15	25.88	500,073

DIVIDENDS

The Bank has had an uninterrupted history of paying dividends on its common shares and on each of its outstanding series of first preferred shares. Information about the Bank's dividends paid or payable per share on the common shares and each outstanding series of first preferred shares in each of the three most recently completed years appears under the heading "Selected share data" in the Capital management section on page 82 of our 2013 Management's Discussion and Analysis for the year ended October 31, 2013, which section is incorporated by reference herein. Information about restrictions on the payment of dividends appears under the heading "Restrictions on the payment of dividends" in Note 21 on page 161 of our 2013 Annual Consolidated Financial Statements for the year ended October 31, 2013, which note is incorporated by reference herein.

The declaration amount and payment of future dividends will be subject to the discretion of the Bank's board of directors, and will be dependent upon the Bank's results of operations, financial condition, cash requirements and future regulatory restrictions on the payment of dividends and other factors deemed relevant by the board of directors. Information about our dividends and our dividend payout ratio (common share dividends as a percentage of net income less preferred share dividends) is provided under the "Capital management" section beginning on page 76 of our 2013 Management's Discussion and Analysis, which section is incorporated by reference herein.

DIRECTORS AND EXECUTIVE OFFICERS

Directors

The following are the Bank's directors as at December 4, 2013:

Name, and Year Elected	Province/State and Country of Residence	Occupation
W. Geoffrey Beattie (2001)	Ontario, CAN	Chief Executive Officer, Generation Capital
David F. Denison (2012)	Ontario, CAN	Corporate Director
The Hon. Paule Gauthier (1991)	Quebec, CAN	Senior Partner, Stein Monast L.L.P.
Richard L. George (2012)	Alberta, CAN	Partner, Novo Investment Group
Timothy J. Hearn (2006)	Alberta, CAN	Chairman, Hearn & Associates
Alice D. Laberge (2005)	British Columbia, CAN	Corporate Director
Jacques Lamarre (2003)	Quebec, CAN	Strategic Advisor, Heenan Blaikie LLP
Brandt C. Louie (2001)	British Columbia, CAN	Chairman and Chief Executive Officer, H.Y. Louie Co. Limited Chairman of the Board, London Drugs Limited
Michael H. McCain (2005)	Ontario, CAN	President and Chief Executive Officer, Maple Leaf Foods Inc.
Heather Munroe-Blum (2011)	Quebec, CAN	Professor of Medicine and Principal Emerita, McGill University
Gordon M. Nixon (2001)	Ontario, CAN	President and Chief Executive Officer, Royal Bank of Canada
David P. O'Brien (1996)	Alberta, CAN	Chair of the Board, Royal Bank of Canada
J. Pedro Reinhard (2000)	Florida, U.S.A.	President, Reinhard & Associates
Thomas A. Renyi (2013)	Maine, U.S.A.	Corporate Director
Edward Sonshine (2008)	Ontario, CAN	Chief Executive Officer, RioCan Real Estate Investment Trust
Kathleen P. Taylor (2001)	Ontario, CAN	Chair of the Board (Designate), Royal Bank of Canada
Bridget A. van Kralingen (2011)	New Jersey, U.S.A.	Senior Vice-President, IBM Global Business Services, IBM Corporation
Victor L. Young (1991)	Newfoundland and Labrador, CAN	Corporate Director

Directors are elected annually and hold office until the next annual meeting of shareholders. Since November 1, 2008, the directors have held the principal occupations described above, except for the following:

Mr. W. Geoffrey Beattie was President and Chief Executive Officer of The Woodbridge Company Limited prior to December 2012 and Deputy Chairman of the Thomson Reuters Corporation prior to May 2013.

Mr. David F. Denison was President and Chief Executive Officer of the Canada Pension Plan Investment Board prior to July 2012.

Mr. Richard L. George was Chief Executive Officer of Suncor Energy Inc. prior to May 2012 and President and Chief Executive Officer of Suncor Energy Inc. prior to December 2011.

Mr. Jacques Lamarre was Director, President and Chief Executive Officer of SNC-Lavalin Group Inc. prior to May 2009.

Ms. Heather Munroe-Blum was Principal and Vice-Chancellor of McGill University prior to June 2013.

Ms. Kathleen P. Taylor was President and Chief Executive Officer of Four Seasons Hotels and Resorts prior to January 2013, President and Chief Operating Officer of Four Seasons Hotels and Resorts prior to August 1, 2010 and President, Worldwide Business Operations of Four Seasons Hotels Inc. prior to January 2007.

Ms. Bridget A. van Kralingen was General Manager of IBM North America from 2010 to January 2012, General Manager of IBM Global Business Services, North East Europe, Middle East and Africa prior to 2010, and Global Managing Partner of IBM's Business Consulting Services – Financial Services Sector prior to 2007.

Committees of the Board

Audit Committee: V.L. Young (Chair), D.F. Denison, T.J. Hearn, A.D. Laberge, J. Lamarre, B.C. Louie, and J.P. Reinhard

Risk Committee: W.G. Beattie (Chair), D.F. Denison, R.L. George, J. Lamarre, M.H. McCain, H. Munroe-Blum, T.A. Renyi, E. Sonshine, K.P. Taylor, B.A. van Kralingen and V.L. Young

Corporate Governance and Public Policy Committee: D.P. O'Brien (Chair), W.G. Beattie, P. Gauthier, R.L. George, T. J. Hearn, B.C. Louie, M.H. McCain, H. Munroe-Blum and E. Sonshine

Human Resources Committee: K.P. Taylor (Chair), P. Gauthier, A.D. Laberge, D.P. O'Brien, J.P. Reinhard and B.A. van Kralingen

Executive Officers

The following are the Bank's executive officers as at December 4, 2013(1):

Name	**Province/State and Country of Residence**	**Title**
Morten N. Friis	Ontario, CAN	Chief Risk Officer(2)
Janice R. Fukakusa	Ontario, CAN	Chief Administrative Officer and Chief Financial Officer
Zabeen Hirji	Ontario, CAN	Chief Human Resources Officer
M. George Lewis	Ontario, CAN	Group Head, Wealth Management and Insurance
A. Douglas McGregor	Ontario, CAN	Group Head, Capital Markets and Investor & Treasury Services

Name	Province/State and Country of Residence	Title
David I. McKay	Ontario, CAN	Group Head, Personal & Commercial Banking[3]
Gordon M. Nixon	Ontario, CAN	President and Chief Executive Officer[3]

(1) On November 15, 2013, RBC announced that Bruce Ross will join RBC in early January 2014 as the Group Head, Technology and Operations. He will join the Group Executive.

(2) On August 29, 2013, RBC announced the retirement of Morten Friis as Chief Risk Officer, to take effect January 10, 2014. Mark Hughes was appointed as Mr. Friis' successor. As part of the planned transition, Mr. Hughes assumed the role of Deputy Chief Risk Officer for RBC on November 1, 2013 and will take over the role of Chief Risk Officer and join the Group Executive on January 10, 2014.

(3) On December 4, 2013, Gordon Nixon advised the board of directors of RBC of his intention to retire effective August 1, 2014, and the board appointed David McKay as President effective February 26, 2014, and President and Chief Executive Officer effective August 1, 2014.

Mr. Friis was appointed to Group Executive in his role as Chief Risk Officer of Royal Bank of Canada in January 2009. Prior to his current role, he was appointed Executive Vice-President and Chief Risk Officer in February 2005.

Ms. Fukakusa was appointed to Chief Administrative Officer and Chief Financial Officer of Royal Bank of Canada in January 2009. Ms. Fukakusa was appointed to Group Executive in her role as Executive Vice-President and Chief Financial Officer in January 2007.

Ms. Hirji was appointed to Group Executive in her role as Chief Human Resources Officer in June 2010. Prior to her current role, Ms. Hirji was Executive Vice-President, Human Resources of Royal Bank of Canada since February 2007.

Mr. Lewis was appointed to Group Executive in his role as Group Head, Wealth Management in March 2007 and effective October 31, 2012 was appointed as Group Head, Wealth Management and Insurance. From July 2000 to May 2008, Mr. Lewis was Chief Executive Officer of RBC Asset Management Inc., our Canadian mutual fund and asset management business.

Mr. McGregor was appointed to Group Executive in his role as Co-Group Head, Capital Markets in November 2008 and effective October 31, 2012 was appointed Co-Group Head, Capital Markets and Investor & Treasury Services. Mr. McGregor assumed full responsibilities for these businesses effective December 4, 2013.

Mr. McKay was appointed to Group Executive in his role as Group Head, Canadian Banking in April 2008 and effective October 31, 2012 was appointed Group Head, Personal & Commercial Banking. From October 2005 until April 2008, Mr. McKay was Executive Vice-President of Personal Financial Services of Royal Bank of Canada.

Mr. Nixon was appointed President of Royal Bank of Canada in April 2001 and Chief Executive Officer in August 2001.

Ownership of Securities

To our knowledge, as at October 31, 2013, the directors and executive officers, as a group, beneficially own or exercise control or direction over less than one per cent (1%) of our common and preferred shares. None of our directors or executive officers holds shares of our subsidiaries except where required for qualification as a director of a subsidiary.

Cease Trade Orders, Bankruptcies, Penalties or Sanctions

To the best of our knowledge, no director or executive officer,

(a) is, as at December 4, 2013, or has been, within the 10 years before, a director, chief executive officer or chief financial officer of any company (including our company), that while that person was acting in that capacity,

   (i) was the subject of a cease trade or similar order or an order that denied the relevant company access to any exemption under securities legislation[3], for a period of more than 30 consecutive days, or

   (ii) was subject to an event that resulted, after the director or executive officer ceased to be a director, chief executive officer or chief financial officer, in the company being the subject of a cease trade or similar order or an order that denied the relevant company access to any exemption under securities legislation[3], for a period of more than 30 consecutive days, or

(b) is, as at December 4, 2013 or has been, within the 10 years before, a director or executive officer of any company (including our company), that while that person was acting in that capacity or within a year of that person ceasing to act in that capacity, became bankrupt, made a proposal under any legislation relating to bankruptcy or insolvency or was subject to or instituted any proceedings, arrangement or compromise with creditors or had a receiver, receiver manager or trustee appointed to hold its assets, or

(c) has, within the 10 years before December 4, 2013, become bankrupt, made a proposal under any legislation relating to bankruptcy or insolvency, or become subject to or instituted any proceedings, arrangement or compromise with creditors, or had a receiver, receiver manager or trustee appointed to hold the assets of the director or executive officer,

Except for the following;

Mr. Reinhard became a director of Dow Corning Corporation in June 2000. The company sought protection under the reorganization provisions under Chapter 11 of the U.S. Bankruptcy Code in 1995 and emerged from Chapter 11 bankruptcy proceedings in 2004. Mr. Reinhard is no longer a director of Dow Corning Corporation.

To the best of our knowledge, none of our directors or executive officers have been subject to (a) any penalties or sanctions imposed by a court relating to securities legislation[3] or by a securities regulatory authority[3] or has entered into a settlement agreement with a securities regulatory authority[3], or (b) any other penalties or sanctions imposed by a court or regulatory body that would likely be considered important to a reasonable investor in making an investment decision.

Conflicts of Interest

To the best of our knowledge, no director or executive officer has an existing or potential material conflict of interest with us or any of our subsidiaries.

3 National Instrument 14-101 restricts the meaning of “securities legislation” to Canadian provincial and territorial legislation and “securities regulatory authority” to Canadian provincial and territorial securities regulatory authorities.

LEGAL PROCEEDING AND REGULATORY ACTIONS

In the ordinary course of our business, we are routinely involved in or parties to various ongoing, pending and threatened legal actions and proceedings.

A description of certain legal proceedings to which we are a party appears under the heading "Guarantees, commitments, pledged assets and contingencies – Litigation" in Note 26 on page 170 of our 2013 Annual Consolidated Financial Statements for the year ended October 31, 2013, which note is incorporated by reference.

Since October 31, 2012, (a) there have been no penalties or sanctions imposed against us by a court relating to securities legislation[4] or by a securities regulatory authority[4], (b) there have been no other penalties or sanctions imposed by a court or regulatory body against us that would likely be considered important to a reasonable investor in making an investment decision, and (c) we have not entered into any settlement agreements with a court relating to securities legislation[4] or with a securities regulatory authority[4].

INTEREST OF MANAGEMENT AND OTHERS IN MATERIAL TRANSACTIONS

To the best of our knowledge, there were no directors or executive officers or any associate or affiliate of a director or executive officer with a material interest in any transaction within the three most recently completed financial years or during the current financial year that has materially affected us or is reasonably expected to materially affect us.

TRANSFER AGENT AND REGISTRAR

For Canada and the Caribbean, Computershare Trust Company of Canada is the transfer agent and registrar for our common shares and our preferred shares. Their principal offices are in the cities of: Halifax, NS; Montreal, QC; Toronto, ON; Calgary, AB; and Vancouver, BC. In the U.S., Computershare Trust Company, N.A. is the co-transfer agent located in Canton, Massachussets. In the U.K., Computershare Investor Services PLC is the co-transfer agent located in Bristol, England.

EXPERTS

Deloitte LLP (Deloitte), independent registered chartered accountants, prepared the Report of Independent Registered Chartered Accountants in respect of our audited Annual Consolidated Financial Statements and the Report of Independent Registered Chartered Accountants in respect of our internal control over financial reporting.

AUDIT COMMITTEE

Audit Committee Mandate

The mandate of the Audit Committee is attached as Appendix C to this Annual Information Form.

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4 National Instrument 14-101 restricts the meaning of "securities legislation" to Canadian provincial and territorial legislation and "securities regulatory authority" to Canadian provincial and territorial securities regulatory authorities.

Composition of Audit Committee

The Audit Committee consists of Victor L. Young (Chair), David F. Denison, Timothy J. Hearn, Alice D. Laberge, Jacques Lamarre, Brandt C. Louie and J. Pedro Reinhard. The board has determined that each member of the Audit Committee is independent under our Director Independence Policy, which incorporates the independence standards under applicable Canadian and U.S. laws and regulations and none receives, directly or indirectly, any compensation from us other than ordinary course compensation for service as a member of the board of directors and its committees or of a board of directors of one or more of our subsidiaries. All members of the Audit Committee are financially literate within the meaning of *National Instrument 52-110 – Audit Committees* and of the Corporate Governance Standards of the NYSE. In considering the criteria for determining financial literacy, the board of directors looks at the ability of a director to read and understand a balance sheet, an income statement and a cash flow statement of a financial institution. The board has determined that each of David F. Denison, Timothy J. Hearn, Alice D. Laberge, J. Pedro Reinhard and Victor L. Young qualifies as an "audit committee financial expert" as defined by the SEC.

Relevant Education and Experience of Audit Committee Members

In addition to each member's general business experience, the education and experience of each Audit Committee member that is relevant to the performance of his or her responsibilities as an Audit Committee member is as follows:

David F. Denison, B.Sc., B.Ed., FCPA, FCA, earned his bachelor degrees in mathematics and education from the University of Toronto and is a Chartered Accountant and a Fellow of the Institute of Chartered Accountants of Ontario. Mr. Denison was President and Chief Executive Officer of the Canada Pension Plan Investment Board from 2005 to 2012 and is a director of Allison Transmission Holdings, Inc. and BCE Inc. Mr. Denison has been a member of our Audit Committee since August 2012.

Timothy J. Hearn, B.Sc., earned his Bachelor of Science degree from the University of Manitoba. Mr. Hearn was Chairman, President and Chief Executive Officer of Imperial Oil Limited from 2002 to 2008 and is a director of ARC Resources Ltd. Mr. Hearn has been a member of our Audit Committee since March 2006.

Alice D. Laberge, B.Sc., M.B.A., earned her Bachelor of Science degree from the University of Alberta and her M.B.A. from the University of British Columbia. Ms. Laberge was President and Chief Executive Officer of Fincentric Corporation until July 2005 and prior to December 2003, was its Chief Financial Officer. Ms. Laberge is a director of Potash Corporation of Saskatchewan and Russel Metals Inc. and has been a member of our Audit Committee since March 2006.

Jacques Lamarre, B.A., B.Sc., earned his Bachelor of Arts degree and Bachelor of Arts and Science degree in Civil Engineering from Laval University. He has also completed Harvard University's Executive Development Program. Prior to May 2009, Mr. Lamarre served as President and Chief Executive Officer of SNC-Lavalin Group Inc. for 13 years. Mr. Lamarre is a director of Suncor Energy Inc. has been a member of our Audit Committee since February 2004.

Brandt C. Louie, *B.Comm., FCPA, FCA*, earned his Bachelor of Commerce degree from the University of British Columbia and is a Chartered Accountant and a Fellow of the Institute of Chartered Accountants of British Columbia. Mr. Louie is Chairman and Chief Executive Officer of H.Y. Louie Co. Limited and Chairman and a director of London Drugs Limited. Mr. Louie has been a member of our Audit Committee since March 2010.

J. Pedro Reinhard, M.B.A., earned his M.B.A. at the Escola de Administracão de Empresas Fundação Getulio Vargas (Sao Paulo) and attended post-graduate studies at the University of Cologne in Germany and Stanford University. Mr. Reinhard is the President of Reinhard & Associates and was Executive Vice-

President and Chief Financial Officer of The Dow Chemical Company prior to October 2005. Mr. Reinhard is a director of Colgate-Palmolive Company and Sigma-Aldrich Corporation and is also a past chairman of the CFO Council Conference Board. Mr. Reinhard has been a member of our Audit Committee since May 2000.

Victor L. Young, B.Comm. (Hons.), M.B.A., earned his Bachelor of Commerce (Honours) degree from Memorial University and his M.B.A. from the University of Western Ontario. From 1984 to 2001, Mr. Young served as Chairman and Chief Executive Officer of Fishery Products International Limited. Mr. Young is a director of Imperial Oil Limited and McCain Foods Limited. Mr. Young has been a member of our Audit Committee since March 2007.

Pre-Approval Policies and Procedures

The Audit Committee has adopted a policy that requires pre-approval by the Audit Committee of audit services and other services within permissible categories of non-audit services. The policy prohibits us from engaging the auditor for “prohibited” categories of non-audit services. A copy of our Pre-Approval Policies and Procedures can be found in Appendix D.

Independent Registered Chartered Accountants’ Fees

Deloitte became our sole auditor following a tender process on September 23, 2003. Deloitte or its predecessor firms have been involved in our audit since 1917 as one of a panel of auditors used by the Bank. Fees relating to the years ended October 31, 2013 and October 31, 2012 to Deloitte and its affiliates were $28.0 million and $24.8 million respectively and are detailed below. The nature of each category of fees is also described below.

	Year ended October 31, 2013 ($Millions)			**Year ended October 31, 2012** ($Millions)		
	Bank and Subsidiaries	**Mutual Funds[1]**	**Total**	**Bank and Subsidiaries**	**Mutual Funds[1]**	**Total**
Audit fees	$20.9	$1.7	**$22.6**	$19.1	$1.8	**$20.9**
Audit-related fees	4.1	-	**4.1**	2.7	-	**2.7**
Tax fees	0.1	0.3	**0.4**	0.1	0.3	**0.4**
All other fees	0.4	0.5	**0.9**	0.4	0.4	**0.8**
Total fees	$25.5	$2.5	**$28.0**	$22.3	$2.5	**$24.8**

(1) The Mutual Funds category includes fees paid for professional services provided by Deloitte for certain Mutual Funds managed by subsidiaries of the Bank. In addition to other administrative costs, the subsidiaries are responsible for the auditors’ fees for professional services rendered in connection with the annual audit, statutory and regulatory filings and other services for the Mutual Funds in return for a fixed administration fee.

Audit Fees

Audit fees were paid for professional services rendered by the auditor for the integrated audit of the Annual Consolidated Financial Statements of the Bank, including its audit of the effectiveness of our internal control over financial reporting, and any financial statement audits of our subsidiaries. In addition, audit fees were paid for services that generally only the Bank’s independent auditor reasonably can provide including services provided in connection with statutory and regulatory filings related to prospectuses and other offering documents.

Audit-Related Fees

Audit-related fees were paid for assurance and related services that are reasonably related to the performance of the audit or review of our Annual Consolidated Financial Statements and are not reported under the audit fees item above. These services consisted of:

- special attest services traditionally performed by the Bank's independent auditor;
- reporting on the effectiveness of internal controls as required by contract or for business reasons;
- the audits of the financial statements of our various pension plans and charitable foundations;
- the audits of various trusts and limited partnerships; and
- the audits of certain special purpose vehicles relating to complex structured products.

Tax Fees

Tax fees were paid for tax compliance services including the review of original and amended tax returns, assistance with questions regarding tax audits and assistance in completing routine tax schedules and calculations.

All Other Fees

These services consist of French translation of financial statements and related continuous disclosure and other public documents containing financial information for us and certain of our subsidiaries as well as accounting and other research publications.

ADDITIONAL INFORMATION

Additional information, including directors' and officers' remuneration and indebtedness, principal holders of our securities, and securities authorized for issuance under equity compensation plans, where applicable, is contained in the Bank's Management Proxy Circular for the most recent annual meeting of shareholders. Additional financial information is provided in our Annual Consolidated Financial Statements and Management's Discussion and Analysis which are included in our 2013 Annual Report for the year ended October 31, 2013.

Copies of this Annual Information Form, our 2013 Annual Report and Management Proxy Circular in respect of the most recent annual meeting of shareholders may be obtained from Investor Relations at 200 Bay Street, North Tower, 4th Floor, Toronto, Ontario, M5J 2W7 (416-955-7802).

This Annual Information Form, the Annual Consolidated Financial Statements and Management's Discussion and Analysis for the year ended October 31, 2013, as well as additional information about us may be found on our website at rbc.com, on SEDAR, the Canadian Securities Administrators' website, at sedar.com, and on the EDGAR section of the SEC's website at sec.gov.

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

TRADEMARKS

Trademarks used in this Annual Information Form include the LION & GLOBE Symbol, ROYAL BANK OF CANADA, RBC, RBC BANK, RBC CAPITAL MARKETS, RBC ENVIRONMENTAL BLUEPRINT, RBC INVESTOR SERVICES and RBC WEALTH MANAGEMENT which are trademarks of Royal Bank of Canada used by Royal Bank of Canada and/or by its subsidiaries under license. All other trademarks mentioned in this annual information form, which are not the property of Royal Bank of Canada, are owned by their respective holders.

APPENDIX A – PRINCIPAL SUBSIDIARIES

PRINCIPAL SUBSIDIARIES

Principal subsidiaries (1)	Principal office address (2)		Carrying value of voting shares owned by the bank (3)
Royal Bank Holding Inc.	Toronto, Ontario, Canada	$	36,853
Royal Mutual Funds Inc.	Toronto, Ontario, Canada		
RBC Insurance Holdings Inc.	Mississauga, Ontario, Canada		
RBC General Insurance Company	Mississauga, Ontario, Canada		
RBC Insurance Company of Canada	Mississauga, Ontario, Canada		
RBC Life Insurance Company	Mississauga, Ontario, Canada		
RBC Direct Investing Inc.	Toronto, Ontario, Canada		
RBC Phillips, Hager & North Investment Counsel Inc.	Toronto, Ontario, Canada		
R.B.C. Holdings (Bahamas) Limited	Nassau, New Providence, Bahamas		
RBC Caribbean Investments Limited	George Town, Grand Cayman, Cayman Islands		
Royal Bank of Canada Insurance Company Ltd.	St. Michael, Barbados		
Investment Holdings (Cayman) Limited	George Town, Grand Cayman, Cayman Islands		
RBC (Barbados) Funding Ltd.	St. Michael, Barbados		
RBC Capital Markets Arbitrage S.A.	Luxembourg, Luxembourg		
Capital Funding Alberta Limited	Calgary, Alberta, Canada		
RBC Global Asset Management Inc.	Toronto, Ontario, Canada		
RBC Investor Services Trust	Toronto, Ontario, Canada		
RBC Investor Services Bank S.A.	Esch-sur-Alzette, Luxembourg		
RBC (Barbados) Trading Bank Corporation	St. James, Barbados		
RBC USA Holdco Corporation (2)	New York, New York, U.S.		10,101
RBC Capital Markets, LLC (2)	New York, New York, U.S.		
RBC Global Asset Management (U.S.) Inc.	Minneapolis, Minnesota, U.S.		
RBC Dominion Securities Limited	Toronto, Ontario, Canada		5,632
RBC Dominion Securities Inc.	Toronto, Ontario, Canada		
RBC Holdings (Barbados) Ltd.	St. Michael, Barbados		2,787
RBC Financial (Caribbean) Limited	Port of Spain, Trinidad and Tobago		
RBC Finance S.à r.l./B.V. (2)	Amsterdam, Netherlands		2,551
RBC Holdings (Luxembourg) S.A R.L.	Luxembourg, Luxembourg		
RBC Holdings (Channel Islands) Limited	Jersey, Channel Islands		
Royal Bank of Canada (Channel Islands) Limited	Guernsey, Channel Islands		
Bluebay Asset Management (Services) Ltd.	London, England		1,719
RBC Europe Limited	London, England		1,510
RBC Capital Trust	Toronto, Ontario, Canada		1,282
Royal Bank Mortgage Corporation	Toronto, Ontario, Canada		1,075
RBC Covered Bond Guarantor Limited Partnership	Toronto, Ontario, Canada		587
The Royal Trust Company	Montreal, Quebec, Canada		525
RBC Bank (Georgia), National Association (2)	Atlanta, Georgia, U.S.		243
RBC Luxembourg (Suisse) Holdings S.A R.L.	Luxembourg, Luxembourg		151
Royal Bank of Canada (Suisse) SA	Geneva, Switzerland		
Royal Trust Corporation of Canada	Toronto, Ontario, Canada		142

(1) The Bank directly or indirectly owns 100% of the voting shares of each subsidiary.

(2) Each subsidiary is incorporated or organized under the laws of the state or country in which the principal office is situated, except for RBC USA Holdco Corporation which is incorporated under the laws of the State of Delaware, U.S., RBC Capital Markets, LLC, which is organized under the laws of the State of Minnesota, U.S. RBC Finance S.à r.l. / B.V. is a company incorporated in the Netherlands with its official seat in Amsterdam, the Netherlands, and place of effective management, central administration, and principal establishment in Luxembourg, Grand Duchy of Luxembourg. It is registered with the Luxembourg Register of Commerce under no. B169.988 and with the Dutch trade register of the Chamber of Commerce under no. 3315188. RBC Bank (Georgia), National Association is a nationally chartered U.S. Bank having a head office in Atlanta, Georgia with operations in Raleigh, North Carolina and has adopted the corporate governance procedures of the law of the State of Delaware.

(3) The carrying value (in millions of dollars) of voting shares is stated as the Bank's equity in such investments.

APPENDIX B – EXPLANATION OF RATINGS AND OUTLOOK

INSTITUTION	RATING	OUTLOOK
Moody's Investors Service	• Obligations rated 'Aa' are judged to be high quality, with "very low credit risk". • Obligations rated 'A' are judged to be upper-medium grade and are subject to lower credit risk. • Issuers (or supporting institutions) rated Prime-1 have a superior ability to repay short-term debt obligations. • The modifier 3 indicates a ranking in the lower end of that generic rating category.	A stable outlook indicates that a rating is not likely to change.
Standard & Poor's	• An obligation rated 'AA' has very strong capacity to meet its financial commitments. It differs from the highest-rated obligations only to a small degree. • An obligation rated 'A' has strong capacity to meet its financial commitments but is somewhat more susceptible to the adverse effects of changes in circumstances and economic conditions than obligations in higher-rated categories. • The addition of a plus or minus sign shows the relative standing within the major rating categories. • A short term obligation rated 'A-1+' has extremely strong capacity to meet its financial commitments.	A stable outlook indicates that a rating is not likely to change.
Fitch Ratings	• 'AA' ratings denote expectations of very low credit risk and are judged to be of very high credit quality. They indicate very strong capacity for payment of financial commitments. This capacity is not significantly vulnerable to foreseeable events. • The modifiers "+" or "-" may be appended to a rating to denote relative status within major rating categories. • An obligation rated 'F1' has the highest short-term credit quality. It indicates the strongest intrinsic capacity for timely payment of financial commitments. The modifier '+' denotes any exceptionally strong credit feature.	A stable outlook indicates that a rating is not likely to change.
DBRS	• An obligation rated 'AA' is of superior credit quality. The capacity for the payment of financial obligations is considered high and it is unlikely to be significantly vulnerable to future events. In many cases they differ from obligations rated 'AAA' only to a small degree. • Preferred shares rated Pfd-1 are of superior credit quality, and are supported by entities with strong earnings and balance sheet characteristics. Pfd-1 securities generally correspond with companies whose senior bonds are rated in the AAA or AA categories. • Each rating category is denoted by the subcategories "high" and "low". The absence of either a "high" or "low" designation indicated the rating is in the middle of the category.	A stable outlook indicates that a rating is not likely to change.

INSTITUTION	RATING	OUTLOOK
Kroll Bond Rating Agency	• An obligation rated 'AAA' is determined to have almost no risk of loss due to credit-related events. Assigned only to the very highest quality obligors and obligations able to survive extremely challenging economic events. • A short-term obligation rated K1 has a very strong ability to meet short-term obligations. • The modifiers "-" or "+" may be appended to ratings in categories AA through CCC to indicate, respectively, upper and lower risk levels within the broader category.	A stable outlook indicates that a rating is not likely to change (generally encompasses a horizon not exceeding two years).

WHAT THE RATINGS ADDRESS:

Long-term Senior Debt
Credit ratings are the current opinion of the rating agency on creditworthiness of an obligor with respect to fixed-income obligations whose original maturity is of a medium to long term nature. They address the possibility that a financial obligation will not be honoured as promised and reflect both the likelihood of default and any financial loss suffered in the event of default.

Subordinated Debt
Credit ratings are the current opinion of the rating agency on creditworthiness of an obligor with respect to a specific financial obligation and a specific class of financial obligation for a specific financial program. Ratings take into consideration the creditworthiness of guarantors, insurers, or other forms of credit enhancement on the obligation and takes into account the currency in which the obligation is denominated.

Preferred Stock
Preferred stock ratings address the issuer's capacity and willingness to pay dividends and principal, in case of limited life, on a timely basis. They address the likelihood of timely payment of dividends, notwithstanding the legal ability to pass on or defer a dividend payment.

Rating Outlook
Rating Outlook assesses the potential direction of a credit rating over the intermediate to longer term. In determining a Rating Outlook consideration is given to any changes in the economic and fundamental business conditions. An Outlook is not necessarily a precursor of a rating change.

APPENDIX C – AUDIT COMMITTEE MANDATE

ROYAL BANK OF CANADA
EXTRACT FROM THE ADMINISTRATIVE RESOLUTIONS ADOPTED BY THE BOARD OF DIRECTORS OF ROYAL BANK OF CANADA

(hereinafter referred to as the "Bank")
October 18, 2013

2.1 Audit Committee

2.1.1 Establishment of Committee and Procedures

a) Establishment of Committee
A committee of the directors to be known as the "Audit Committee" (hereinafter the "Committee") is hereby established.

b) Composition of Committee
The Committee shall be composed of not less than five directors. Each member shall be financially literate, as the Board of Directors interprets such qualification in its business judgment, or must become financially literate within a reasonable period of time after appointment to the Committee. At least one member shall have accounting or related financial management expertise, as the Board of Directors interprets such qualification in its business judgment and in accordance with applicable regulatory requirements. No member of the Committee may serve on the audit committees of more than two other public companies, unless the Board of Directors determines that this simultaneous service would not impair the ability of the member to serve effectively on the Committee.

c) Independence of Committee Members
As required by the *Bank Act*, none of the members of the Committee shall be an officer or employee of the Bank or of an affiliate of the Bank. All of the members of the Committee shall be "unaffiliated", as determined by regulations made under the *Bank Act*. All of the members of the Committee shall be independent, as determined by director independence standards adopted by the Board in accordance with applicable regulatory requirements.

d) Appointment of Committee Members
Members shall be appointed or reappointed at the annual organizational meeting of the directors and in the normal course will serve a minimum of three years. Each member shall continue to be a member until a successor is appointed, unless the member resigns, is removed or ceases to be a director. The Board of Directors may fill a vacancy that occurs in the Committee at any time.

e) Committee Chairman and Secretary
The Board of Directors or, in the event of its failure to do so, the members of the Committee, shall appoint or reappoint, at the annual organizational meeting of the directors, a Chairman from among their number. The Chairman shall not be a former employee of the Bank or of an affiliate. The Committee shall also appoint a Secretary who need not be a director.

f) Time and Place of Meetings
Meetings may be called by any member of the Committee, or by the external auditors. The time and place of and the procedure at meetings shall be determined from time to time by the members, provided that:

i) a quorum for meetings shall be three members, a majority of whom must be "resident Canadian" except as otherwise provided by the *Bank Act*;
ii) the Committee shall meet at least quarterly;
iii) the Committee may request any officer or employee of the Bank or the Bank's outside counsel or external auditors to attend a meeting of the Committee or to meet with any members of, or consultants to, the Committee;
iv) notice of the time and place of every meeting shall be given in writing or by telephone, facsimile, email or other electronic communication to each member of the Committee and to the external auditors at least 24 hours prior to the time fixed for such meeting, provided, however, that business referred to in paragraph 2.1.3.f)(ii) below may be transacted at a meeting of which at least one hour prior notice is given as aforesaid, and that a member may in any manner waive notice of a meeting; and attendance of a member at a meeting is a waiver of notice of the meeting, except where a member attends a meeting for the express purpose of objecting to the transaction of any business on the grounds that the meeting is not lawfully called; and
v) a resolution in writing signed by all the members entitled to vote on that resolution at a Committee meeting, other than a resolution of the Committee carrying out its duties under subsection 194(3) of the *Bank Act*, shall be as valid as if it had been passed at a meeting of the Committee.

g) Reporting to the Board of Directors
i) The Committee shall report to the Board of Directors following each meeting with respect to its activities and with such recommendations as are deemed desirable in the circumstances.
ii) Prior to approval by the directors, the Committee will also report to the Board on the annual statement and returns that must be approved by the directors under the *Bank Act*.

h) Access to Management and External Advisors

i) In fulfilling its responsibilities, the Committee shall have unrestricted access to management and employees of the Bank. The Committee is also empowered to investigate any matter with full access to all books, records, facilities, management and employees of the Bank and the authority to select, retain, terminate and approve the fees of outside counsel or other experts for this purpose.

ii) The Committee shall, as it deems necessary to carry out it duties, select, retain, terminate and approve the fees of any independent legal, accounting or other advisor or consultant.

i) Private Meetings

At least quarterly, the Committee shall meet with no members of management present and shall have separate private meetings with the external auditors, and each of the chief internal auditor, the chief financial officer, the general counsel, and the chief compliance officer, to discuss any matters that the Committee or these groups believe should be discussed.

j) Evaluation of Effectiveness and Review of Mandate

The Committee shall annually review and assess the adequacy of its mandate and evaluate its effectiveness in fulfilling its mandate.

2.1.2 General Scope of Responsibilities and Purpose of the Committee

Management is responsible for the preparation, presentation and integrity of the Bank's financial statements and for maintaining appropriate accounting and financial reporting principles and policies and internal controls and procedures designed to ensure compliance with accounting standards and applicable laws and regulations.

The external auditors are responsible for planning and carrying out, in accordance with professional standards, an audit of the Bank's annual financial statements and internal control over financial reporting, and reviews of the Bank's quarterly financial information.

The Committee's purpose is to review the adequacy and effectiveness of these activities and to assist the Board in its oversight of:

(i) the integrity of the Bank's financial statements;
(ii) the external auditors' qualifications and independence;
(iii) the performance of the Bank's internal audit function and external auditors;
(iv) the adequacy and effectiveness of internal controls; and
(v) the Bank's compliance with legal and regulatory requirements.

The Committee is also responsible for preparing any report from the Committee that may be required to be included in the Bank's annual proxy statement or that the Board elects to include on a voluntary basis.

The Committee shall meet every fiscal quarter, or more frequently at the discretion of the Committee if circumstances dictate, to discuss with management the annual audited financial statements and quarterly financial statements.

2.1.3 Specific Responsibilities

a) Documents and Reports

The Committee shall review:

i) prior to review and approval by the Board and public disclosure: the annual statement of the Bank, which includes the annual audited financial statements; the quarterly financial statements of the Bank; the annual information form; the quarterly and annual management's discussion and analysis; and earnings press releases;
ii) the types of financial information and earnings guidance provided and types of presentations made to analysts and rating agencies, and shall be satisfied that adequate procedures are in place for the review of the Bank's public disclosure of financial information extracted or derived from the Bank's financial statements and shall periodically assess the adequacy of these procedures;
iii) such returns as the Superintendent of Financial Institutions may specify and other periodic disclosure documentation and reports as may be required under applicable law;
iv) such investments and transactions that could adversely affect the well-being of the Bank as the external auditors or any officer of the Bank may bring to the attention of the Committee;
v) prospectuses relating to the issuance of securities of the Bank;
vi) reports on any litigation matters which could significantly affect the financial statements; and
vii) reports from the chief compliance officer on regulatory compliance matters, including the anti-money laundering program.

b) Internal Control

The Committee shall:

i) require management to implement and maintain appropriate systems of internal control, including internal controls over financial reporting and for the prevention and detection of fraud and error;

ii) review, evaluate and approve systems of internal control and meet with the chief internal auditor and with management to assess the adequacy and effectiveness of these systems of internal control and to obtain on a regular basis reasonable assurance that the organization is in control;

iii) receive reports from the Chief Executive Officer and the Chief Financial Officer as to the existence of any significant deficiency or material weakness in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the Bank's ability to record, process, summarize and report financial information and as to the existence of any fraud, whether or not material, that involves management or other employees who have a significant role in the Bank's internal control over financial reporting;

iv) review and approve the Bank's disclosure policy and review reports on the effectiveness of the Bank's disclosure controls and procedures; and

v) review the process relating to and the certifications of the Chief Executive Officer and the Chief Financial Officer, including certifications on the design and effectiveness of the Bank's disclosure controls and procedures and internal control over financial reporting, and the integrity of the Bank's quarterly and annual financial statements.

c) Oversight of Independent Control Functions

The Committee shall oversee the finance, compliance and internal audit functions, having regard to their independence from the businesses whose activities they review, by:

Finance function

i. reviewing and approving the appointment or removal of the chief financial officer;
ii. reviewing and approving on a regular basis the mandate of the chief financial officer and of the finance function;
iii. reviewing and approving on a regular basis the organizational structure of the finance function;
iv. annually reviewing and approving the function's budget and resources;
v. annually assessing the effectiveness of the chief financial officer and the finance function; and
vi. on a periodic basis reviewing the results of independent reviews of the finance function;

Compliance function

i. reviewing and approving the appointment or removal of the chief compliance officer;
ii. reviewing and approving on a regular basis the mandate of the chief compliance officer and of the compliance function;
iii. reviewing and approving on a regular basis the organizational structure of the compliance function;
iv. annually reviewing and approving the function's budget and resources;
v. annually assessing the effectiveness of the chief compliance officer and the compliance function; and
vi. on a periodic basis reviewing the results of independent reviews of the compliance function;

Internal Audit function

i. reviewing and approving the appointment or removal of the chief internal auditor;
ii. reviewing and approving on a regular basis the mandate of the chief internal auditor and the charter and code of ethics of the internal audit function;
iii. reviewing and approving on a regular basis the organizational structure of the internal audit function;
iv. annually reviewing and approving the function's budget and resources and overall risk methodology;
v. annually assessing the effectiveness of the chief internal auditor and the internal audit function; and
vi. on a periodic basis reviewing the results of independent reviews of the internal audit function;

d) Internal Auditor

The Committee shall:

i) meet with the chief internal auditor to review and approve the annual internal audit plan and review the results of internal audit activities, including any significant issues reported to management by the internal audit function and management's responses and/or corrective actions;

ii) meet with the chief internal auditor to review the status of identified control weaknesses;

iii) review representations from the chief internal auditor, based on audit work done, on the adequacy and degree of compliance with the Bank's systems of internal control; and

iv) review with the chief internal auditor any issues that may be brought forward by the chief internal auditor, including any difficulties encountered by the internal audit function, such as audit scope, information access, or resource limitations.

e) External Auditors

The Committee shall have the authority and responsibility to recommend the appointment and the revocation of the appointment of any registered public accounting firm (including the external auditors) engaged for the purpose of preparing or issuing an audit report or performing other audit, review or attest services, and to fix their remuneration, subject to the powers conferred on the shareholders by the *Bank Act*. The Committee shall be responsible for the oversight of the work of each such accounting firm, including resolution of disagreements between management and the accounting firm regarding financial reporting, and each such firm shall report directly to the Committee. The Committee shall:

i) meet with the external auditors to review and discuss the annual audit plan, the results of the audit, their report with respect to the annual statement and the returns and transactions referred to in subsection 194(3) of the *Bank Act*, and the report required to be provided to the Committee by the external auditors pursuant to Rule 2-07 of the U.S. Securities and Exchange Commission's Regulation S-X;

ii) have the sole authority to approve all audit engagement fees and terms, as well as the provision and the terms of any legally permissible non-audit services to be provided by the external auditors to the Bank, with such approval to be given either specifically or pursuant to preapproval policies and procedures adopted by the committee in accordance with Rule 2-01 of the U.S. Securities and Exchange Commission's Regulation S-X and the Canadian Securities Administrators' National Instrument 52-110;

iii) review with the external auditors any issues that may be brought forward by the external auditors, including any audit problems or difficulties, such as restrictions on their audit activities or access to requested information, and management's response, and review all material correspondence between the external auditors and management relating to audit findings;

iv) annually assess the performance of the external auditors, including quality of services, qualifications, relevant experience, geographical reach, quality of communications, professional scepticism, independence and objectivity, and review formal written statements delineating all relationships between the external auditors and the Bank that may impact such independence and objectivity;

v) discuss with the external auditors and with management the annual audited financial statements and quarterly financial statements, including the disclosures contained in the annual and quarterly management's discussion and analysis;

vi) review hiring policies concerning partners, employees and former partners and employees of the present and former external auditors;

vii) review and evaluate the qualifications, performance and independence of the lead partner of the external auditors and discuss the timing and process for implementing the rotation of the lead audit partner, the concurring audit partners and any other active audit engagement team partner;

viii) at least annually, obtain and review a report by the external auditors describing: the external auditors' internal quality-control procedures; to the extent permitted under the relevant review process, any material issues raised by the most recent internal quality-control review, or peer review, of the external auditors, or by any inquiry or investigation by governmental or professional authorities, within the preceding five years, respecting one or more independent audits carried out by the external auditors, and any steps taken to deal with any such issues; and

ix) take into account the opinions of management and the Bank's internal auditors in assessing the qualifications, performance and independence of the external auditors.

f) Capital Management

The Committee:

i) shall review the adequacy and effectiveness of internal controls related to capital management;

ii) shall review capital transactions and as provided in the relevant standing resolutions of the Board of Directors, may designate and authorize the issue of First Preferred Shares and the issue of securities qualifying as Tier 2A capital under capital adequacy guidelines issued by the Superintendent of Financial Institutions; and

iii) in connection with the exercise of the power delegated to senior management to authorize and approve issues of subordinated indebtedness of the Bank, shall review and approve the Draft Securities Disclosure Document as provided in the relevant standing resolution of the Board of Directors.

g) Other

i) The Committee shall discuss major issues regarding accounting principles and financial statement presentations, including significant changes in the Bank's selection or application of accounting principles, analyses prepared by management or the external auditors setting forth significant financial reporting issues and judgments made in connection with the preparation of the financial statements, including analyses of the effect on the financial statements of alternative methods of applying Canadian or U.S. generally accepted accounting principles, of regulatory and accounting initiatives and of off-balance sheet structures;

ii) The Committee shall establish procedures for the receipt, retention, treatment and resolution of complaints received by the Bank regarding accounting, internal accounting controls or auditing matters, as well as procedures for the confidential and anonymous submission by employees of concerns regarding accounting or auditing matters;

iii) The Committee shall establish and monitor procedures to provide disclosure of information to customers of the Bank that is required to be disclosed by the *Bank Act* and for dealing with complaints as required by subsection 455(1) of the *Bank Act* and satisfy itself that the procedures are being adhered to by the Bank;

(iv) The Committee shall review and discuss any reports concerning material violations submitted to it by Bank attorneys or counsel pursuant to the attorney professional responsibility rules of the U.S. Securities and Exchange Commission, the Bank's attorney reporting policy, or otherwise;

iii) The Committee shall discuss the major financial risk exposures of the Bank and the steps management has taken to monitor and control such exposures; and

iv) Subject to the laws applicable to the subsidiary, the Committee may perform for and on behalf of a subsidiary the functions of an audit committee of the subsidiary.

APPENDIX D – PRE-APPROVAL POLICIES AND PROCEDURES

POLICIES AND PROCEDURES

FOR THE PRE-APPROVAL OF SERVICES

TO BE PERFORMED BY PUBLIC ACCOUNTING FIRMS

(EFFECTIVE OCTOBER 11, 2012)

Mandate

1. The mandate of the Audit Committee established by the Board of Directors confers on the Committee the authority and responsibility (among other things) to pre-approve all audit and any legally permissible non-audit services to be provided by the external auditors and all audit, review and attest services provided by any other public accounting firm, with such approval to be given either specifically or pursuant to pre-approval policies and procedures adopted by the Committee.

Purpose

2. These Policies and Procedures are intended:
   a) to specify the methods by which the Audit Committee may pre-approve the provision of audit, review and attest services by any public accounting firm to the Bank and its subsidiaries;
   b) to specify the methods by which the Audit Committee may pre-approve the provision of non-audit services to the Bank and its subsidiaries by the Bank's external auditors and their affiliates (the "auditors") that do not impair the independence of the auditors under applicable laws and professional standards, including the rules of the Canadian Institute of Chartered Accountants, the Public Company Accounting Oversight Board ("PCAOB"), the Canadian Securities Administrators and the U.S. Securities and Exchange Commission;
   c) to set forth procedures designed to ensure that any services to be provided by the auditors and that any audit, review or attestation services to be performed by any other public accounting firm have been properly authorized and pre-approved under the authority of the Audit Committee, and that the Committee is promptly informed of each service; and
   d) to ensure that the Audit Committee's responsibilities under applicable law are not delegated to management.

Required Approval of Audit and Non-Audit Services

3. The Audit Committee shall pre-approve all engagements of the auditors by:
   a) the Bank; or
   b) any subsidiary.

4. The Audit Committee shall pre-approve engagements of any public accounting firm to provide audit, review or attest services to:
   a) the Bank; or
   b) any subsidiary.

5. The Audit Committee shall evidence its pre-approval by resolution of the Committee or through the exercise of delegated authority in accordance with these Policies and Procedures.

6. "Subsidiary" has the meaning set forth in Rule 1-02(x) of the U.S. Securities and Exchange Commission's Regulation S-X.

7. For the purpose of these Policies and Procedures and any pre-approval:

a) "Audit services" include services that are a necessary part of the audit process and any activity that is a necessary procedure used by the accountant in reaching opinions on the financial statements and on internal control over financial reporting as is required under applicable auditing standards ("AAS"), including technical reviews to reach an audit judgment on complex accounting issues;

b) The term "audit services" is broader than those services strictly required to perform an audit pursuant to AAS and include such services as:
i) the issuance of comfort letters and consents in connection with offerings of securities;
ii) the performance of domestic and foreign statutory audits;
iii) attest services required by statute or regulation; and
iv) assistance with and review of documents filed with the Office of the Superintendent of Financial Institutions, Canadian securities administrators, the Securities and Exchange Commission, the Board of Governors of the Federal Reserve Board and other regulators having jurisdiction over the activities of the Bank and its subsidiaries, and responding to comments from such regulators;

c) "Audit-related" services are assurance and related services traditionally performed by the principal accountant and that are reasonably related to the performance of the audit or review of financial statements and not categorized under "audit fees" for disclosure purposes.

"Audit-related services" include:
i) employee benefit plan audits, including audits of employee pension plans,
ii) due diligence related to mergers and acquisitions,
iii) consultations and audits in connection with acquisitions, including evaluating the accounting treatment for proposed transactions;
iv) internal control reviews;
v) attest services not required by statute or regulation; and
vi) consultations regarding financial accounting and reporting standards.

Non-financial operational audits are not "audit-related" services;

d) "Review services" are services applied to unaudited financial statements and consist of the inquiry and analytical procedures that provide the accountant with a reasonable basis for expressing limited assurance that there are no material modifications that should be made to financial statements for them to be in conformity with International Financial Reporting Standards or, if applicable, any other comprehensive basis of accounting;

e) "Attest" services are those engagements where the accountant issues an examination, a review, or an agreed-upon procedures report on a subject matter, or an assertion about the subject matter that is the responsibility of another party. Examples of the subject matter of an "attest" engagement include: examinations (i.e., audits) of financial forecasts and projections; reviews of pro-forma financial information; reporting on a company's internal control over financial reporting; and examinations of compliance with contractual arrangements or laws and regulations.

Delegation

8. The Audit Committee may from time to time delegate to one or more of its members who are "independent" (within the meanings of applicable law and the rules or policies of a securities commission having jurisdiction, and the NYSE) the power to pre-approve from time to time:

a) audit, review or attest services to be provided by any public accounting firm (including the auditors) that have not been otherwise approved by the Committee;
b) permissible non-audit services to be provided by the auditors that have not otherwise been approved by the Committee, and
c) changes in the scope of pre-approved engagements and the maximum estimated fees for engagements that have been pre-approved by the Committee.

9. The member(s) exercising such delegated authority must report at the next regularly scheduled meeting of the Audit Committee any services that were pre-approved under this delegated authority since the date of the last regularly scheduled meeting.

10. The member(s) exercising delegated authority may evidence his or her approval by signing an instrument in writing that describes the engagement with reasonable specificity, or by signing an engagement letter containing such a description.

11. In addition, member(s) exercising delegated authority may pre-approve an engagement orally, if any such oral approval is promptly confirmed in writing. Such written confirmation may be given by fax or e-mail and must describe the engagement with reasonable specificity.

Responsibilities of External Auditors

12. To support the independence process, the external auditors shall:

    a) confirm in engagement letters that performance of the work will not impair independence;
    b) satisfy the Audit Committee that they have in place comprehensive internal policies and processes to ensure adherence, world-wide, to independence requirements, including robust monitoring and communications;
    c) provide regular communication and confirmation to the Committee on independence;
    d) provide for Committee approval, in connection with each annual audit engagement, a detailed scope of services outlining each individual audit to be performed and a detailed description of audit-related services;
    e) utilize the assigned tracking numbers in all fee billings and correspondence provide detailed annual fee reporting and review management's detailed quarterly fee reporting.
    f) Communicate to the Audit Committee all matters required to be communicated by the Canadian Public Accountability Board and U.S. Public Company Accounting Oversight Board.
    g) maintain certification by the Canadian Public Accountability Board and registration with the U.S. Public Company Accounting Oversight Board; and
    h) review their partner rotation plan and advise the Committee on an annual basis.

Engagements

13. The Audit Committee will not, as a general rule, pre-approve a service more than one year prior to the time at which it is anticipated that the firm of accountants will be engaged to provide the service.

14. Engagements will not be considered to be revolving in nature and may not operate from year-to-year.

15. All audit and non-audit services to be provided by the auditors and all audit, review or attest services to be provided by any public accounting firm shall be provided pursuant to an engagement letter that shall:

    a) be in writing and signed by the auditors or public accounting firm;
    b) specify the particular services to be provided;
    c) specify the period in which the services will be performed;
    d) specify the maximum total fees to be paid; and
    e) in the case of engagements of the auditors, include a confirmation by the auditors that the services are not within a category of services the provision of which would impair their independence under applicable law and Canadian and U.S. generally accepted auditing standards.

16. Management shall, before signing and delivering an engagement letter on behalf of the Bank or a subsidiary and before authorizing the commencement of an engagement:

    a) obtain an engagement letter in accordance with the foregoing;
    b) confirm that the services are described in the engagement letter accurately and with reasonable specificity;

c) obtain confirmation from the auditors that they have conducted an analysis that supports their conclusion that performance of the services will not impair their independence;
d) with respect to engagements for the provision of services other than audit and audit-related services, obtain confirmation from legal counsel for the Bank that performance of the services will not impair independence; and
e) verify that the performance of the services has been specifically approved by the Audit Committee or a member in accordance with authority delegated by the Committee.

All engagement letters entered into pursuant to these Policies and Procedures shall be made available to the Audit Committee.

Tax Services

17. The Audit Committee, and any member in the exercise of delegated power, shall consider the provision of tax services by the auditors on an engagement-by-engagement basis.

18. The Audit Committee shall not pre-approve, and any member of the Audit Committee may not exercise delegated power to engage the auditors to provide, tax services to the Bank or a subsidiary:

a) to represent the Bank or a subsidiary before a tax or other court;
b) if the provision of the services would be prohibited, as prescribed by paragraph 22 of these Policies and Procedures; or
c) related to marketing, planning or opinion in favour of the tax treatment of (1) a transaction offered under conditions of confidentiality and for which a fee has been or will be paid by the Bank; or (2) a transaction that was initially recommended directly or indirectly, by the accountant and a significant purpose of which is tax avoidance, unless the proposed tax treatment is at least more likely than not to be allowable under applicable tax laws.

19. The Audit Committee shall not pre-approve, and any member of the Audit Committee may not exercise delegated power to engage the auditors to provide tax services to a person in a financial oversight role at the Bank, or an immediate family member of such a person, except as would be permitted by the PCAOB rules.

Other Non-Audit Services

20. The Audit Committee, and any member in the exercise of delegated power, shall consider the provision of other non-audit services (non-audit services other than audit-related services and tax services, and including non-audit services relating to internal control, business recovery services and due diligence or comfort letter type services legally required or customarily provided by an issuer's accountants in the United Kingdom, at the issuer's expense, pursuant to an arrangement letter between an accountant, the issuer and a lender or investment bank) by the auditors on an engagement-by-engagement basis. Any approval of non-audit services relating to internal control must be preceded by a discussion with the auditors of the potential effects of the services on independence as required by the rules of the PCAOB.

Value-Added Services

21. The Audit Committee recognizes and approves of the fact that the auditors from time to time provide, without charge or commitment, value added services to the Bank and its subsidiaries that do not involve an engagement of the auditors. Such value added services may include surveys, educational sessions, benchmarking studies, and monitoring of contest draws as an independent observer. The Audit Committee receives and reviews periodic reports from management and the auditors providing representative examples of such services as part of its monitoring of the Bank's overall relationship with the auditors.

Prohibited Services

22. The Audit Committee shall not pre-approve, and any member may not exercise delegated power to engage the auditors to provide any services, including tax services or business recovery services, that (i) provide for a contingency or commission fee arrangement; or (ii) involve the auditors performing any of the non-audit services set forth in paragraph (c)(4) of Rule 2-01 of the U.S. Securities and Exchange Commission's Regulation S-X, which include:
    a. providing bookkeeping or other services related to the accounting records or financial statements of the Bank or any of its subsidiaries,
    b. providing financial information systems design and implementation to the Bank or any of its subsidiaries,
    c. providing actuarial services to the Bank or any of its subsidiaries,
    d. providing internal audit outsourcing services to the Bank or any of its subsidiaries,
    e. providing human resources services to the Bank or any of its subsidiaries,
    f. providing broker-dealer, investment adviser, or investment banking services to the Bank or any of its subsidiaries,
    g. functioning in the role of management for the Bank or any of its subsidiaries,
    h. auditing their own work in relation to the Bank or any of its subsidiaries,
    i. providing appraisal or valuation services, contribution in kind reports or fairness opinions to the Bank or any of its subsidiaries,
    j. serving in an advocacy role for the Bank or any of its subsidiaries,
    k. providing legal services to the Bank or any of its subsidiaries,
    l. providing services that fall within the category of "expert" services that are prohibited by applicable law to the Bank or any of its subsidiaries, or
    m. providing services to the Bank or any of its subsidiaries that would otherwise compromise their independence under applicable regulatory guidance.

For the purposes of the Prohibited Services listed in this Section 22 above, a "subsidiary" includes any entity for which the Bank equity accounts that is material to the Bank. Therefore, the Audit Committee is not permitted to pre-approve the provision of the prohibited services listed above by the auditors to these entities.

Timely Reporting to the Audit Committee

23. Management shall provide a quarterly written report to the Audit Committee of services performed and related fees, at the scheduled meeting of the Committee held following the end of each fiscal quarter end.

No Delegation to Management

24. Nothing in these Policies and Procedures shall be interpreted as a delegation to management of the Audit Committee's responsibilities under applicable law.

Effective Date

25. These updated Policies and Procedures are effective as and from October 11, 2012.

Disclosure

26. The Bank shall disclose these Policies and Procedures in its periodic filings, as required by applicable law.

Review

27. The Audit Committee shall review and reassess the adequacy of these Policies and Procedures on a bi-annual basis.

MANAGEMENT'S DISCUSSION AND ANALYSIS

Exhibit 2

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, 2013, compared to the preceding two years. This MD&A should be read in conjunction with our 2013 Annual Consolidated Financial Statements and related notes and is dated December 4, 2013. 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 2013 Annual Information Form, is available free of charge on our website at rbc.com/investorrelations, on the Canadian Securities Administrators' website at sedar.com and on the EDGAR section of the United States (U.S.) Securities and Exchange Commission's (SEC) website at sec.gov.

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A-Z *See our Glossary for definitions of terms used throughout this document*

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 2013 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 and market review and outlook for Canadian, U.S., European and global economies, the regulatory environment in which we operate, the outlook and priorities for each of our business segments, and the risk environment including our liquidity and funding management. 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 and 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, regulatory compliance, operational, strategic, reputation and competitive risks and other risks discussed in the Risk management and Overview of other risks sections; the impact of regulatory reforms, including relating to the Basel Committee on Banking Supervision's (BCBS) global standards for capital and liquidity reform, the *Dodd-Frank Wall Street Reform and Consumer Protection Act* and the regulations issued and to be issued thereunder, over-the-counter derivatives reform, the payments system in Canada, the U.S. *Foreign Account Tax Compliance Act* (FATCA), and regulatory reforms in the United Kingdom (U.K.) and Europe; the high levels of Canadian household debt; cybersecurity; the business and economic conditions in Canada, the U.S. and certain other countries in which we operate; the effects of changes in government fiscal, monetary and other policies; our ability to attract and retain employees; the accuracy and completeness of information concerning our clients and counterparties; the development and integration of our distribution networks; model, information technology and social media risk; and the impact of environmental issues.

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 2013 Annual Report are set out in the Overview and outlook section and for each business segment under the heading Outlook and priorities. Except as required by law, we do not undertake to update any forward-looking statement, whether written or oral, that may be made from time to time by us or on our behalf.

Additional information about these and other factors can be found in the Risk management and Overview of other risks sections.

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.

Selected financial and other highlights

Table 1

(Millions of Canadian dollars, except per share, number of and percentage amounts)	2013	2012	2011	2013 vs. 2012 Increase (decrease)	
Continuing operations					
Total revenue	$ 30,867	$ 29,772	$ 27,638	$ 1,095	3.7%
Provision for credit losses (PCL)	1,239	1,301	1,133	(62)	(4.8)%
Insurance policyholder benefits, claims and acquisition expense (PBCAE)	2,784	3,621	3,358	(837)	(23.1)%
Non-interest expense	16,227	15,160	14,167	1,067	7.0%
Net income before income taxes	10,617	9,690	8,980	927	9.6%
Net income from continuing operations	8,429	7,590	6,970	839	11.1%
Net loss from discontinued operations	–	(51)	(526)	51	n.m.
Net income	$ 8,429	$ 7,539	$ 6,444	$ 890	11.8%
Segments – net income from continuing operations					
Personal & Commercial Banking	$ 4,438	$ 4,088	$ 3,740	$ 350	8.6%
Wealth Management	899	763	811	136	17.8%
Insurance	597	714	600	(117)	(16.4)%
Investor & Treasury Services	343	85	230	258	303.5%
Capital Markets	1,710	1,581	1,292	129	8.2%
Corporate Support	442	359	297	83	23.1%
Net income from continuing operations	$ 8,429	$ 7,590	$ 6,970	$ 839	11.1%
Selected information					
Earnings per share (EPS) – basic	$ 5.60	$ 4.98	$ 4.25	$ 0.62	12.4%
– diluted	5.54	4.93	4.19	0.61	12.4%
Return on common equity (ROE) (1), (2)	19.4%	19.3%	18.7%	n.m.	10 bps
Selected information from continuing operations					
EPS – basic	$ 5.60	$ 5.01	$ 4.62	$ 0.59	11.8%
– diluted	5.54	4.96	4.55	0.58	11.7%
ROE (1), (2)	19.4%	19.5%	20.3%	n.m.	(10) bps
PCL on impaired loans as a % of average net loans and acceptances	0.31%	0.35%	0.33%	n.m.	(4) bps
Gross impaired loans (GIL) as a % of loans and acceptances	0.52%	0.58%	0.65%	n.m.	(6) bps
Capital ratios and multiples (3)					
Common Equity Tier 1 (CET1) ratio (3)	9.6%	n.a. (3)	n.a. (3)	n.a.	n.a.
Tier 1 capital ratio (3)	11.7%	13.1%	13.3%	n.a.	n.a.
Total capital ratio (3)	14.0%	15.1%	15.3%	n.a.	n.a.
Assets-to-capital multiple (3), (4)	16.6X	16.7X	16.1X	n.a.	n.a.
Selected balance sheet and other information					
Total assets	$ 860,819	$ 825,100	$ 793,833	$ 35,719	4.3%
Securities	182,718	161,611	167,022	21,107	13.1%
Loans (net of allowance for loan losses)	408,666	378,244	347,530	30,422	8.0%
Derivative related assets	74,822	91,293	99,650	(16,471)	(18.0)%
Deposits	558,480	508,219	479,102	50,261	9.9%
Common equity	43,939	39,453	34,889	4,486	11.4%
Average common equity (1)	41,650	37,150	32,600	4,500	12.1%
Risk-weighted assets (RWA) (3)	318,981	280,609	267,780	n.a.	n.a.
Assets under management (AUM)	391,100	343,000	308,700	48,100	14.0%
Assets under administration (AUA) (5)	4,050,900	3,653,300	3,446,400	397,600	10.9%
Common share information					
Shares outstanding (000s) – average basic	1,443,735	1,442,167	1,430,722	1,568	0.1%
– average diluted	1,466,529	1,468,287	1,471,493	(1,758)	(0.1)%
– end of period	1,441,056	1,445,303	1,438,376	(4,247)	(0.3)%
Dividends declared per common share	$ 2.53	$ 2.28	$ 2.08	$ 0.25	11.0%
Dividend yield (6)	4.0%	4.5%	3.9%	n.m.	(50) bps
Common share price (RY on TSX)	$ 70.02	$ 56.94	$ 48.62	$ 13.08	23.0%
Market capitalization (TSX)	100,903	82,296	69,934	18,607	22.6%
Business information from continuing operations (number of)					
Employees (full-time equivalent) (FTE)	74,247	74,377	68,480	(130)	(0.2)%
Bank branches	1,372	1,361	1,338	11	0.8%
Automated teller machines (ATMs)	4,973	5,065	4,626	(92)	(1.8)%
Period average US$ equivalent of C$1.00 (7)	$ 0.977	$ 0.997	$ 1.015	$ (0.020)	(2.0)%
Period-end US$ equivalent of C$1.00	$ 0.959	$ 1.001	$ 1.003	$ (0.042)	(4.2)%

(1) Average amounts are calculated using methods intended to approximate the average of the daily balances for the period. This includes ROE and Average common equity. For further details, refer to the Key performance and non-GAAP measures section.
(2) These measures may not have a standardized meaning under generally accepted accounting principles (GAAP) and may not be comparable to similar measures disclosed by other financial institutions. For further details, refer to the Key performance and non-GAAP measures section.
(3) Effective the first quarter of 2013, we calculate capital ratios and Assets-to-capital multiple using the Basel III framework. The capital ratios are calculated on the “all-in” basis. The prior periods’ capital ratios and Assets-to-capital multiple were calculated using the Basel II framework. Basel III and Basel II are not directly comparable. Capital ratios and multiples for 2011 comparative amounts in the MD&A were determined under Canadian GAAP. The CET1 ratio is a new regulatory measure under the Basel III framework. The CET1 ratio is not applicable (n.a.) for prior periods as Basel III was adopted prospectively, effective the first quarter of 2013. For further details, refer to the Capital management section.
(4) Effective the first quarter of 2013, Assets-to-capital multiple is calculated on a transitional basis as per the Office of the Superintendent of Financial Institutions (OSFI) Capital Adequacy Requirements (CAR) Guideline.
(5) Includes AUA from Investor Services and $32.6 billion (2012 – $38.4 billion, 2011 – $36.0 billion) of securitized mortgages and credit card loans.
(6) Defined as dividends per common share divided by the average of the high and low share price in the relevant period.
(7) 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 (RY on TSX and NYSE) is Canada's largest bank as measured by assets and market capitalization, and is among the largest banks in the world, based on market capitalization. We are one of North America's leading diversified financial services companies, and provide personal and commercial banking, wealth management services, insurance, investor services and capital markets products and services on a global basis. We employ approximately 79,000 full- and part-time employees who serve more than 15 million personal, business, public sector and institutional clients through offices in Canada, the U.S. and 44 other countries. For more information, please visit rbc.com.

Our business segments are described below.

Personal & Commercial Banking comprises our personal and business banking operations, as well as certain investment businesses in Canada, the Caribbean and the U.S.

Wealth Management serves affluent, high net worth and ultra-high net worth clients from our offices in key financial centres mainly in Canada, the U.S., the U.K., continental Europe, 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 as well as through RBC distribution channels and third-party distributors.

Insurance offers insurance products and services through our proprietary distribution channels, comprised of the field sales force which includes retail insurance branches, our field sales representatives, call centres and online, as well as through independent insurance advisors and affinity relationships in Canada. Outside North America, we operate in reinsurance markets globally.

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

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.

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	Wealth Management	Insurance	Investor & Treasury Services	Capital Markets
○ Canadian Banking ○ Caribbean & U.S. Banking	○ Canadian Wealth Management ○ U.S. & International Wealth Management ○ Global Asset Management	○ Canadian Insurance ○ International Insurance		○ 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 of **"Always earning the right to be our clients' first choice."** Our strategic goals are:

- In Canada, to be the undisputed leader in financial services;
- Globally, to be a leading provider of capital markets, investor, and wealth management solutions; and
- In targeted markets, to be a leading provider of select financial services complementary to our core strengths.

For our progress in 2013 against our business strategies and strategic goals, refer to the Business segment results section.

Overview and outlook

Economic and market review and outlook – data as at December 4, 2013

Canada

The Canadian economy is expected to grow at an estimated rate of 1.7% during calendar 2013, which is below our estimate of 2.4% as at November 28, 2012. Growth continues to be driven by consumer spending and business investment, moderated by weak net exports. The unemployment rate decreased to 6.9% in October 2013, supported by improvement during the year in labour markets. Housing market activity continues to benefit from these positive employment trends and the continuing low interest rate environment. Although the Canadian economy is growing at a moderate pace, concerns about the export outlook and continued low inflation led the Bank of Canada (BoC) to maintain its overnight rate at 1% in October 2013.

In calendar 2014, we expect the Canadian economy to grow at a rate of 2.6%, driven by solid consumer and investment spending and an improvement in global demand for exports. Given the ongoing low inflation environment and the factors restraining the growth of global demand for Canadian exports, we do not expect the BoC to change its overnight rate from the current 1% until at least the second quarter of 2015.

U.S.

We expect the U.S. economy to grow at an estimated rate of 1.7% during calendar 2013, below our estimate of 2.3% as at November 28, 2012. Moderate consumer spending and the improvement in the housing market more than offset a decline in government spending, and continue to drive moderate economic growth. The impact of the October 2013 federal government partial shutdown on the economy is not expected to be significant. Business investment continues to recover, and the unemployment rate improved to 7.3% in October 2013. In order to provide stimulus to the economy, the Federal Reserve (Fed) is maintaining interest rates at low levels, and maintained the size of its monthly asset purchases, despite market expectations of a reduction in the program in 2013.

In calendar 2014, we expect the U.S. economy to grow at a rate of 2.7%, driven by solid consumer spending and housing market activity as well as stronger business investment. The impact on consumer confidence of a failure by the government to complete debt negotiations could reduce spending activity in the near term. We expect the Fed to reduce its monthly asset purchases starting in March 2014 and cease making purchases by the end of 2014 as labour market conditions and the inflation rate approach the Fed's targeted levels.

Europe

The Eurozone economy is expected to contract at an estimated rate of (0.4%) during calendar 2013, below our estimate of growth of 0.1% as at November 28, 2012. The economy emerged from recession in the second quarter of 2013, but continues to show the effects of fiscal austerity measures and limited access to funding. The unemployment rate stabilized at 12.1% in October, reflecting limited improvement in labour markets. The European Central Bank (ECB) is continuing to provide stimulus to the Eurozone economy and decreased interest rates by 25 bps in May 2013 to 0.50% and by a further 25 bps in November 2013 to 0.25%.

We expect the Eurozone economy to grow at a rate of 1.0% in calendar 2014 as the ECB's policy actions continue to take effect. We expect the ECB to maintain its current low interest rates throughout 2014 in order to mitigate the impact of continuing fiscal austerity measures and encourage demand for credit.

Financial markets

Capital markets in Canada and the U.S. gradually improved during 2013, resulting from modest economic growth in both countries as well as the maintenance of stimulative monetary policy by the BoC and the Fed. Yields on long-term Canadian and U.S. government bonds rose from May to September 2013, following a period of historical lows as markets anticipated a reduction in the Fed's monthly asset purchase program. Credit spreads on corporate bonds started to widen in the U.S. in the latter half of 2013 after remaining low for most of the year. Equity markets improved throughout the year, despite some uncertainty regarding the outcome of the U.S. government's efforts to avoid hitting the debt ceiling. Despite continued uncertainty in global financial markets, there were slight signs of overall improvement in 2013.

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 Overview of other risks section.

Regulatory environment

We continue to monitor and prepare for regulatory developments by identifying and working to mitigate any potential negative business or economic impact resulting from the global proliferation of regulatory reform initiatives. These developments include prohibitions on proprietary trading and certain investment in hedge and other investment funds (the Volcker Rule) under the U.S. *Dodd-Frank Wall Street Reform and Consumer Protection Act* ("Dodd-Frank"), the Fed's proposal for Enhanced Supervision of Foreign Banking Organizations, and other Dodd-Frank initiatives; changes to capital and liquidity rules under the Basel Committee on Banking Supervision's global standards (Basel III); over-the-counter derivatives reform; the U.S. *Foreign Account Tax Compliance Act* (FATCA); enhanced risk disclosures recommended by the Enhanced Disclosure Task Force (EDTF) of the Financial Stability Board; and other reforms.

For a discussion on risk factors resulting from these and other regulatory developments which may affect our business and financial results, refer to the Risk management – Top and emerging risks 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 (TSR)

Our focus is to maximize total shareholder returns through the achievement of top quartile performance 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 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 the TSR will vary depending on market conditions, and the relative position reflects the market's perception of our overall performance relative to our peers over a period of time.

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.

We compared favourably to all our performance objectives in 2013. The following table provides a summary of our performance against our financial performance objectives in 2013:

Financial performance objectives — **Table 2**

	2013 results	Achieved
Diluted EPS growth of 7% +	12.4%	✓
ROE of 18% +	19.4%	✓
Strong capital ratios (CET1) (1)	9.6%	✓
Dividend payout ratio 40% – 50%	45%	✓

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

For 2014, our financial performance objectives will remain unchanged.

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	13% Second quartile	13% Second quartile
Peer group average (excluding RBC) (2)	11%	9%

(1) The three and the five year average annual TSR are calculated based on our common share price appreciation plus reinvested dividends for the period October 31, 2010 to October 31, 2013 and October 31, 2008 to October 31, 2013 respectively, based on information as disclosed by Bloomberg L.P.

(2) We compare our TSR to that of a global peer group approved by our Board of Directors and consisting of the following 20 financial institutions: seven large Canadian financial institutions in addition to us (Bank of Montreal, Canadian Imperial Bank of Commerce, Manulife Financial Corporation, National Bank of Canada, Power Financial Corporation, The Bank of Nova Scotia and The Toronto-Dominion Bank), five U.S. financial institutions (Bank of America Corporation, JPMorgan Chase & Co., The Bank of New York Mellon Corporation, U.S. Bancorp and Wells Fargo & Company), five European financial institutions (Banco Bilbao Vizcaya Argentaria Group (BBVA), Barclays PLC, BNP Paribas, Credit Suisse Group AG and Deutsche Bank Group) and two Australian financial institutions (National Australia Bank and Westpac Banking Corporation).

Our three and five year average annual TSR of 13% ranked us in the second quartile for both periods within our global peer group. The three year and five year average annual TSR for our global peer group was 11% and 9% respectively.

Common share and dividend information — Table 4

For the year ended October 31	2013	2012	2011	2010	2009
Common share price (RY on TSX) – close, end of period	$ 70.02	$ 56.94	$ 48.62	$ 54.39	$ 54.80
Dividends paid per share	2.46	2.22	2.04	2.00	2.00
Increase (decrease) in share price	23.0%	17.1%	(10.6)%	(0.7)%	17.0%
Total shareholder return	28.0%	22.0%	(6.7)%	2.9%	22.7%

Key corporate events of 2013

Canadian auto finance and deposit business of Ally Financial Inc. (Ally Canada)
On February 1, 2013, we completed the acquisition of Ally Canada for total cash consideration of $3.7 billion. Ally Canada's operations provide financial services, including floor plan financing, directly to auto dealers and also offer financing for consumers through dealerships. The acquisition adds scale to our existing consumer and commercial auto financing businesses. For further details, refer to Note 11 of our 2013 Annual Consolidated Financial Statements.

Financial performance

Overview

2013 vs. 2012
Net income of $8,429 million was up $890 million or 12% from a year ago. Diluted earnings per share (EPS) of $5.54 was up $0.61 and return on common equity (ROE) of 19.4% increased from 19.3% in 2012. At October 31, 2013, our Common Equity Tier 1 (CET1) ratio was 9.6%.

Our results reflected strong earnings growth across most of our business segments and were driven by solid volume growth across all our Canadian Banking businesses, partially offset by spread compression, strong growth in our corporate and investment banking businesses, and higher average fee-based client assets in Wealth Management. Favourable income tax adjustments in 2013 of $214 million related to prior years, lower provision for credit losses (PCL) reflecting improved credit quality, improved business performance in Investor Services, and continuing benefits from our ongoing focus on efficiency management activities also contributed to the increase. These factors were partially offset by lower trading revenue in Capital Markets and a charge of $160 million ($118 million after-tax) in Insurance as a result of proposed legislation in Canada, which would affect the policyholders' tax treatment of certain individual life insurance policies.

In addition, our prior year results were impacted by net favourable adjustments of $60 million after-tax including a release of $128 million of tax uncertainty provisions and interest income of $72 million ($53 million after-tax) related to a refund of taxes paid due to the settlement of several tax matters with the Canada Revenue Agency (CRA), an adjustment related to a change in estimate of mortgage prepayment interest of $125 million ($92 million after-tax), and a loss of $224 million ($213 million after-tax) related to the acquisition of the remaining 50% stake of RBC Dexia Investor Services Limited (RBC Dexia).

Our ROE was up 10 basis points (bps) despite holding higher common equity as a result of Basel III capital requirements effective the first quarter of 2013, reflecting our solid earnings growth.

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

Summary of 2012 vs. 2011
In 2012, net income of $7,539 million was up $1,095 million or 17% from 2011. Diluted EPS of $4.93 was up $0.74 and ROE of 19.3% was up 60 bps.

Effective the third quarter of 2012, we no longer have discontinued operations, as the sale of our U.S. regional retail banking operations closed in the second quarter of 2012. Net loss from discontinued operations in 2012 was $51 million due to operating losses related to our U.S. regional retail banking operations.

Continuing operations
In 2012, net income from continuing operations of $7,590 million was up $620 million or 9% from 2011. The increase in net income was driven by higher fixed income trading and corporate and investment banking results as well as strong volume growth across most of our domestic banking businesses. Lower claims costs in Insurance, higher funding and liquidity trading in Investor & Treasury Services, increased average fee-based client assets in Wealth Management, and continuing benefits from our ongoing focus on efficiency management activities also contributed to the increase. In addition, net income in 2012 was favourably impacted by the release of tax uncertainty provisions and interest income and the adjustment related to a change in estimate of mortgage prepayment interest, as described above. These factors were partially offset by higher costs in support of business growth, increased PCL in Capital Markets and our Caribbean portfolio, and lower transaction

volumes in Wealth Management. The loss related to the acquisition of the remaining 50% stake of RBC Dexia also negatively impacted net income in 2012.

Discontinued operations
In 2012, net loss from discontinued operations was $51 million as compared to a net loss of $526 million in 2011, primarily reflecting a loss on sale of our U.S. regional retail banking operations in 2011. Net loss from discontinued operations in 2012 included only four months of operating losses related to our U.S. regional retail banking operations compared to a full year of results in 2011.

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

The estimated impact of foreign currency translation on our results was not significant in 2013 as compared to 2012.

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

Table 5

(Average foreign currency equivalent of C$1.00) (1)	2013	2012	2011
U.S. dollar	**0.977**	0.997	1.015
British pound	**0.626**	0.630	0.631
Euro	**0.740**	0.771	0.727

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

Total revenue

Table 6

(Millions of Canadian dollars)	2013	2012	2011
Interest income	**$ 21,150**	$ 20,852	$ 20,813
Interest expense	**7,899**	8,354	9,456
Net interest income	**$ 13,251**	$ 12,498	$ 11,357
Investments (1)	**$ 6,408**	$ 5,375	$ 5,305
Insurance (2)	**3,911**	4,897	4,474
Trading	**867**	1,298	655
Banking (3)	**4,244**	3,799	3,596
Underwriting and other advisory	**1,569**	1,434	1,485
Other (4)	**617**	471	766
Non-interest income	**$ 17,616**	$ 17,274	$ 16,281
Total revenue	**$ 30,867**	$ 29,772	$ 27,638
Additional trading information			
Total trading revenue			
Net interest income	**$ 1,661**	$ 1,532	$ 1,377
Non-interest income	**867**	1,298	655
Total trading revenue	**$ 2,528**	$ 2,830	$ 2,032
Total trading revenue by product			
Interest rate and credit	**$ 1,611**	$ 1,923	$ 1,218
Equities	**594**	516	463
Foreign exchange and commodities	**323**	391	351
Total trading revenue	**$ 2,528**	$ 2,830	$ 2,032
Trading revenue (teb) by product			
Interest rate and credit	**$ 1,611**	$ 1,923	$ 1,218
Equities	**972**	945	920
Foreign exchange and commodities	**323**	391	351
Total trading revenue (teb)	**$ 2,906**	$ 3,259	$ 2,489
Trading revenue (teb) by product – Capital Markets			
Interest rate and credit	**$ 1,350**	$ 1,584	$ 968
Equities	**942**	925	906
Foreign exchange and commodities	**286**	323	289
Total Capital Markets trading revenue (teb)	**$ 2,578**	$ 2,832	$ 2,163

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

2013 vs. 2012
Total revenue increased $1,095 million or 4% from last year.

Net interest income increased $753 million or 6%, mainly due to solid volume growth across all businesses in Canadian Banking. The inclusion of our acquisition of Ally Canada and strong growth in our lending portfolio in Capital Markets also contributed to the increase. These factors were partially offset by spread compression. In addition, the prior year was favourably impacted by a mortgage prepayment interest adjustment (prepayment adjustment) of $125 million resulting from a change in methodology with respect to the timing of recognition of mortgage prepayment interest, and interest income of $72 million related to a refund of taxes paid of $128 million due to the settlement of several tax matters with the CRA.

Investments revenue increased $1,033 million or 19%, mainly due to higher average fee-based client assets across all businesses in Wealth Management resulting from net sales and capital appreciation, and incremental revenue related to our additional 50% ownership of Investor Services.

Insurance revenue decreased $986 million or 20%, mainly due to a change in fair value of investments backing our policyholder liabilities resulting from an increase in long-term interest rates, largely offset in PBCAE.

Trading revenue in Non-interest income decreased $431 million or 33%. Total trading revenue of $2,528 million, which comprises trading-related revenue recorded in Net interest income and Non-interest income, decreased $302 million, or 11%, mainly due to lower fixed income trading revenue, largely in Europe, as a result of challenging market conditions.

Banking revenue increased $445 million or 12%, mainly due to strong growth in our loan syndication business primarily in the U.S. Higher service fee revenue and higher credit card transaction volumes in Personal & Commercial Banking, and increased foreign exchange revenue in Investor Services primarily driven by higher transaction volumes also contributed to the increase.

Underwriting and other advisory revenue increased $135 million or 9%, mainly due to higher debt origination reflecting solid issuance activity. Higher mergers and acquisitions (M&A) activity reflecting increased mandates mainly in Canada and the U.S. also contributed to the increase.

Other revenue increased $146 million or 31%, mainly due to gains on the disposition of our London Metal Exchange (LME) shares. In addition, the prior year was unfavourably impacted by our proportionate share of a securities exchange and trading loss of $36 million ($26 million after-tax) related to the acquisition of RBC Dexia.

2012 vs. 2011
Total revenue increased $2,134 million or 8% from 2011, mainly due to strong trading revenue reflecting improved market conditions compared to the unfavourable conditions in 2011 and strong growth in lending and increased loan syndication activity in our corporate and investment banking businesses. Strong volume growth across most of our Canadian banking businesses, higher average fee-based client assets in Wealth Management, and incremental revenue related to our additional 50% ownership of Investor Services also contributed to the increase. Volume growth across most insurance products, and the change in fair value of investments backing our policyholder liabilities, which was largely offset in PBCAE, also contributed to the increase. These factors were partially offset by losses compared to gains in 2011 in Other revenue and lower transaction volumes mainly in Wealth Management.

Provision for credit losses
2013 vs. 2012
Total PCL decreased $62 million or 5% from a year ago, mainly reflecting improved credit quality in our Canadian Banking and Caribbean portfolios, partially offset by higher provisions in Capital Markets and Wealth Management.

2012 vs. 2011
Total PCL increased $168 million or 15% as compared to 2011, mainly due to higher provisions related to Capital Markets and our Caribbean portfolios. Higher average loan balances reflecting volume growth in Canadian home equity products also contributed to the increase. These factors were partially offset by lower PCL in our Canadian credit card portfolio.

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

Insurance policyholder benefits, claims and acquisition expense
2013 vs. 2012
PBCAE decreased $837 million or 23% from a year ago, mainly due to the change in fair value of investments backing our policyholder liabilities, which was largely offset in insurance revenue. Favourable actuarial adjustments reflecting management actions and assumption changes also contributed to the decrease. These factors were partially offset by the charge of $160 million as a result of proposed legislation in Canada, which would affect the policyholders' tax treatment of certain individual life insurance policies.

2012 vs. 2011
PBCAE increased $263 million or 8% as compared to 2011, mainly due to the change in fair value of investments backing our policyholder liabilities, largely offset in insurance revenue, and volume growth across most products. These factors were partially offset by lower claims costs in Canadian insurance products and a reduction of policy acquisition cost-related liabilities reflecting changes to our proprietary distribution channel.

Non-interest expense

Table 7

(Millions of Canadian dollars)	2013	2012	2011
Salaries	$ 4,665	$ 4,313	$ 4,074
Variable compensation	3,924	3,650	3,300
Benefits and retention compensation	1,345	1,185	1,099
Share-based compensation	256	139	188
Human resources	$ 10,190	$ 9,287	$ 8,661
Impairment of goodwill and other intangibles	10	168	–
Equipment	1,135	1,020	960
Occupancy	1,246	1,170	1,076
Communications	742	764	746
Professional and other external services	1,003	949	958
Other expenses	1,901	1,802	1,766
Non-interest expense	$ 16,227	$ 15,160	$ 14,167

2013 vs. 2012

Non-interest expense increased $1,067 million or 7%, primarily reflecting incremental costs related to our additional 50% ownership of Investor Services and higher variable compensation mainly driven by higher revenue in Wealth Management. The inclusion of our acquisition of Ally Canada, higher costs in support of business growth, and higher litigation provisions and related legal costs in Capital Markets also contributed to the increase. These factors were partially offset by continued benefits from our ongoing focus on efficiency management activities, and lower variable compensation in Capital Markets reflecting a lower compensation to revenue ratio. In addition, the prior year was unfavourably impacted by an impairment loss and other costs of $188 million related to the acquisition of RBC Dexia.

2012 vs. 2011

Non-interest expense increased $993 million or 7% as compared to 2011, primarily due to higher variable compensation, largely driven by improved results in Capital Markets and higher revenue in Wealth Management. Higher costs in support of business and volume growth and the impact of a full quarter of non-interest expense related to our additional 50% ownership of Investor Services also contributed to the increase. In addition, our non-interest expense was negatively impacted by the loss relating to the acquisition of RBC Dexia noted above. The increase in non-interest expense was partially offset by continuing benefits from our efficiency management activities.

Income and other taxes

Table 8

(Millions of Canadian dollars, except percentage amounts)	2013	2012	2011
Income taxes	$ 2,188	$ 2,100	$ 2,010
Other taxes			
Goods and services sales taxes	$ 370	343	338
Payroll taxes	384	371	349
Capital taxes	85	80	75
Property taxes	119	124	107
Insurance premium taxes	50	50	49
Business taxes	25	21	18
	$ 1,033	$ 989	$ 936
Total income and other taxes	$ 3,221	$ 3,089	$ 2,946
Net income before income taxes	$ 10,617	$ 9,690	$ 8,980
Effective income tax rate	20.6%	21.7%	22.4%
Effective total tax rate (1)	27.6%	28.9%	29.7%

(1) Total income and other taxes as a percentage of net income before income taxes and other taxes.

2013 vs. 2012

Income tax expense increased $88 million or 4% from the prior year, mainly due to higher earnings before income tax. The effective income tax rate of 20.6% decreased 110 bps from 21.7% in the prior year, mainly due to favourable income tax adjustments in 2013 related to prior years. Our prior year results were favourably impacted by the release of $128 million of tax uncertainty provisions and interest income of $72 million ($53 million after-tax) related to a refund of taxes paid due to the settlement of several tax matters with the CRA in 2012.

Other taxes increased $44 million or 4%, mainly due to higher sales taxes and payroll taxes. In addition to the income and other taxes reported in our Consolidated Statements of Income, we recorded income tax recoveries of $352 million, as compared to income taxes of $72 million in 2012, in shareholders' equity, primarily reflecting foreign currency translation losses from hedging activities.

2012 vs. 2011

Income tax expense increased $90 million or 4% from 2011, mainly due to higher earnings before income taxes. The effective income tax rate of 21.7% decreased 70 bps from 22.4% in 2011, mainly due to a reduction in statutory Canadian corporate income tax rates and the release of the tax uncertainty provisions noted above. These factors were partially offset by a loss related to our acquisition of the remaining 50% stake of RBC Dexia, which was not deductible for tax purposes.

Other taxes increased $53 million or 6% from 2011, mainly due to higher payroll and property taxes.

Business segment results

Results by business segment — Table 9

(Millions of Canadian dollars, except percentage amounts)	2013 Personal & Commercial Banking	2013 Wealth Management	2013 Insurance	2013 Investor & Treasury Services	2013 Capital Markets (1)	2013 Corporate Support (1)	2013 Total	2012 Total	2011 Total
Net interest income	$ 9,435	$ 396	$ –	$ 671	$ 2,872	$ (123)	$ 13,251	$ 12,498	$ 11,357
Non-interest income	3,788	5,091	3,928	1,133	3,708	(32)	17,616	17,274	16,281
Total revenue	$ 13,223	$ 5,487	$ 3,928	$ 1,804	$ 6,580	$ (155)	$ 30,867	$ 29,772	$ 27,638
PCL	997	51	–	–	188	3	1,239	1,301	1,133
PBCAE	–	–	2,784	–	–	–	2,784	3,621	3,358
Non-interest expense	6,240	4,201	549	1,343	3,844	50	16,227	15,160	14,167
Net income before income taxes	$ 5,986	$ 1,235	$ 595	$ 461	$ 2,548	$ (208)	$ 10,617	$ 9,690	$ 8,980
Income tax	1,548	336	(2)	118	838	(650)	2,188	2,100	2,010
Net income from continuing operations	$ 4,438	$ 899	$ 597	$ 343	$ 1,710	$ 442	$ 8,429	$ 7,590	$ 6,970
Loss from discontinued operations	–	–	–	–	–	–	–	(51)	(526)
Net income	$ 4,438	$ 899	$ 597	$ 343	$ 1,710	$ 442	$ 8,429	$ 7,539	$ 6,444
ROE from continuing operations	31.0%	16.1%	41.6%	16.7%	14.2%	n.m.	19.4%	19.5%	20.3%
ROE							19.4%	19.3%	18.7%
Average assets	$ 356,000	$ 21,600	$ 11,900	$ 83,100	$ 368,300	$ 12,300	$ 853,200	$ 810,600	$ 778,900

(1) Net interest income, total revenue and net income before income taxes are presented in Capital Markets on a taxable equivalent basis (tab). The taxable equivalent basis adjustment is eliminated in the Corporate Support segment. For a further discussion, refer to the How we measure and report our business segments section.

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 reflect 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. The following highlights the key aspects of how our business segments are managed and reported:

- Personal & Commercial Banking reported results include securitized Canadian residential mortgage and credit card loans and related amounts for income and provisions for credit losses on impaired loans.
- Wealth Management reported results also include disclosure in U.S. dollars as we review and manage the results of certain businesses largely in this currency.
- Insurance reported results include the change in fair value of investments mainly backing our Canadian life policyholder liabilities recorded as revenue, which is largely offset in PBCAE.
- Capital Markets results are reported on a taxable equivalent basis (teb), which grosses up net interest income from certain tax-advantaged sources (Canadian taxable corporate dividends) 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 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, including residual asset/liability management results, impact from income tax adjustments, net charges associated with unattributed capital and PCL on loans not yet identified as impaired.

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 were 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.

Capital attribution
Our 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
A funds transfer pricing methodology is used to allocate interest income and expense by product to each business segment. This allocation considers the interest rate risk, liquidity and funding risk and regulatory requirements of each of our business segments. We base transfer pricing on external market costs and each business segment fully absorbs the costs of running its business. Our business segments may retain certain interest rate exposures subject to management approval that would be expected in the normal course of operations.

Net interest margin
We report net interest margin (NIM) for Personal & Commercial Banking and our Canadian banking businesses based on average earning assets which includes only those assets that give rise to net interest income including deposits with other banks, certain securities and loans.

PCL
PCL are recorded to recognize estimated losses on impaired loans, as well as losses that have been incurred but are not yet identified in our loans portfolio. This 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 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 2013 Annual Consolidated Financial Statements.

Key performance and non-GAAP measures

Performance measures

Return on common equity
We measure and evaluate the performance of our consolidated operations and each business segment using a number of financial metrics such as net income and ROE. We use ROE, at both the consolidated and business segment levels, as a measure of return on total capital invested in our business. Management views the business segment ROE measure as a useful measure for supporting investment and resource allocation decisions because it adjusts for certain items that may affect comparability between business segments and certain competitors.

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 and risk capital involves the use of assumptions, judgments and methodologies that are regularly reviewed and revised by management as necessary. Changes to such assumptions, judgments and methodologies can have a material effect on the 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 10

(Millions of Canadian dollars, except percentage amounts)	2013 Personal & Commercial Banking	2013 Wealth Management	2013 Insurance	2013 Investor & Treasury Services	2013 Capital Markets	2013 Corporate Support	2013 Total	2012 Total	2011 Total
Net income available to common shareholders from continuing operations	$ 4,349	$ 866	$ 589	$ 330	$ 1,640	$ 304	$ 8,078	$ 7,235	$ 6,611
Loss to common shareholders from discontinued operations							–	(51)	(526)
Net income available to common shareholders	$ 4,349	$ 866	$ 589	$ 330	$ 1,640	$ 304	$ 8,078	$ 7,184	$ 6,085
Average common equity from continuing operations (1), (2)	$ 14,050	$ 5,400	$ 1,400	$ 2,000	$ 11,500	$ 7,300	$ 41,650	$ 36,750	$ 29,800
Average common equity from discontinued operations (1)							–	400	2,800
Total average common equity (1), (2)	$ 14,050	$ 5,400	$ 1,400	$ 2,000	$ 11,500	$ 7,300	$ 41,650	$ 37,150	$ 32,600
ROE (3)	31.0%	16.1%	41.6%	16.7%	14.2%	n.m.	19.4%	19.3%	18.7%

(1) Average common equity represent rounded figures.
(2) The amounts for the segments are referred to as attributed capital or economic capital.
(3) Calculated under Basel III, including comparative periods. 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 present value of capital required to support in-force business. We use discount rates that are consistent with those used by other insurance companies. 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 present value the future expected earnings and capital required for the in-force business, reconciliation to financial statements information is not applicable.

Non-GAAP measures

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 capital, thus enabling users to identify relative contributions to shareholder value. Economic profit is a non-GAAP measure, does not have a standardized meaning under GAAP and may not be comparable to similar measures disclosed by other financial institutions.

The capital charge includes a charge for common equity and preferred shares. We prospectively revised our cost of equity in the first quarter of 2013 to 8.5% from 9.5% in 2012, largely as a result of the continuing low interest rate environment. Effective Q1 2014, our cost of equity will increase to 9.0% due to higher long-term interest rates.

The following table provides a summary of our Economic profit on a continuing basis:

Economic profit from continuing operations **Table 11**

	2013							2012	2011
(Millions of Canadian dollars)	Personal & Commercial Banking	Wealth Management	Insurance	Investor & Treasury Services	Capital Markets	Corporate Support	Total	Total	Total
Net income from continuing operations	$ 4,438	$ 899	$ 597	$ 343	$ 1,710	$ 442	$ 8,429	$ 7,590	$ 6,970
add: Non-controlling interests	(4)	–	–	(1)	–	(93)	(98)	(97)	(101)
After-tax effect of amortization of other intangibles	26	67	–	21	1	2	117	112	123
Goodwill and intangibles writedown	–	–	–	–	–	–	–	168	–
Adjusted net income	$ 4,460	$ 966	$ 597	$ 363	$ 1,711	$ 351	$ 8,448	$ 7,773	$ 6,992
less: Capital charge	1,285	492	129	180	1,053	653	3,792	3,744	3,213
Economic profit from continuing operations	$ 3,175	$ 474	$ 468	$ 183	$ 658	$ (302)	$ 4,656	$ 4,029	$ 3,779

Results excluding specified items

Our results include specified items as described below. We believe excluding these specified items from our results is more indicative of our ongoing operating results, which will provide readers with a better understanding of management's perspective on our performance, and should enhance the comparability of our financial performance for the fiscal year ended October 31, 2013 with the fiscal year ended October 31, 2012. These measures are non-GAAP, do not have a standardized meaning under GAAP and may not be comparable to similar measures disclosed by other financial institutions.

A charge related to proposed legislation in Canada relating to certain individual life insurance policies in Insurance

Our Insurance results were impacted by a charge of $160 million ($118 million after-tax) recorded in the current year, as a result of proposed legislation in Canada, which would affect the policyholders' tax treatment of certain individual life insurance policies.

The following table provides calculations of our Insurance results excluding this charge:

Insurance **Table 12**

	2013		
(Millions of Canadian dollars, except percentage amounts)	As reported	Charge related to certain individual life insurance policies	Adjusted
Revenue	$ 3,928	$ –	$ 3,928
PBCAE	2,784	(160)	2,624
Non-interest expense	549	–	549
Net income before income taxes	$ 595	$ 160	$ 755
Net income	$ 597	$ 118	$ 715
Selected balance and other information			
Net income available to common shareholders	$ 589	$ 118	$ 707
Average common equity	1,400	–	1,400
ROE	41.6%	–	49.9%

Acquisition of the remaining 50% stake of RBC Dexia included in Investor & Treasury Services

Our Investor & Treasury Services results were impacted in the prior year by a loss of $224 million ($213 million after-tax) related to our acquisition of the remaining 50% stake of RBC Dexia.

The following table provides calculations of our Investor & Treasury Services results and measures excluding this specified item:

Investor & Treasury Services **Table 13**

	2012		
(Millions of Canadian dollars, except percentage amounts)	As reported	Loss related to the acquisition of the remaining 50% stake of RBC Dexia (1)	Adjusted
Net interest income	$ 668	$ –	$ 668
Non-interest income	657	36	693
Total Revenue	$ 1,325	36	$ 1,361
Non-interest expense	1,134	(188)	946
Net income before income taxes	$ 191	$ 224	$ 415
Net income	$ 85	$ 213	$ 298
Selected balances and other information			
Net income available to common shareholders	$ 85	$ 213	$ 298
Average common equity	1,700		1,700
ROE (2)	4.3%		16.9%

(1) Consisted of an impairment loss of $168 million (before- and after-tax), comprised of a writedown of goodwill and other intangibles, other costs relating to the acquisition of $20 million ($19 million after-tax), and a loss of $36 million ($26 million after-tax), which was our proportionate share of the loss recorded by RBC Dexia from the securities exchange with Dexia Group and trading losses on the sale of a majority of the securities received in the exchange.

(2) Based on actual balances before rounding.

Personal & Commercial Banking

Personal & Commercial Banking is comprised of our personal and business banking operations, as well as our expanded auto financing and certain retail investment businesses, including our online discount brokerage channel, and operates through two business lines: Canadian Banking, and Caribbean & U.S. Banking. We provide services to 13 million individual, business and institutional clients across Canada, the Caribbean and the U.S. In Canada, we provide a broad suite of financial products and services through our extensive branch, automated teller machine (ATM), online and telephone banking networks, as well as through a large number of proprietary sales professionals. In the Caribbean, we offer a broad range of financial products and services to individuals, business clients and public institutions in various markets. In the U.S., we serve the cross-border banking needs of Canadian clients within the U.S. through online channels, as well as the banking product needs of our U.S. wealth management clients.

Our banking-related operations compete in the Canadian financial services industry, which consists of other Schedule I banks, independent trust companies, foreign banks, credit unions, caisses populaires, and auto financing companies. We maintain top rankings in market share in this competitive environment for most retail and business financial product categories, and have the largest branch network, the most ATMs and the largest mobile sales network across Canada. In the Caribbean, our competition includes banks, trust companies and investment management companies serving retail and corporate customers and public institutions. We are the second largest bank as measured by assets in the English Caribbean, with 116 branches in 19 countries and territories. In the U.S., we compete primarily with other Canadian banking institutions with operations in the U.S.

Economic and market review

We continued to see solid volume growth across most of our Canadian banking businesses, reflecting gradual improvements in the Canadian economy and the continuing low interest rate environment. Improved credit loss rates across our portfolios reflected stable and improving labour markets. Our businesses continued to be impacted by spread compression and certain regulatory measures which scaled back the pace of borrowing. In the Caribbean, unfavourable economic conditions continued to negatively impact our results through spread compression and lower loan volumes.

Highlights

- We completed the acquisition of Ally Canada on February 1, 2013 and fully integrated it in 2013, adding scale to our existing consumer and commercial auto financing businesses and extending our leadership position in Canadian auto financing.
- We were named “Best Retail Bank in North America” by *Retail Banker International* for the second consecutive year and we took the top spot in the highly competitive “Innovation in Customer Service” category by *Retail Banker International*.
- We were named “Best Commercial Bank in Canada” in World Finance’s 2013 Banking Awards with strong leadership position and overall financial strength and stability in Canada.
- We launched a co-branded Target‡ RBC MasterCard‡ to provide clients instant savings at Target stores or earnings towards Target‡ GiftCard Rewards based on purchases made everywhere else.
- We continued to innovate by introducing RBC Secure Cloud, a mobile payments service that allows clients to more safely and securely pay for purchases using their mobile devices.
- In the Caribbean, we continued to focus on improving and sustaining performance through strategic growth, client care, market focus, and sound banking practices across the region in a difficult operating environment.

Outlook and priorities

Financial conditions in Canada are expected to remain favourable, supported by the continuing low rate environment. We expect continued volume growth across most of our products. However, due to moderating housing activity resulting from regulatory changes and elevated consumer debt levels, growth in our home equity products and personal loans is expected to slow. We anticipate our business lending will remain strong as business investment is expected to improve further, reflecting favourable credit conditions and the continuing low interest rate environment. Spread compression related to low interest rates and the highly competitive environment is expected to continue to put pressure on our net interest margins.

In the Caribbean, challenging market conditions and a slow economic recovery continue to constrain our outlook. Net interest margins will likely remain challenged by strong competition and spread compression. However, efficiency is expected to improve and result in volume growth as well as a reduction in expenses as we leverage our common operating model in our Caribbean platforms.

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

Key strategic priorities for 2014

In Canada, our priorities are to continue to:

- Provide a superior client experience through relevant and tailored advice in order to achieve industry leading volume growth.
- Leverage our sales capabilities, strategic partnerships and innovative distribution channels to help broaden our client base and strengthen our distribution channels.
- Enhance our services and products in the emerging payments market.
- Streamline our business processes to improve the customer experience and maintain our industry-leading efficiency.

In the Caribbean and the U.S., we are focused on:

- Continuing to integrate our businesses in the Caribbean to reduce costs and enhancing the client experience by simplifying the way we do business, and improving productivity in our banking network.
- Strengthening the cross-border business in the U.S. and continuing to assess the market and our strategic business development options.

Personal & Commercial Banking **Table 14**

(Millions of Canadian dollars, except number of and percentage amounts and as otherwise noted)	2013	2012	2011
Net interest income	$ 9,435	$ 9,061	$ 8,515
Non-interest income	3,788	3,582	3,510
Total revenue	13,223	12,643	12,025
PCL	997	1,167	1,142
Non-interest expense	6,240	5,932	5,682
Net income before income taxes	5,986	5,544	5,201
Net income	$ 4,438	$ 4,088	$ 3,740
Revenue by business			
Canadian Banking	$ 12,422	$ 11,815	$ 11,199
Caribbean & U.S. Banking	801	828	826
Key ratios			
ROE	31.0%	31.5%	30.9%
NIM (1)	2.78%	2.86%	2.86%
Efficiency ratio (2)	47.2%	46.9%	47.3%
Operating leverage	(0.6)%	0.7%	n.a.
Selected average balance sheet information			
Total assets	$ 356,000	$ 331,500	$ 310,700
Total earning assets (3)	338,900	316,400	297,200
Loans and acceptances (3)	337,700	315,400	294,800
Deposits	262,300	243,900	221,200
Attributed capital	14,050	12,700	11,800
Other information			
AUA (4)	$ 192,200	$ 179,200	$ 165,900
AUM	3,400	3,100	2,700
Number of employees (FTE)	37,997	38,231	38,216
Effective income tax rate	25.9%	26.3%	28.1%
Credit information			
Gross impaired loans as a % of average net loans and acceptances	0.55%	0.58%	0.70%
PCL on impaired loans as a % of average net loans and acceptances	0.30%	0.37%	0.39%

(1) NIM is calculated as Net interest income divided by Average total earning assets.
(2) Efficiency ratio is calculated as Non-interest expense divided by Total revenue.
(3) Average total earning assets and average loans and acceptances include average securitized residential mortgages and credit card loans for the year of $53.9 billion and $7.2 billion, respectively (2012 – $44.9 billion and $7.3 billion; 2011 – $42.0 billion and $4.0 billion).
(4) AUA includes securitized residential mortgages and credit card loans as at October 31, 2013 of $25.4 billion and $7.2 billion respectively (October 31, 2012 – $31.0 billion and $7.4 billion; October 31, 2011 – $32.1 billion and $3.9 billion).
n.a. not applicable

Financial performance

2013 vs. 2012

Net income increased $350 million or 9% compared to the prior year, reflecting solid volume growth across all our domestic businesses, improved credit quality in our Canadian and Caribbean portfolios, and the inclusion of our acquisition of Ally Canada. These factors were partially offset by spread compression, and a provision related to post-employment benefits and restructuring charges in the Caribbean of $40 million ($31 million after-tax). The prior year was favourably impacted by a mortgage prepayment interest adjustment (prepayment adjustment) of $125 million ($92 million after-tax) resulting from a change in methodology with respect to the timing of recognition of mortgage prepayment interest.

Total revenue increased $580 million or 5% from the previous year, mainly due to solid volume growth across all businesses in Canada, and the inclusion of our acquisition of Ally Canada, partially offset by spread compression. The prior year was favourably impacted by the prepayment adjustment as noted above.

Net interest margin decreased 8 bps as the prior year was favourably impacted by 4 bps due to the prepayment adjustment noted above. The continuing low interest rate environment and competitive pricing pressures also contributed to the decrease.

PCL decreased $170 million, and the PCL ratio decreased 7 bps, mainly due to lower PCL in both our Canadian and Caribbean portfolios, reflecting improved credit quality. For further details, refer to the Credit quality performance section.

Non-interest expense increased $308 million or 5%, mainly due to the inclusion of our acquisition of Ally Canada, higher costs in support of business growth, including higher staff costs, and higher pension expense. The provision related to post-employment benefits and restructuring charges in the Caribbean also contributed to the increase. These factors were partially offset by continuing benefits from our ongoing focus on efficiency management activities.

Average loans and acceptances increased $22 billion or 7%, mainly due to growth in Canadian home equity products, personal loans, and business loans. Average deposits increased $18 billion or 8%, reflecting solid growth in both business and personal deposits.

2012 vs. 2011

Net income was up $348 million or 9% from 2011, reflecting strong volume growth across most of our domestic businesses, a lower effective tax rate in Canada and the favourable prepayment adjustment as noted above. These factors were partially offset by continued spread compression in Canada as well as higher PCL in the Caribbean.

Total revenue was up $618 million or 5% from 2011, reflecting strong volume growth in Canada in personal deposits, residential mortgages, business deposits and loans and personal loans. The favourable impact of the prepayment adjustment as well as higher credit card transaction volumes also contributed to the increase.

Net interest margin remained flat as the favourable impact of the prepayment adjustment was largely offset by spread compression reflecting the continuing low interest rate environment.

PCL was up $25 million or 2% from 2011, mainly due to higher provisions in our Caribbean portfolio and higher PCL in our Canadian secured retail and business lending portfolios. These factors were partially offset by lower write-offs related to our Canadian credit card portfolio.

Non-interest expense was up $250 million or 4% from 2011, mainly due to higher costs in support of business growth in Canada. Higher staff costs in the Caribbean and set-up costs in our U.S. cross border banking business also contributed to the increase. These factors were partially offset by continuing benefits from our ongoing focus on efficiency management activities. In addition, our results in 2011 included net stamp tax and accounting adjustments in Caribbean banking, which favourably impacted our results in that year.

Average loans and acceptances increased $21 billion or 7% from 2011, mainly due to continued growth in Canadian home equity and business and personal lending products. Average deposits were up $23 billion or 10% from 2011, primarily in Canada, reflecting solid growth in personal and business deposits.

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

Canadian Banking financial highlights — **Table 15**

(Millions of Canadian dollars, except number of and percentage amounts and as otherwise noted)	2013	2012	2011
Net interest income	$ 8,874	$ 8,483	$ 7,960
Non-interest income	3,548	3,332	3,239
Total revenue	12,422	11,815	11,199
PCL	910	1,017	1,033
Non-interest expense	5,530	5,258	5,082
Net income before income taxes	5,982	5,540	5,084
Net income	$ 4,414	$ 4,085	$ 3,664
Revenue by business			
Personal Financial Services	$ 6,948	$ 6,591	$ 6,192
Business Financial Services	2,990	2,894	2,750
Cards and Payment Solutions	2,484	2,330	2,257
Key ratios			
ROE	38.1%	39.3%	38.0%
NIM (1)	2.72%	2.78%	2.77%
Efficiency ratio (2)	44.5%	44.5%	45.4%
Operating leverage	0.0%	2.0%	n.a.
Selected average balance sheet information			
Total assets	$ 338,600	$ 315,400	$ 296,100
Total earning assets (3)	326,600	305,300	287,200
Loans and acceptances (3)	330,400	307,900	287,300
Deposits	248,100	230,300	208,600
Attributed capital	11,400	10,200	9,450
Other information			
AUA (4)	183,600	171,100	158,000
Number of employees (FTE)	31,956	31,787	31,607
Effective income tax rate	26.2%	26.3%	27.9%
Credit information			
Gross impaired loans as a % of average net loans and acceptances	0.36%	0.37%	0.44%
PCL on impaired loans as a % of average net loans and acceptances	0.28%	0.33%	0.36%

(1) NIM is calculated as Net interest income divided by Average total earning assets.
(2) Efficiency ratio is calculated as Non-interest expense divided by Total revenue.
(3) Average total earning assets and average loans and acceptances include average securitized residential mortgages and credit card loans for the year of $53.9 billion and $7.2 billion, respectively (2012 – $44.9 billion and $7.3 billion; 2011 – $42.0 billion and $4.0 billion).
(4) AUA includes securitized residential mortgages and credit card loans as at October 31, 2013 of $25.4 billion and $7.2 billion respectively (October 31, 2012 – $31.0 billion and $7.4 billion; October 31, 2011 – $32.1 billion and $3.9 billion).
n.a. not applicable

Financial performance

2013 vs. 2012

Net income increased $329 million or 8%, compared to the prior year, reflecting solid volume growth across all businesses, improved credit quality, and the contribution of our acquisition of Ally Canada of $65 million, net of integration and intangible amortization costs of $58 million ($43 million after-tax). These factors were partially offset by spread compression. The prior year was favourably impacted by a mortgage prepayment adjustment (prepayment adjustment) of $125 million ($92 million after-tax) resulting from a change in methodology with respect to the timing of recognition of mortgage prepayment interest.

Total revenue increased $607 million or 5%, from the previous year, primarily due to solid volume growth across all businesses, including higher credit card transaction volumes and higher mutual fund assets. The inclusion of our acquisition of Ally Canada contributed $222 million during the year. These factors were partially offset by spread compression. The prior year results were favourably impacted by the prepayment adjustment as noted above.

Net interest margin decreased 6 bps from the previous year as the prior year was favourably impacted by 4 bps due to the prepayment adjustment noted above. The continuing low interest rate environment and competitive pricing pressures also contributed to the decrease.

PCL decreased $107 million, and the PCL ratio decreased 5 bps, mainly due to improved credit quality in our business, credit card and personal loans portfolios.

Non-interest expense increased $272 million or 5%, largely reflecting the inclusion of our acquisition of Ally Canada which contributed $119 million, including integration and intangible amortization costs of $58 million. Higher costs in support of business growth, including higher staff costs, and higher pension expense also contributed to the increase. These factors were partially offset by continuing benefits from our ongoing focus on efficiency management activities.

Average loans and acceptances increased $23 billion or 7%, mainly due to growth in home equity products, personal loans, and business loans, as well as the inclusion of our acquisition of Ally Canada. Average deposits increased $18 billion or 8%, primarily reflecting growth in business and personal deposits.

2012 vs. 2011

Net income increased $421 million or 11% from 2011, reflecting strong volume growth across most of our businesses, a lower effective tax rate and the favourable prepayment adjustment noted above. These factors were partially offset by spread compression.

Total revenue increased $616 million or 6% from 2011, reflecting strong volume growth in personal deposits, residential mortgages, business deposits and loans and personal loans. The favourable prepayment adjustment and higher credit card transaction volumes also contributed to the increase. These factors were partially offset by spread compression.

Net interest margin increased 1 bp mainly due to the prepayment adjustment and a favourable change in product mix, largely offset by spread compression reflecting the low interest rate environment.

PCL decreased $16 million or 2% from 2011, mainly due to lower write-offs related to our credit card portfolio, partially offset by higher provisions in our secured retail and business lending portfolios.

Non-interest expense increased $176 million or 3% from 2011, mainly due to higher costs in support of business growth, partially offset by continuing benefits from our ongoing focus on efficiency management activities.

Business line review

Personal Financial Services

Personal Financial Services focuses 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 and self-directed brokerage accounts, and Guaranteed Investment Certificates (GICs). We rank first or second in market share for most personal banking products in Canada and our retail banking network is the largest in Canada with 1,255 branches and 4,622 ATMs.

Financial performance

Total revenue increased $357 million or 5% compared to the prior year, reflecting solid volume growth across all businesses, and the inclusion of our acquisition of Ally Canada. These factors were partially offset by lower spreads. The prior year results were favourably impacted by the prepayment adjustment as noted above.

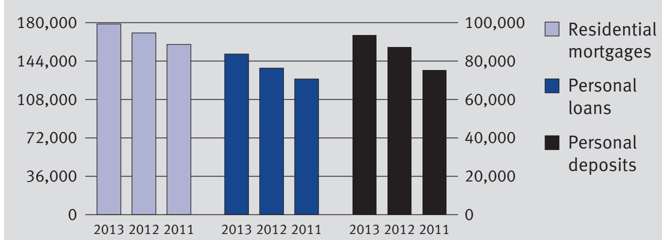
Average residential mortgages increased by 5% compared to 2012, resulting from the ongoing low interest rate environment and improving housing market activity. Average personal loans grew by 10% from last year largely due to the inclusion of our acquisition of Ally Canada, and solid growth in indirect lending and home equity products. Average personal deposits grew by 7% from last year, as new and existing clients continued to use savings and other deposit products.

Selected highlights — **Table 16**

(Millions of Canadian dollars, except number of)	2013	2012	2011
Total revenue	$ 6,948	$ 6,591	$ 6,192
Other information (average)			
Residential mortgages	178,700	170,400	159,700
Personal loans	83,800	76,300	70,500
Personal deposits	93,700	87,300	75,200
Personal GICs	63,100	59,100	56,900
Branch mutual fund balances (1)	95,300	82,300	74,500
AUA – Self-directed brokerage (1)	53,300	48,900	45,500
Number of:			
New deposit accounts opened (thousands)	1,285	1,204	1,158
Branches	1,255	1,239	1,214
ATM	4,622	4,724	4,293

(1) Represents year-end spot balances.

Average residential mortgages, personal loans and deposits
(Millions of Canadian dollars)



Business Financial Services

Business Financial Services offers a wide range of lending, leasing, deposit, investment, foreign exchange, cash management, auto dealer financing (floorplan), and trade products and services to small, medium-sized and commercial businesses and 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 $96 million or 3% compared to the prior year, primarily due to solid volume growth in business deposits and business loans, and the inclusion of our acquisition of Ally Canada, partially offset by lower spreads.

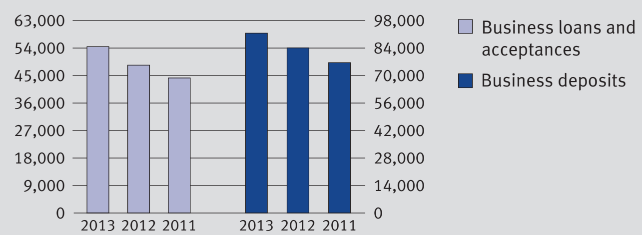
Average loans and acceptances were up 12% and average business deposits were up 9%, due to the acquisition of new clients, along with increased activity from existing clients.

Selected highlights — **Table 17**

(Millions of Canadian dollars)	2013	2012	2011
Total revenue	$ 2,990	$ 2,894	$ 2,750
Other information (average)			
Business loans and acceptances	54,300	48,300	44,200
Business deposits (1)	91,300	83,900	76,500

(1) Includes GIC balances.

Average business loans and acceptances and business deposits
(Millions of Canadian dollars)



Card and Payment Solutions

Cards and Payment Solutions provides a wide array of convenient credit cards with loyalty and reward benefits, and payment products and solutions within Canada. We have over 6.5 million credit card accounts and have approximately 22% market share of Canada's credit card purchase volume.

In addition, this business line includes our 50% interest in Moneris Solutions, Inc., our merchant card processing joint venture with the Bank of Montreal.

Financial performance

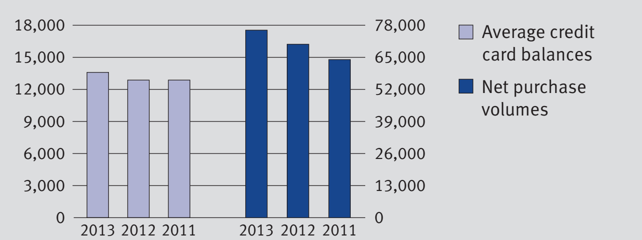
Total revenue increased $154 million or 7%, compared to the prior year, driven by higher credit card transaction volumes, higher balances, and higher spreads, partially offset by higher points costs.

Average credit card balances increased 5% and net purchase volumes increased 8% due to strength in new account acquisitions, driving higher active account growth.

Selected highlights — **Table 18**

(Millions of Canadian dollars)	2013	2012	2011
Total revenue	$ 2,484	$ 2,330	$ 2,257
Other information			
Average credit card balances	13,600	12,900	12,900
Net purchase volumes	76,200	70,500	64,300

Average credit card balances and net purchase volumes
(Millions of Canadian dollars)



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 an extensive branch and ATM network, and online banking.

Our U.S. cross-border banking business serves the needs of our Canadian clients within the U.S. through online channels, and offers a broad range of financial products and services to individuals across all 50 states. As well, we serve the banking product needs of our U.S. wealth management clients.

Financial performance

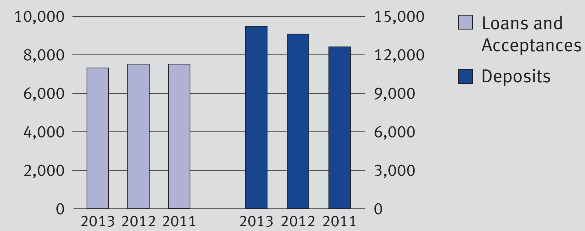
Total revenue decreased $27 million or 3% from the prior year, due to lower loan balances reflecting continuing unfavourable economic conditions, as well as spread compression in the Caribbean resulting from the low interest rate environment and a change in product mix, partially offset by the favourable impact of the weaker Canadian dollar.

Average loans and acceptances decreased by $200 million or 3%, primarily due to lower loan balances driven by weak economic conditions in the Caribbean. Average deposits increased by $600 million or 4%, mostly due to increased liquidity in the Caribbean leading to higher savings and current account balances.

Selected highlights **Table 19**

(Millions of Canadian dollars, except number of and percentage amounts)	2013	2012	2011
Total revenue	$ 801	$ 828	$ 826
Other information			
Net interest margin	4.57%	5.21%	5.52%
Average loans and acceptances	7,300	7,500	7,500
Average deposits	14,200	13,600	12,600
AUA	8,600	8,100	7,900
AUM	3,400	3,100	2,700
Average AUA	8,300	8,000	7,500
Average AUM	3,300	2,800	2,600
Number of:			
Branches	116	121	123
ATM	351	341	333

Average loans and deposits (Millions of Canadian dollars)



Wealth Management

Wealth Management comprises Canadian Wealth Management, U.S. & International Wealth Management and Global Asset Management (GAM). We serve affluent, high net worth (HNW) and ultra-high net worth (UHNW) clients in over 180 countries from our offices in key financial centres mainly in Canada, the U.S., the U.K., continental Europe, 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 as well as through RBC distribution channels and third-party distributors. Our competitive environment is discussed below in each business.

Economic and market review

Economic and financial market conditions in Canada and the U.S. gradually improved during the year, although market conditions remained uncertain in some European countries, driving higher average fee-based client assets reflecting net sales and capital appreciation and higher transactions volumes. The continuing low interest rate environment resulted in spread compression and money market fee waivers.

Highlights

- Client assets have surpassed $1 trillion, a 12% increase from last year largely reflecting capital appreciation and net sales. We realized strong growth in our credit and deposit-taking businesses, with loans up 22% and deposits up 9% compared to last year.
- In connection with growing our high-performing global asset management business, we maintained our leadership position in retail asset management with a 14.5% market share, continued to leverage BlueBay Asset Management's (BlueBay) leading fixed income and alternatives expertise to expand our product offering in Canada and the U.S. and deepened our relationships with HNW and UHNW clients globally.
- We continued to execute on our growth strategies to deliver integrated global wealth management advice, solutions and services to HNW and UHNW clients. In 2013 we were recognized as a top 10 global wealth manager, ranking sixth globally by client assets for the third consecutive year in Scorpio Partnership's 2013 Global Private Banking KPI Benchmark. We received numerous significant industry awards from around the world during the year, reflecting the strength of our global capabilities and commitment to client service.
- In Canada, our full service wealth management business continued to extend its industry lead in HNW share.
- Outside Canada, we have grown client assets by 14% through our continued focus on improving advisor productivity and efficiency in the U.S., and the execution of our long-term growth strategy outside North America.

Outlook and priorities

We expect that as global market conditions continue to improve, our revenues will grow driven by higher client assets and transaction volumes. The low interest rate environment is expected to continue, and we anticipate ongoing interest rate spread compression and continuing money market fund fee waivers in the U.S. We will continue to leverage our reputation, brand and financial strength to increase our market share of HNW and UHNW globally. For further details on our general economic review and outlook, refer to the Economic and market review and outlook section.

Key strategic priorities for 2014

- Leverage and grow our high-performing asset management business.
- Focus growth on the HNW and UHNW client segment in our geographic wealth businesses.
- Leverage the RBC brand and competitive strengths to seamlessly bring the full value of RBC to our clients around the world.

Wealth Management			Table 20
(Millions of Canadian dollars, except number of and percentage amounts and as otherwise noted)	2013	2012	2011
Net interest income	$ 396	$ 393	$ 365
Non-interest income			
Fee-based revenue	3,463	2,964	2,821
Transactional and other revenue	1,628	1,478	1,522
Total revenue	5,487	4,835	4,708
PCL	51	(1)	–
Non-interest expense	4,201	3,796	3,586
Net income before income taxes	1,235	1,040	1,122
Net income	$ 899	$ 763	$ 811
Revenue by business			
Canadian Wealth Management	$ 1,889	$ 1,741	$ 1,724
U.S. & International Wealth Management	2,225	1,977	1,948
U.S. & International Wealth Management (US$ millions)	2,174	1,973	1,980
Global Asset Management	1,373	1,117	1,036
Key ratios			
ROE	16.1%	14.1%	15.9%
Pre-tax margin (1)	22.5%	21.5%	23.8%
Selected average balance sheet information			
Total assets	$ 21,600	$ 20,900	$ 20,900
Loans and acceptances	12,100	9,900	8,200
Deposits	31,900	29,200	28,200
Attributed capital	5,400	5,150	4,850
Other information			
Revenue per advisor (000s) (2)	$ 862	$ 793	$ 784
AUA	639,200	577,800	527,200
AUM	387,200	339,600	305,700
Average AUA	609,500	554,800	532,300
Average AUM	367,600	322,500	302,800
Number of employees (FTE) (3)	12,462	12,139	12,063
Number of advisors (4)	4,366	4,388	4,281

(1) Pre-tax margin is defined as net income before income taxes divided by Total revenue.
(2) Represents investment advisors and financial consultants of our Canadian and U.S. full-service wealth businesses.
(3) FTE numbers have been restated to account for the transfer of Wealth Management Operations from Corporate Support into Wealth Management during 2013.
(4) Represents client-facing advisors across all our wealth management businesses.

2013 vs. 2012

Net income increased $136 million or 18% from a year ago, mainly due to higher average fee-based client assets and higher transaction volumes, partially offset by higher PCL.

Total revenue increased $652 million or 13%, mainly due to higher average fee-based client assets across all business lines resulting from net sales and capital appreciation and higher transaction volumes reflecting improved market conditions.

PCL increased $52 million mainly reflecting provisions on a few accounts. For further details, refer to the Credit quality performance section.

Non-interest expense increased $405 million or 11%, mainly due to higher variable compensation driven by higher revenue and increased staff levels and infrastructure investments in support of business growth.

2012 vs. 2011

Net income decreased $48 million or 6% from 2011, mainly due to lower transaction volumes partially offset by higher average fee-based client assets and a lower effective tax rate. In addition, our 2012 results included the unfavourable impact of certain regulatory and legal matters of $29 million ($21 million after-tax) and our 2011 results included favourable accounting and tax adjustments of $39 million after-tax.

Total revenue increased $127 million or 3%, mainly due to higher average fee-based client assets across all business lines resulting from capital appreciation and net sales, and volume growth in loans and deposits. The increase in fair value of our U.S. share-based compensation plan and the favourable impact of the weaker Canadian dollar also contributed to the increase. These factors were partially offset by lower transaction volumes.

Non-interest expense increased $210 million or 6% mainly due to higher staff levels and infrastructure investments in support of business growth. The unfavourable impact of certain regulatory and legal matters noted above and the unfavourable impact of the weaker Canadian dollar also contributed to the increase. In addition, our 2011 results included favourable accounting adjustments of $42 million related to our deferred compensation plan.

Business line review

Canadian Wealth Management

Canadian Wealth Management includes our full-service Canadian wealth advisory business, which is the largest as measured by AUA, with over 1,500 investment advisors providing comprehensive advice-based financial solutions to affluent, HNW and UHNW clients. Additionally, we provide discretionary investment management and estate and trust services to our clients through approximately 60 investment counsellors and 110 trust professionals in locations across Canada. We also serve international clients through a team of over 35 private bankers in key centres 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

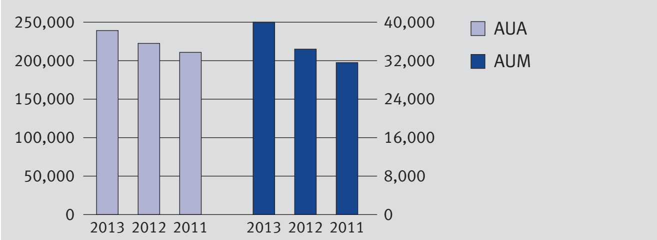
Revenue increased $148 million or 9%. The 9% increase in AUA from a year ago was mainly due to higher average fee-based client assets resulting from net sales and capital appreciation, and higher transaction volumes reflecting improved market conditions.

Selected highlights **Table 21**

(Millions of Canadian dollars)	2013	2012	2011
Total revenue	$ 1,889	$ 1,741	$ 1,724
Other information			
Total loans and acceptances (1)	2,500	2,300	1,900
Total deposits (1)	13,400	11,900	11,000
AUA	251,400	230,400	209,700
AUM	43,600	36,100	31,700
Average AUA	239,100	222,100	210,900
Average AUM	40,000	34,400	31,500
Total assets under fee-based programs	139,400	120,700	109,000

(1) Represents an average amount, which is calculated using methods intended to approximate the average of the daily balances for the period.

Average AUA and AUM (1) (Millions of Canadian dollars)



(1) Represents average balances, which are more representative of the impact client balances have upon our revenue.

U.S. & International Wealth Management

U.S. Wealth Management includes our private client group, which is the seventh largest full-service wealth advisory firm in the U.S., as measured by number of advisors, with over 1,900 financial advisors. It also serves international clients through a team of more than 80 financial advisors and private bankers in key centres across the U.S. 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. In the U.S., we operate in a fragmented and extremely competitive industry. There are approximately 4,500 registered broker-dealers in the U.S., comprising independent, regional and global players.

International Wealth Management includes Wealth Management – British Isles & Caribbean, and Wealth Management – Emerging Markets. We provide customized and integrated trust, banking, credit, and investment solutions to HNW and UHNW clients and corporate clients with over 1,500 employees located in 18 countries around the world. Competitors in International Wealth Management comprise global wealth managers, traditional offshore private banks, domestic wealth managers and U.S. investment-led private client operations.

Financial performance

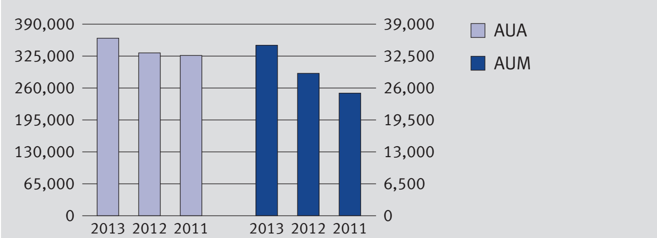
Revenue increased $248 million or 13% from a year ago. In U.S. dollars, revenue increased $201 million or 10%, mainly due to a 7% increase in AUA reflecting capital appreciation and net sales and higher transaction volumes reflecting improved market conditions.

Selected highlights **Table 22**

(Millions of Canadian dollars)	2013	2012	2011
Total revenue	$ 2,225	$ 1,977	$ 1,948
Other information (US $ millions)			
Total revenue	2,174	1,973	1,980
Total loans, guarantees and letters of credit (1)	12,100	10,200	8,800
Total deposits (1)	18,000	17,200	17,400
AUA	371,900	347,800	318,600
AUM	35,600	31,300	26,900
Average AUA	361,800	331,700	326,500
Average AUM	34,700	29,000	24,900
Total assets under fee-based programs (2)	83,200	71,700	66,900

(1) Represents an average amount, which is calculated using methods intended to approximate the average of the daily balances for the period.
(2) Represents amounts related to our U.S. wealth management businesses.

Average AUA and AUM (1) (Millions of U.S. dollars)



(1) Represents average balances, which are more representative of the impact client balances have upon our revenue.

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 emerging markets. We provide a broad range of investment management services through mutual, pooled and hedge 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 bank, and directly to individual clients. We also provide investment solutions directly to institutional clients, including pension plans, 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 major banks, insurance companies, asset management organizations and boutique firms. The Canadian fund management industry is large and mature, but still 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, insurance companies and boutique asset managers.

Internationally, through our leading 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, regional and boutique asset managers in the geographies where we serve clients.

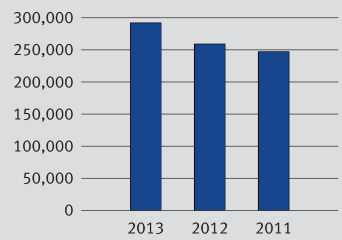
Financial performance
Revenue increased $256 million or 23% from a year ago, mainly due to a 13% increase in AUM reflecting net sales and capital appreciation and higher semi-annual performance fees.

Selected highlights — **Table 23**

(Millions of Canadian dollars)	2013	2012	2011
Total revenue (1)	$ 1,373	$ 1,117	$ 1,036
Other information			
Canadian net long-term mutual fund sales	8,064	7,906	7,300
Canadian net money market mutual fund (redemptions) sales	(1,348)	(1,981)	(3,400)
AUM	306,500	272,200	247,200
Average AUM	292,100	259,100	246,700

(1) Includes BlueBay results which are reported on a one-month lag.

Average AUM (1) (Millions of Canadian dollars)



(1) Represents average balances, which are more representative of the impact client balances have upon our revenue.

Insurance

Insurance comprises our insurance operations in Canada and globally and operates 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 branches, our field sales representatives, call centres as well as online, through independent insurance advisors and affinity relationships. Outside North America, we operate in reinsurance markets globally. Our competitive environment is discussed below in each business.

Economic and market review
Continued low interest rates, uncertain global market conditions and changes in the regulatory environment continued to impact the insurance marketplace resulting in price increases, product refinements and competitors exiting certain lines of business. These factors have impacted our businesses; however, product and pricing actions taken in recent years, conservative investment practices and diversified product lines have mitigated this challenging environment.

Highlights
- In Canada, we continued to focus on our newly integrated field sales channel, providing tools, processes and products to further enable the delivery of advice-based solutions, enhance the overall client experience and increase cross-sell opportunities.
- We signed an agreement to transition the sales and distribution support of our travel agency insurance business to Manulife Financial. We remain committed to the direct travel insurance business and continue to look for ways to grow the business by offering our travel insurance solutions through proprietary channels.
- In the fourth quarter, we expanded our products and services based on the unique needs of our clients by launching our new Group Benefit solutions which include health and dental coverage for small and medium businesses.
- Internationally, we continued to work successfully with our existing partners and added new counterparties in order to grow our diversified business, reflecting our strong credit rating and our expertise.
- We were ranked highest overall in customer satisfaction for auto insurance claims experience among insurance companies in Canada, according to the inaugural J.D. Power 2013 Canadian Auto Claims Satisfaction Study.
- On October 22, 2013, the federal government's Bill C-4 received first reading in the House of Commons. The second reading for Bill C-4 was on October 29, 2013. Bill C-4 affects the policyholders' tax treatment of certain individual life insurance policies. As a result of this substantially enacted legislation, we recognized a charge in PBCAE of $160 million ($118 million after-tax). The charge is based on our current assumptions and will be updated, if necessary, to reflect any changes in policyholder experience or regulations.

Outlook and priorities
Financial conditions are expected to remain stable and we expect continued growth. We anticipate the product and pricing actions taken during the last few years, including increasing volumes through our growing proprietary channels and the execution of efficiency management initiatives will mitigate economic and regulatory challenges. For further details on our general economic review and outlook, refer to the Economic and market review and outlook section.

Key strategic priorities for 2014
- Leverage the field sales force through streamlined processes, tools and products, and continue to deliver a variety of insurance products and services to our clients through advice-based cross-sell strategies.
- Deepen client relationships by continuing to provide our customers with a comprehensive suite of insurance products and services based on their unique family needs.
- Grow our new Group Benefit solutions launched in the latter part of 2013 that include health and dental coverage.
- Continue to simplify the way we do business by streamlining all business processes to ensure that clients find it easy to do business with us, while diligently managing our expenses.
- Pursue select international niche opportunities, within our risk appetite, with the aim of continuing to grow our core reinsurance business.

Insurance				Table 24
(Millions of Canadian dollars, except percentage amounts and as otherwise noted)		2013	2012	2011
Non-interest income				
Net earned premiums		$ 3,674	$ 3,705	$ 3,533
Investment income (1)		(17)	929	703
Fee income		271	263	239
Total revenue		3,928	4,897	4,475
Insurance policyholder benefits and claims (1)		2,326	3,055	2,757
Insurance policyholder acquisition expense		458	566	601
Non-interest expense		549	515	498
Net income before income taxes		595	761	619
Net income		$ 597	$ 714	$ 600
Revenue by business				
Canadian Insurance		$ 1,962	$ 2,992	$ 2,676
International Insurance		1,966	1,905	1,799
Key ratios				
ROE		41.6%	46.8%	37.6%
Selected average balance sheet information				
Total assets		$ 11,900	$ 11,500	$ 10,500
Attributed capital		1,400	1,500	1,550
Other information				
Premiums and deposits (2)		$ 4,924	$ 4,849	$ 4,701
Canadian Insurance		2,344	2,362	2,355
International Insurance		2,580	2,487	2,346
Insurance claims and policy benefit liabilities		8,034	7,921	7,119
Fair value changes on investments backing policyholder liabilities (1)		(491)	410	214
Embedded value (3)		6,302	5,861	5,327
AUM		500	300	300
Number of employees (FTE)		2,965	2,744	2,859

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

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

(3) 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

2013 vs. 2012

Net income decreased $117 million or 16%, mainly due to a charge of $160 million ($118 million after-tax) as a result of proposed legislation in Canada, which would affect the policyholders' tax treatment of certain individual life insurance policies. Excluding this charge, net income of $715 million was relatively flat compared to the prior year as favourable actuarial adjustments and the continuing benefit from our ongoing focus on efficiency management activities were mostly offset by higher net claims costs.

Total revenue decreased $969 million or 20%, mainly due to the change in fair value of investments backing our policyholder liabilities resulting from an increase in long-term interest rates, largely offset in PBCAE.

PBCAE decreased $837 million or 23%, mainly due to the change in fair value of investments backing our policyholder liabilities, which was largely offset in revenue. Favourable actuarial adjustments reflecting management actions and assumption changes also contributed to the decrease. These factors were partially offset by the charge related to certain individual life insurance policies as noted above.

Non-interest expense increased $34 million or 7%, mainly due to the reclassification of certain acquisition expenses from PBCAE and higher costs in support of business growth, partially offset by continuing benefits from our ongoing focus on efficiency management activities.

Premiums and deposits were up $75 million or 2%, mainly reflecting volume growth in International Insurance.

Embedded value increased $441 million or 8%, mainly reflecting growth from operations partially offset by the impact of increased discount rates and the transfer of capital for our insurance businesses through dividend payments. For further details, refer to the Key performance and non-GAAP measures section.

Results excluding the charge related to certain individual life insurance policies are non-GAAP measures. For further details, including a reconciliation, refer to the Key performance and non-GAAP measures section.

2012 vs. 2011

Net income increased $114 million or 19% from 2011, mainly due to lower claims costs in disability, home and auto products and the favourable impact of a $33 million ($24 million after-tax) reduction of policy acquisition cost-related liabilities reflecting changes to our proprietary distribution channel. Higher net investment gains and volume growth in our reinsurance products also contributed to the increase. These factors were partially offset by higher claims costs in our reinsurance products.

Total revenue increased $422 million or 9%, mainly due to volume growth across reinsurance, life and home and auto products and the change in fair value of investments backing our policyholder liabilities, which was largely offset in PBCAE.

PBCAE increased $263 million or 8%, mainly due to the change in fair value of investments backing our policyholder liabilities, largely offset in revenue, and volume growth across reinsurance, life, home and auto products. These factors were partially offset by lower claims costs in disability, home and auto products and the reduction of policy acquisition cost-related liabilities as noted above.

Non-interest expense increased $17 million or 3%, mainly due to higher costs in support of business growth, partially offset by continuing benefits from our ongoing focus on efficiency management activities.

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, trip cancellation insurance and interruption insurance.

In Canada, we compete against over 200 insurance companies, with the majority of the organizations specializing in either 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 the home, auto and wealth markets.

Financial performance

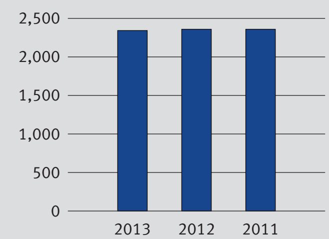
Total revenue decreased $1,030 million or 34% from last year, mainly due to the change in fair value of investments backing our policyholder liabilities resulting from the increase in long-term interest rates, which was largely offset in PBCAE.

Premiums and deposits decreased $18 million or 1% due to lower volumes in both life and health and travel product lines.

Selected highlights — Table 25

(Millions of Canadian dollars)	2013	2012	2011
Total revenue	$ 1,962	$ 2,992	$ 2,676
Other information			
Premiums and deposits			
Life and health	1,245	1,280	1,274
Property and casualty	942	965	962
Annuity and segregated fund deposits	157	117	119
Fair value changes on investments backing policyholder liabilities	(510)	408	209

Premiums and deposits (Millions of Canadian dollars)



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., U.K. and Eurozone. The reinsurance industry is competitive but barriers to entry remain high.

Financial performance

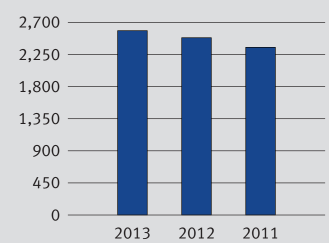
Total revenue increased $61 million or 3%, mainly due to volume growth in our U.K. annuity and European life products.

Premiums and deposits increased $93 million, or 4% driven by the growth mentioned above.

Selected highlights — Table 26

(Millions of Canadian dollars)	2013	2012	2011
Total revenue	$ 1,966	$ 1,905	$ 1,799
Other information			
Premiums and deposits			
Life and health	2,069	1,980	1,969
Property and casualty	50	56	38
Annuity	461	451	339

Premiums and deposits (Millions of Canadian dollars)



Investor & Treasury Services

Investor & Treasury Services is a specialist provider of asset servicing, custody, payments, and treasury services for financial institutions and other institutional investors worldwide. We deliver custodial, advisory, financing and other services to safeguard client assets, maximize liquidity, and manage risk across multiple jurisdictions. We also provide funding and liquidity management for RBC. We are a top 10 global custodian by assets under administration with a network of 18 offices across North America, Europe and Asia-Pacific. While we compete against the world's largest global custodians, we remain a specialist provider and our transaction banking business competes primarily with major Canadian banks.

Economic and market review

The highly competitive environment in the global custody industry continued to pressure our margins. Overall, investor confidence increased as market conditions in Canada and the U.S. gradually improved during 2013, driving higher transaction volumes. Nonetheless, European market conditions in select markets remained uncertain reflecting continued concerns about the European sovereign debt crisis.

Highlights

- Our earnings improved with the reorganization and integration efforts over the past year, driven by new client and business mandates and our ongoing focus on cost management activities.
- Following the RBC Dexia acquisition, we continued to integrate our investor services business and implemented key organizational changes that focused on deepening client relationships and cross-selling opportunities.
- In 2013, we were ranked best custodian overall (*Global Investor*), fund administrator of the year in Canada (Custody Risk Americas Awards) and top overall for customer service (R&M Fund Services.net).

Outlook and priorities

In 2014, as a result of the integration of our investor services business, we expect to further leverage our integrated capabilities to deliver a specialised service offering to our institutional clients while continuing to focus on their asset servicing needs. We expect that the global economy will improve gradually as ongoing concerns around the European sovereign debt crisis continue to subside. We believe there are strong long-term prospects for our business, largely underpinned by our operating model as a specialist provider, which will position us competitively in a rapidly-changing operating environment. For further details on our general economic review and outlook, refer to the Economic and market review and outlook section.

Key strategic priorities for 2014

- Focus on maintaining our superior customer service for custody and asset servicing amidst the competitive industry environment.
- Grow our Treasury & Market Services businesses as part of our full-service offering and to support our enterprise funding and liquidity management objectives.
- Maintain our highly disciplined approach to risk management in support of all client activities.
- Align our technological capabilities, to support our business activities and meet our clients' rapidly evolving needs.

Investor & Treasury Services — **Table 27**

(Millions of Canadian dollars, except percentage amounts and as otherwise noted)	2013	2012	2011
Net interest income	$ 671	$ 668	$ 573
Non-interest income	1,133	657	569
Total revenue	1,804	1,325	1,142
Non-interest expense	1,343	1,134	821
Net income before income taxes	461	191	321
Net income	$ 343	$ 85	$ 230
Key Ratios			
ROE	16.7%	4.3%	18.4%
ROE adjusted (1)	n.a.	16.9%	n.a.
Selected average balance sheet information			
Total assets	$ 83,100	$ 73,600	$ 70,000
Deposits	104,300	102,200	103,200
Client deposits	36,100	23,400	19,300
Wholesale funding deposits	68,200	78,800	83,900
Attributed capital	2,000	1,700	1,200
Other Information			
Economic profit (2)	$ 183	$ 107	$ 133
AUA (3)	3,208,800	2,886,900	2,744,400
Average AUA (3)	3,052,600	2,781,800	2,825,100
Number of employees (FTE) (4)	5,208	6,084	112

(1) Measure has been adjusted for the acquisition of the remaining 50% stake of RBC Dexia. For further details, refer to the Key performance and non-GAAP measures section.
(2) Economic profit is a non-GAAP measure. For further details, refer to the Key performance and non-GAAP measures section.
(3) AUA and average AUA represented the total AUA of Investor Services, formerly RBC Dexia, of which we had a 50% ownership interest prior to July 27, 2012.
(4) On July 27, 2012, we completed our acquisition of the remaining 50% stake of RBC Dexia. Prior to this acquisition, FTE numbers do not include our RBC Dexia joint venture.
n.a. not applicable

Financial performance

2013 vs. 2012

Net income increased $258 million from the prior year. Excluding a prior year loss of $224 million ($213 million after-tax) related to the acquisition of the remaining 50% stake of RBC Dexia, net income increased $45 million or 15%, primarily reflecting improved business performance in Investor Services including higher revenue and continuing benefits from our ongoing focus on efficiency management activities. Incremental earnings related to our additional 50% ownership of Investor Services also contributed to the increase. These factors were partially offset by lower funding and liquidity revenue and a restructuring charge of $44 million ($31 million after-tax) in the current year related to the integration of Investor Services, primarily in Europe.

Total revenue increased $479 million or 36% from the prior year. Excluding our proportionate share of the securities exchange and trading loss in the prior year of $36 million ($26 million after-tax) related to the acquisition of RBC Dexia, total revenue increased $443 million or 33%, largely reflecting incremental revenue related to our additional 50% ownership of Investor Services. Higher custodial fees, mainly driven by growth in average fee-based client assets, and increased foreign exchange revenue in Investor Services, primarily driven by higher transaction volumes, also positively impacted our revenue. These factors were partially offset by lower funding and liquidity revenue across most geographies as the prior year benefited from tightening credit spreads.

Non-interest expense increased $209 million or 18% from the prior year. Excluding an impairment loss and other costs in the prior year of $188 million ($187 million after-tax) related to the acquisition of RBC Dexia, non-interest expense increased $397 million as continuing benefits from our ongoing focus on efficiency management activities was more than offset by incremental costs related to our additional 50% ownership of Investor Services, the restructuring charge related to the integration of Investor Services noted above and higher infrastructure costs.

2012 vs. 2011

Net income was down $145 million or 63% from 2011. Excluding the loss in 2012 related to the acquisition of the remaining 50% stake of RBC Dexia, net income increased $68 million or 30%. The increase was mainly due to higher funding and liquidity trading results, partially offset by lower foreign exchange revenue and decreased custodial fees.

Total revenue was up $183 million or 16% from 2011. Excluding our proportionate share of the securities exchange and trading loss in 2012 related to the acquisition of RBC Dexia, total revenue increased $219 million or 19%, largely related to higher funding and liquidity trading revenue across all geographies. Higher interest income on assets held for liquidity purposes and a full quarter of revenue related to our additional 50% ownership of Investor Services, partially offset by lower foreign exchange revenue and decreased custodial fees, also contributed to the increase. The increase in revenue was partially offset by the unfavourable impact of the depreciation of the Euro against the Canadian dollar.

Non-interest expense was up $313 million or 38% from 2011. Excluding the impairment loss and other costs in 2012 related to the acquisition of RBC Dexia, non-interest expense increased $125 million or 15%, mainly due to a full quarter of costs related to our additional 50% ownership of Investor Services. Higher staff costs, including increased variable compensation on improved results also contributed to the increase. These factors were partially offset by the depreciation of the Euro against the Canadian dollar.

Results excluding the loss related to the acquisition of the remaining 50% stake of RBC Dexia for the fiscal year ended October 31, 2012 are non-GAAP measures. For further details on this specified item impacting our results, including a reconciliation, refer to the Key performance and non-GAAP measures section.

Capital Markets

Capital Markets provides public and private companies, institutional investors, governments and central banks globally with a wide range of capital markets products and services across our 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. Outside North America, we have a select presence in the U.K. and Europe, and Asia-Pacific, where we offer a diversified set of capabilities in our key sectors of expertise such as energy, mining and infrastructure.

In Canada, we compete mainly with Canadian banks where we are the 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. In the U.K. and Europe, we compete in our key sectors of expertise with global and regional investment banks. In Asia-Pacific, we compete with global and regional investment banks in select products, consisting of our fixed income distribution and currencies trading in Asia and our corporate and investment banking in Australia.

Economic and market review

Capital markets in Canada and the U.S. gradually improved during 2013 resulting from modest economic growth in both countries and ongoing stimulative monetary policy. European market conditions in select markets, remained uncertain as sovereign debt issues continued.

Higher client activity driven by improvements in the global economy and the low interest rate environment led to strong issuance activity throughout most of the year, with our corporate and investment banking businesses performing well, driven by higher lending, loan syndication, debt origination, and M&A. This was despite a continued challenging trading environment with yields on long-term government and corporate bonds at historically low levels in the first half of the year and yields and volatility in credit spreads increasing in the latter half of 2013 as a result of market concerns related to uncertainty about the direction of U.S. fiscal and monetary policies. As a result of these market conditions, our fixed income trading businesses were unfavourably impacted.

Highlights

- We continued to focus on growing our corporate and investment banking businesses, particularly in the U.S. and Europe, while rebalancing our global markets businesses by leveraging our investments that were made in prior years, redeploying capital from trading to corporate and investment banking businesses and managing risks by narrowing our focus of trading products.
- In Canada, we maintained our market leadership by deepening our existing client relationships, gaining new clients, and offering a full suite of global capabilities. We were named Best Investment Bank in Canada by Euromoney Magazine for the sixth consecutive year and we continued to win significant mandates including acting as financial advisor to Nexen Inc. on its $15.1 billion acquisition by CNOOC Limited.
- In the U.S., we leveraged our key strategic investments made in recent years to expand our corporate and investment banking businesses, developed new lending relationships and increased focus on our origination and client flow businesses. We had a record year in U.S. corporate and investment banking and were ranked 10th largest investment bank in the Americas by fees for the first nine months of 2013 (Thomson Reuters). We attained this by gaining market share, growing our businesses and winning several significant mandates including acting as a joint bookrunner on the $49 billion of senior unsecured notes offerings by Verizon Communications Inc, joint lead arranger and joint bookrunner on the $24.9 billion leveraged buyout of Dell Inc., and joint lead arranger and joint bookrunner on the acquisition financing of the $6 billion acquisition of Neiman Marcus Group.

- In the U.K. and Europe, we continued to expand our corporate and investment banking businesses. We accomplished this by selectively growing in our key sectors of expertise, focused on gaining new clients through our continued focus on increasing lending activity and market positions. We won new mandates including leading an offer for the U.K.'s Debt Management Office for $2 billion. Due to the challenging trading environment, we refocused our efforts on improving returns in our core global markets businesses and exited non-performing businesses such as our European government bond business.
- In Asia, we continued to focus on our fixed income trading distribution and foreign exchange trading capabilities, while in Australia, we continued to selectively grow our corporate and investment banking business in mining, energy and infrastructure.

Outlook and priorities

In 2014, we anticipate continuing growth in our equity and debt origination, M&A advisory services, and lending businesses as a result of expected continuing improvement in economic and market environments, and strategic investments in our U.S. corporate and investment banking businesses in recent years.

Overall we anticipate net improvements in our global markets businesses driven by growth in our fixed income, currencies and commodities businesses reflecting stabilizing market conditions particularly in the U.S., as compared to the challenging market conditions in 2013. However improvements in the global economy and stabilizing market conditions will be dependent on market responses to resolutions surrounding uncertainty about the direction of U.S. fiscal and monetary policies particularly in the first half of 2014, and further resolutions of European sovereign debt concerns. We also anticipate that regulatory reforms, in particular related to over-the-counter (OTC) derivatives reform, the Volcker Rule and Basel III will unfavourably impact growth in our trading businesses.

For further details, refer to our Risk management – Top and emerging risks section. For further details on our general economic outlook, refer to the Economic and market review and outlook section.

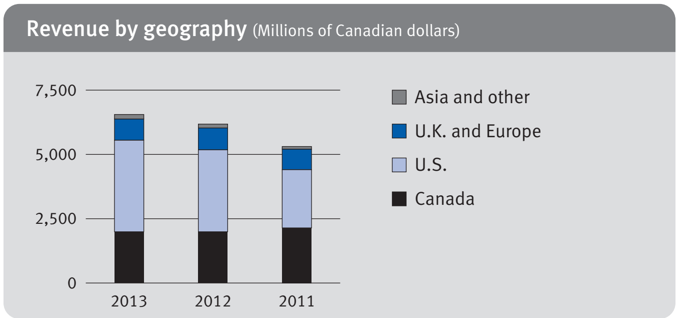
Key strategic priorities for 2014

- Maintain our clear leadership position in Canada by focusing on execution and long-term client relationships, increasing our market share with small- and medium-sized companies and leveraging our global capabilities.
- Expand and strengthen client relationships in the U.S. by leveraging industry sector coverage and our lending relationships to increase market share and drive fee-based revenues, while improving margins.
- Build on our core strengths in Europe and Asia in both Corporate and Investment Banking and Global Markets by improving profitability, selectively growing Corporate and Investment Banking in our sectors of expertise and focusing on the sustainability of trading through origination and sales.
- Deepen client relationships and optimize capital employed to earn high risk-adjusted returns on assets and equity, effectively manage risk by maintaining discipline within our risk tolerance framework and drive efficiency in our business model.
- Manage through the significant changes to the regulatory environment specifically related to OTC derivatives reform, the Volcker Rule, and Basel III changes related to credit valuation adjustments (CVA), Liquidity Coverage Ratio (LCR) and revised leverage framework.

Capital Markets financial highlights — **Table 28**

(Millions of Canadian dollars, except number of percentage amounts and as otherwise noted)	2013	2012	2011
Net interest income (1)	$ 2,872	$ 2,559	$ 2,197
Non-interest income	3,708	3,629	3,127
Total revenue (1)	6,580	6,188	5,324
PCL	188	135	(14)
Non-interest expense	3,844	3,746	3,487
Net income before income taxes	2,548	2,307	1,851
Net income	$ 1,710	$ 1,581	$ 1,292
Revenue by business			
Corporate and Investment Banking	$ 3,014	$ 2,533	$ 2,371
Global Markets	3,492	3,635	3,143
Other	74	20	(190)
Key ratios			
ROE	14.2%	13.5%	15.2%
Selected average balance sheet information			
Total assets	$ 368,300	$ 349,200	$ 322,000
Trading securities	100,800	90,400	112,300
Loans and acceptances	54,700	47,000	35,300
Deposits	35,300	30,900	26,500
Attributed capital	11,500	11,150	8,000
Other information			
Number of employees (FTE)	3,644	3,560	3,537
Credit information			
Gross impaired loans as a % of average net loans and acceptances	0.42%	0.83%	0.65%
PCL on impaired loans as a % of average net loans and acceptances	0.34%	0.29%	(0.04)%

(1) The teb adjustment for 2013 was $380 million (2012 – $431 million, 2011 – $459 million). For further discussion, refer to the How we measure and report our business segments section.



Financial performance
2013 vs. 2012
Net income increased $129 million or 8%, driven primarily by strong growth in Corporate and Investment Banking mainly in the U.S. and lower variable compensation. These factors were partially offset by lower trading revenue and higher PCL.

Total revenue increased $392 million or 6%, largely due to strong growth in our corporate and investment banking businesses driven by higher lending, loan syndication and debt origination mainly in the U.S. and increased volumes from our cash equities business across most geographies. These factors were partially offset by lower revenue in our fixed income trading businesses largely in Europe, as a result of challenging market conditions in the current year.

PCL increased $53 million or 39%, mainly reflecting provisions on a few accounts. For further details, refer to the Credit quality performance section.

Non-interest expense increased $98 million or 3%, mainly due to higher litigation provisions and related legal costs, and higher support costs related to infrastructure, control initiatives and increased regulation. These factors were partially offset by lower variable compensation reflecting a lower compensation to revenue ratio and continuing benefits from our ongoing focus on efficiency management activities.

2012 vs. 2011
Net income increased $289 million or 22% from 2011, driven primarily by our global markets businesses due to higher fixed income trading results reflecting improved market conditions as compared to the challenging market conditions in the latter half of 2011. Strong growth in our corporate and investment banking results driven by higher lending and increased loan syndication activity primarily in the U.S. also contributed to the increase. These factors were partially offset by higher PCL, as compared to recoveries in 2011 and a higher effective tax rate reflecting increased earnings in higher tax jurisdictions.

Total revenue increased $864 million or 16%, largely due to higher fixed income trading primarily driven by improved market conditions mainly in the U.S. as compared to the challenging market conditions in the latter half of 2011, resulting in increased client activity, greater market liquidity and tightening credit spreads. In our corporate and investment banking businesses, strong client growth in lending and increased loan syndication activity also contributed to the increase.

PCL of $135 million compared to a recovery of $14 million in 2011, largely reflecting provisions on a few accounts in 2012.

Non-interest expense increased $259 million or 7%, mainly due to higher variable compensation on improved results. Higher costs in support of business growth, primarily in our corporate and investment banking businesses in the U.S. and U.K., also contributed to the increase. This increase was partially offset by continuing benefits from our ongoing focus on efficiency management activities.

Business line review

Corporate and Investment Banking

Corporate and Investment Banking comprises our corporate lending, loan syndications, debt and equity origination, M&A advisory services, private equity, research, client securitization and the global credit businesses. For debt and equity origination, revenues are 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 $3,014 million increased $481 million or 19%, as compared to the prior year.

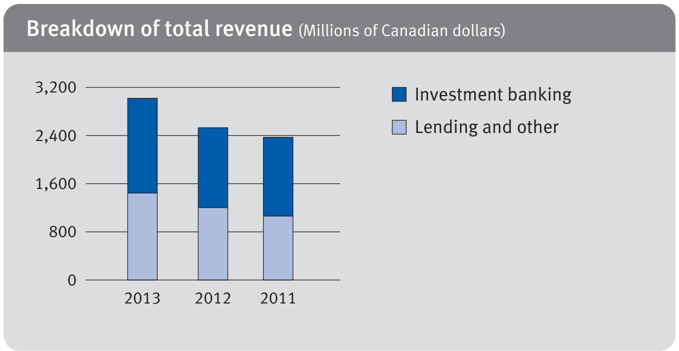
Investment banking revenue increased $236 million or 18%, mainly driven by strong growth in our loan syndication business primarily in the U.S. Higher debt origination reflecting solid issuance activity primarily in the U.S. and Europe and higher M&A activity reflecting increased mandates mainly in Canada and the U.S. also contributed to the increase.

Lending and other revenue increased $245 million or 21%, primarily due to strong growth in our lending portfolio largely in the U.S.

Selected highlights — **Table 29**

(Millions of Canadian dollars)	2013	2012	2011
Total revenue (1)	$ 3,014	$ 2,533	$ 2,371
Breakdown of revenue (1)			
Investment banking	1,574	1,338	1,306
Lending and other (2)	1,440	1,195	1,065
Other information			
Average assets	40,000	33,800	21,300

(1) The teb adjustment for 2013 was $2 million (2012 – $10 million, 2011 – $20 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.



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 $3,492 million decreased $143 million or 4% as compared to the prior year.

Revenue in our Fixed income, currencies and commodities business decreased $218 million or 11%, largely due to significantly lower fixed income trading revenue driven by challenging market conditions reflecting uncertainty about the direction of U.S. fiscal and monetary policy, and lower client volumes and narrower bid/ask spreads in the first half of the year. These factors were partially offset by strong growth in debt origination primarily in the U.S. and Europe driven by increased client activity.

Revenue in our Equities business increased $62 million or 7%, largely reflecting improved trading results and volume growth in our cash equities business. Higher equity origination mainly in the U.S. reflecting stronger issuance activity also contributed to the increase.

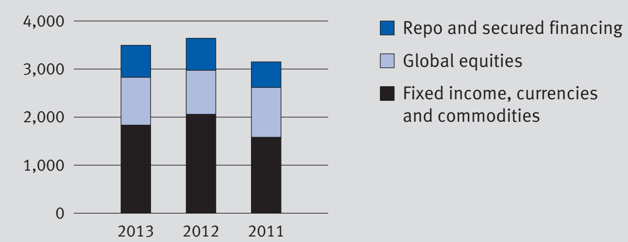
Selected highlights **Table 30**

(Millions of Canadian dollars)	2013	2012	2011
Total revenue (1)	$ 3,492	$ 3,635	$ 3,143
Breakdown of revenue (1)			
Fixed income, currencies and commodities	1,834	2,052	1,584
Equities	989	927	1,033
Repo and secured financing (2)	669	656	526
Other information			
Average assets	351,100	311,700	278,500

(1) The teb adjustment for 2013 was $378 million (2012 – $421 million, 2011 – $439 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.

Breakdown of total revenue (Millions of Canadian dollars)



Other

Other comprises our legacy portfolio which consists of our bank-owned life insurance (BOLI) stable value products, U.S. commercial mortgage-backed securities and U.S. auction rate securities (ARS). 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.

Financial performance

Revenue of $74 million increased $54 million as compared to the prior year, mainly due to higher gains on our U.S. student loan auction rate securities legacy portfolios.

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 31**

(Millions of Canadian dollars, except number of)	2013	2012	2011
Net interest income (loss) (1)	$ (123)	$ (183)	$ (293)
Non-interest income (loss)	(32)	67	257
Total revenue (1)	(155)	(116)	(36)
PCL	3	–	5
Non-interest expense	50	37	93
Net income (loss) before income taxes (1)	(208)	(153)	(134)
Income taxes (recoveries) (1)	(650)	(512)	(431)
Net income (2)	$ 442	$ 359	$ 297
Other information			
Number of employees (FTE)	11,971	11,618	11,694

(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, 2013 was $93 million (October 31, 2012 – $92 million; October 31, 2011 – $92 million).

Due to the nature of activities and consolidated 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.

Net interest income (loss) 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 recorded in Capital Markets. The amount deducted from net interest income (loss) was offset by an equivalent increase in income taxes (recoveries). The teb amount for the year ended October 31, 2013 was $380 million as compared to $431 million in the prior year and $459 million for the year ended October 31, 2011. For further discussion, refer to the How we measure and report our business segments section.

In addition to the teb impacts noted above, the following identifies the other material items affecting the reported results in each period.

2013
Net income was $442 million largely reflecting net favourable tax adjustments, including $214 million of income tax adjustments related to prior years, and asset/liability management activities.

2012
Net income was $359 million largely reflecting the settlement of several tax matters with the CRA which resulted in the release of $128 million of tax uncertainty provisions and interest income of $72 million ($53 million after-tax) related to a refund of taxes paid and asset/liability management activities.

2011
Net income was $297 million largely due to asset/liability management activities and gains related to the change in fair value of certain derivatives used to economically hedge our funding activities.

Quarterly financial information

Fourth quarter 2013 performance

Q4 2013 vs. Q4 2012
Fourth quarter net income was $2,119 million, up $208 million or 11% from the prior year. Diluted EPS of $1.40 was up $0.15 and ROE of 18.6% was down 10 bps. Our fourth quarter earnings reflected strong growth in our corporate and investment banking businesses and solid volume growth across all our Canadian Banking businesses. Higher average fee-based client assets in Wealth Management and improved business performance in Investor Services also contributed to the increase. In addition, our results were positively impacted by a lower effective tax rate, largely reflecting favourable income tax adjustments of $124 million related to prior years and lower PCL. These factors were partially offset by a charge of $160 million ($118 million after-tax) as a result of proposed legislation in Canada, which would affect the policyholders' tax treatment of certain individual life insurance policies.

Total revenue increased $452 million or 6%, mainly due to higher average fee-based client assets in Wealth Management, higher loan syndication activity in Capital Markets, as well as the inclusion of our acquisition of Ally Canada, and solid volume growth across all our Canadian Banking businesses. Higher trading revenue and improved business performance in Investor Services also contributed to the increase. These factors were partially offset by spread compression due to the continuing low rate environment and competitive pricing pressures in Canadian Banking, and lower equity origination in Capital Markets.

Total PCL decreased $27 million or 7% from a year ago, mainly reflecting a provision taken in the prior year on a single account in Capital Markets and lower provisions in our Canadian Banking business lending portfolios. These factors were partially offset by higher PCL on a few accounts in Wealth Management.

PBCAE increased $108 million or 14%, mainly due to the charge related to certain individual life insurance policies as noted above and higher net claims costs. These factors were partially offset by favourable actuarial adjustments reflecting management actions and assumption changes.

Non-interest expense increased $291 million or 8%, primarily reflecting higher variable compensation driven by higher revenue in Wealth Management and a provision related to post-employment benefits and restructuring charges in the Caribbean of $40 million. Higher litigation provisions and related legal costs in Capital Markets, the inclusion of our acquisition of Ally Canada, and higher costs in support of business growth also contributed to the increase. These factors were partially offset by the continuing benefits from our ongoing focus on efficiency management activities.

Quarterly results and trend analysis

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

Quarterly results (1) **Table 32**

	2013				2012			
(Millions of Canadian dollars, except per share and percentage amounts)	Q4	Q3	Q2	Q1	Q4	Q3	Q2	Q1
Continuing operations								
Net interest income	$ 3,350	$ 3,393	$ 3,223	$ 3,285	$ 3,175	$ 3,289	$ 3,031	$ 3,003
Non-interest income	4,620	3,825	4,546	4,625	4,343	4,467	3,893	4,571
Total revenue	$ 7,970	$ 7,218	$ 7,769	$ 7,910	$ 7,518	$ 7,756	$ 6,924	$ 7,574
PCL	335	267	288	349	362	324	348	267
PBCAE	878	263	938	705	770	1,000	640	1,211
Non-interest expense	4,164	4,001	4,011	4,051	3,873	3,759	3,857	3,671
Net income before income taxes	$ 2,593	$ 2,687	$ 2,532	$ 2,805	$ 2,513	$ 2,673	$ 2,079	$ 2,425
Income taxes	474	383	596	735	602	433	516	549
Net income from continuing operations	$ 2,119	$ 2,304	$ 1,936	$ 2,070	$ 1,911	$ 2,240	$ 1,563	$ 1,876
Net loss from discontinued operations	–	–	–	–	–	–	(30)	(21)
Net income	$ 2,119	$ 2,304	$ 1,936	$ 2,070	$ 1,911	$ 2,240	$ 1,533	$ 1,855
EPS – basic	$ 1.41	$ 1.54	$ 1.28	$ 1.37	$ 1.26	$ 1.49	$ 1.00	$ 1.23
– diluted	1.40	1.52	1.27	1.36	1.25	1.47	0.99	1.22
EPS from continuing operations – basic	$ 1.41	$ 1.54	$ 1.28	$ 1.37	$ 1.26	$ 1.49	$ 1.02	$ 1.24
– diluted	1.40	1.52	1.27	1.36	1.25	1.47	1.01	1.23
Segments – net income (loss) from continuing operations								
Personal & Commercial Banking	$ 1,081	$ 1,180	$ 1,057	$ 1,120	$ 1,034	$ 1,102	$ 940	$ 1,012
Wealth Management	205	236	225	233	207	156	212	188
Insurance	107	160	166	164	194	179	151	190
Investor & Treasury Services	92	104	67	80	72	51	(121)	83
Capital Markets	472	388	386	464	410	429	371	371
Corporate Support	162	236	35	9	(6)	323	10	32
Net income from continuing operations	$ 2,119	$ 2,304	$ 1,936	$ 2,070	$ 1,911	$ 2,240	$ 1,563	$ 1,876
Net income – total	$ 2,119	$ 2,304	$ 1,936	$ 2,070	$ 1,911	$ 2,240	$ 1,533	$ 1,855
Effective income tax rate from continuing operations	18.3%	14.3%	23.5%	26.2%	24.0%	16.2%	24.8%	22.6%
Period average US$ equivalent of C$1.00	$ 0.960	$ 0.963	$ 0.982	$ 1.005	$ 1.011	$ 0.982	$ 1.008	$ 0.987

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

Seasonality

Seasonal factors impact our results in most quarters. The first quarter is seasonally stronger for our capital markets businesses. The second quarter has fewer days than the other quarters, generally resulting in a decrease in net interest income and certain expense items. The third quarter results for Investor Services are generally favourably impacted by higher securities lending as a result of the European dividend season. The third and fourth quarters include the summer months during which market activity generally tends to slow, negatively impacting the results of our capital markets, brokerage and investment management businesses.

Notable items affecting our consolidated results

- In the fourth quarter of 2013, our results included a charge of $160 million ($118 million after-tax) as a result of proposed legislation in Canada, which would affect the policyholders' tax treatment of certain individual life insurance policies, as well as net favourable income tax adjustments including a $124 million income tax adjustment related to prior years.
- In the third quarter of 2013, our results included net favourable income tax adjustments including a $90 million income tax adjustment related to the prior year.
- In the second quarter of 2013, our results included a restructuring charge of $44 million ($31 million after-tax) related to the integration of Investor Services, primarily in Europe.
- In the third quarter of 2012, our results included a release of $128 million of tax uncertainty provisions and interest income of $72 million ($53 million after-tax) related to a refund of taxes paid due to the settlement of several tax matters with the CRA, as well as a favourable adjustment of $125 million ($92 million after-tax) resulting from a change in methodology with respect to the timing of recognition of mortgage prepayment interest, and an additional loss of $12 million ($11 million after-tax) related to the acquisition of the remaining 50% stake of RBC Dexia.
- In the second quarter of 2012, our results included a loss of $212 million ($202 million after-tax) related to the acquisition of the remaining 50% stake of RBC Dexia.

Trend analysis

Economic conditions in Canada and the U.S. gradually improved over the period, with capital markets in Canada and the U.S. generally showing improvement in 2013. Conditions in global financial markets remained generally uncertain during the period due to ongoing European sovereign debt issues.

Earnings have been generally robust over the period, driven largely by solid volume growth in our Canadian Banking businesses and generally solid results in Capital Markets including a strong fourth quarter of 2013. Wealth Management results have generally trended upwards since the third quarter of 2012 due to higher average fee-based client assets and higher transaction volumes, with the current quarter decline primarily due to higher PCL. Insurance results have continued to fluctuate over the period, due to the timing of new U.K. annuity contracts and actuarial adjustments, and have been unfavourably impacted in the current quarter by a charge as a result of proposed legislation in Canada relating to certain individual life insurance policies. Investor & Treasury Services' results in the five quarters since our acquisition of the remaining 50% stake of RBC Dexia have fluctuated, with solid results in the latter half of fiscal 2013.

Revenue continued to trend upwards with some fluctuations over the period. The general increase in revenue over the period continued to be driven by solid volume growth across most of our Canadian Banking businesses, growth in our corporate and investment banking business, and higher average fee-based client assets in Wealth Management. Our ownership of the additional 50% of Investor Services has contributed incremental revenue since the third quarter of 2012 and our acquisition of Ally Canada has contributed incremental revenue since the second quarter of 2013. Trading revenue fluctuated over the period due to challenging market conditions. Net interest income continued to trend up over the period, primarily due to solid volume growth across most of our Canadian Banking businesses, partially offset by spread compression caused by the continuing low interest rate environment and increased competitive pricing pressures.

PCL generally has been stable over the period, and has generally trended downwards since the fourth quarter of 2012 due to stabilizing asset quality in the Canadian retail portfolio and the improving credit quality of our Caribbean portfolio. The current quarter increase in PCL is largely due to provisions on a few accounts in Wealth Management. Provisions in Capital Markets have fluctuated, and have trended down over the past three quarters.

PBCAE has fluctuated quarterly as it reflects the changes to the fair value of investments backing our policyholder liabilities, largely offset in revenue. PBCAE has also been impacted by volume growth in our Insurance businesses as well as actuarial liability adjustments and generally lower claims costs. PBCAE in the current quarter included a charge as a result of proposed legislation in Canada relating to certain individual life insurance policies as noted above.

Non-interest expense has generally trended upwards over the period, mainly driven by higher variable compensation due to increased revenue in Wealth Management, and higher costs in support of business growth. Incremental costs related to our additional 50% ownership of Investor Services since the third quarter of 2012 and our acquisition of Ally Canada in the second quarter of 2013 have also contributed to the increase. These factors were partially offset by continuing benefits from our ongoing focus on efficiency management activities.

Our effective income tax rate fluctuated over the period, resulting from varying levels of income being reported in jurisdictions with different tax rates, as well as fluctuating levels of income from tax-advantaged sources (Canadian taxable corporate dividends), and various tax adjustments. The reduction in statutory Canadian corporate tax rates over the period generally lowered our effective tax rate. In the third and fourth quarters of 2013, the effective tax rate was impacted by net favourable income tax adjustments related to prior years as noted above.

Results by geographic segment (1)

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

Table 33

	2013				2012				2011			
(Millions of Canadian dollars)	Canada	U.S.	Other International	Total	Canada	U.S.	Other International	Total	Canada	U.S.	Other International	Total
Continuing operations												
Net interest income	$ 10,960	$ 1,602	$ 689	$ 13,251	$ 10,413	$ 1,308	$ 777	$ 12,498	$ 9,641	$ 1,091	$ 625	$ 11,357
Non-interest income	8,855	3,834	4,927	17,616	9,378	3,564	4,332	17,274	9,270	2,815	4,196	16,281
Total revenue	$ 19,815	$ 5,436	$ 5,616	$ 30,867	$ 19,791	$ 4,872	$ 5,109	$ 29,772	$ 18,911	$ 3,906	$ 4,821	$ 27,638
PCL	898	77	264	1,239	1,021	90	190	1,301	1,016	(12)	129	1,133
PBCAE	1,425	10	1,349	2,784	2,320	16	1,285	3,621	2,124	21	1,213	3,358
Non-interest expense	9,345	3,677	3,205	16,227	8,809	3,404	2,947	15,160	8,376	3,159	2,632	14,167
Income taxes	1,754	402	32	2,188	1,600	519	(19)	2,100	1,728	259	23	2,010
Net income from continuing operations	$ 6,393	$ 1,270	$ 766	$ 8,429	$ 6,041	$ 843	$ 706	$ 7,590	$ 5,667	$ 479	$ 824	$ 6,970
Net loss from discontinued operations	–	–	–	–	–	(51)	–	(51)	–	(526)	–	(526)
Net income	$ 6,393	$ 1,270	$ 766	$ 8,429	$ 6,041	$ 792	$ 706	$ 7,539	$ 5,667	$ (47)	$ 824	$ 6,444

(1) For geographic reporting, our segments are grouped into Canada, U.S. and Other International. For further details, refer to Note 29 of our 2013 Annual Consolidated Financial Statements.

2013 vs. 2012

Net income in Canada was up $352 million or 6% from the prior year, mainly due to solid volume growth across all businesses in Canadian Banking. Higher average fee-based client assets in Wealth Management, strong growth in our corporate and investment banking businesses driven by higher lending, M&A and loan syndication, improved credit quality in our Canadian Banking portfolio, and the contribution of our acquisition of Ally Canada also contributed to the increase. These factors were partially offset by spread compression and a charge of $160 million ($118 million after-tax) in Insurance as a result of proposed legislation in Canada, which would affect the policyholders' tax treatment of certain individual life insurance policies. In addition, the prior year results were favourably impacted by a settlement of several tax matters with the CRA which resulted in the release of $128 million of tax uncertainty provisions and interest income of $72 million ($53 million after-tax) and a favourable adjustment related to a change in estimate of mortgage prepayment interest of $125 million ($92 million after-tax). Our results in the prior year were also unfavourably impacted by an impairment loss related to the acquisition of the remaining 50% stake of RBC Dexia of which $105 million (before- and after-tax) was recorded in our Canadian operations.

U.S. net income increased $478 million or 60% from the prior year, largely due to favourable income tax adjustments of $214 million related to prior years. Strong growth in our corporate and investment banking businesses mainly driven by higher loan syndication and higher lending, and higher average fee-based client assets and higher transaction volumes in Wealth Management also contributed to the increase. These factors were partially offset by higher variable compensation in Wealth Management and Capital Markets.

Other International net income was up $60 million or 8% from the previous year, largely due to strong growth in our corporate and investment banking businesses. Improved business performance in Investor Services including higher revenue and continuing benefits from our ongoing focus on efficiency management activities, lower variable compensation in Capital Markets, and higher average fee-based client assets and higher transaction volumes in Wealth Management also contributed to the increase. In addition, the prior year results were unfavourably impacted by the impairment loss related to our acquisition of RBC Dexia as noted above of which $63 million (before- and after-tax) was recorded in our Other International operations, and our proportionate share of the loss on the securities exchange and trading losses recorded by RBC Dexia. These factors were partially offset by lower trading revenue largely in Europe, higher PCL in Wealth Management and Capital Markets, and a provision related to post-employment benefits and restructuring charges in the Caribbean of $40 million ($31 million after-tax).

2012 vs. 2011
Continuing operations
Net income in Canada was up $374 million or 7% compared to 2011, mainly due to strong volume growth across most of our Canadian banking businesses, the release of tax uncertainty provisions and interest income as noted above, a lower effective tax rate due to a reduction in statutory Canadian corporate income tax rates, and the mortgage prepayment interest adjustment as noted above. These factors were partially offset by increased costs in support of business growth partially offset by continuing benefits from our ongoing focus on efficiency management activities, and the impairment loss related to the acquisition of the remaining 50% stake of RBC Dexia as noted above.

U.S. net income increased $364 million or 76% compared to 2011, largely due to higher trading results, reflecting improved market conditions as compared to the challenging market conditions in the latter half of 2011. Strong growth in our corporate and investment banking results driven by client growth in our lending, loan syndication and origination businesses also contributed to the increase. These factors were partially offset by higher PCL in Capital Markets.

Other International net income was down $118 million or 14% compared to 2011, largely due to the impairment loss related to our acquisition of RBC Dexia as noted above, and higher PCL in Caribbean banking. These factors were partially offset by higher fixed income trading results in Capital Markets. In addition, 2011 included a gain related to MBIA which favourably impacted results in that year.

Discontinued operations
For details on results for our discontinued operations, refer to the Financial performance section.

Financial condition

Condensed balance sheets (1) — Table 34

As at October 31 (Millions of Canadian dollars)	2013	2012	2011
Assets			
Cash and due from banks	$ 15,870	$ 12,617	$ 12,428
Interest-bearing deposits with banks	9,061	10,255	6,460
Securities	182,718	161,611	167,022
Assets purchased under reverse repurchase agreements and securities borrowed	117,517	112,257	84,947
Loans			
Retail	321,678	301,185	284,745
Wholesale	88,947	79,056	64,752
Allowance for loan losses	(1,959)	(1,997)	(1,967)
Investments for account of segregated fund holders	513	383	320
Other – Derivatives	74,822	91,293	99,650
– Assets of discontinued operations	–	–	27,152
– Other	51,652	58,440	48,324
Total assets	$ 860,819	$ 825,100	$ 793,833
Liabilities			
Deposits	$ 558,480	$ 508,219	479,102
Insurance and investment contracts for account of segregated fund holders	513	383	320
Other – Derivatives	76,745	96,761	100,522
– Liabilities of discontinued operations	–	–	20,076
– Other	166,403	165,194	142,707
Subordinated debentures	7,443	7,615	8,749
Trust capital securities	900	900	894
Total liabilities	810,484	779,072	752,370
Equity attributable to shareholders	48,540	44,267	39,702
Non-controlling interests	1,795	1,761	1,761
Total equity	50,335	46,028	41,463
Total liabilities and equity	$ 860,819	$ 825,100	$ 793,833

(1) Foreign currency-denominated assets and liabilities are translated to Canadian dollars.

2013 vs. 2012
Total assets were up $36 billion or 4% from the previous year.

Interest-bearing deposits with banks decreased by $1 billion or 12% largely reflecting the increased placement of our deposits internally as a result of our acquisition of the remaining 50% stake of RBC Dexia, partially offset by higher overnight deposits.

Securities were up $21 billion or 13% compared to the prior year, primarily due to an increase in government and corporate debt securities as part of our management of liquidity and funding risk.

Assets purchased under reverse repurchase agreements (reverse repos) and securities borrowed increased by $5 billion or 5%, mainly attributable to the impact of the depreciation of the Canadian dollar against certain other currencies.

Loans were up $30 billion or 8%, predominantly due to solid volume growth in Canadian home equity products reflecting the ongoing low interest rate environment and our acquisition of Ally Canada. Higher corporate lending in Capital Markets also contributed to the increase.

Derivative assets were down $16 billion or 18%, mainly attributable to lower fair values of interest rate swaps due to an increase in interest rates.

Other assets were down $7 billion or 12%, primarily reflecting a decrease in cash collateral requirements.

Total liabilities were up $31 billion or 4% from the previous year.

Deposits increased $50 billion or 10%, mainly reflecting our issuances of covered bonds and other fixed term notes for funding requirements and growth in business deposits. Demand for our high-yield savings accounts and other product offerings in our retail business as well as the impact of the depreciation of the Canadian dollar against certain other currencies also contributed to the increase.

Derivative liabilities were down $20 billion or 21%, primarily attributable to lower fair values of interest rate swaps due to an increase in interest rates.

Other liabilities increased by $1 billion or 1%, mainly resulting from higher obligations related to securities sold short and the impact of the depreciation of the Canadian dollar against certain other currencies. These factors were partially offset by a decrease in repurchase agreements as a result of lower funding requirements and a decrease in cash collateral requirements.

Total equity increased by $4 billion or 9%, largely reflecting earnings, net of dividends.

Our consolidated balance sheet was impacted by foreign currency translation which increased our total assets and our total liabilities and equity by approximately $14 billion due to the depreciation of the Canadian dollar against certain other currencies as compared to last year.

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 special purpose entities (SPEs) 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 SPEs 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.

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 for sales and trading activities. Securitization can be used as a cost-effective fund raising technique compared to the relative cost of issuing unsecured wholesale debt.

The majority of our securitization activities are recorded on our Consolidated Balance Sheets. We securitize our credit card receivables, on a revolving basis, through a consolidated SPE. We securitize single and multiple-family residential mortgages through the NHA MBS program, which are not derecognized from our Consolidated Balance Sheets. For details of these activities, refer to Note 6 and Note 7 of our 2013 Annual Consolidated Financial Statements.

We have also securitized residential mortgage loans through the Canadian social housing program which are derecognized from our Consolidated Balance Sheets when sold to third party investors. During 2013, we did not securitize mortgages through the Canadian social housing program (2012 – $21 million).

In prior years, we securitized commercial mortgages by selling them in collateral pools, which met certain diversification, leverage and debt coverage criteria, to SPEs, one of which is sponsored by us. We also participated in bond securitization activities where we purchased government, government related and corporate bonds and repackaged those bonds in participation certificates, which were sold to third party investors. Securitized commercial mortgage loans and bond participation certificates 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 and the commercial mortgages sold to our sponsored SPE. As at October 31, 2013, there were $1.3 billion of commercial mortgages (October 31, 2012 – $1.4 billion) and $624 million of bond participation certificates (October 31, 2012 – $661 million) outstanding related to these prior period securitization activities. During 2013, we did not securitized bond participation certificates, or commercial mortgages.

Involvement with unconsolidated special purpose entities

In the normal course of business, we engage in a variety of financial transactions with SPEs to support our customers' financing and investing needs, including securitization of client financial assets, creation of investment products, and other types of structured financing. The following table summarizes SPEs in which we have significant financial interests, but have not consolidated.

Special Purpose Entities **Table 35**

	2013												2012	
			Total assets by credit ratings			Total assets by average maturities				Total assets by geographic location of borrowers				
As at October 31 (Millions of Canadian dollars)	Total assets (1)	Maximum exposure (1)(2)	Investment grade (3)	Non-Investment grade (3)	Not Rated	Under year	1 to 5 years	Over 5 years	Not applicable	Canada	U.S.	Other International	Total assets (1)	Maximum exposure (1)
Unconsolidated SPEs														
Multi-seller conduits (4)	$ 31,075	$ 31,556	$ 30,919	$ 156	$ –	$6,000	$24,143	$ 932	$ –	$ 5,570	$22,549	$ 2,956	$ 29,582	$ 30,029
Structured finance	3,895	1,272	3,745	150	–	200	–	3,695	–	200	3,695	–	5,039	1,760
Investment funds	1,621	1,461	584	–	1,037	–	–	584	1,037	32	656	933	1,584	1,082
Credit investment product	74	15	–	74	–	–	–	74	–	–	–	74	852	169
Third-party securitization vehicles	8,098	992	1,688	33	6,377	–	105	3,601	4,392	–	3,706	4,392	6,811	1,266
Other	241	76	–	–	241	–	–	–	241	36	200	5	368	103
	$ 45,004	$ 35,372	$ 36,936	$ 413	$7,655	$6,200	$24,248	$8,886	$ 5,670	$ 5,838	$30,806	$ 8,360	$ 44,236	$ 34,409

(1) Total assets and maximum exposure to loss correspond to disclosures provided in Note 7 to our 2013 Annual Consolidated Financial Statements. Total asset amounts may differ from those presented in Note 7 due to certain entities, primarily mutual and pooled funds, which we sponsor but where we do not hold a significant financial interest.

(2) The maximum exposure to loss resulting from significant financial interests in these SPEs consists mostly of investments, loans, liquidity and credit enhancement facilities and fair value of derivatives. The maximum exposure to loss may exceed the total assets in the multi-seller conduits, as our liquidity facilities may sometimes be extended for up to 102% of the total value of the assets in the conduits.
(3) Our internal risk ratings for major counterparty types approximate those of public rating agencies. Ratings of AAA, AA, A, and BBB represent investment grade ratings and ratings of BB or lower represent non-investment grade ratings.
(4) Represents multi-seller conduits that we administer.

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.

Approximately 81% of assets in unconsolidated SPEs in which we have significant financial interests were internally rated A or above, compared to 79% in the prior year. For multi-seller conduits, 99% of assets were internally rated A or above, consistent with the prior 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.

The assets in unconsolidated SPEs as at October 31, 2013 have varying maturities and a remaining expected weighted average life of approximately 3.5 years.

RBC-administered multi-seller conduits

We administer multi-seller conduits which are used primarily for the securitization of our clients' financial assets. We are involved in these conduit markets because our clients value these transactions. Our clients primarily use 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, risk-adjusted return and cross-selling opportunities.

We provide services such as transaction structuring, administration, backstop liquidity facilities and partial credit enhancements to the multi-seller conduits. Fee revenue for all such services amounted to $158 million during the year (2012 – $146 million). We do not maintain any ownership or retained interests in these multi-seller conduits and have no rights to, or control of, their assets.

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 36**

	2013				2012			
As at October 31 (Millions of Canadian dollars)	Notional of committed amounts (1)	Allocable notional amounts	Outstanding loans (2)	Total maximum exposure to loss	Notional of committed amounts (1)	Allocable notional amounts	Outstanding loans (2)	Total maximum exposure to loss
Backstop liquidity facilities	$ 31,675	$ 27,875	$ 896	$ 28,771	$ 30,143	$ 25,935	$ 1,391	$ 27,326
Credit enhancement facilities	2,889	2,785	–	2,785	2,703	2,703	–	2,703
Total	$ 34,564	$ 30,660	$ 896	$ 31,556	$ 32,846	$ 28,638	$ 1,391	$ 30,029

(1) Based on total committed financing limit.
(2) Net of allowance for loan losses and write-offs.

As at October 31, 2013, the notional amount of backstop liquidity facilities we provide increased by $1.5 billion or 5.1% from the prior year. Total loans extended to the multi-seller conduits under the backstop liquidity facilities decreased by $495 million from the prior year primarily due to principal repayments. The partial credit enhancement facilities we provide increased by $186 million from the prior year. The increase in the amount of backstop liquidity facilities and partial credit enhancement facilities provided to the multi-seller conduits compared to the prior year primarily reflects a fluctuation in exchange rates and an expansion of the outstanding securitized assets of the multi-seller conduits in support of our clients' securitization needs.

Maximum exposure to loss by client type — **Table 37**

	2013			2012		
As at October 31 (Millions)	(US$)	(C$)	Total (C$)	(US$)	(C$)	Total (C$)
Outstanding securitized assets						
Credit cards	$ 6,096	$ 510	$ 6,866	$ 7,410	$ 510	$ 7,912
Auto loans and leases	8,643	2,252	11,264	7,903	2,193	10,087
Student loans	3,374	–	3,518	2,429	–	2,427
Trade receivables	2,688	56	2,859	2,290	112	2,400
Asset-backed securities	859	–	896	1,454	–	1,453
Equipment receivables	1,649	–	1,720	1,275	–	1,274
Consumer loans	–	–	–	1,020	–	1,019
Electricity market receivables	–	173	173	–	255	255
Dealer floor plan receivables	765	740	1,538	587	561	1,147
Fleet finance receivables	313	265	592	310	265	575
Insurance premiums	87	–	90	87	–	87
Corporate loan receivables	75	–	78	101	–	101
Residential mortgages	–	1,530	1,530	–	1,020	1,020
Transportation finance	415	–	432	272	–	272
Total	$ 24,964	$ 5,526	$ 31,556	$ 25,138	$ 4,916	$ 30,029
Canadian equivalent	$ 26,030	$ 5,526	$ 31,556	$ 25,113	$ 4,916	$ 30,029

Our overall exposure increased 5.1% compared to the prior year reflecting a fluctuation in exchange rates and improved business conditions which led to an expansion of the outstanding securitized assets of the multi-seller conduits. Correspondingly, total assets of the multi-seller conduits increased by $1.5 billion or 5.0% over the prior year, primarily due to increase in the Auto loans and leases, Student loans, Trade and Equipment receivables and Residential mortgages asset classes, which was offset partially by decreases in the Credit cards, Consumer loans and Asset-backed securities asset classes.

Multiple independent debt rating agencies review all of the transactions in the multi-seller conduits. Transactions financed in the 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 the Canadian multi-seller conduits are also reviewed by Dominion Bond Rating Services (DBRS). 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, 2013, the total asset-backed commercial paper (ABCP) issued by the conduits amounted to $18.8 billion, an increase of $1.7 billion or 9.9% since the prior year. The increase in the amount of ABCP issued by the multi-seller conduits compared to the prior year is primarily due to increased client usage. The rating agencies that rate the ABCP rated 75% of the total amount issued within the top ratings category and the remaining amount in the second highest ratings category compared with 71% in the prior year.

We sometimes 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, 2013, the fair value of our inventory was $14 million, a decrease of $13 million from the prior year. The fluctuations in inventory held reflect normal trading activity. This inventory is classified as Securities – Trading on our Consolidated Balance Sheets.

Structured finance SPEs

We invest in ARS of entities which fund their long-term investments in student loans by issuing short-term senior and subordinated notes. As at October 31, 2013, the total assets of the unconsolidated ARS trusts in which we have significant investments were $2.8 billion (2012 – $3.9 billion). Our maximum exposure to loss in these ARS trusts as at October 31, 2013 was $680 million (2012 – $1.1 billion). The decrease in total assets and our maximum exposure to loss is primarily related to the sale, redemption or defeasement of the underlying ARS investment securities. As at October 31, 2013, approximately 89% of these investments were AAA rated. Interest income from the ARS investments, which is reported in Net-interest income was $6.5 million during the year (2012 – $19 million).

We also provide liquidity facilities to certain municipal bond Tender Option Bond (TOB) programs in which we have a significant interest but do not consolidate because the residual certificates are held by third parties. As at October 31, 2013, the total assets of these unconsolidated municipal bond TOB trusts were $941 million (2012 – $856 million) and our maximum exposure to loss was $572 million (2012 – $552 million). The increase in total assets of these TOB trusts and in our maximum exposure to loss relative to the prior year is primarily related to new TOB trusts and an increase in our TOB funding limits. Fee revenue from provision of liquidity facilities to these entities reported in Non-interest income was $3 million during the year (2012 – $2 million).

Investment funds

We enter into fee-based equity derivative transactions with third parties including mutual funds, unit investment trusts and other investment funds. These transactions provide their investors with the desired exposure to the referenced funds, and we economically hedge our exposure from these derivatives by investing in those third party managed referenced funds. Our maximum exposure as at October 31, 2013, which is primarily related to our investments in the reference funds, was $867 million (October 31, 2012 – $1.1 billion). The total assets held in the unconsolidated reference funds as at October 31, 2013 were $1.0 billion (October 31, 2012 – $1.6 billion). The decreases in total assets and our maximum exposure compared to the prior year are primarily due to negative performance of the reference funds and redemptions of capital by us and third-party investors in the funds.

Beginning in the first quarter of 2013, 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, 2013, total assets in these funds were $584 million (October 31, 2012 – $nil).

Third-party securitization vehicles

We hold significant interests in certain unconsolidated third-party securitization vehicles, which are SPEs. We, as well as other financial institutions, are obligated to provide funding to these SPEs up to our maximum commitment level and are exposed to credit losses on the underlying assets after various credit enhancements. As at October 31, 2013, total assets of these funds were $4.4 billion (October 31, 2012 – $3.9 billion) and our maximum exposure to loss in these entities was $774 million (October 31, 2012 – $1.1 billion). The increase in total assets compared to the prior year reflects additional securitized assets funded by other investors in one of our SPEs. The decrease in our maximum exposure compared to prior periods reflects the amortizing nature of several of these transactions. Interest income earned in respect of these investments reported in Net-interest income was $10 million (2012 – $15 million).

We also invest in the securities issued by unconsolidated third-party SPEs, including government-sponsored SPEs, as part of our trading activities. These investments do not carry a funding commitment; therefore our maximum exposure to loss is limited to our investment. As at October 31, 2013, total assets of SPEs in which we have significant investments were $3.7 billion (October 31, 2012 – $2.9 billion). Our maximum exposure to loss in these entities was $218 million (October 31, 2012 – $118 million). Fluctuations in the amounts presented for these SPEs reflect normal trading activity and the extent to which our investments in certain entities are significant as at the end of the reporting period.

Credit investment product SPEs and Others

We use SPEs to create customized credit products to meet investors' specific requirements and created tax credit funds. Refer to Note 7 to our 2013 Annual Consolidated Financial Statements for more detail on these SPEs.

Guarantees, retail and commercial commitments

We provide guarantees and commitments to our clients 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, 2013 amounted to $232 billion compared to $204 billion in the prior year. The increase compared to the prior year relates primarily to business growth in wholesale commitments. Refer to Liquidity and Funding Management and Note 26 to our 2013 Annual Consolidated Financial Statements for details regarding our guarantees and commitments.

Risk management

Overview

Our diversified business activities expose us to a wide variety of risks in virtually all aspects of our operations. Our ability to manage these risks is a key competency within RBC, and is supported by a strong risk culture and an effective risk management approach. We define risk as the potential for loss or an undesirable outcome with respect to volatility of actual earnings in relation to expected earnings, capital adequacy or liquidity.

We manage our risks by seeking to ensure that business activities and transactions provide an appropriate balance of return for the risks assumed and remain within our Risk Appetite, which is collectively managed throughout RBC, through adherence to our Enterprise Risk Appetite Framework. These risks include credit, market, liquidity and funding, insurance, regulatory compliance, operational, strategic, reputation and competitive risk. For further details, refer to the respective risk sections.

Enhanced Disclosure Task Force

On October 29, 2012, the Enhanced Disclosure Task Force (EDTF), established by the Financial Stability Board, issued its report "Enhancing the Risk Disclosures of Banks", which included 32 recommendations aimed at improving clarity, comparability and transparency of risk disclosures. For a listing of the location of the related disclosures, refer to the Index for Enhanced Disclosure Task Force recommendations on page 98.

Top and emerging risks

Our view of risks is not static. An important component of our enterprise risk management approach is to ensure that top risks which are evolving or emerging risks are appropriately identified, managed, and incorporated into existing enterprise risk management assessment, measurement, monitoring and escalation processes.

These practices ensure management is forward-looking in its assessment of risks to the organization. Identification of top and emerging risks occurs in the course of businesses developing and pursuing approved strategies and as part of the execution of risk oversight responsibilities by Group Risk Management (GRM), Finance, Corporate Treasury, Global Compliance and other control functions.

Risk oversight activities which can lead to identification of new, evolving or emerging risks include control mechanisms (e.g. approval of new products, transactions, projects or initiatives), business strategy development, stress testing, portfolio level measurement, monitoring and reporting activities, and the ongoing assessment of industry and regulatory developments.

Details of the top and emerging risks we are facing are discussed below.

Regulatory environment

Certain regulatory reforms will impact the way in which we operate, both in Canada and abroad. We continue to respond to these and other developments and are working to minimize any potential business or economic impact. The following regulatory reforms have potential to increase our operational, compliance, and technology costs.

Basel Committee on Banking Supervision global standards for capital and liquidity reform (Basel III)

The Basel Committee's new standards for capital and liquidity establish minimum requirements for common equity, increased capital requirements for counterparty credit exposures, a new global leverage ratio and measures to promote the build up of capital that can be drawn down in periods of stress. Banks around the world have begun to implement these new standards (commonly referred to as Basel III).

On January 7, 2013, the Basel Committee released final rules for the short-term Basel III Liquidity Coverage Ratio (LCR), including phased timelines for compliance. The Basel global timeline sets the minimum required coverage at 60% for 2015 (increasing 10% per annum until full compliance is achieved by January 2019). While the Basel III long-term liquidity standard (the Net Stable Funding Ratio, or NSFR) has not been finalized, we continue to measure our liquidity position and make adjustments that we believe are appropriate in anticipation of the Basel Committee's final NSFR implementation schedule.

In June 2013, the Basel Committee issued a revised leverage framework for industry consultation. Various jurisdictions including the U.S. have proposed or are in the process of developing national requirements for leverage. The Office of the Superintendent of Financial Institutions (OSFI) has not yet published a Canadian Basel III leverage requirement. Depending on the final leverage rules, the leverage ratio may require us to hold more capital than otherwise required under our risk-based measures.

In June 2013, the European Commission published the final Capital Requirements Directive (CRD 4) and the accompanying Capital Requirements Regulation (CRR) which implement the Basel III requirements in the European Union (EU), effective January 1, 2014. In addition to the Basel III requirements, CRD 4 / CRR introduces improvements to the transparency of activities of banks and investment funds in different countries, adds a host of governance standards (including standards for executive compensation and bonuses, board oversight of risk and board diversity), and implements a common reporting framework for regulatory reporting. This change may also result in higher capital requirements for our European subsidiaries.

Dodd-Frank – Enhanced Supervision of Foreign Banking Organizations

On December 14, 2012, the U.S. Federal Reserve proposed a new oversight regime for foreign banks operating in the United States, pursuant to sections 165 and 166 of the *Dodd-Frank Act*. The rule is proposed to take effect in July 2015 and is intended to address the perceived systemic risk that large foreign banks could pose to the U.S. financial markets. Under the rule as proposed, we would be required to re-organize all of our U.S. bank and non-bank subsidiaries into a separately capitalized U.S. holding company, against which U.S. prudential regulations for capital, liquidity and enhanced supervision would apply. These include U.S. focused requirements for capital, liquidity, leverage, risk management, stress testing and early remediation, as well as limits on exposures to single counterparties. The majority of the proposed requirements would apply at the U.S. holding company level, while notably, the liquidity rules would extend to business activities conducted within our U.S. banking operations. We continue to assess the full implications of the proposal, and if adopted, there may be a need to develop a separate, U.S.-based infrastructure to meet these U.S.-specific requirements.

Dodd-Frank – Volcker Rule

The industry continues to await final implementation rules from U.S. federal financial regulators relating to the Volcker Rule. As currently drafted, the proposed rule would impact our global capital markets activities and funding activities as its extraterritorial reach extends to the bank and each of its subsidiaries and affiliates. Under the proposal, certain activities may be permitted to continue (e.g. exemptions available for underwriting, market making, and risk mitigating/hedging activities), although under new, restrictive definitions. Trading and investment activities outside of the U.S. may be permitted if conducted in accordance with certain exemptions from the regulation (e.g. activities found to be conducted solely outside of the U.S.), that may limit wholesale activities conducted in Canada or elsewhere. In anticipation of final rule issuance, we are continuing to analyze our investment, trading and funding activities across all of our businesses as part of our good faith compliance efforts to conform. This includes assessing our compliance and risk management programs as they relate to the proposed rule. Depending on the manner in which the rule is ultimately implemented, the proposed restrictions on proprietary trading and certain fund activities may have an adverse impact on our results of operations. U.S. regulators estimate final rules will be published by the end of 2013.

Over-the-counter (OTC) derivatives reform
Reforms in the OTC derivatives markets continue on a global basis, with the governments of the G20 nations proceeding with plans to transform the capital regimes, national regulatory frameworks and infrastructures in which we and other market participants operate. We, along with other Canadian banks, will experience changes in our wholesale banking business, some of which will impact our client- and trading-related derivatives revenues in Capital Markets. As part of this, we are implementing a compliance framework to adhere to the new mandatory clearing and reporting requirements of the U.S. *Dodd-Frank* and European Market Infrastructure Rules (EMIR) as they come into effect.

On December 31, 2012, we registered as a swaps dealer in the U.S. pursuant to the U.S. Commodity Futures Trading Commission (CFTC) requirements. To avoid the imposition of duplicative prudential requirements (and mitigate some of the expected compliance and operating costs), we are working with similarly-affected Canadian banks and Canadian and U.S. authorities to encourage reliance on the Canadian framework. The deadline for concluding discussions on a substitute compliance framework is December 21, 2013.

The payments system in Canada
The Federal government is currently reviewing a number of aspects of the Canadian payments system, including governance, mobile payments, debit and credit cards, and the state of the regulatory framework. Potential changes arising from the review could have implications for the bank from technological, systems, operational and regulatory perspectives. While the review is still at an early stage, risks associated with the implementation of these reforms could include implications for revenues and business strategies.

Foreign Account Tax Compliance Act (FATCA)
In 2010, the U.S. government passed legislation requiring non-U.S. financial institutions operating in the U.S. to provide information to U.S. tax authorities on non-U.S. persons' financial accounts in order to identify persons evading U.S. taxes through the use of foreign (non-U.S.) accounts. Final regulations implementing FATCA were published on January 17, 2013. The rules are scheduled to take effect starting July 1, 2014. The U.S. is working to facilitate implementation with certain jurisdictions through the negotiation of Inter-Governmental Agreements (IGAs) and it is expected that Canada will ultimately sign such an agreement.

Regulatory reform in the U.K. and Europe
The regulatory framework in the U.K. and Europe continues to undergo significant reform and reorganization. In the U.K. we continue to monitor developments arising from recommendations made by the Independent Commission on Banking and endorsed by the U.K. government, in particular the requirement that banks ring-fence their retail banking activities from their investment banking operations. As currently proposed, our U.K. entities would be exempt from the requirement to separate our retail banking and investment banking activities, by virtue of meeting prescribed *de minimis* thresholds. The EMIR require firms to clear certain OTC standardized derivative contracts through central counterparties, establish risk mitigation controls for OTC derivatives transactions that cannot be cleared, and report both cleared and non-cleared contracts to trade repositories. The majority of the requirements came into force on March 15, 2013, while certain others are expected to come into force in 2014. The review of Markets in Financial Instruments Directive (MiFID II) is another key initiative seeking to achieve greater trade transparency, enhanced investor protection and more oversight of OTC derivatives and fixed income products, primarily through the introduction of new types of regulated trading platforms and increased governance over certain trading activities. Negotiations on the final shape of MiFID II are ongoing and are not expected to come into force before 2015.

High levels of Canadian household debt
Growing Canadian household debt levels and elevated housing prices are resulting in increasing vulnerability to external risk factors. Growth in consumer debt has been driven by rising housing prices and high debt levels could amplify the effect of an external shock to the Canadian economy. In an increasing interest rate environment the debt service capacity of Canadian consumers will be negatively impacted. This will be more challenging for consumers with floating rate debt or impending mortgage renewals. The combination of increasing unemployment, rising interest rates, and a downturn in real estate markets would pose a risk to the credit quality of our retail lending portfolio. We actively manage our lending portfolios and stress test them against various scenarios. Our stress testing shows that the vast majority of our mortgage clients have sufficient capacity to absorb interest rate increases in the ranges currently forecast. For further discussion relating to our retail portfolio, refer to the Credit risk section.

Cybersecurity
Given our reliance on digital and internet technologies to conduct and expand our global operations, we are increasingly exposed to risks related to cybersecurity. Such incidents may include unauthorized access to our systems for purposes of misappropriating assets, gaining access to sensitive information, corrupting data, or causing operational disruption. Although our computer systems continue to be subject to cyber attacks, to date we have not experienced a material breach of cybersecurity. Such an event could compromise our confidential information as well as that of our clients and third parties with whom we interact and may result in negative consequences, including remediation costs, loss of revenue, additional regulatory scrutiny, litigation and reputational damage. We continue to place a significant focus on enhancing our cybersecurity technologies, processes and practices to protect our networks, systems, computers and data from attack, damage or unauthorized access. We will continue to actively monitor the cybersecurity threat landscape to review best practices and to implement additional controls to mitigate this risk.

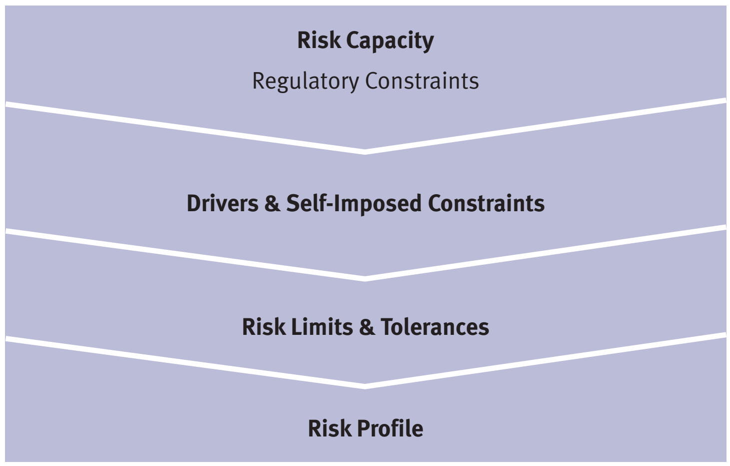
Enterprise risk management

Our Enterprise Risk Management Framework provides an overview of our enterprise-wide programs for identifying, measuring, controlling and reporting on the significant risks that face the organization.

Risk culture
Our strong risk culture begins with setting the right tone at the top, from the Board of Directors to senior management, and across all businesses and employees. In order to reinforce our strong risk culture, risk accountabilities play an important part in performance evaluations. We are committed to maintaining our strong risk culture which is built on fostering risk awareness, a clear understanding of the risks that one can take and in developing a strong sense of responsibility for risk.

We have a strong ethical culture of integrity and compliance grounded in our Code of Conduct. The Code of Conduct broadly addresses a variety of ethical and legal concerns that our employees face on a daily basis. Our Code of Conduct is supported by a number of global and regional compliance frameworks, policies, training programs, online tools, job aids, new employee orientation materials, and the direction of senior management.

Risk Appetite
Our Risk Appetite is the amount and type of risk we are able and willing to accept in the pursuit of our business objectives. Our Risk Appetite Framework has four major components as illustrated below:



The framework provides a structured approach to:

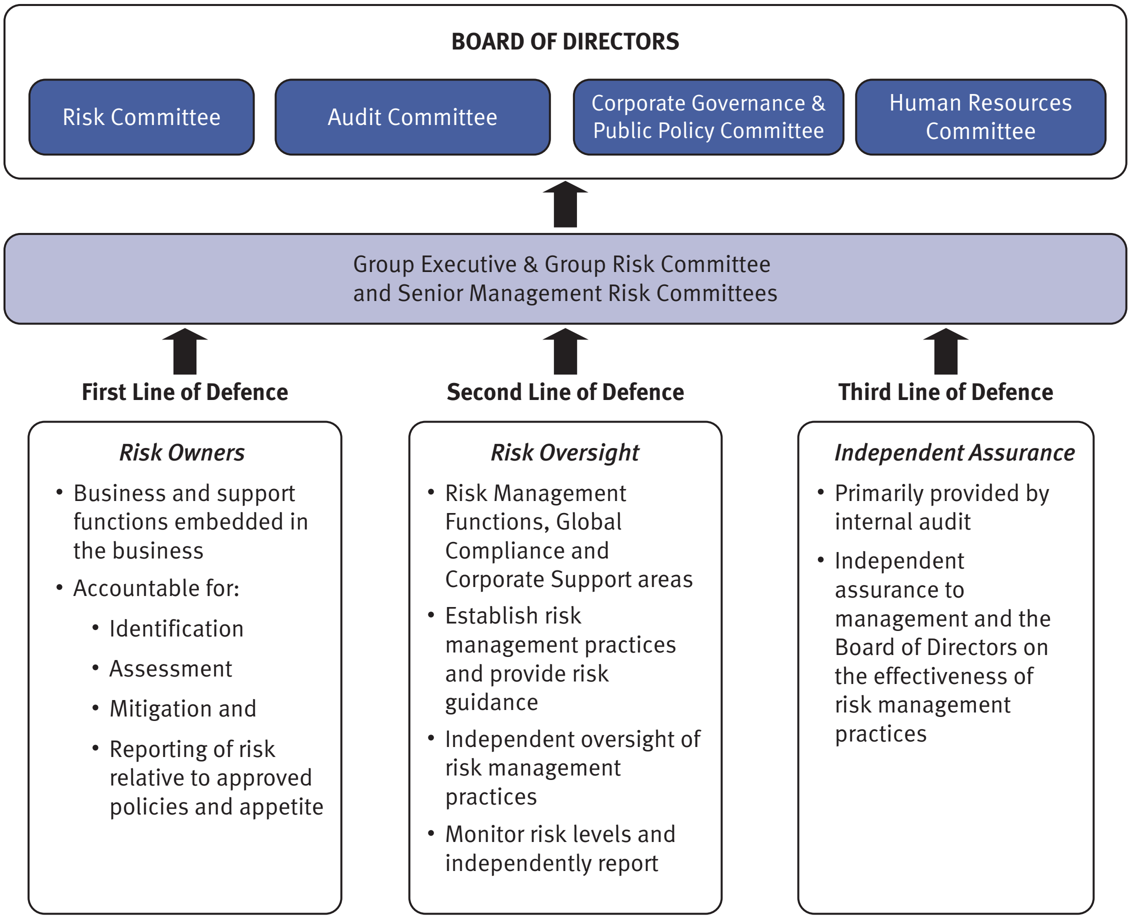
1. Define our **Risk Capacity** by identifying regulatory constraints that restrict our ability to accept risk.
2. Establish and regularly confirm our Risk Appetite, comprised of **Drivers** that are the business objectives which include risks we must accept to generate desired financial returns, and **Self-Imposed Constraints** that limit or otherwise influence the amount of risk undertaken. Our Self-Imposed Constraints include:
   - maintaining stability of earnings;
   - avoiding excessive concentrations of risk;
   - maintaining low exposure to stress events;
   - ensuring sound management of regulatory compliance risk and operational risk;
   - ensuring sound management of liquidity and funding risk;
   - ensuring capital adequacy by maintaining capital ratios in excess of rating agency and regulatory expectations;
   - maintaining a AA rating; and
   - maintaining a Risk Profile that is consistent with our international peer group.
3. Set **Risk Limits and Tolerances** to ensure that risk-taking activities are within Risk Appetite.
4. Regularly measure and evaluate our **Risk Profile**, representing the risks we are exposed to, relative to our Risk Appetite, and ensure appropriate action is taken prior to Risk Profile surpassing Risk Appetite.

The Enterprise Risk Appetite Framework is structured in such a way that it can be applied at the enterprise, business segment, business unit, and legal entity levels. Risk Appetite is integrated into our business strategies and capital plan. As part of strategic planning, each business segment's risk posture is assessed to anticipate the impact of strategic priorities and growth objectives on Risk Profile. We also ensure that the business strategy aligns with the enterprise and business segment level Risk Appetite.

Risk management principles
The following principles guide our enterprise-wide management of risk:

1. **Effective balancing of risk and reward** by aligning Risk Appetite with business strategy, diversifying risk, pricing appropriately for risk, mitigating risk through preventive and detective controls and transferring risk to third parties.
2. **Shared responsibility for risk management** as business segments are responsible for active management of their risks, with direction and oversight provided by GRM and other corporate functions groups.
3. **Business decisions are based on an understanding of risk** as we perform rigorous assessment of risks in relationships, products, transactions and other business activities.
4. **Avoid activities that are not consistent with our values, Code of Conduct or policies,** which contributes to the protection of our reputation.
5. **Proper focus on clients reduces our risks** by knowing our clients and ensuring that all products and transactions are suitable for, and understood by our clients.
6. **Use of judgment and common sense** in order to manage risk throughout the organization.

Risk governance
Our overall risk governance structure shown below illustrates our Three Lines of Defence governance model.



The Board of Directors provides oversight and carries out its risk management mandate primarily through its committees which include the Risk Committee, the Audit Committee, the Corporate Governance & Public Policy Committee and the Human Resources Committee. The Board of Directors has responsibility for approving our Risk Appetite.

The purpose of the Risk Committee is to oversee our risk management program. The Risk Committee's oversight role is designed to ensure that the risk management function is adequately independent from the businesses whose activities it reviews, and that the policies, procedures and controls used by management are sufficient to keep risks within our risk appetite.

The Audit Committee also has a risk oversight role through its responsibilities to review our internal controls and the control environment, and to ensure that policies related to capital management and adequacy are in place and effective. The Audit Committee regularly reviews reporting on legal and regulatory compliance risks including significant litigation issues and regulatory compliance matters.

In addition, the following board committees have specific reputation risk oversight responsibilities:

- Corporate Governance & Public Policy Committee monitors the effectiveness of our corporate governance, reviews policies and programs, reviews our efforts to understand and meet changing public values and expectations, and identifies, assesses and advises management on public affairs issues related to our image and reputation.
- Human Resources Committee, along with the Risk Committee, is jointly responsible for our Code of Conduct, and actively oversees the design and operation of our compensation system.

The Group Executive (GE) is comprised of our senior management team and is led by the President & Chief Executive Officer (CEO). The GE is responsible for our strategy and its execution and establishing the "tone at the top". The GE actively shapes and recommends our Risk Appetite for approval by the Board of Directors. The GE's risk oversight role is executed primarily through the mandate of the Group Risk Committee (GRC). The GRC with the assistance of its supporting senior management risk committees is responsible for ensuring that our overall Risk Profile is consistent with our strategic objectives and remains within Risk Appetite and there are ongoing, appropriate and effective risk management processes.

The **First Line of Defence** is provided by the business as well as support functions embedded in the business. The First Line of Defence has ownership and accountability for:

- Risk identification, assessment, mitigation, control and reporting in accordance with established enterprise risk policies; and
- Alignment of business and operational strategies with corporate risk culture and Risk Appetite.

The **Second Line of Defence** is provided by functions with independent oversight accountabilities such as GRM, Global Compliance, and other corporate support areas. The Second Line of Defence:

- Establishes the enterprise level risk management frameworks and policies, and provides risk guidance,
- Provides oversight of the effectiveness of First Line risk management practices, and
- Monitors and independently reports on the level of risk relative to established appetite.

The Chief Risk Officer (CRO) and GRM have overall responsibility for promoting our risk culture; monitoring our Risk Profile relative to our Risk Appetite; and maintaining our enterprise-wide program for identifying, measuring, controlling and reporting the significant risks that we face. The Chief Compliance Officer and Global Compliance are responsible for our policies and processes designed to mitigate and manage regulatory compliance risk. Corporate Treasury manages and oversees our capital position, structural interest rate risk and liquidity and funding risks.

The **Third Line of Defence** is primarily provided by internal audit. The Third Line of Defence provides independent assurance to senior management and the Board of Directors on the effectiveness of risk management policies, processes and practices in all areas of our organization.

The roles of the various stakeholders in our enterprise risk management program are described further in the discussion of specific risks in the following pages.

Risk measurement

Our ability to measure risks is a key component of our enterprise-wide risk and capital management processes. Certain measurement methodologies are common to a number of risk types, while others only apply to a single risk type. While quantitative risk measurement is important, we also place reliance on qualitative factors. Our measurement models and techniques are continually subject to independent assessment for appropriateness and reliability. For those risk types that are difficult to quantify, we place greater emphasis on qualitative risk factors and assessment of activities to gauge the overall level of risk to ensure that they are within our Risk Appetite.

Quantifying expected loss

Expected loss represents losses that are statistically expected to occur in the normal course of business in a given period of time. For credit risk, the key parameters used to measure our exposure to expected loss are probability of default, loss given default, and exposure at default. For market risk, a statistical technique known as Value-at-Risk (VaR) is used to measure losses under normal market conditions.

Quantifying unexpected loss

Unexpected loss is a statistical estimate of the amount by which actual losses can exceed expected loss over a specified time horizon, measured at a specified level of confidence. We hold capital to withstand these unexpected losses, should they occur. For further information, refer to the Capital management section.

Stress testing

Stress testing examines potential effects resulting from changes in risk drivers corresponding to exceptional but plausible adverse events, and is an important component of our risk management framework. Stress testing results are used in:

- monitoring our risk profile relative to risk appetite;
- setting limits;
- identifying key risks to and potential shifts in our capital levels and financial position;
- enhancing our understanding of available mitigating actions in response to adverse events; and
- assessing the adequacy of our target capital levels.

Our enterprise-wide stress tests evaluate key balance sheet, income statement, and capital impacts arising from risk exposures and changes in earnings. The results are used by our senior management risk committees, the GRC, and the Board of Directors to understand our performance drivers under stress, and review stressed capital ratios against regulatory constraints and internal targets. The results are also explicitly incorporated into our Internal Capital Adequacy Assessment Process (ICAAP) and Capital Plan analyses.

We annually evaluate a number of enterprise-wide stress test scenarios over a multi-year horizon, featuring a range of severities. Our Board of Directors approves the recommended scenarios, and GRM leads the scenario assessment process. Results from across the organization are integrated to develop an enterprise-wide view of the impacts, with input from subject matter experts in GRM, Corporate Treasury, Finance, and Economics. Recent scenarios evaluated include severe recessions, energy price shocks, and natural catastrophe events.

Stress testing of specific risk types such as market risk, liquidity risk, structural interest rate risk, retail and wholesale credit risk, operational risk, and insurance risk supplement our enterprise-wide stress tests. Results may be used in a variety of decision-making processes including risk limit setting, portfolio composition, or business implementation strategies. For further details of some of these programs, refer to the Market risk and Liquidity and funding management sections.

Ad-hoc stress tests are used periodically to inform business planning and risk management decisions related to a particular line of business or portfolio. Along with our internal stress testing program, we also participate in a number of regulator-required stress test exercises at both the consolidated and subsidiary levels.

Validation of measurement models

We widely use models for many purposes, including validation of financial products and the measurement and management of different types of risk. Models are subject to validation by qualified employees that are sufficiently independent of the model design and development, or by approved external parties. Model validation is a comprehensive independent review of a model that checks the applicability of the model's logic, its assumptions and theoretical underpinnings, the appropriateness of input data sources, and provides an interpretation of the model results and the strategic use of the model outputs. By reviewing and evaluating a model's assumptions as well as its limitations, initial and ongoing model validation helps ensure the model incorporates current market developments and industry trends. Our model validation process is designed to ensure that all underlying model risk factors are identified and successfully mitigated.

Risk control

Our enterprise-wide risk management approach is supported by a comprehensive set of risk controls. The controls are anchored by our Enterprise Risk Management and Risk-Specific Frameworks. These frameworks lay the foundation for the development and communication of policies, establishment of formal risk review and approval processes, and the establishment of delegated authorities and limits. The implementation of robust risk controls enables the optimization of risk and return on both a portfolio and a transactional basis.

Our risk management frameworks and policies are organized into the following five levels:

Level 1: Enterprise Risk Management Framework provides an overview of our enterprise-wide program for identifying, measuring, controlling and reporting on the significant risks we face. The Risk Appetite Framework underpins this framework.

Level 2: Risk-Specific Frameworks elaborate on each specific risk type and the mechanisms for identifying, measuring, monitoring and reporting of risks; key policies; and roles and responsibilities.

Level 3: Enterprise Risk Policies articulate minimum requirements, within which businesses and employees must operate.

Level 4: "Multi-risk" Enterprise Risk Policies govern activities such as product risk review and approval, stress testing, risk limits, risk approval authorities and model risk management.

Level 5: Business Segments and Corporate Support; Specific Policies and Procedures are established to manage the risks that are unique to their operations.

Risk review and approval processes
Risk review and approval processes are established by GRM based on the nature, size, and complexity of the risk involved. In general, the risk review and approval process involves a formal review and approval by an individual, group or committee that is independent from the originator. The approval responsibilities are governed by delegated authorities based on the following categories: transactions, structured credit, projects and initiatives, and new products and services.

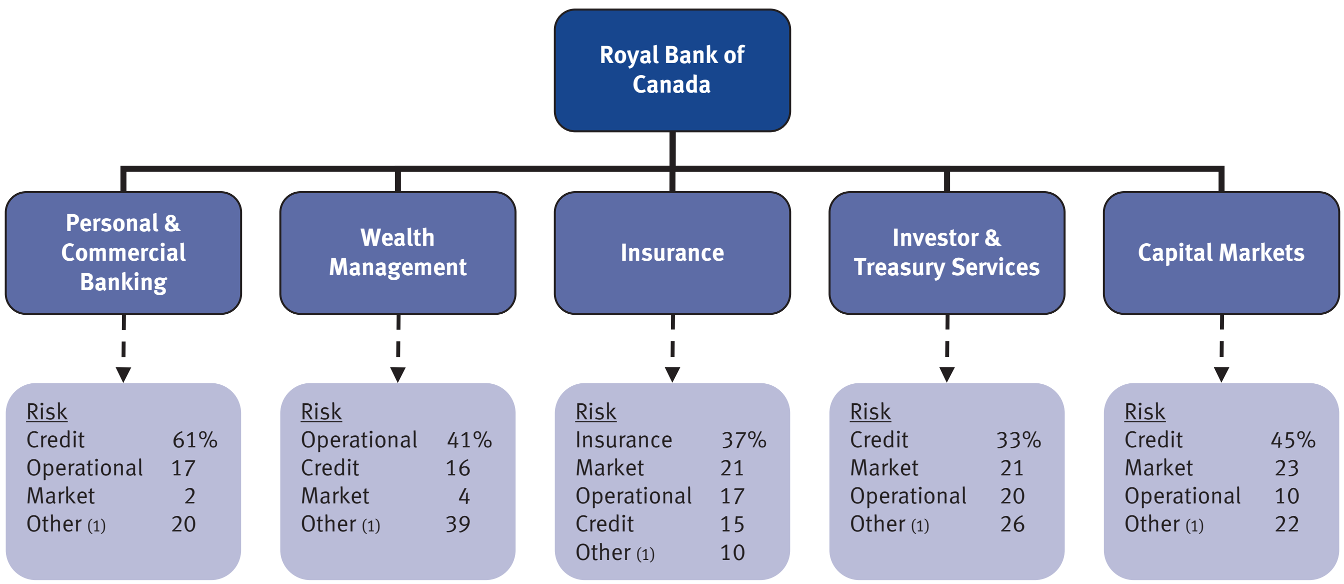
Authorities and limits
The Risk Committee of the Board of Directors delegates credit, market, and insurance risk authorities to the President & CEO and the CRO. These delegated authorities allow these officers to approve single name, geographic (country and region) and industry sector exposures within defined parameters to manage concentration risk, establish underwriting and inventory limits for trading and investment banking activities and set market risk tolerances.

The Board of Directors also delegates liquidity risk authorities to the President & CEO, Chief Administrative Officer and Chief Financial Officer, and the CRO. These limits act as a key risk control designed to ensure that reliable and cost-effective sources of cash or its equivalent are available to satisfy our current and prospective commitments.

Reporting
Enterprise level risk monitoring and reporting are critical components of our enterprise risk management program and support the ability of senior management and the Board of Directors to effectively perform their risk management and oversight responsibilities. On a quarterly basis, we provide to senior management and the Board of Directors the Enterprise Risk Report which includes a comprehensive review of our Risk Profile relative to our Risk Appetite and focuses on the range of risks we face along with analysis of the related issues and trends. In addition to our regular risk monitoring, other risk specific presentations are provided to and discussed with senior management and the Board of Directors on top and emerging risk issues or significant changes in our level of risk.

Risk in the context of our business activities
In carrying out our business activities, we are exposed to a range of risks. The following chart provides a high level view of risks within our business segments. We have used risk capital (i.e. economic capital less capital attribution for goodwill and intangibles) to illustrate the relative size of the risks in each of our businesses. The risk capital distribution reflects the diversified nature of our business activities.

Within Personal & Commercial Banking credit risk is the most significant risk, largely related to our personal financial services, business financial services and cards businesses. The primary risks within Wealth Management, which provides services to institutional and individual clients, are operational risk and credit risk. Risks within our Insurance operations primarily relate to insurance risk in our life, health, home and auto businesses followed by market risk and operational risk. The largest risk within Investor & Treasury Services is credit risk, followed by market risk and operational risk. The most significant risk within Capital Markets is credit risk followed by market risk.



(1) Other risks include regulatory capital allocation, business risk, and fixed assets risk.

The shaded texts along with the tables specifically marked with an asterisk(*) in the following sections of the MD&A represent our disclosures on credit, market and liquidity and funding risks in accordance with IFRS 7, *Financial Instruments: Disclosures*, and include discussion on how we measure our risks and the objectives, policies and methodologies for managing these risks. Therefore, these shaded texts and tables represent an integral part of our 2013 Annual Consolidated Financial Statements.

Credit risk

Credit risk is the risk of loss associated with an obligor's potential inability or unwillingness to fulfill their contractual obligations. Credit risk may arise directly from the risk of default of a primary obligor (e.g. issuer, debtor, counterparty, borrower or policyholder), or indirectly from a secondary obligor (e.g. guarantor or reinsurer).

The failure to effectively manage credit risk across all our products, services and activities can have a direct, immediate and material impact on our earnings and reputation.

We balance our risk and return by:

- Ensuring credit quality is not compromised for growth;
- Diversifying credit risks in transactions, relationships and portfolios;
- Using our credit risk rating and scoring systems or other approved credit risk assessment or rating methodologies, policies and tools;
- Pricing appropriately for the credit risk taken;
- Applying consistent credit risk exposure measurements;
- Mitigating credit risk through preventive and detective controls;
- Transferring credit risk to third parties, where appropriate, through approved credit risk mitigation techniques, including hedging activities and insurance coverage; and
- Ongoing credit risk monitoring and administration.

Risk measurement

We quantify credit risk, at both the individual obligor and portfolio levels, to manage expected credit losses and minimize unexpected losses in order to limit earnings volatility.

We employ different risk measurement processes for our wholesale and retail credit portfolios. The wholesale portfolio comprises businesses, sovereigns, public sector entities, banks and other financial institutions, and certain individuals and small businesses that are managed on an individual client basis. The retail portfolio is comprised of residential mortgages and personal, credit card and small business loans, which are managed on a pooled basis. Credit risk rating systems are designed to assess and quantify the risk inherent in credit activities in an accurate and consistent manner.

In measuring credit risk and setting regulatory capital, two principal approaches are available: Internal Ratings Based (IRB) Approach and Standardized Approach. Most of our credit risk exposure is measured under the IRB Approach.

Economic capital, which is our internal quantification of risks, is used extensively for performance measurement, limit setting and internal capital adequacy.

The key parameters that form the basis of our credit risk measures for both regulatory and economic capital are:

- Probability of default (PD): An estimated percentage that represents the likelihood of default within a one-year period of an obligor for a specific rating grade or for a particular pool of exposure.
- Exposure at default (EAD): An amount expected to be owed by an obligor at the time of default.
- Loss given default (LGD): An estimated percentage of EAD that is not expected to be recovered during the collections and recovery process.

These parameters are determined based on historical experience from internal credit risk rating systems in accordance with supervisory standards, and are independently validated and updated on a regular basis.

Under the Standardized Approach, used primarily for Investor Services and our Caribbean and U.S. banking operations, risk weights prescribed by OSFI are used to calculate risk-weighted assets (RWA) for credit risk exposure.

Wholesale credit portfolio

The wholesale credit risk rating system is designed to measure the credit risk inherent in our wholesale lending activities.

Each obligor is assigned a borrower risk rating (BRR), reflecting an assessment of the credit quality of the obligor. Each BRR has a PD assigned to it. The BRR differentiates the riskiness of obligors and represents our evaluation of the obligor's ability and willingness to meet its contractual obligations on time over a three year time horizon. The assignment of BRRs is based on the evaluation of the obligor's business risk and financial risk and is based on a fundamental credit analysis. The determination of the PD associated with each BRR relies primarily on internal default history since the late 1990s augmented where necessary with reference to external data. PD estimates are designed to be a conservative reflection of our experience across the economic cycle including periods of stress or economic downturn.

Our rating system is largely consistent with that of external rating agencies. The following table maps our 22-grade internal risk ratings compared to ratings by external rating agencies.

Internal ratings map* **Table 38**

Ratings	Standard & Poor's (S&P)	Moody's Investors Service (Moody's)	Description
1	AAA	Aaa	Investment Grade
2	AA+	Aa1	
3	AA	Aa2	
4	AA-	Aa3	
5	A+	A1	
6	A	A2	
7	A-	A3	
8	BBB+	Baa1	
9	BBB	Baa2	
10	BBB-	Baa3	
11	BB+	Ba1	Non-investment Grade
12	BB	Ba2	
13	BB-	Ba3	
14	B+	B1	
15	B	B2	
16	B-	B3	
17	CCC+	Caa1	
18	CCC	Caa2	
19	CCC-	Caa3	
20	CC	Ca	
21	D	C	Impaired
22	Bankruptcy	Bankruptcy	

* This table represents an integral part of our 2013 Annual Consolidated Financial Statements.

Each credit facility is assigned an LGD rate. LGD rates are largely driven by factors that will impact the extent of any losses in the event the obligor defaults and include seniority of debt, collateral security, and the industry sector in which the obligor operates. Estimated LGD rates draw primarily on internal loss experience since the late 1990s. Where we have limited internal loss data we also look to external data to inform the estimation. LGD rates are estimated to reflect conditions that might be expected to prevail in a period of an economic downturn, with additional conservatism added to reflect data limitations and judgments made in the estimation process.

EAD is estimated based on the current exposure to the obligor and the possible future changes in that exposure driven by factors such as the nature of the credit commitment and the type of obligor. As with LGD, rates are estimated to reflect downturn conditions, with added conservatism to reflect data and modeling uncertainty. Estimates are based on internal data dating back to the late 1990s.

Estimates of PD, LGD, and EAD are updated, and then validated and back-tested by an independent team within the Bank, on an annual basis. In addition, quarterly monitoring and back-testing is performed by the estimation team. These ratings and risk measurements are used in the determination of our expected losses and unexpected losses as well as economic and regulatory capital, setting of risk limits, portfolio management and product pricing.

Retail credit portfolio

Credit scoring is the primary risk rating system for assessing obligor and transaction risk for retail exposures. Credit scores along with decision strategies are employed in the acquisition of new clients (acquisition) and management of existing clients (behavioural).

Criteria used to pool exposures for risk quantification include behavioural score, product type (mortgages, credit cards, lines of credit and instalment loans), collateral type (chattel, liquid assets and real estate), loan to value, and the delinquency status (performing, delinquent and default) of the exposure. Regular monitoring and periodic adjustments and alignments are conducted to ensure that this process provides for a meaningful differentiation of risk. Migration between the pools is considered when assessing credit quality.

The pools are also assessed based on credit risk parameters (PD and EAD) which consider borrower and transaction characteristics, including behavioural credit score, product type and delinquency status. LGD is reviewed and re-estimated on an annual basis under the Basel III IRB Approach. The estimation is based on transaction specific factors, including product, loan to value and collateral types. LGD is determined based on over 10 years of historical economic losses with the highest degree of granularity and sufficient margin of conservatism. Parameters are validated and back-tested by an independent team within the bank.

The following table maps PD bands to various risk levels:

Internal ratings map* — **Table 39**

PD bands	Description
0% – 1.0%	Low risk
1.1% – 6.4%	Medium risk
6.5% – 99.99%	High risk
100.00%	Impaired/Default

* This table represents an integral part of our 2013 Annual Consolidated Financial Statements.

Risk control

The Board of Directors and its committees, the GE, the GRC and other senior management risk committees work together to ensure a Credit Risk Framework and supporting policies, processes and procedures exist to manage credit risk and approve related credit risk limits. Reports are distributed to the Board of Directors, the GRC, and senior executives to keep them informed of our Risk Profile, including trending information and significant credit risk issues and shifts in exposures to ensure appropriate actions can be taken where necessary. Our enterprise-wide credit risk policies set out the minimum requirements for the management of credit risk in a variety of borrower, transactional and portfolio management contexts.

Credit policies are an integral component of our Credit Risk Management Framework and set out the minimum requirements for the management of credit risk as follows:

Credit risk assessment

- Mandatory use of credit risk rating and scoring systems.
- Consistent credit risk assessment criteria.
- Standard content requirements in credit application documents.

Credit risk mitigation

Structuring of transactions

- Specific credit policies and procedures set out the requirements for structuring transactions. Risk mitigants include the use of guarantees, seniority, loan-to-value requirements and covenants. Product-specific guidelines set out appropriate product structuring as well as client and guarantor criteria. The third-party guarantors that we deal with are primarily sovereign-sponsored agencies.

Collateral

- We often require obligors to pledge collateral as security when we advance credit. The extent of risk mitigation provided by collateral depends on the amount, type and quality of the collateral taken. Specific requirements relating to collateral valuation and management are documented in our credit risk management policies.

Credit derivatives

- Used as a tool to mitigate industry sector concentration and single-name exposure. For a more detailed description of the types of credit derivatives we enter into and how we manage related credit risk, refer to Note 8 of our 2013 Annual Consolidated Financial Statements.

Product approval

- Proposals for credit products and services are comprehensively reviewed and approved under a risk assessment framework.

Credit portfolio management

- Limits are used to ensure our portfolio is well-diversified, manage concentration risk and remain within our Risk Appetite. Limits are reviewed on a regular basis taking into account the business, economic, financial and regulatory environments.
- Our credit limits are established at the following levels: single name limits (notional and economic capital), underwriting risk limits, geographic (country and region) limits, industry sector limits (notional and economic capital), and product and portfolio limits, where deemed necessary.

Gross credit risk exposure

Gross credit risk exposure is calculated based on the definitions provided under the Basel II and Basel III frameworks. Under this method, risk exposure is calculated before taking into account any collateral and inclusive of an estimate of potential future changes to that credit exposure. Gross credit risk is categorized into lending-related and other, and trading-related.

Lending-related and other includes:

- Loans and acceptances outstanding, undrawn commitments, and other exposures including contingent liabilities such as letters of credit and guarantees, Available-for-sale (AFS) debt securities and deposits with financial institutions. Undrawn commitments represent an estimate of the contractual amount that may be drawn upon at the time of default of an obligor.

Trading-related credit includes:

- Repo-style transactions which include repurchase and reverse repurchase agreements and securities lending and borrowing transactions. For repo-style transactions, gross exposure represents the amount at which securities were initially financed, before taking into account collateral.
- Derivatives gross exposure amount which represents the credit equivalent amount, which is defined by OSFI as the replacement cost plus an amount for potential future credit exposure.

Gross (excluding allowance for loan losses) credit risk exposure by portfolio and sector* — Table 40

	As at											
	October 31 2013						October 31 2012					
	Lending-related and other			Trading-related			Lending-related and other			Trading-related		
	Loans and acceptances						Loans and acceptances					
(Millions of Canadian dollars)	Outstanding	Undrawn commitments	Other (1)	Repo-style transactions	Derivatives (2)	Total exposure (3)	Outstanding	Undrawn commitments	Other (1)	Repo-style transactions	Derivatives (2)	Total exposure (3)
Residential mortgages	$ 209,238	$ –	$ –	$ –	$ –	$ 209,238	$ 198,324	$ –	$ –	$ –	$ –	$ 198,324
Personal	94,311	77,463	32	–	–	171,806	86,697	70,274	39	–	–	157,010
Credit cards	14,142	20,347	–	–	–	34,489	13,661	18,036	–	–	–	31,697
Small business (4)	3,987	4,043	41	–	–	8,071	2,503	3,933	40	–	–	6,476
Retail	$ 321,678	$ 101,853	$ 73	$ –	$ –	$ 423,604	$ 301,185	$ 92,243	$ 79	$ –	$ –	$ 393,507
Business (4)												
Agriculture	$ 5,441	$ 630	$ 51	$ –	$ 30	$ 6,152	$ 5,202	$ 659	$ 29	$ –	$ 29	$ 5,919
Automotive	6,167	3,602	255	–	451	10,475	3,585	3,219	240	–	546	7,590
Consumer goods	6,230	5,786	509	–	142	12,667	5,432	3,510	467	–	224	9,633
Energy	8,906	19,843	3,140	–	2,047	33,936	8,802	17,229	2,762	29	1,598	30,420
Non-bank financial services	4,903	8,529	13,374	134,290	18,368	179,464	3,895	6,954	11,149	124,925	6,051	152,974
Forest products	893	434	104	–	15	1,446	811	398	97	–	11	1,317
Industrial products	4,038	3,656	384	–	266	8,344	3,938	2,727	292	–	197	7,154
Mining & metals	1,074	2,648	807	–	158	4,687	965	2,630	681	91	113	4,480
Real estate & related	24,413	5,461	1,487	7	295	31,663	20,650	4,531	1,366	–	337	26,884
Technology & media	4,006	6,883	500	3	620	12,012	4,203	4,922	242	2	359	9,728
Transportation & environment	5,593	3,032	1,574	–	564	10,763	5,221	2,515	1,069	–	976	9,781
Other	21,520	9,989	9,060	2,202	14,537	57,308	20,554	8,575	7,783	25,807	3,964	66,683
Sovereign (4), (5)	4,396	5,527	34,789	27,193	8,319	80,224	4,193	5,026	36,239	20,130	7,868	73,456
Bank (4)	1,320	270	67,007	87,953	21,243	177,793	990	406	66,878	85,164	21,868	175,306
Wholesale	$ 98,900	$ 76,290	$ 133,041	$ 251,648	$ 67,055	$ 626,934	$ 88,441	$ 63,301	$ 129,294	$ 256,148	$ 44,141	$ 581,325
Total exposure	$ 420,578	$ 178,143	$ 133,114	$ 251,648	$ 67,055	$ 1,050,538	$ 389,626	$ 155,544	$ 129,373	$ 256,148	$ 44,141	$ 974,832

* This table represents an integral part of our 2013 Annual Consolidated Financial Statements.
(1) Includes contingent liabilities such as letters of credit and guarantees, AFS debt securities and deposits with financial institutions.
(2) Credit equivalent amount after factoring in master netting agreements.
(3) Gross credit risk exposure is before allowance for loan losses. Exposure under Basel III (2013) and Basel II (2012) asset classes of qualifying revolving retail and other retail are largely included within Personal and Credit cards, while home equity lines of credit are included in Personal.
(4) Refer to Note 5 of our 2013 Annual Consolidated Financial Statements for the definition of these terms.
(5) Sovereign as at October 31, 2012 was previously restated to include deposits with a central bank, which were previously not included in our exposure.

2013 vs. 2012

Total gross credit risk exposure increased $76 billion or 8% from the prior year, largely reflecting increases in outstanding loans, undrawn lending commitments and derivatives.

Retail exposure increased $30 billion or 8%, primarily due to solid volume growth in Canadian home equity products reflecting the ongoing low interest rate environment and our acquisition of Ally Canada.

Wholesale exposure increased $46 billion or 8%, largely due to an increase in outstanding loans and undrawn commitments driven by higher corporate lending along with an increase in derivatives. Derivatives increased as a result of the implementation of Basel III and now includes exposures related to exchange traded derivatives and derivatives with central clearing counterparties in the calculation of Total exposure. Wholesale loan utilization was 37%, unchanged from the prior year.

Gross (excluding allowance for loan losses) credit risk exposure by geography* — Table 41

	As at											
	October 31 2013						October 31 2012					
	Lending-related and other			Trading-related			Lending-related and other			Trading-related		
	Loans and acceptances						Loans and acceptances					
(Millions of Canadian dollars)	Outstanding	Undrawn commitments	Other	Repo-style transactions	Derivatives (1)	Total exposure (2)	Outstanding	Undrawn commitments	Other	Repo-style transactions	Derivatives (1)	Total exposure (2)
Canada	$ 373,530	$ 129,632	$ 58,048	$ 55,394	$ 23,619	$ 640,223	$ 346,834	$ 117,797	$ 55,548	$ 81,691	$ 9,820	$ 611,690
U.S.	23,177	35,633	20,811	120,482	11,829	211,932	20,219	28,172	19,088	92,056	10,157	169,692
Europe (3)	11,471	10,200	39,111	55,928	27,215	143,925	10,679	7,705	39,357	65,329	19,941	143,011
Other International	12,400	2,678	15,144	19,844	4,392	54,458	11,894	1,870	15,380	17,072	4,223	50,439
Total exposure (4)	$ 420,578	$ 178,143	$133,114	$ 251,648	$ 67,055	$ 1,050,538	$ 389,626	$ 155,544	$129,373	$ 256,148	$ 44,141	$ 974,832

* This table represents an integral part of our 2013 Annual Consolidated Financial Statements.
(1) Credit equivalent amount after factoring in master netting agreements.
(2) Gross credit risk exposure is before allowance for loan losses.
(3) Europe as at October 31, 2012 was previously restated to include deposits with a central bank, which were previously not included in our exposure.
(4) Geographic profile is based on country of residence of the borrower.

2013 vs. 2012

The geographic mix of our gross credit risk exposure did not change significantly from the prior year as Canada, U.S., Europe and Other International ended the year at 61%, 20%, 14% and 5% respectively. Growth in U.S. lending is driven by continuing efforts to strengthen our wholesale business in that market.

Loans and acceptance outstanding and undrawn commitments*(1), (2) **Table 42**

	As at									
	October 31 2013					October 31 2012				
(Millions of Canadian dollars)	Low risk	Medium risk	High risk	Impaired	Total	Low risk	Medium risk	High risk	Impaired	Total
Retail (3)										
Residential mortgages	$ 178,353	$ 24,011	$ 6,183	$ 691	$ 209,238	$ 166,217	$ 24,772	$ 6,661	$ 674	$ 198,324
Personal	143,747	23,890	3,774	363	171,774	133,711	19,418	3,569	273	156,971
Credit cards	25,429	7,907	1,153	–	34,489	24,022	6,592	1,083	–	31,697
Small business	4,567	2,214	1,212	37	8,030	3,201	2,201	1,001	33	6,436
	$ 352,096	$ 58,022	$ 12,322	$ 1,091	$ 423,531	$ 327,151	$ 52,983	$ 12,314	$ 980	$ 393,428

	As at							
	October 31 2013				October 31 2012			
(Millions of Canadian dollars)	Investment grade	Non-investment grade	Impaired	Total	Investment grade	Non-investment grade	Impaired	Total
Wholesale (4)								
Business	$ 73,865	$ 88,705	$ 1,107	$ 163,677	$ 65,781	$ 74,078	$1,268	$ 141,127
Sovereign	9,582	341	–	9,923	9,021	198	–	9,219
Bank	1,387	200	3	1,590	1,255	139	2	1,396
	$ 84,834	$ 89,246	$ 1,110	$ 175,190	$ 76,057	$ 74,415	$1,270	$ 151,742

* This table represents an integral part of our 2013 Annual Consolidated Financial Statements.
(1) This table represents our retail and wholesale loans and acceptances outstanding and undrawn commitments by portfolio and risk category. For a qualitative description of the credit risk assessment process, refer to the Risk measurement section.
(2) Based on exposure at default, which is the expected gross exposure upon the default of an obligor. This amount is before allowance for impaired loans and does not reflect the impact of credit risk mitigation such as guarantees.
(3) Includes undrawn commitments of $nil, $77.5 billion, $20.3 billion, and $4 billion for residential mortgages, personal, credit cards and small business, respectively.
(4) Includes undrawn commitments of $70.5 billion, $5.5 billion, and $0.3 billion for business, sovereign and bank, respectively.

2013 vs. 2012

For our retail portfolio, there was no significant shift in the overall distribution of exposures across the various credit quality categories as 83% of our portfolio is low risk, 14% is medium risk and 3% is high risk. Within our wholesale portfolio the increase in Business exposure is due to portfolio growth and our acquisition of Ally Canada.

European exposure **Table 43**

	As at							
	October 31 2013							October 31 2012
	Loans and acceptances		Other					
(Millions of Canadian dollars)	Outstanding	Undrawn commitments (1)	Securities (2)	Letters of credit and guarantees	Repo-style transactions	Derivatives	Total European exposure	Total European exposure
Gross exposure to Europe (3)	$ 11,471	$ 10,200	$ 21,592	$ 17,519	$ 55,928	$ 27,215	$143,925	$ 143,011
Less: Collateral held against repo-style transactions	–	–	–	–	54,416	–	54,416	63,887
Potential future credit exposure add-on amount	–	–	–	–	–	18,827	18,827	10,536
Undrawn commitments	–	10,200	–	17,519	–	–	27,719	27,781
Gross drawn exposure to Europe	$ 11,471	$ –	$ 21,592	$ –	$ 1,512	$ 8,388	$ 42,963	$ 40,807
Less: Collateral applied against derivatives	–	–	–	–	–	6,306	6,306	6,495
Add: Trading securities	–	–	13,816	–	–	–	13,816	11,742
Net exposure to Europe (4)	$ 11,471	$ –	$ 35,408	$ –	$ 1,512	$ 2,082	$ 50,473	$ 46,054

(1) Comprised of undrawn commitments of $7.4 billion to corporate entities, $2 billion to financial entities and $0.8 billion to sovereign entities. On a country basis, exposure is comprised of $3.8 billion to U.K., $2.3 billion to France, $1.9 billion to Germany, $232 million to Ireland, $134 million to Spain, with the remaining $1.8 billion related to Other Europe. Of the undrawn commitments, over 86% are to investment grade entities.
(2) Securities include $13.8 billion of trading securities (2012 – $11.7 billion), $13.8 billion of deposits (2012 – $12.5 billion) and $7.8 billion of AFS securities (2012 – $6.8 billion).
(3) Gross exposure to Europe as at October 31, 2012 was previously restated to include deposits with a central bank, which were previously not included in our exposure.
(4) Excludes $1 billion (2012 – $0.6 billion) of exposures to supranational agencies and $2.4 billion (2012 – $1.9 billion) of exposures to trade credit reinsurance.

Our gross credit risk exposure is calculated based on the definitions provided under the Basel III (2013) and Basel II (2012) frameworks whereby risk exposure is calculated before taking into account any collateral and inclusive of an estimate of potential future changes to that credit exposure. On that basis, our total European exposure as at October 31, 2013 was $144 billion. Our gross drawn exposure to Europe was $43 billion, after taking into account collateral held against repo-style transactions of $54 billion, letters of credit and guarantees, and undrawn commitments for loans of $28 billion and potential future credit exposure to derivatives of $19 billion. Our net exposure to Europe was $51 billion, after taking into account $6 billion of collateral, primarily in cash, we hold against derivatives and the addition of trading securities of $14 billion held in our trading book. Our net exposure to Europe also reflected $0.7 billion of mitigation through credit default swaps, which are largely used to hedge single name exposures and market risk.

Net European exposure **Table 44**

	As at					
	October 31 2013					October 31 2012
(Millions of Canadian dollars)	Loans outstanding	Securities (1)	Repo-style transactions	Derivatives	Total	Total
U.K. (2)	$ 7,288	$ 8,387	$ 1,241	$ 599	$ 17,515	$ 14,887
Germany	272	7,350	34	614	8,270	6,815
France	634	2,901	36	285	3,856	3,786
Total U.K., Germany, France	$ 8,194	$ 18,638	$ 1,311	$ 1,498	$ 29,641	$ 25,488
Greece	$ –	$ –	$ –	$ –	$ –	$ 14
Ireland	59	39	11	65	174	498
Italy	208	104	–	13	325	157
Portugal	5	–	–	1	6	1
Spain	363	127	–	1	491	803
Total Peripheral (3)	$ 635	$ 270	$ 11	$ 80	$ 996	$ 1,473
Luxembourg	$ 494	$ 5,103	$ 13	$ 56	$ 5,666	$ 6,900
Netherlands	559	2,062	–	240	2,861	3,283
Norway	339	2,558	–	28	2,925	1,632
Sweden	1	2,781	49	–	2,831	1,371
Switzerland	349	2,602	102	41	3,094	3,233
Other	900	1,394	26	139	2,459	2,674
Total Other Europe	$ 2,642	$ 16,500	$ 190	$ 504	$ 19,836	$ 19,093
Total exposure to Europe (4), (5)	$ 11,471	$ 35,408	$ 1,512	$ 2,082	$ 50,473	$ 46,054

(1) Securities include $13.8 billion of trading securities (2012 – $11.7 billion), $13.8 billion of deposits (2012 – $12.5 billion) and $7.8 billion of AFS securities (2012 – $6.8 billion).
(2) U.K. as at October 31, 2012 was previously restated to include deposits with a central bank, which were previously not included in our exposure.
(3) Gross credit risk exposure to peripheral Europe is comprised of $nil to Greece (2012 – $nil), Ireland $1.5 billion (2012 – $3.8 billion), Italy $0.3 billion (2012 – $0.2 billion), Portugal $0.1 billion (2012 – $0.1 billion), and Spain $0.9 billion (2012 – $1.1 billion).
(4) Excludes $1 billion (2012 – $0.6 billion) of exposures to supranational agencies.
(5) Geographic profile is based on country of risk, which reflects our assessment of the geographic risk associated with a given exposure. Typically, this is the residence of the borrower.

2013 vs. 2012

Net credit risk exposure to Europe increased $4 billion from the prior year, primarily in the U.K., Sweden and Germany, largely due to an increase in deposits, trading securities and AFS securities.

Our net exposure to peripheral Europe, which includes Greece, Ireland, Italy, Portugal and Spain, remained minimal, slightly down from the prior year. This exposure was predominantly investment grade. Our net exposure to larger European countries, including the U.K., Germany and France, was primarily related to our capital markets, wealth management and investor services businesses, particularly in fixed income, treasury services, derivatives, and corporate and individual lending. These are predominantly client-driven businesses where we transact with a range of European financial institutions, corporations and individuals. In addition, we engage in primary dealer activities in the U.K., where we participate in auctions of government debt and act as a market maker and provide liquidity to clients. Exposures to other European countries are largely related to securities which include trading securities, deposits, and AFS securities.

Our trading securities are related to both client market making activities and our funding and liquidity management needs. All of our trading securities are marked-to-market on a daily basis. Deposits primarily included deposits with central banks or financial institutions and also included deposits related to our wealth management business in the Channel Islands. AFS securities largely comprised of Organization of Economic Co-operation and Development government and corporate debt. Our European corporate loan book is run on a global basis and the underwriting standards for this loan book reflect the same approach to the use of our balance sheet as we have applied in both Canada and the U.S. We had credit losses of $127 million on this portfolio for this year, primarily related to a couple of accounts. The gross impaired loans ratio of this loan book was 0.69%.

Net European exposure by client type — Table 45

(Millions of Canadian dollars)	U.K.	Germany	France	Total U.K., Germany, France	Greece	Ireland	Italy	Portugal	Spain	Total Peripheral	Other Europe	Total Europe	Total Europe
	As at												
	October 31 2013												October 31 2012
Financials	$ 4,265	$ 5,999	$ 1,296	$ 11,560	$ –	$ 85	$ 40	$ 1	$ 32	$ 158	$ 9,875	$ 21,593	$ 21,944
Sovereign (1)	5,834	1,534	1,692	9,060	–	21	5	–	23	49	7,096	16,205	12,661
Corporate	7,416	737	868	9,021	–	68	280	5	436	789	2,865	12,675	11,449
Total (2)	$ 17,515	$ 8,270	$ 3,856	$ 29,641	$ –	$ 174	$ 325	$ 6	$ 491	$ 996	$ 19,836	$ 50,473	$ 46,054

(1) Sovereign as at October 31, 2012 was previously restated to include deposits with a central bank, which were previously not included in our exposure.
(2) Geographic profile is based on country of risk, which reflects our assessment of the geographic risk associated with a given exposure. Typically, this is the residence of the borrower.

2013 vs. 2012
Our net exposure to Sovereign increased $4 billion, largely due to higher deposits with the Bank of England. The increase in Corporate net exposure of $1 billion was largely in the U.K. Our net exposure to Financials decreased by $0.4 billion as reductions in France and the U.K. were partially offset by an increase in Germany.

Residential mortgages and home equity lines of credit

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

Residential mortgages and home equity lines of credit — Table 46

(Millions of Canadian dollars, except percentage amounts)	As at October 31, 2013					
	Residential mortgages (1)					Home equity lines of credit
	Insured (2)		Uninsured		Total	Total
Region (3)						
Canada						
Atlantic provinces	$ 6,388	57%	$ 4,729	43%	$ 11,117	$ 1,986
Quebec	12,552	52	11,652	48	24,204	4,045
Ontario	36,491	44	46,582	56	83,073	16,609
Prairie provinces	25,099	54	21,063	46	46,162	10,422
B.C. and territories	16,078	39	24,708	61	40,786	10,018
Total Canada (4)	$ 96,608	47%	$ 108,734	53%	$ 205,342	$ 43,080
U.S.	5	1	373	99	378	270
Other International	11	–	2,715	100	2,726	2,144
Total International	$ 16	1%	$ 3,088	99%	$ 3,104	$ 2,414
Total	$ 96,624	46%	$ 111,822	54%	$ 208,446	$ 45,494
Total – 2012	$ 82,104	42%	$ 114,393	58%	$ 196,497	$ 45,073

(1) The residential mortgages amounts exclude our third party mortgage-backed securities (MBS) of $792 million (2012 – $1,827 million).
(2) Insured residential mortgages are mortgages whereby our exposure to default is mitigated by insurance through the Canadian Mortgage and Housing Corporation (CMHC) or other private mortgage default insurers.
(3) Region is based upon address of the property mortgaged. The Atlantic provinces are comprised of Newfoundland and Labrador, Prince Edward Island, Nova Scotia and New Brunswick, the Prairie provinces are comprised of Manitoba, Saskatchewan and Alberta, and B.C. and territories are comprised of British Columbia, Nunavut, Northwest Territories and Yukon.
(4) Total Canada residential mortgages balance of $205 billion consolidated is comprised of $183 billion of residential mortgages and $5 billion of mortgages with commercial clients of which $3.8 billion are insured mortgages, both in Canadian Banking, and $17 billion of securitized residential mortgages in Capital Markets.

Home equity lines of credit are uninsured and reported within the personal loan category. As at October 31, 2013, home equity lines of credit in Canadian Banking were $43 billion (2012 – $44 billion). Approximately 97% of these home equity lines of credit (2012 – 97%) are secured by a first lien on real estate, and less than 8% (2012 – 7%) of these clients pay the scheduled interest payment only.

Residential mortgages portfolio by amortization period

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

Residential mortgages portfolio by amortization period **Table 47**

	As at October 31 2013			As at October 31 2012
	Canada	U.S. and Other International	Total	Total
Amortization period				
≤ 25 years	68%	86%	68%	63%
>25 years ≤ 30 years	22	14	22	23
> 30 years ≤ 35 years	8	–	8	10
> 35 years	2	–	2	4
Total	100%	100%	100%	100%

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

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

Average LTV ratio **Table 48**

	2013 Uninsured	
	Residential mortgages (1)	Homeline products (2)
Region (3)		
Atlantic provinces	73%	74%
Quebec	71	73
Ontario	71	71
Prairie provinces	73	73
B.C. and territories	69	67
U.S.	69	n.m.
Other International	83	n.m.
Average (4), (5), (6)	71%	71%

(1) Residential mortgages excludes residential mortgages within the homeline products.
(2) Homeline products are comprised of both residential mortgages and home equity lines of credit.
(3) Region is based upon address of the property mortgaged. The Atlantic provinces are comprised of Newfoundland and Labrador, Prince Edward Island, Nova Scotia and New Brunswick, the Prairie provinces are comprised of Manitoba, Saskatchewan and Alberta, and B.C. and territories are comprised of British Columbia, Nunavut, Northwest Territories and Yukon.
(4) Effective the fourth quarter of 2013, we calculate the average LTV ratio for newly originated and acquired uninsured residential mortgages and homeline products on a weighted basis by mortgage amounts at origination.
(5) The average LTV ratio for our uninsured residential mortgages and homeline products was 72% and 73%, respectively, for the fiscal year ended October 31, 2012.
(6) For newly originated mortgages and homeline products, LTV is calculated based on the total facility amount for the residential mortgage and homeline product divided by the value of the related residential property.
n.m. not meaningful

While the above table provides the LTV ratios for the current year originations, the LTV ratio on our outstanding balances of the entire Canadian Banking uninsured residential mortgages including homeline products is 56% as at October 31, 2013 (2012 – 56%). Effective the fourth quarter of 2013 we revised our calculation methodology. The new calculation is both weighted by mortgage balances and adjusted for property values based on the Teranet – National Bank National Composite House Price Index. Previously this calculation was both adjusted for property values based on a Statistics Canada provincial housing price index and weighted by property values.

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

We continue to actively manage our entire mortgage portfolio and perform stress testing, based on a combination of increasing unemployment, rising interest rates, and a downturn in real estate markets. Our stress test results indicate the vast majority of our residential mortgage and homeline clients have sufficient capacity to continue making payments in the event of a shock to one of the above noted parameters.

Provision for (recovery of) credit losses — **Table 49**

(Millions of Canadian dollars)	2013	2012
Personal & Commercial Banking	$ 997	$ 1,167
Wealth Management	51	(1)
Capital Markets	188	135
Corporate Support and Other (1)	3	–
Total PCL	**$ 1,239**	**$ 1,301**
Canada (2)		
Residential mortgages	$ 27	$ 34
Personal	391	413
Credit cards	346	391
Small business	32	43
Retail	796	881
Wholesale	151	209
PCL on impaired loans	947	1,090
U.S. (2)		
Retail	$ 3	$ 4
Wholesale	32	29
PCL on impaired loans	35	33
Other International (2)		
Retail	$ 86	$ 64
Wholesale	171	116
PCL on impaired loans	257	180
Total PCL on impaired loans	1,239	1,303
PCL on loans not yet identified as impaired	–	(2)
Total PCL	**$ 1,239**	**$ 1,301**
PCL ratio (3)		
Total PCL ratio	0.31%	0.35%
Personal & Commercial Banking	0.30%	0.37%
Canadian Banking	0.28%	0.33%
Caribbean Banking	1.24%	2.08%
Capital Markets	0.34%	0.29%

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

2013 vs. 2012

Total PCL decreased $62 million, or 5%, from a year ago. The PCL ratio decreased 4 bps.

PCL in Personal & Commercial Banking decreased $170 million or 15%, and the PCL ratio decreased 7 bps, mainly reflecting improved credit quality in our Canadian business lending, credit card and personal loans portfolios as well as our Caribbean portfolio.

PCL in Wealth Management increased $52 million, mainly reflecting provisions on a few accounts.

PCL in Capital Markets increased $53 million or 39%, mainly reflecting provisions on a few accounts largely in the technology & media sector.

Gross impaired loans (GIL)		Table 50
(Millions of Canadian dollars)	2013	2012
Personal & Commercial Banking	$ 1,872	$ 1,820
Wealth Management	96	6
Capital Markets	229	389
Investor & Treasury Services	3	2
Corporate Support and Other	1	33
Total GIL	$ 2,201	$ 2,250
Canada (1)		
Retail	$ 729	$ 715
Wholesale	526	641
GIL	1,255	1,356
U.S. (1)		
Retail	$ 14	$ 7
Wholesale	98	162
GIL	112	169
Other International (1)		
Retail	$ 348	$ 258
Wholesale	486	467
GIL	834	725
Total GIL	$ 2,201	$ 2,250

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

2013 vs. 2012

Total GIL decreased $49 million or 2% from a year ago.

GIL in Personal & Commercial Banking increased $52 million or 3%, mainly due to higher impaired loans in our Canadian business lending portfolios.

GIL in Wealth Management increased $90 million, mainly due to a few accounts.

GIL in Capital Markets decreased $160 million or 41%, primarily due to write-offs in our technology & media sector.

Allowance for credit losses (ACL)		Table 51
(Millions of Canadian dollars)	2013	2012
Allowance for impaired loans		
Personal & Commercial Banking	$ 486	$ 507
Wealth Management	53	–
Capital Markets	58	126
Investor & Treasury Services	2	2
Corporate Support and Other	–	2
Total allowance for impaired loans	599	637
Canada (1)		
Retail	$ 149	$ 142
Wholesale	170	239
Allowance for impaired loans	319	381
U.S. (1)		
Retail	$ 2	$ 1
Wholesale	19	38
Allowance for impaired loans	21	39
Other International (1)		
Retail	$ 146	$ 96
Wholesale	113	121
Allowance for impaired loans	259	217
Total allowance for impaired loans	599	637
Allowance for loans not yet identified as impaired	1,451	1,451
Total ACL	$ 2,050	$ 2,088

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

2013 vs. 2012

Total ACL decreased $38 million or 2% from a year ago, mainly related to lower ACL in our Capital Markets and Caribbean portfolios, partially offset by higher ACL in Wealth Management.

Market risk

Market risk is defined to be the potential loss due to changes in market determined variables such as interest rates, credit spreads, equity prices, commodity prices, foreign exchange rates and implied volatilities.

Market risk manifests itself in the following ways:
- Fair Value Through Profit or Loss (FVTPL) positions whose revaluation gains and losses are reported in Revenue;
- AFS securities where revaluation gains and losses are reported as Other comprehensive income;
- The structural interest rate mismatch between assets and liabilities that are not marked-to-market which affects Net Interest Income; and
- Other positions whose financial performance is a function of market determined pricing variables.

Market risk controls – FVTPL positions

As an element of the Enterprise Risk Appetite Framework, the Board of Directors approves the overall market risk constraints for RBC. GRM creates and manages the control structure for FVTPL positions that ensures that business is conducted consistent with Board requirements. The Market and Trading Credit Risk function within GRM is responsible for creating and managing the controls and governance procedures that ensure that risk taken is consistent with risk appetite constraints set by the Board. These controls include limits on:
- Market risk positions;
- Probabilistic measures of potential loss such as Value-at-Risk (VaR) and Stressed Value-at-Risk defined below, and;
- Scenario based stress tests which utilize both actual historical market scenarios such as the global financial crisis of 2008 and hypothetical scenarios designed to be more forward looking. These stress tests apply severe and long duration stresses to market variables.

Market Risk Positions – are measures of potential loss due to changes in market variables.

Value-at-Risk (VaR) – is a statistical measure of potential loss for a financial portfolio computed at a given level of confidence and over a defined holding period. We measure VaR at the 99th percentile confidence level for price movements over a 1 day holding period using historic simulation of the last two years of equally weighted historic market data. These calculations are updated daily with current risk positions with the exception of CVA and certain other positions which are updated weekly.

Stressed Value-at-Risk (SVaR) – is calculated in an identical manner as VaR with the exception that it is computed using a fixed historical one year period of extreme volatility and its inverse rather than the most recent two year history. The stress period used is the interval from September 2008 through August 2009. Stressed VaR is calculated weekly for all portfolios.

VaR and SVaR are statistical estimates based on historical market data and should be interpreted with knowledge of their limitations – which include the following:
- VaR and SVaR will not be predictive of future losses if the realized market movements differ significantly from the periods used to compute them.
- VaR and SVaR project potential losses over a one day holding period and do not project potential losses for risk positions held over longer time periods.
- VaR and SVaR are measured using positions at close of business and do not include the impact of trading activity over the course of a day.

We validate our VaR and SVaR measures through a variety of means – including subjecting the models to vetting and validation by a group independent of the model developers and by back-testing the VaR against daily marked-to-market revenue to identify and examine events in which actual outcomes in trading revenue exceed the VaR projections.

Stress Tests – Our market risk stress testing program is used to identify and control risk due to large changes in market prices and rates. We conduct stress testing daily on positions that are marked-to-market. The stress tests simulate both historical and hypothetical events which are severe and long term in duration. Historical scenarios are taken from actual market events over the last 30 years and range in duration up to 90 days. Examples include the equity market crash of 1987 and the global financial crisis of 2008. Hypothetical scenarios are designed to be forward looking at potential future market stresses, and are designed to be severe but plausible. We are constantly evaluating and refining these scenarios as market conditions change. Stress results are calculated assuming an instantaneous revaluation of our positions with no management action.

These measures are computed on all positions that are FVTPL for financial reporting purposes, with the exception of those in a designated hedging relationship and those in our insurance businesses.

Market risk measures – FVTPL positions
VaR and Stress VaR
The following table presents our Market risk VaR and Market risk Stressed VaR figures for 2013 and 2012:

Market Risk VaR* **Table 52**

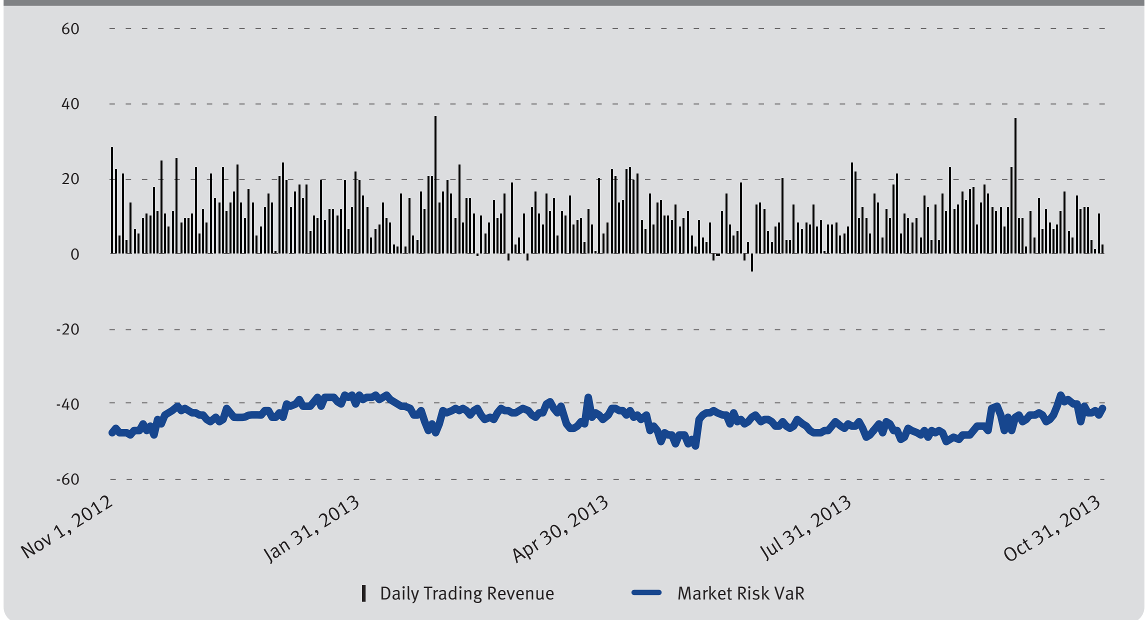
	2013				2012			
	As at	For the year ended October 31			As at	For the year ended October 31		
(Millions of Canadian dollars)	Oct. 31	Average	High	Low	Oct. 31	Average	High	Low
Equity	$ 8	$ 9	$ 19	$ 5	$ 10	$ 11	$ 21	$ 5
Foreign exchange	5	4	7	1	2	4	7	1
Commodities	3	3	5	2	3	2	4	1
Interest rate	38	41	51	36	50	50	65	34
Credit specific (1)	10	10	12	7	10	9	12	7
Diversification (2)	(23)	(23)	(31)	(16)	(28)	(24)	(41)	(13)
Market risk VaR	$ 41	$ 44	$ 51	$ 38	$ 47	$ 52	$ 66	$ 43
Market risk Stressed VaR	$ 117	$ 95	$ 123	$ 73	$ 79	$ 78	$ 107	$ 62

* This table represents an integral part of our 2013 Annual Consolidated Financial Statements.
(1) General credit spread risk is measured under interest rate VaR while credit specific risk captures issuer-specific credit spread volatility.
(2) Market risk VaR is less than the sum of the individual risk factor VaR results due to portfolio diversification.

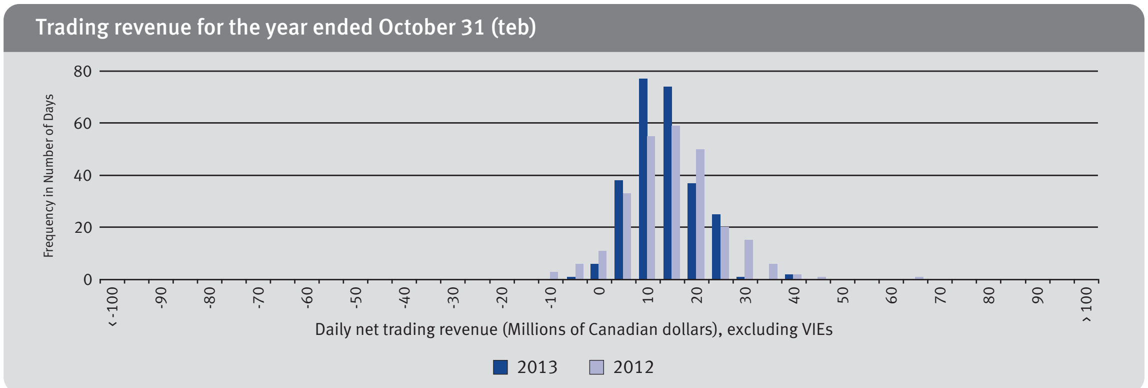
Average Market risk VaR of $44 million was down $8 million compared to the prior year, mainly driven by lower risk in fixed income portfolios in the current year and the roll forward of the historical VaR window. Average Stressed VaR of $95 million increased $17 million from $78 million in the prior year, largely due to increased positions and higher measured risk in certain mortgage-backed securities (MBS) and high grade credit-sensitive fixed income debt whose price behavior was particularly volatile in the historical period used for Stressed VaR when compared to more recent history. The higher risk attributed to MBS was in part due to changes in methodology which more accurately reflected the price behaviour of MBS during the global financial crisis of 2008 and 2009, which is the historical period used for SVaR.

The following chart graphically displays a bar chart of our daily trading profit and loss and a line chart of our daily Market risk VaR for the current year. We incurred net trading losses on seven days in the year, as compared to 20 days last year, totaling $14 million, with none of the losses exceeding VaR.

Trading Revenue and VaR (Millions of Canadian dollars)



The following chart displays the distribution of daily trading profit and loss. The largest reported profit in the current year was $36 million with an average daily profit of $11 million. The largest daily reported loss of $5 million, which occurred on June 25, 2013, was largely driven by RBC credit spread tightening.



Market risk measures for other FVTPL positions
Assets and liabilities of RBC Insurance
We offer a range of insurance products to clients and hold investments to meet the future obligations to policyholders. The investments which support actuarial liabilities are predominantly fixed income assets designated as at FVTPL. Consequently changes in the fair values of these assets are recorded in investment income in the consolidated statements of income and are largely offset by changes in the fair value of the actuarial liabilities, the impact of which is reflected in insurance policyholder benefits and claims. Liabilities with respect to insurance obligations are reported at $8.0 billion as of October 2013. We held $5.9 billion of trading securities in support of the liabilities. We also held $2.2 billion of securities classified as AFS as investments.

Market Risk – AFS
Securities classified as AFS of $38 billion as at October 31, 2013, compared to $40 billion as at October 31, 2012. We hold debt securities designated as AFS primarily as investments and to manage interest rate risk in our non-trading banking activity (as described above). Certain legacy debt portfolios are also classified as AFS. Our portfolio of AFS securities expose us to interest rate risk, measured as the change in the value of the securities for a one basis point parallel increase in yields, and credit spread risk, measured as a change in the value for a one basis point widening of credit spreads. Changes in the value of these securities are reported in other comprehensive income. As at October 31, 2013, the interest rate risk for the portfolio was $3.8 million and the credit spread risk was $6.1 million (1). Our AFS securities also include equity investments of $1.7 billion as at October 31, 2013, down from $1.8 billion last year.

(1) Interest rate and credit spread risks are represented on a pre-tax basis and exclude the securities held in our insurance businesses.

Market risk controls – Structural Interest Rate Risk (SIRR) Positions (2)

The asset/liability mismatch of positions not marked-to-market is referred to as SIRR and is subject to a separate set of limits and controls. The Board of Directors approves the overall risk appetite for SIRR, and ALCO along with GRM provide oversight for this risk with risk policies, limits, and operating standards. Interest rate risk reports are reviewed regularly by ALCO, the Group Risk Committee, the Risk Committee of the Board and the Board of Directors.

(2) SIRR positions include impact of derivatives in hedge accounting relationships and AFS securities used for interest rate risk management.

Risk measurement

SIRR measures the potential loss of both one year net interest income and instantaneous economic value of equity due to interest rate changes. These measures are reported on a weekly basis and are subject to limits and controls set by ALCO and GRM.

We further supplement our assessment by measuring interest rate risk for a range of dynamic and static market scenarios. Dynamic scenarios simulate our interest income in response to various combinations of business and market factors. Business factors include assumptions about future pricing strategies and volume and mix of new business, whereas market factors include assumed changes in interest rate levels and changes in the shape of the yield curve. Static scenarios supplement dynamic scenarios and are employed for assessing the risks to the value of equity and net interest income.

As part of our monitoring process, the effectiveness of our interest rate risk mitigation activity is assessed on value and earnings bases, and model assumptions are validated against actual client behavior.

Market risk measures – Structural Interest Rate Positions
The following table provides the potential before-tax impact of an immediate and sustained 100 bps and 200 bps increase or decrease in interest rates on net interest income and economic value of equity of our non-trading portfolio, assuming that no further hedging is undertaken. These measures are based upon assumptions made by senior management and validated by empirical research. All interest rate risk measures are based upon interest rate exposures at a specific time and continuously change as a result of business activities and our risk management actions. Over the course of 2013, our interest rate risk exposure was well within our target level.

Market risk measures – Non-trading banking activities*											Table 53
	2013						2012		2011		
	Economic value of equity risk			Net interest income risk (2)							
(Millions of Canadian dollars)	Canadian dollar impact	U.S. dollar impact (1)	Total	Canadian dollar impact	U.S. dollar impact (1)	Total	Economic value of equity risk	Net interest income risk (2)	Economic value of equity risk	Net interest income risk (2)	
Before-tax impact of:											
100bps increase in rates	$ (537)	$ (3)	$ (540)	$ 381	$ 10	$ 391	$ (497)	$ 397	$ (454)	$ 307	
100bps decrease in rates	444	2	446	(302)	(1)	(303)	405	(322)	412	(161)	
Before-tax impact of:											
200bps increase in rates	(1,152)	(8)	(1,160)	733	25	758	(1,005)	842	(925)	708	
200bps decrease in rates	793	6	799	(397)	(1)	(398)	651	(370)	615	(189)	

* This table represents an integral part of our 2013 Annual Consolidated Financial Statements.
(1) Represents the impact on the non-trading portfolios held in our U.S. banking operations.
(2) Represents the 12-month Net interest income exposure to an instantaneous and sustained shift in interest rates.

Non-trading foreign exchange rate risk

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

Our overall trading and non-trading market risk objectives, policies and methodologies have not changed significantly from 2012.

Market risk measures for other material non-trading portfolios
Derivatives in hedge accounting relationships

Derivative assets in a designated hedge accounting relationship of $2.0 billion as at October 31, 2013 were down from $2.7 billion in the prior year, and derivative liabilities of $931 million as at October 31, 2013 were down from $1.1 billion in the prior year. We use interest rate swaps to manage our structural interest rate risk as described above. To the extent these swaps are considered effective hedges, changes in their fair value are recognized in other comprehensive income. The interest rate risk for the designated cash flow hedges, measured as the change in the value of the derivatives for a one basis point parallel increase in yields, was $6.9 million as of October 31, 2013.

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

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

Linkage of market risk to selected balance sheet items

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

Linkage of market risk to selected balance sheet items **Table 54**

	As at October 31, 2013				
(Millions of Canadian dollars)	Balance Sheet amount	Included in VaR, SVaR and Stress testing	Included in Structural Interest Rate Risk	Included in other risk controls (1)	Not subject to market risk (1),(2)
Assets					
Cash and due from banks	$ 15,870	$ 8,202	$ 6,716	$ 952	$ –
Interest-bearing deposits with banks	9,061	2,833	6,228	–	–
Securities					
Trading	144,023	137,718	–	6,305	–
Available-for-sale	38,695	–	34,315	4,380	–
Assets purchased under reverse repurchase agreements and securities borrowed	117,517	116,703	814	–	–
Loans	408,666	16,555	391,085	1,026	–
Investments for account of segregated fund holders	513	–	–	513	–
Derivatives	74,822	71,678	3,144	–	–
Other assets	51,652	12,631	29,620	2,616	6,785
Total assets	$ 860,819	$ 366,320	$ 471,922	$ 15,792	$ 6,785
Liabilities					
Deposits	$ 558,480	$ 101,584	$ 456,896	$ –	$ –
Insurance and Investment contracts for account of segregated fund holders	513	–	–	513	–
Obligations related to securities sold short	47,128	47,128	–	–	–
Obligations related to assets sold under repurchase	60,416	60,147	269	–	–
Derivatives	76,745	75,368	1,377	–	–
Other liabilities	58,859	12,962	24,682	8,724	12,491
Subordinated debentures	7,443	–	7,443	–	–
Trust capital securities	900	–	900	–	–
Total liabilities	810,484	297,189	491,567	9,237	12,491
Total equity	50,335				
Total liabilities and equity	$ 860,819				

(1) "Included in other risk controls" includes $12.3 billion of assets and $8.7 billion of liabilities (net of intra-group liabilities) in RBC Insurance which are subject to a separate risk control framework. These amounts include trading securities of $5.9 billion, AFS securities of $2.2 billion and fair valued liabilities of $8.0 billion. In addition to the RBC Insurance positions, $442 million of trading securities and $2.2 billion in AFS and held-to-maturity (HTM) securities are included in other risk controls.

(2) Other assets under "Not subject to market risk" include certain receivable amounts and physical and intangible assets. Other liabilities include certain payable amounts. For further details, refer to Note 18 of our 2013 Annual Consolidated Financial Statements.

Liquidity and funding management

Liquidity and funding risk (liquidity risk) is the risk that we may be unable to generate or obtain sufficient cash or its equivalent in a timely and cost-effective manner to meet our commitments as they come due. The nature of banking services inherently exposes us to various types of liquidity risk. The most common sources of liquidity risk arise from mismatches in the timing and value of cash inflows and outflows, both from on- and off-balance sheet exposures.

Our liquidity position is established to satisfy our current and prospective commitments in normal business conditions, and in conjunction with our capital position, to maintain safety and soundness in times of stress. To achieve these goals, we operate under a comprehensive Liquidity Management Framework and employ key liquidity risk mitigation strategies that include the maintenance of:

- An appropriate balance between the level of exposure allowed under our risk appetite given the potential impact of extreme but plausible events and the cost of its mitigation;
- Broad funding access, including preserving and promoting a reliable base of core client deposits, ongoing access to diversified sources of wholesale funding and demonstrated capacities to monetize specific asset classes;
- A comprehensive enterprise-wide liquidity contingency plan that is supported by unencumbered marketable securities, a portion of which consists of an earmarked contingency pool that provides assured access to cash and is available to supplement other sources of cash in a crisis; and
- Appropriate and transparent liquidity transfer pricing and cost allocation.

Our liquidity management policies, practices and processes reinforce these risk mitigation strategies. In managing liquidity risk, we favour a centralized management approach to the extent possible given the various considerations outlined in this section.

In 2010, OSFI introduced a regulatory enterprise liquidity metric, Net Cumulative Cash Flow. Limits are applicable for both Canadian dollars and foreign currencies and on an all currency basis and we submit a formal compliance report to OSFI on a monthly basis. We also continue to prepare for Basel III regulatory reforms led by the BCBS and supported by OSFI and other jurisdictions. The BCBS liquidity standards include minimum requirements for two regulatory measures, the Liquidity Coverage Ratio (LCR) and Net Stable Funding Ratio (NSFR). In January 2013, the BCBS released its final rules for LCR, with phased timelines for compliance, starting with a minimum of 60% coverage in 2015 and increasing by 10% annually to 100% in 2019. The BCBS continues to review the NSFR guidelines, with planned implementation effective 2018. We submit LCR and NSFR reports to OSFI regularly. In July 2013, the BCBS published a consultative paper on "Liquidity coverage ratio disclosure standards". Comments on this consultative document were submitted in October 2013 to the BCBS. Banks are expected to comply with the BCBS disclosure standards beginning in 2015.

Our liquidity risk objectives, policies and methodologies have not changed materially from 2012. However, certain limits and risk practices have been modified as a result of market conditions and to align with local regulatory developments and to position ourselves for the prospective Basel III regulatory liquidity standards. We continue to maintain liquidity and funding that is appropriate for the execution of our strategy. Liquidity risk remains well within our risk appetite. However, our liquidity management policies, practices and processes will be modified to take into account evolving regulatory requirements, as appropriate.

Risk measurement

To monitor and control risk within appropriate tolerances, limits are set on various metrics reflecting a range of time horizons and severity of stress conditions. Risk methodologies and underlying assumptions are periodically reviewed and validated to ensure alignment with our operating environment, expected economic and market conditions, rating agency preferences, regulatory requirements and accepted practices. Liquidity risk is measured using contractual maturity dates for some assets and liabilities (e.g., wholesale lending and funding) and effective maturity for others. In the effective maturity approach, the liquidity value of assets and liabilities is determined based on observed behavioural or market-based patterns unrelated to contractual maturity. For example, effective maturity may be shorter than contractual maturity if the demonstrated behaviour of the asset suggests that it can be monetized before maturity. Effective maturity for a liability may be longer than contractual maturity if the demonstrated behaviour of the liability suggests that it will be extended or rolled over at maturity. Specific examples include government bonds for assets as they can be quickly and reliably monetized and relationship-based deposits for liabilities where a significant portion is typically assigned core value although contractual maturity dates may be quite short or even legally characterized as available on demand (conversely, demand loans display attributes of longer term assets and are treated accordingly from an effective maturity perspective). Internally derived assumptions consider all relevant material and available data, information and methods of quantifying liquidity risk. We measure and manage our liquidity position from three risk perspectives as follows:

Structural (longer-term) liquidity risk

We use cash capital and other structural metrics, which focus on mismatches in effective maturity between all assets and liabilities, to measure and control balance sheet risk and to assist in the determination of our term funding strategy. Stressed conditions are considered, including a protracted loss of unsecured wholesale deposits that fund illiquid assets.

Tactical (shorter-term) liquidity risk

We apply net cash flow limits in Canadian dollar and foreign currencies for key short-term time horizons (overnight to nine weeks) under various stages of stress and assign a risk-adjusted limit to our aggregate pledging exposure and individual limits by types of pledging activities to measure our shorter-term liquidity exposures. Net cash flow positions reflect known and anticipated cash flows for all material unencumbered assets, liabilities and off-balance sheet activities. Pledged assets are not considered a source of available liquidity. We also control this risk by adhering to group-wide and unit-specific prescribed regulatory standards.

Contingency liquidity risk

Contingency liquidity risk management assesses the impact of and our intended responses to sudden stressful events. Our liquidity contingency plan, maintained and administered by Corporate Treasury, guides our actions and responses to liquidity crises. The Liquidity Crisis Team, consisting of senior representatives with relevant subject matter expertise from key business segments and Corporate Support, contributes to the development of stress tests and funding plans and meets regularly to assess our liquidity status, conduct stress tests and review liquidity contingency preparedness.

Our stress tests, which include elements of scenario and sensitivity analyses, are based on models that measure our potential exposure to global, country-specific and RBC-specific events (or combinations thereof) and consider both historical and hypothetical events over a nine week period consistent with our internal tactical liquidity risk measure and our view of the most critical time span for such events. Different levels of severity are considered for each type of crisis with some scenarios reflecting multiple notch downgrades to our credit ratings. Key tests are run monthly, while others are run quarterly. The frequency of review is determined by considering a combination of likelihood and impact.

In a particularly acute short-term crisis or if a crisis was to extend over a number of months, actions would be taken to supplement liquidity available from our earmarked contingency asset pool by limiting cash and collateral outflows and by accessing new sources of liquidity and funding; for example, through sales of liquid assets and securitization and, in extraordinary circumstances, sales of core assets. As well, in light of our current credit ratings and well-developed market relationships and access, it is expected that even under extreme but plausible scenarios, we would continue to be able to access wholesale funding markets, albeit possibly at reduced overall capacity, higher costs and for shorter average maturities.

While we also have potential access to various normal course and emergency central bank lending facilities in Canada, the U.S. and Europe, such facilities are not considered a source of funding in our contingency planning for scenarios identified as extreme but plausible.

After reviewing test results, the liquidity contingency plan and other liquidity risk management practices and limits may be modified accordingly. The risk of more prolonged crises is addressed through measures of structural liquidity risk that assume stress conditions.

Our liquid assets consist primarily of a diversified pool of highly rated and liquid marketable securities and include segregated portfolios (in both Canadian and U.S. dollars) of contingency liquidity assets to address potential on- and off-balance sheet liquidity exposures (such as deposit erosion, loan drawdowns and higher collateral demands), that have been sized through models we have developed or by the scenario analyses and stress tests we conduct periodically. These portfolios are subject to minimum asset quality levels and, as appropriate, other strict eligibility guidelines (e.g., maturity, diversification and eligibility for central bank advances) to maximize ready access to cash in emergencies. Examples of assets held in these portfolios include U.S. and Canadian federal government treasury bills and bonds, U.S. Agency bonds, U.S. and Canadian government guaranteed and sponsored entity bonds, other highly rated foreign sovereign bonds and their guaranteed debt, supranational bonds and Canadian provincial bonds. Our total pool of unencumbered liquid assets, whether held specifically for contingency liquidity purposes or for investment or trading activities, would be available during times of crisis as sources of liquidity, either via outright sale or to obtain secured funding.

Risk profile

As at October 31, 2013, relationship-based deposits which are the primary source of funding for retail loans and mortgages, were $359 billion or 54% of our total funding (October 31, 2012 – $329 billion or 54%). Funding for highly liquid assets consisted primarily of short-term wholesale funding that reflects the expected monetization period of these assets. This wholesale funding comprised unsecured short-term liabilities of $67 billion and secured (repos and short sales) liabilities of $111 billion, and represented 10% and 17% of total funding as at October 31, 2013, respectively (October 31, 2012 – $84 billion and $105 billion or 14% and 17% of total funding, respectively). Long-term wholesale funding is mostly used to fund less liquid wholesale assets. Additional quantitative information is provided in the following Funding section.

As at October 31, 2013, we held earmarked contingency liquidity assets of $11.5 billion, of which $6.5 billion was in U.S. currency and $5 billion was in Canadian currency (October 31, 2012 – $9.7 billion of which $5.2 billion was in U.S. currency and $4.5 billion was in Canadian currency). During the year ended October 31, 2013, we increased our earmarked contingency liquidity assets and, as a result, held on average $10 billion, of which $5.5 billion was in U.S. currency and $4.5 billion was in Canadian currency (October 31, 2012 – $8.3 billion of which $4.9 billion was in U.S. currency and $3.4 billion was in Canadian currency). We also held a derivatives pledging liquid asset buffer of US$3.7 billion as at October 31, 2013 to mitigate the volatility of our net pledging requirements for derivatives trading (October 31, 2012 – US$1.3 billion). This buffer averaged US$2.3 billion during the year ended October 31, 2013 (October 31, 2012 – US$1.3 billion). Our buffers were resized during the year to reflect changes in our liquidity policies and balance sheet composition.

As recommended by the EDTF, the following table provides a summary of our liquidity reserve and encumbered assets, according to level of liquidity. Unencumbered assets available as collateral represent, for the most part, a ready source of funding that can be accessed quickly, when required. Liquid assets available as collateral consist of on-balance sheet cash and securities holdings as well as securities received as collateral from securities financing (reverse repos and off-balance sheet collateral swaps) and derivative transactions and constitute the preferred source for quickly accessing liquidity. Illiquid assets for which there are established funding markets, such as mortgages and credit card receivables, can be monetized although requiring more lead times relative to liquid assets. We do not include encumbered assets as a source of available liquidity in measuring liquidity risk. As at October 31, 2013, our unencumbered highly marketable liquid assets comprised 54% of our total liquid assets. For the purpose of constructing the following table, encumbered assets include: (i) Bank-owned liquid assets that are either pledged as collateral (e.g., repo financing and derivative pledging) or not freely available due to regulatory or internal policy requirements (e.g., earmarked to satisfy mandatory reserve or local capital adequacy requirements and to maintain continuous access to payment and settlement systems); (ii) securities received as collateral from securities financing and derivative transactions which have either been re-hypothecated where permissible (e.g., to obtain financing through repos or to cover securities sold short) or have no liquidity value since re-hypothecation is prohibited; and iii) illiquid assets that have been securitized and sold into the market or that have been pledged as collateral in support of structured term funding vehicles. Unencumbered assets are the difference between total and encumbered assets from both on- and off-balance sheet sources.

Liquidity reserve and asset encumbrance (1)							Table 55
	As at October 31, 2013						
				Encumbered assets		Unencumbered assets	
(Millions of Canadian dollars)	On-balance sheet assets	Off-balance sheet securities received as collateral from securities financing and derivative transactions	Total assets	Pledged as collateral	Other (2)	Available as collateral (3)	Other (4)
Liquid assets							
Cash and deposits with central banks	$ 12,711	$ –	$ 12,711	$ –	$ 980	$ 11,731	$ –
Deposits with financial institutions	12,220	–	12,220	287	–	11,933	–
Precious metals	173	–	173	–	–	173	–
Securities and reverse repos (5)							
Canadian government obligations	59,760	11,120	70,880	40,164	–	30,716	–
Foreign government obligations	113,464	4,350	117,814	54,053	–	63,761	–
Other securities	72,133	11,953	84,086	40,743	48	43,295	–
Loans							
NHA mortgage-backed securities	32,556	–	32,556	10,738	–	21,818	–
Other assets	11,678	–	11,678	11,678	–	–	–
Total liquid assets	$ 314,695	$ 27,423	$ 342,118	$ 157,663	$ 1,028	$ 183,427	$ –
Other illiquid assets							
Securities and reverse repos not included above	$ 54,878	$ 14,781	$ 69,659	$ 23,349	$ –	$ 37,114	$ 9,196
Loans	378,069	–	378,069	64,775	–	125,789	187,505
Other assets	113,177	–	113,177	–	–	–	113,177
Total other illiquid assets	$ 546,124	$ 14,781	$ 560,905	$ 88,124	$ –	$ 162,903	$ 309,878
	$ 860,819	$ 42,204	$ 903,023	$ 245,787	$ 1,028	$ 346,330	$ 309,878

(Millions of Canadian dollars)	As at October 31 2013 Unencumbered assets
Royal Bank of Canada	$ 351,398
Foreign branches	129,796
Subsidiaries	175,014
	$ 656,208

(1) Information is provided from an enterprise-wide perspective. In managing liquidity risk, we consider market, legal, regulatory, tax and other constraints that may impede transferability of liquidity among RBC units.
(2) Includes assets which are believed to be restricted from being used to secure funding for legal or other reasons.
(3) Includes assets that are readily available in the normal course of business to secure funding or meet collateral needs.
(4) Other unencumbered assets are not subject to any restrictions on their use to secure funding or as collateral, but would not be considered readily available because they may not be readily acceptable at central banks or other lending programs.
(5) Includes investment grade government, public sector entities and corporate bonds and money market securities, exchange-traded funds, and equities traded as part of a major stock index but excludes auction rate and non-agency asset-backed securities as well as non-index equities and mutual funds. All securities are recorded at market value.

Other sources of liquidity that could be available to mitigate stressed conditions include: (i) our unused wholesale funding capacity, which is regularly assessed using an established methodology that is periodically reviewed and, as necessary, revised, and (ii) central bank borrowing facilities if, in extraordinary circumstances, market sources were not sufficient to allow us to monetize our assets available as collateral to meet our requirements (e.g., Bank of Canada, Federal Reserve Bank, Bank of England, and Bank of France).

Risk control

The Board of Directors annually approves delegation of liquidity risk authorities to senior management. The Risk Committee of the Board annually approves the Liquidity Management Framework and is responsible for its oversight. The Board of Directors and the Risk Committee also review, on a regular basis, reporting on our enterprise-wide liquidity position and status. The GRC and ALCO share management oversight responsibility and review all liquidity documents prepared for the Board of Directors or its committees. ALCO annually approves the Liquidity Management Framework's key supporting documents and provides strategic direction and primary management oversight to Corporate Treasury, GRM, other functions and business platforms in the area of liquidity risk management. To maximize funding and operational efficiencies, we monitor and manage our liquidity position on a consolidated basis and for key units taking into account market, legal, regulatory, tax, operational and any other applicable restrictions that may impede transferability of liquidity between RBC units. This includes analyzing our ability to lend or borrow funds between branches and subsidiaries, and converting funds between currencies. The outcome of this analysis is considered in liquidity metrics and our Recovery Plan.

Policies

Our principal liquidity policies define risk tolerance parameters. They authorize senior management committees, Corporate Treasury or GRM to approve more detailed policies and limits that govern management, measurement and reporting requirements for specific businesses and products.

Authorities and limits

Limits for our structural liquidity risk positions are approved at least annually and monitored regularly. Net cash flow limits are approved at least annually. Depending on the significance of each reporting entity, net cash flow limits are monitored daily or weekly by major currency, branches, subsidiaries and geographic locations. Any potential exceptions to established limits are reported immediately to Corporate Treasury and GRM, who provide or arrange for approval where appropriate after reviewing remedial action plans.

The liquidity factors for cash flow assets and liabilities under varying conditions are reviewed periodically by Corporate Treasury, GRM and the business segments to determine if they remain valid or changes to assumptions and limits are required. Through this process, we ensure that a close link is maintained between the management of liquidity risk, market liquidity risk and credit risk, including GRM approval of credit lines between entities. In response to our experience during periods of market volatility over the past six years, we have modified the liquidity treatment of certain asset classes to reflect changes in market liquidity. Where required, limits are reduced in consideration of the results of stress tests.

Funding

Funding strategy

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

Deposit profile

We continued to focus on building our core deposit base in Canada. Our relationship-based deposits, including our personal deposit franchise and our commercial and institutional client groups, maintain balances with relatively low volatility profiles and constitute our principal source of reliable funding. Reflecting deposit insurance and at times, exclusive relationships with us, these balances represent a highly stable source of core deposits in most conceivable environments as they are typically less responsive to market developments than those from transactional lenders and investors. Core deposits, consisting of our own statistically derived liquidity adjusted estimates of the highly stable portions of our relationship-based balances (demand, notice and fixed-term) together with wholesale funds maturing beyond one year have increased approximately 2% during the year and represent 70% of our total deposits, up from 68% last year. During the year, core deposits grew by about 10% with the most material contribution coming from an extension of our wholesale funding maturity profile. For further details on the gross dollar amounts of our relationship-based deposits and our wholesale funds maturing beyond one year, refer to the Risk profile section and the following Remaining maturity of wholesale debt issued table, respectively.

Long-term debt issuance

During 2013, we continued to experience more favourable unsecured wholesale funding access and pricing compared to global peers. As demonstrated in the following table, we also continued to expand our unsecured long-term funding base by selectively issuing, either directly or through our subsidiaries, $31 billion of term funding in various currencies and markets. Total unsecured long-term funding outstanding increased by $10.2 billion.

We use residential mortgage and credit card and auto receivable-backed securitization programs as alternative sources of funding and for liquidity and asset/liability management purposes. Our total secured long-term funding includes outstanding MBS sold, covered bonds that are collateralized with residential mortgages, and credit card and auto receivables. Compared to 2012, our outstanding MBS sold decreased $1.4 billion while our covered bonds and credit card and auto receivables increased $9.4 billion and $1 billion, respectively.

For further details, refer to the Off-balance sheet arrangements section.

Long-term funding sources* **Table 56**

(Millions of Canadian dollars)	2013	2012
Unsecured long-term funding	$ 69,903	$ 59,661
Secured long-term funding	59,285	50,321
Commercial mortgage-backed securities sold	1,304	1,434
Subordinated debentures	7,408	7,416
	$ 137,900	$ 118,832

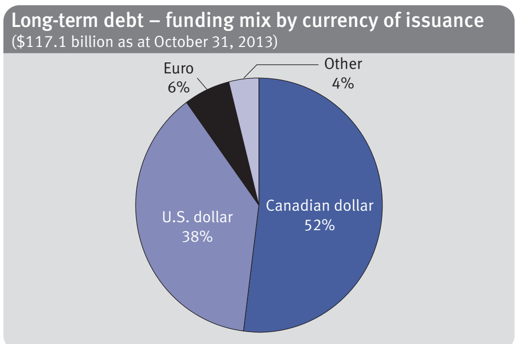
* This table represents an integral part of our 2013 Annual Consolidated Financial Statements.

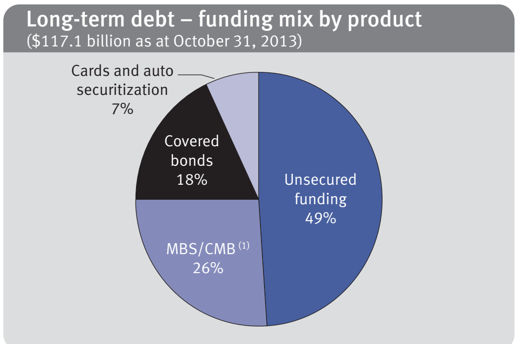
Our wholesale funding activities are well-diversified by geography, investor segment, instrument, currency, structure and maturity. We maintain an ongoing presence in different funding markets, which allows us to continuously monitor market developments and trends, identify opportunities and risks, and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

Programs by geography — Table 57

Canada	U.S.	Europe/Asia
• Canadian Shelf – $15 billion	• SEC Registered – US$25 billion • SEC Registered Covered Bonds – US$12 billion	• European Debt Issuance Program – US$40 billion • Covered Bond Program – Euro 23 billion • Japanese Issuance Programs – JPY 1 trillion

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





(1) Mortgage-backed securities and Canada Mortgage Bonds

The following table provides the remaining maturity of our wholesale debt issued and represents our enhanced disclosure in response to EDTF recommendations.

Remaining maturity of wholesale debt issued (1) — Table 58

	As at October 31, 2013							
(Millions of Canadian dollars)	Less than 1 month	1 to 3 months	3 to 6 months	6 to 12 months	Less than 1 year sub-total	1 to 2 years	2 years and greater	Total
Bearer deposit notes, certificates of deposit and commercial paper	$ 5,886	$ 5,564	$ 20,253	$ 14,370	$ 46,073	$ 261	$ 3,523	$ 49,857
Deposit and medium-term notes	1,154	3,984	3,652	5,467	14,257	12,327	41,216	67,800
Mortgage securitization	757	2,565	4,211	2,154	9,687	2,371	18,392	30,450
Covered bonds	–	–	–	–	–	3,164	17,713	20,877
Cards and auto securitization	54	94	132	213	493	2,965	4,501	7,959
Total	$ 7,851	$12,207	$ 28,248	$ 22,204	$ 70,510	$ 21,088	$ 85,345	$ 176,943
Comprises:								
- Unsecured	$ 7,040	$ 9,548	$ 23,905	$ 19,837	$ 60,330	$ 12,588	$ 44,739	$ 117,657
- Secured	811	2,659	4,343	2,367	10,180	8,500	40,606	59,286

(1) Excludes short-term wholesale deposits, bankers' acceptances and subordinated debt.

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

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

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

Contractual maturities of financial assets, financial liabilities and off-balance sheet items **Table 59**

(Millions of Canadian dollars)	As at October 31, 2013									
	Less than 1 month	1 to 3 months	3 to 6 months	6 to 9 months	9 to 12 months	1 year to 3 years	3 years to 5 years	5 years and greater	With no specific maturity	Total
Assets										
Cash and deposits with banks	$ –	$ –	$ –	$ –	$ –	$ –	$ –	$ –	$ 24,931	$ 24,931
Securities										
Trading (1)	93,407	40	19	40	38	502	281	4,507	45,189	144,023
Available-for-sale	3,420	4,641	1,268	796	1,116	5,317	7,156	13,140	1,841	38,695
Assets purchased under reverse repurchase agreements and securities borrowed	61,871	18,388	17,985	6,268	6,980	1,151	–	–	4,874	117,517
Loans (net of allowance for loan losses)	15,698	11,662	5,568	10,208	18,855	128,918	97,938	29,761	90,058	408,666
Other										
Customers' liability under acceptances	1,240	501	563	705	2,617	2,393	1,671	263	–	9,953
Derivatives	2,349	5,028	2,338	2,353	1,627	14,939	12,401	33,786	1	74,822
Other financial assets	16,247	989	780	112	119	477	239	639	575	20,177
Total financial assets	$ 194,232	$41,249	$28,521	$20,482	$ 31,352	$153,697	$119,686	$ 82,096	$167,469	$ 838,784
Other non-financial assets	1,275	455	313	149	743	1,745	2	1,939	15,414	22,035
Total assets	$ 195,507	$41,704	$28,834	$20,631	$ 32,095	$155,442	$119,688	$ 84,035	$182,883	$ 860,819
Liabilities and equity										
Deposits (2)										
Unsecured borrowing	$ 22,589	$16,026	$31,266	$12,330	$ 16,785	$ 65,341	$ 25,978	$ 14,658	$281,237	$ 486,210
Secured borrowing	812	3,129	5,048	2,129	1,905	16,257	11,394	10,288	–	50,962
Covered bonds	–	–	–	–	–	7,851	9,987	3,470	–	21,308
Other										
Acceptances	1,240	501	563	705	2,617	2,393	1,671	263	–	9,953
Obligations related to securities sold short	47,128	–	–	–	–	–	–	–	–	47,128
Obligations related to assets sold under repurchase agreements and securities loaned	53,389	1,991	1,308	877	290	1,500	–	–	1,061	60,416
Derivatives	3,021	5,233	2,569	2,536	2,312	16,971	12,133	31,970	–	76,745
Other financial liabilities	20,995	1,090	720	261	336	667	391	3,969	60	28,489
Subordinated debentures	1,005	–	–	603	–	3,214	–	2,621	–	7,443
Trust capital securities	–	900	–	–	–	–	–	–	–	900
Total financial liabilities	$ 150,179	$28,870	$41,474	$19,441	$ 24,245	$114,194	$ 61,554	$ 67,239	$282,358	$ 789,554
Other non-financial liabilities	1,697	2,834	686	114	135	1,832	965	7,374	5,293	20,930
Equity	–	–	–	–	–	–	–	–	50,335	50,335
Total liabilities and equity	$ 151,876	$31,704	$42,160	$19,555	$ 24,380	$116,026	$ 62,519	$ 74,613	$337,986	$ 860,819
Off-balance sheet items										
Financial guarantees	$ 2,203	$ 854	$ 1,824	$ 1,714	$ 2,567	$ 3,166	$ 3,074	$ 139	$ 51	$ 15,592
Lease commitments	62	122	181	179	173	1,264	787	1,346	–	4,114
Commitments to extend credit	3,757	6,843	4,780	6,488	7,320	44,043	65,276	13,615	1,044	153,166
Other commitments	2,291	37	13	210	1,733	350	418	169	57,749	62,970
Total off-balance sheet items	$ 8,313	$ 7,856	$ 6,798	$ 8,591	$ 11,793	$ 48,823	$ 69,555	$ 15,269	$ 58,844	$ 235,842

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

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

(Millions of Canadian dollars)	Less than 1 month	1 to 3 months	3 to 6 months	6 to 9 months	9 to 12 months	1 year to 3 years	3 years to 5 years	5 years and greater	With no specific maturity	Total
	As at October 31, 2012									
Assets										
Cash and deposits with banks	$ –	$ –	$ –	$ –	$ –	$ –	$ –	$ –	$ 22,872	$ 22,872
Securities										
Trading (1)	74,067	102	694	37	11	296	360	4,911	40,305	120,783
Available-for-sale	3,698	6,749	2,496	1,543	491	4,963	5,838	12,998	2,052	40,828
Assets purchased under reverse repurchase agreements and securities borrowed (2)	65,988	22,677	7,473	5,211	3,385	2,205	–	–	5,318	112,257
Loans (net of allowance for loan losses) (2)	12,444	9,546	8,487	11,989	20,918	83,635	124,218	22,060	84,947	378,244
Other										
Customers' liability under acceptances	1,329	435	404	624	2,406	1,907	2,167	113	–	9,385
Derivatives	2,517	3,799	2,891	2,379	1,372	15,735	14,222	48,374	4	91,293
Other financial assets	24,912	952	618	169	637	216	113	190	–	27,807
Total financial assets	$184,955	$44,260	$23,063	$21,952	$29,220	$108,957	$146,918	$ 88,646	$155,498	$803,469
Other non-financial assets (2)	2,646	594	298	277	193	1,427	–	1,859	14,337	21,631
Total assets	$187,601	$44,854	$23,361	$22,229	$29,413	$110,384	$146,918	$ 90,505	$169,835	$825,100
Liabilities and equity										
Deposits (3)										
Unsecured borrowing	$ 36,012	$14,247	$21,947	$14,865	$22,299	$ 49,577	$ 22,470	$ 8,525	$252,947	$442,889
Secured borrowing	–	2,423	546	2,613	3,509	21,150	14,733	8,384	–	53,358
Covered bonds	2,592	–	–	–	–	3,204	2,499	3,677	–	11,972
Other										
Acceptances	1,329	435	404	624	2,406	1,907	2,167	113	–	9,385
Obligations related to securities sold short	40,756	–	–	–	–	–	–	–	–	40,756
Obligations related to assets sold under repurchase agreements and securities loaned (2)	58,494	1,835	1,009	560	654	–	–	–	1,480	64,032
Derivatives	2,793	4,794	2,162	2,701	1,979	19,703	15,659	46,969	1	96,761
Other financial liabilities (2)	25,789	652	816	291	437	274	108	3,730	–	32,097
Subordinated debentures	–	–	–	–	–	233	–	7,382	–	7,615
Trust capital securities	–	–	–	–	–	900	–	–	–	900
Total financial liabilities	$167,765	$24,386	$26,884	$21,654	$31,284	$ 96,948	$ 57,636	$ 78,780	$254,428	$759,765
Other non-financial liabilities (2)	1,707	2,087	329	199	912	2,096	729	7,211	4,037	19,307
Equity	–	–	–	–	–	–	–	–	46,028	46,028
Total liabilities and equity	$169,472	$26,473	$27,213	$21,853	$32,196	$ 99,044	$ 58,365	$ 85,991	$304,493	$825,100
Off-balance sheet items										
Financial guarantees	$ 340	$ 2,061	$ 2,445	$ 2,234	$ 1,941	$ 2,791	$ 2,532	$ 317	$ 22	$ 14,683
Lease commitments	58	117	174	172	167	1,246	856	1,258	–	4,048
Commitments to extend credit	3,273	3,603	3,956	4,064	7,448	36,992	57,871	10,169	1,033	128,409
Other commitments	145	614	707	1,102	2,110	374	181	163	56,141	61,537
Total off-balance sheet items	$ 3,816	$ 6,395	$ 7,282	$ 7,572	$11,666	$ 41,403	$ 61,440	$ 11,907	$ 57,196	$208,677

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

Contractual maturities of financial liabilities and off-balance sheet items – undiscounted basis

The following tables provide remaining contractual maturity analysis of our financial liabilities and off-balance sheet items. The amounts disclosed in the following table are the contractual undiscounted cash flows of all financial liabilities (i.e. par value or amount payable upon maturity). The amounts do not reconcile directly with those in our consolidated balance sheets as the table only incorporates cash flows relating to payments on maturity of the instrument and do not recognize premiums, discounts or mark-to-market adjustments recognized in the instruments' carrying value as at the balance sheet date. Financial liabilities are based upon earliest period in which they are required to be paid. For off-balance sheet items, the undiscounted cash flows potentially payable under financial guarantees and commitments to extend credit are classified on the basis of the earliest date they can be called.

Contractual maturities of financial liabilities and off-balance sheet items – undiscounted basis* — Table 60

	As at October 31, 2013					
(Millions of Canadian dollars)	On demand	Within 1 year	1 to 3 years	3 to 5 years	Over 5 years	Total
Financial liabilities						
Deposits (1)	$ 264,287	$ 128,884	$ 89,003	$ 46,895	$ 28,432	$ 557,501
Other						
Acceptances	–	5,626	2,393	1,671	263	9,953
Obligations related to securities sold short	–	47,128	–	–	–	47,128
Obligations related to assets sold under repurchase agreements and securities loaned	1,061	57,855	1,500	–	–	60,416
Other liabilities	60	23,378	635	406	4,095	28,574
Subordinated debentures	–	–	200	–	7,208	7,408
Trust capital securities	–	900	–	–	–	900
	265,408	263,771	93,731	48,972	39,998	711,880
Off-balance sheet items						
Financial guarantees (2)	5,850	9,550	181	11	–	15,592
Operating leases	–	717	1,264	787	1,346	4,114
Commitments to extend credit (2)	117,753	35,413	–	–	–	153,166
	123,603	45,680	1,445	798	1,346	172,872
Total financial liabilities and off balance-sheet items	$ 389,011	$ 309,451	$ 95,176	$ 49,770	$ 41,344	$ 884,752

	As at October 31, 2012					
(Millions of Canadian dollars)	On demand	Within 1 year	1 to 3 years	3 to 5 years	Over 5 years	Total
Financial liabilities						
Deposits (1), (3)	$ 237,643	$ 136,244	$ 73,722	$ 39,326	$ 19,902	$ 506,837
Other						
Acceptances	–	5,198	1,907	2,167	113	9,385
Obligations related to securities sold short	–	40,756	–	–	–	40,756
Obligations related to assets sold under repurchase agreements and securities loaned (3)	1,480	62,552	–	–	–	64,032
Other liabilities (3)	426	27,915	197	87	3,464	32,089
Subordinated debentures	–	–	199	–	7,217	7,416
Trust capital securities	–	–	900	–	–	900
	239,549	272,665	76,925	41,580	30,696	661,415
Off-balance sheet items						
Financial guarantees (2)	11,406	2,965	291	20	1	14,683
Operating leases	–	688	1,246	856	1,258	4,048
Commitments to extend credit (2)	128,239	170	–	–	–	128,409
	139,645	3,823	1,537	876	1,259	147,140
Total financial liabilities and off balance-sheet items	$ 379,194	$ 276,488	$ 78,462	$ 42,456	$ 31,955	$ 808,555

* This table represents an integral part of our 2013 Annual Consolidated Financial Statements.
(1) A major portion of relationship-based deposits are repayable on demand or at short notice on a contractual basis while, in practice, these customer balances form a core base, as explained in the preceding Deposit profile section, for our operations and liquidity needs.
(2) We believe that it is highly unlikely that all or substantially all of these guarantees and commitments will be drawn or settled within one year, and contracts may expire without being drawn or settled. The management of the liquidity risk associated with potential extensions of funds is outlined in the preceding Risk measurement section.
(3) Amounts have been revised from those previously presented.

Credit ratings

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

On October 23, 2013, S&P again affirmed our ratings with a stable outlook reflecting S&P's expectations that we will continue to manage our balance sheet prudently, maintain favourable asset quality, and generate consistent though slower earnings growth through our premier Canadian businesses.

On July 22, 2013, Moody's affirmed our ratings with a stable outlook. On January 28, 2013, Moody's removed systematic support from the subordinated debt ratings of RBC and all other Canadian banks, consistent with their announcement in October 2012.

On July 9, 2013, DBRS affirmed our ratings with a stable outlook, which are underpinned by our highly diversified business model, strong Canadian retail franchise and well positioned capital markets business.

On December 13, 2012, S&P upgraded our outlook to stable from negative and affirmed our long- and short-term issuer credit ratings. The outlook revision followed a review by S&P of banking sector industry and economic risks in Canada, which resulted in a revision to their Banking Industry Country Risk Assessment for Canada to group 2 from 1.

The following table presents our major credit ratings and outlooks as at December 4, 2013:

Credit ratings — **Table 61**

	As at December 4, 2013 (1)		
	Short-term debt	Senior long-term debt	Outlook
Moody's	P-1	Aa3	stable
S&P	A-1+	AA-	stable (2)
Fitch Ratings	F1+	AA	stable
DBRS	R-1(high)	AA	stable

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

(2) On December 13, 2012, S&P upgraded our outlook to stable from negative.

On October 23, 2013, Kroll Bond Rating Agency (KBRA), a registered National Recognized Statistical Rating Organization with the SEC, assigned us senior long-term and short-term debt and deposit ratings of AA and K1+, respectively, with a stable outlook. KBRA was requested to rate a commercial MBS multi-borrower transaction where RBC was one of four third party interest rate cap providers. Given KBRA's policy to rate all parties to a transaction, it was required to issue a rating on RBC. These ratings were unsolicited and we did not participate in the rating process.

Additional contractual obligations for rating downgrades

A lowering of our credit rating may have potentially adverse consequences for our funding capacity or access to the capital markets, may also affect our ability, and the cost, to enter into normal course derivative or hedging transactions and may require us to post additional collateral under certain contracts. However, we estimate, based on periodic reviews of ratings triggers embedded in our existing businesses and of our funding capacity sensitivity, that a minor downgrade would not significantly influence our liability composition, funding access, collateral usage and associated costs. The following table presents the additional collateral obligations required at the reporting date in the event of a one-, two- or three-notch downgrade to our credit ratings. These additional collateral obligations are incremental requirements for each successive downgrade and do not represent the cumulative impact. The amounts reported change periodically as a result of several factors including the transfer of trading activity to centrally cleared financial market infrastructures and exchanges, the expiration of transactions with downgrade triggers, the imposition of internal limitations on new agreements to exclude downgrade triggers, as well as normal course mark to market of positions with collateralized counterparties moving from a negative to a positive position. There is no outstanding senior debt issued in the market that contains rating triggers which would lead to early prepayment of principal.

Additional contractual obligations for rating downgrades — **Table 62**

	2013			2012		
(Millions of Canadian dollars)	One-notch downgrade	Two-notch downgrade	Three-notch downgrade	One-notch downgrade	Two-notch downgrade	Three-notch downgrade
Contractual derivatives funding or margin requirements	$ 616	$ 171	$ 762	$ 1,582	$ 256	$ 248
Other contractual funding or margin requirements (1)	490	187	95	678	170	–

(1) Includes GICs issued by our municipal markets business out of New York and London.

Insurance risk

Insurance risk refers to the potential financial loss that may arise where the amount, timing and/or frequency of benefit payments under insurance or reinsurance contracts are different than expected. Insurance risk does not include other risks covered by other parts of our risk management framework (e.g., credit, market and operational risk).

We have put in place an Insurance Risk Framework designed to identify, manage, and report on the insurance risks that face the organization. Insurance risk is managed through our infrastructure, systems, controls, and monitoring. Specific risk management policies, methodologies, and programs have been developed to support the management of risk including: delegated risk approval authorities, a product development and pricing process, and experience study analysis.

Regulatory compliance risk

Regulatory compliance risk is the risk of potential non-conformance with laws, rules, regulations, prescribed practices, or ethical standards in any jurisdiction in which we operate. Issues regarding compliance with laws and regulations can arise in a number of areas in a large complex financial institution such as RBC, and are often the result of inadequate or failed internal processes, people or systems.

Laws and regulations are in place to protect the financial and other interests of our clients, investors and the public. Changes to laws, including tax laws, regulations or regulatory policies, as well as the changes in how they are interpreted, implemented or enforced, could adversely affect us, for example by lowering barriers to entry in the businesses in which we operate or increasing our costs of compliance. Further, there is no assurance that we always will be or will be deemed to be in compliance with laws, regulations or regulatory policies. Accordingly, it is possible that we could receive a judicial or regulatory judgment or decision that results in fines, damages, and other costs or injunctions or loss of licenses or registrations that would damage our reputation and negatively impact our earnings. In addition, we are subject to litigation arising in the ordinary course of our business and the adverse resolution of any litigation could have a material adverse effect on our results or could give rise to significant reputational damage, which in turn could impact our future business prospects.

Global compliance has developed a Regulatory Compliance Management Framework consistent with regulatory expectations from OSFI and other regulators. The framework is designed to manage and mitigate the risks associated with failing to comply with, or adapt to, current and changing laws and regulations in the jurisdictions in which we operate. Within the framework there are five elements that form a cycle by which all regulatory compliance risk management programs are developed, implemented and maintained. The first element is intended to ensure our regulatory compliance programs evolve alongside our business activities and operations. The second element is intended to ensure regulatory compliance risks are identified and assessed appropriately so regulatory compliance programs are designed in a manner to most effectively meet regulatory requirements. The third element relates to the design and implementation of specific controls. The fourth element is intended to ensure appropriate monitoring and oversight of the effectiveness of the controls. Lastly, the fifth element is intended to ensure the timely escalation and resolution of issues, and clear and transparent reporting. This is a critical step in enabling senior management and the Board of Directors to effectively perform their management and oversight responsibilities.

Operational risk

Operational risk is the risk of loss or harm resulting from inadequate or failed internal processes, people and systems or from external events.

Operational risk is embedded in all our activities, including the practices and controls used to manage other risks. Failure to manage operational risk can result in direct or indirect financial loss, reputational impact, regulatory censure, or failure in the management of other risks such as credit or market risk.

We have put in place an Operational Risk Framework which is founded on the principles of our Enterprise Risk Management Framework and sets out the elements that support these principles with respect to the management of operational risk. This framework is dynamic, articulating our strategy regarding management, measurement and reporting of operational risk. Its foundation is the Three Lines of Defence risk governance model as responsibility for risk management is shared across the organization. This model encompasses the practices, requirements, roles and responsibilities for a fully comprehensive, coordinated enterprise-wide approach for the management of operational risk.

Operational risk is difficult to measure in a complete and precise manner, given that exposure to operational risk is often implicit, bundled with other risks, or otherwise not taken on intentionally. In the financial services industry, measurement tools and methodologies continue to evolve. The two options available to us under Basel II are the Advanced Measurement Approach (AMA) and the Standardized Approach. Currently, we employ the Standardized Approach for measuring operational risk and we have made significant progress to meet requirements to achieve Advanced Measurement Approach status.

Operational risk is managed through our infrastructure, controls, systems and people, complemented by central groups focusing on enterprise-wide management and oversight of specific operational risks such as fraud, privacy, outsourcing, and business disruption, as well as people and systems risks.

Specific programs, policies, standards and methodologies have been developed to support the management of operational risk. These programs are (i) Risk and Control Assessment and monitoring of business environment and control factors with Key Risk indicators, (ii) Operational Risk Event data collection and analysis, (iii) External Event – Industry loss analysis, and (iv) Scenario Analysis.

Strategic risk

Strategic risk is the risk that the enterprise or particular business areas will make inappropriate strategic choices, or will be unable to successfully implement selected strategies or related plans and decisions.

Responsibility for selecting and successfully implementing business strategies is mandated to the individual heads of the businesses. Oversight of strategic risk is the responsibility of the heads of the business segments, the Enterprise Strategy Office, GE, and the Board of Directors. Management of strategic risk is supported by the Enterprise Strategy Group through the use of an Enterprise Strategy Framework.

Reputation risk

Reputation risk is the risk that an activity undertaken by an organization or its representatives will impair its image in the community or lower public confidence in it, resulting in the loss of business, legal action or increased regulatory oversight.

Reputation risk can arise from a number of events and primarily occurs in connection with credit risk, regulatory, legal and operational risks. Operational failures and non-compliance with laws and regulations can have a significant reputational impact on us.

We have put in place a Reputation Risk Framework which provides an overview of our approach to the management of this risk. It focuses on our organizational responsibilities, and controls in place to mitigate reputation risks.

The following principles guide our management of reputation risk:

- We must operate with integrity at all times in order to sustain a strong and positive reputation;
- Protecting our reputation is the responsibility of all our employees, including senior management and extends to all members of the Board of Directors.

Competitive risk

The competition for clients among financial services companies in the markets in which we operate is intense. Client loyalty and retention can be influenced by a number of factors, including new technology used or services offered by our competitors, relative service levels, relative prices, product and service attributes, our reputation and actions taken by our competitors. Other companies, such as insurance companies and non-financial companies, are increasingly offering services traditionally provided by banks. This competition could also reduce net interest income, fee revenue and adversely affect our results.

Overview of other risks

In addition to the risks described in the Risk management section, there are other risk factors, described below, which may adversely affect our businesses and financial results. The following discussion is not exhaustive as other factors could also adversely affect our results.

Business and economic conditions

Our earnings are significantly affected by the general business and economic conditions in the geographic regions in which we operate. These conditions include consumer saving and spending habits as well as consumer borrowing and repayment patterns, business investment, government spending, the level of activity and volatility of the capital markets and inflation. For example, an economic downturn may result in high unemployment and lower family income, corporate earnings, business investment and consumer spending, and could adversely affect the demand for our loan and other products and result in higher provisions for credit losses. Given the importance of our Canadian operations, an economic downturn in Canada or in the U.S. impacting Canada would largely affect our personal and business lending activities in our Canadian Banking businesses, including cards, and could significantly impact our results of operations.

Economic conditions in the Eurozone continue to show moderate signs of improvement as the risks of a sovereign default and exit from the currency union have lessened, although there continues to be risks to the growth outlook. We continue to follow market events very closely, and manage our exposure accordingly. Overall, we continue to transact business in a prudent manner and remain comfortable with our exposures in Europe, which are with well-rated counterparties mainly located in core European countries. For further details, refer to the Credit risk section.

In addition to our net exposure to Europe mentioned above, we are also subject to indirect exposure. We have implemented processes to monitor and mitigate indirect credit risk including specific controls related to the management of derivative and repo-style transaction exposures. Indirect market risk related to increased volatility resulting from European sovereign debt concerns are monitored through regular market risk stress testing and hypothetical scenario analysis. From an operational risk perspective, we have implemented contingency planning in the event of a crisis in the Eurozone economy.

Our analysis indicates that further deterioration in the Eurozone economies will result in adverse effects which are within our ability to manage as established through our stress testing, balance sheet analysis and operational assessments.

Our earnings are also sensitive to changes in interest rates. A continuing low interest rate environment in Canada, the U.S. and globally would result in net interest income being unfavourably impacted by spread compression largely in Personal & Commercial Banking and Wealth Management. While an increase in interest rates would benefit our businesses that are currently impacted by spread compression, a significant increase in interest rates could also adversely impact household balance sheets. This could result in credit deterioration which might negatively impact our financial results, particularly in some of our Personal & Commercial Banking and Wealth Management businesses.

Capital Markets and Investor & Treasury Services would be negatively impacted if global capital markets deteriorate resulting in lower average fee-based client assets and transaction volumes and trading volatility. In Wealth Management, weaker market conditions would lead to lower average fee-based client assets and transaction volumes. Worsening of financial and credit market conditions may adversely affect our ability to access capital markets on favourable terms and could negatively affect our liquidity, resulting in increased funding costs and lower transaction volumes in Capital Markets and Investor & Treasury Services. For further details on economic and market factors which may impact our financial performance, refer to the Wealth Management, Investor & Treasury Services and Capital Markets sections.

Government fiscal, monetary and other policies

Our businesses and earnings are affected by the fiscal, monetary or other policies that are adopted by the Bank of Canada and various other Canadian regulatory authorities, the Board of Governors of the Federal Reserve System in the U.S. and other U.S. government authorities, as well as those adopted by international regulatory authorities and agencies in jurisdictions in which we operate. Such policies can also adversely affect our clients and counterparties in Canada, the U.S. and internationally, which may increase the risk of default by such clients and counterparties.

Ability to attract and to retain employees

Competition for qualified employees is intense within the financial services industry and from non-financial industries looking to recruit. Although our goal is to retain and attract qualified employees, there is no assurance that we will be able to do so.

Accuracy and completeness of information on clients and counterparties

When deciding to extend credit or enter into other transactions with clients and counterparties, we may rely on information provided by or on behalf of clients and counterparties, including audited financial statements and other financial information. We may also rely on representations of clients and counterparties as to the completeness and accuracy of that information. Our financial results could be adversely impacted if the financial statements and other financial information relating to clients and counterparties on whom we rely do not comply with GAAP or are materially misleading.

Development and integration of our distribution networks

We regularly explore opportunities to expand our distribution networks, either through acquisitions or organically by adding, for example, new bank branches, insurance offices, online savings accounts and ATMs in high-growth, receptive markets. However, if we are not able to develop or integrate these distribution networks effectively, our results of operations and financial condition may be negatively affected.

Model risk

The use of models plays an important role in many of our business activities. We use a variety of models for many purposes, including the valuation of financial products, risk measurement and management of different types of risk. Model risk is the risk of error in the design, development, implementation or subsequent use of models. We have established an enterprise-wide Model Risk Management Framework, including principles, policies and procedures, roles and responsibilities to manage model risk. One of the key factors in the framework to mitigate model risk is independent validation.

Information technology risk

We use information technology for business operations and the enablement of strategic business goals and objectives. Information technology risk is the risk to our business associated with the use, ownership, operation, involvement, influence and adoption of information technology within the enterprise. It consists of information technology related events that could potentially have an adverse impact on our business. Such events could result in business interruption, service disruptions, theft of intellectual property and confidential information, additional regulatory scrutiny, litigation and reputational damage. To manage our information technology risk, we have established an enterprise-wide Information Technology Risk Management Framework.

Social media risk

The scale and profile of social media has grown to present a number of risks. These risks include brand and reputational damage, information leaks, non-compliance with regulatory requirements and governance risk. To manage the risks associated with social media, we have implemented an enterprise-wide policy as well as business unit policies on the usage of external social media, which sets out the requirements for the business and corporate use of social media and is part of our larger Social Media Governance Framework.

Environmental risk

Environmental risk is the risk of loss to financial, operational or reputational value resulting from the impact of environmental issues. It arises from our business activities and our operations. For example, the environmental issues associated with our clients' purchase and sale of contaminated property or development of large-scale projects may give rise to credit and reputation risk. Operational and legal risks may arise from environmental issues at our branches, offices or data processing centres.

Corporate Environmental Affairs (CEA) sets enterprise-wide policy requirements for the identification, assessment, control, monitoring and reporting of environmental risk. Oversight is provided by GE and the Corporate Governance and Public Policy Committee (CG&PPC) of the Board of Directors. Business segments and corporate functions are responsible for incorporating environmental risk management requirements and controls within their operations. The CEA Group also provides advisory services and support to business segments on the management of specific environmental risks in business transactions.

Periodically, we verify that our environmental risk management policies and processes are operating as intended. On an annual basis, and more frequently as required, environmental risk management activities, issues, and trends are reported to GE and to the CG&PPC of the Board of Directors. Failure to adequately manage environmental risk could adversely impact our results and/or significantly impact our reputation.

For more information on RBC and environmental risk management, visit our website at rbc.com/community-sustainability/environment/responsible-financing.html.

Other factors

Other factors that may affect actual results include changes in government trade policy, changes in accounting standards, including their effect on our accounting policies, estimates and judgements, the timely and successful development of new products and services, our ability to cross-sell more products to customers, technological changes and our reliance on third parties to provide components of our business infrastructure, the failure of third parties to comply with their obligations to us and our affiliates as such obligations relate to the handling of personal information, fraud by internal or external parties, the possible impact on our business from disease or illness that affects local, national or global economies, disruptions to public infrastructure, including transportation, communication, power and water, international conflicts and other political developments including those relating to the war on terrorism, and our success in anticipating and managing the associated risks.

We caution that the foregoing discussion of risk factors, many of which are beyond our control, is not exhaustive and other factors could also affect our results.

For further details on our contingencies, including litigation, refer to Note 26 of our 2013 Annual Consolidated Financial Statements.

Capital management

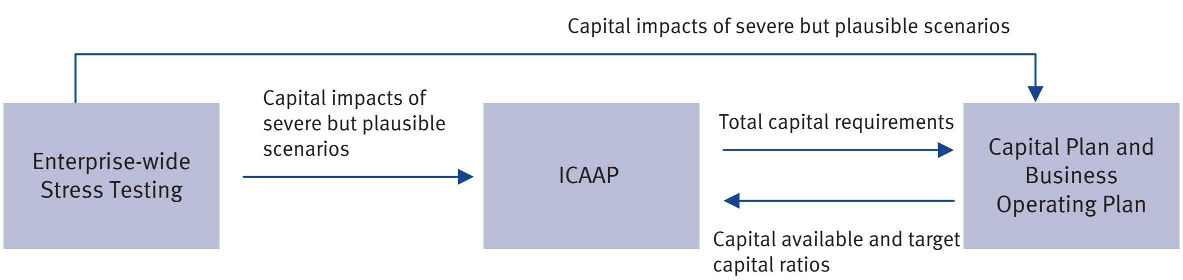
We actively manage our capital to maintain strong capital ratios and high ratings while providing strong returns to our shareholders. In addition to the regulatory requirements, we consider the expectations of rating agencies, depositors and shareholders, as well as our business plans, stress tests, peer comparisons and our internal capital ratio targets. Our goal is to optimize our capital usage and structure, and provide support for our business segments and clients and better returns for our shareholders, while protecting depositors and senior creditors.

Capital management framework

Our capital management framework provides the policies and processes for defining, measuring, raising and investing all types of capital in a coordinated and consistent manner. It includes the overall approach of capital management, including guiding principles as well as roles and responsibilities relating to capital adequacy and transactions, dividends, solo capital and management of risk-weighted assets and gross-adjusted assets or total exposures. We manage and monitor capital from several perspectives, including regulatory capital, economic capital and subsidiary capital.

Our capital planning is a dynamic process which involves various teams including Finance, Corporate Treasury, GRM and Economics, and covers internal capital ratio targets, potential capital transactions as well as projected dividend payouts and share repurchases. The integral parts of our capital planning comprise business operating plan, Enterprise-wide stress testing, Internal Capital Adequacy Assessment Process (ICAAP), along with the considerations of regulatory capital requirements and accounting changes, internal capital requirements, rating agency metrics and solo capital.

Our capital plan is established on an annual basis and is aligned with the management actions included in the annual business operating plan, which includes forecast growth in assets and earnings taking into account our business strategies, projected market and economic environment and peer positioning. This includes incorporating potential capital transactions based on our projected internal capital generation, business forecasts, market conditions and other developments, such as accounting and regulatory changes that may impact capital requirements. All of the components in the capital plan are monitored throughout the year and are revised as appropriate.



Our Enterprise-wide stress testing and ICAAP provide key inputs for capital planning including setting the appropriate internal capital ratio targets. The stress scenarios are evaluated across the organization, and results are integrated to develop an enterprise-wide view of financial impacts and capital requirements, which in turn facilitate the planning of mitigating actions to absorb exceptional adverse events. ICAAP is an OSFI mandated annual process to assess capital adequacy and requirements to cover all material risks, with a cushion to cover severe but plausible contingencies. In accordance with the OSFI guideline, the major components of our ICAAP process include comprehensive risk assessment, stress testing, capital assessment and planning (both economic and regulatory capital), board and senior management oversight, monitoring and reporting and internal control review.

Our internal capital targets are established to maintain robust capital positions in excess of OSFI's Basel III "all-in" regulatory targets, which include minimum capital requirements plus a capital conservation buffer that can absorb losses during periods of stress. The "all-in" methodology includes all regulatory adjustments that will be required by 2019, while retaining the phase-out rules for non-qualifying capital instruments, as per OSFI's Basel III Capital Adequacy Requirements (CAR) guideline published in December 2012. The stress test results of our Enterprise-wide stress testing and ICAAP are incorporated into the OSFI capital conservation buffer, with a view to ensuring the bank has adequate capital to underpin risks and absorb losses under all plausible stress scenarios given our risk profile and appetite. In addition, we include a discretionary cushion on top of the OSFI regulatory targets to maintain capital strength for forthcoming regulatory and accounting changes, peer comparatives, rating agencies sensitivities and solo capital level.

The Board of Directors is responsible for the ultimate oversight of capital management, including the annual review and approval of capital plan. ALCO and GE share management oversight responsibility for capital management and receive regular reports detailing our compliance with established limits and guidelines. The Risk Committee is responsible for the governance of our capital management framework. The Audit and Risk Committees approve the capital plan which includes the approval of the ICAAP process. The Audit Committee is also responsible for the ongoing review of internal controls over capital management.

Basel III

Effective the first quarter of 2013, our regulatory capital requirements are determined on a Basel III "all-in" basis as per OSFI guidelines. Prior to the first quarter of 2013, our regulatory capital requirements were under the Basel II framework.

The top corporate entity to which Basel III applies at the consolidated level is Royal Bank of Canada.

Under Basel III, banks select from among alternative approaches to calculate their minimum regulatory capital required to underpin credit, market and operational risks.

We adopted the Basel III IRB approach to calculate credit risk capital for consolidated regulatory reporting purposes. While the majority of our credit risk exposures are reported under the Basel III IRB approach for regulatory capital purposes, certain portfolios considered non-material from a consolidated perspective continue to use the Basel III Standardized approach for credit risk (for example, our Caribbean banking operations). For consolidated regulatory reporting of operational risk capital, we continue to use the Standardized approach. For consolidated regulatory reporting of market risk capital, we use both Internal Models-based and Standardized approaches.

In December 2010, the BCBS issued "Basel III: A global regulatory framework for more resilient banks and banking systems", which outlines the capital and liquidity requirements for global banks, with the objective of promoting financial stability and is intended to ensure sustainable economic growth. The BCBS sets out the Basel III transitional requirements for Common Equity Tier 1 (CET1), Tier 1 and Total capital ratios at 3.5%, 4.5% and 8%, respectively for 2013, which will be fully phased-in to 7%, 8.5% and 10.5%, respectively (including minimums plus capital conservation buffer of 2.5%) by January 1, 2019. The BCBS also released the Non-Viability Contingent Capital (NVCC) requirements in January 2011 with an effort to ensure the loss absorbency of regulatory capital instruments at the point of non-viability. In August 2011, OSFI issued an advisory outlining the NVCC principles and requirements, including a full and permanent conversion of non-common capital instruments into common shares upon a trigger event, effective the first quarter of 2013.

Effective the first quarter of 2013, OSFI expected Canadian banks to meet the "all-in" targets (minimum ratios plus the capital conservation buffer – January 1, 2019 BCBS requirements) for CET1 ratio, and Tier 1 and Total capital ratios by the first quarter of 2014. The final OSFI Basel III CAR guideline issued in 2013 also delayed the implementation of the CVA capital charge rules until January 1, 2014. In August 2013, OSFI published the advisory related to the phase-in options for the CVA capital charge over a period of five years, beginning in 2014.

In June 2013, BCBS published a consultative paper on "Revised Basel III leverage ratio framework and disclosure requirements" requiring public disclosure starting January 1, 2015. BCBS will continue to test the minimum requirement of 3% for the leverage ratio, and make any adjustments to the definition and calibration of the leverage ratio by 2017, with a view to migrating to Pillar 1 treatment on January 1, 2018 based on appropriate review and calibration. Starting January 1, 2013, Canadian banks are required to report the Basel III leverage ratio and its components to OSFI. The proposed leverage ratio is intended to act as a supplementary measure to risk-based capital requirements, and is currently defined as Basel III Tier 1 capital divided by Total exposures which include both on- and off-balance sheet exposures.

OSFI released the list of six Canadian banks, including RBC, which are designated as domestic systemically important banks (D-SIBs) in March 2013, for which an additional 1% risk weighted capital surcharge will be required commencing January 1, 2016. In July 2013, BCBS published a revised document on "Global systemically important banks (G-SIB): updated assessment methodology and the higher loss absorbency requirement". BCBS requires all banks with a Basel III leverage ratio total exposure exceeding EUR 200 billion as well as those designated as G-SIBs in the prior year to make publicly available the 12 indicators used in the assessment methodology by 2014, with the goal of enhancing the transparency of the relative scale of banks' potential global systemic importance and data quality. As indicated by OSFI in October 2013, Canadian banks, including RBC, that meet the BCBS size threshold and are not designated as G-SIBs in the previous year will be required to disclose in the report to shareholders the 12 indicators only (not the full template) for financial year ends 2013 and 2014 no later than the first quarter of 2015. For subsequent year ends, disclosure should be made as part of a bank's annual report to shareholders.

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

Basel III – OSFI regulatory target **Table 63**

Basel III Capital Ratios	OSFI regulatory target requirements for large banks under Basel III					RBC pro forma capital ratios as at October 31, 2012 (2)	RBC capital ratios as at October 31, 2013	Meet or exceed OSFI target ratios	OSFI target requirements as of (1)
	Minimum	Capital Conservation Buffer	Minimum including Capital Conservation Buffer	D-SIBs Surcharge (1)	Minimum including Capital Conservation Buffer and D-SIBs surcharge (1)				
Common Equity Tier 1 (%)	› 4.5%	2.5%	› 7.0%	1.0%	› 8.0%	8.9%	9.6%	✓	2013/2016
Tier 1 capital (%)	› 6.0%	2.5%	› 8.5%	1.0%	› 9.5%	11.3%	11.7%	✓	2014/2016
Total capital (%)	› 8.0%	2.5%	› 10.5%	1.0%	› 11.5%	13.9%	14.0%	✓	2014/2016

(1) The D-SIBs surcharge will be applicable to risk weighted capital commencing January 1, 2016.
(2) The 2012 Basel III pro forma capital ratios have been restated to reflect the delayed regulatory implementation of a CVA capital charge requirement.

The following table provides details on our regulatory capital, RWA and capital ratios. Our capital position remained strong during the year and our capital ratios remain well above OSFI regulatory targets:

Regulatory capital, RWA and capital ratios

Regulatory capital, risk-weighted assets (RWA) and capital ratios **Table 64**

As at October 31 (Millions of Canadian dollars, except percentage and multiple amounts)	Basel III (1) 2013	Basel III Pro forma (2) 2012	Basel II 2012
Capital			
CET1	$ 30,541	$ 27,447	n.a. (1)
Tier 1 capital	37,196	34,843	36,807
Total capital	44,716	42,575	42,347
RWA			
Credit risk	$ 232,641	$ 231,197	$ 209,559
Market risk	42,184	35,049	30,109
Operational risk	44,156	40,941	40,941
RWA	$ 318,981	$ 307,187	$ 280,609
Capital ratios and multiples (3)			
CET1 ratio (1)	9.6 %	8.9 %	n.a. (1)
Tier 1 capital ratio	11.7 %	11.3 %	13.1 %
Total capital ratio	14.0 %	13.9 %	15.1 %
Assets-to-capital multiple (4)	16.6 X	16.0 X	16.7 X
GAA (billions) (4)	$ 807.0	$ 742.7	$ 740.8

(1) Effective the first quarter of 2013, we calculate capital ratios and Assets-to-capital multiple using the Basel III framework. The capital ratios are calculated on the "all-in" basis. The prior periods' capital ratios and Assets-to-capital multiple were calculated using the Basel II framework. Basel III and Basel II are not directly comparable. The CET1 ratio is a new regulatory measure under the Basel III framework. The CET1 capital and ratio are not applicable (n.a.) for prior periods as Basel III was adopted prospectively, effective the first quarter of 2013.

(2) The 2012 Basel III pro forma capital, RWA, capital ratios and multiples have been restated to reflect the delayed regulatory implementation of the CVA capital charge requirement.

(3) To enhance comparability among other global financial institutions, the following are our transitional capital ratios. The transitional CET1, Tier 1 and Total capital ratios as at October 31, 2013 were 11.9%, 11.9% and 13.9% respectively. Transitional is defined as capital calculated according to the current year's phase-in of regulatory adjustments and phase-out of non-qualifying capital instruments.

(4) Effective the first quarter of 2013, Assets-to-capital multiple and GAA are calculated on a transitional basis as per OSFI CAR Guideline.

Basel III regulatory capital and capital ratios

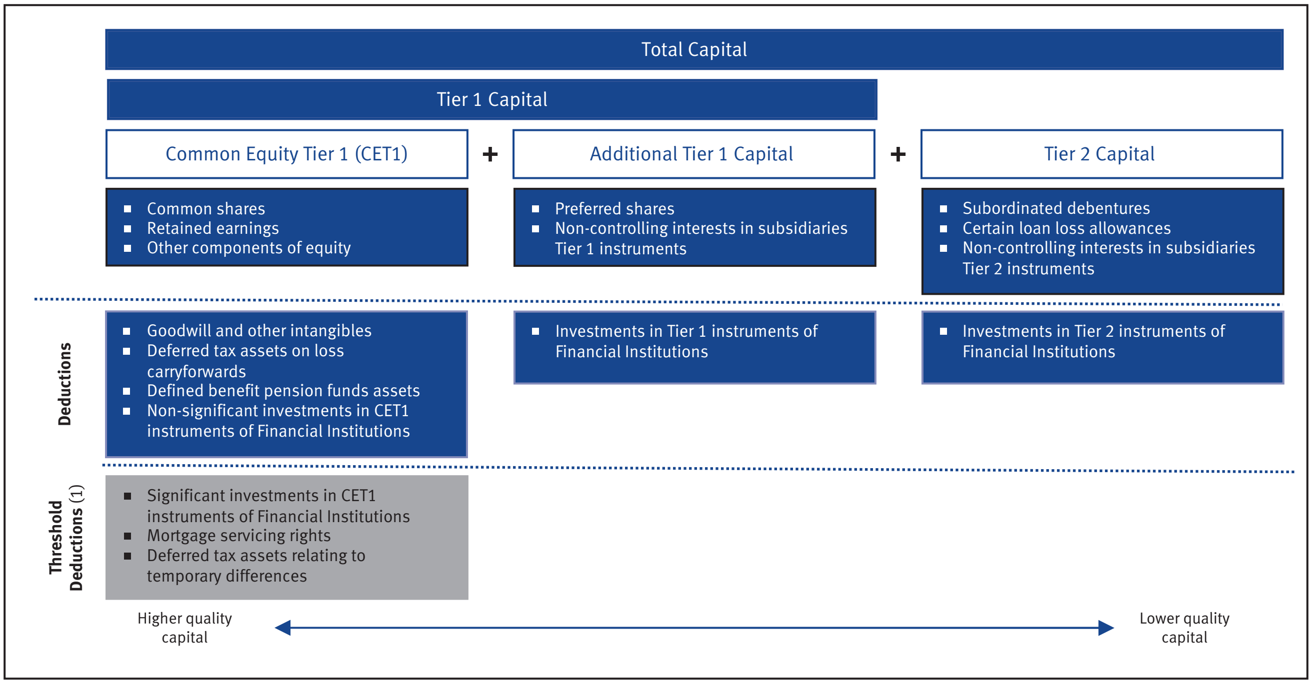
Under Basel III, regulatory capital includes CET1, Tier 1 and Tier 2 capital.

CET1 capital comprises the highest quality of capital. Regulatory adjustments under Basel III are expanded to include full deductions of certain items and additional capital components that are subject to threshold deductions.

Tier 1 capital comprises predominantly CET1 and additional Tier 1 items. Tier 2 capital includes subordinated debentures that meet certain criteria, certain loan loss allowances and non-controlling interests in subsidiaries' Tier 2 instruments. Total capital is defined as the sum of Tier 1 and Tier 2 capital.

Regulatory capital ratios are calculated by dividing CET1, Tier 1 and Total capital by RWA. Pending the BCBS's review of the final Basel III leverage ratio framework, OSFI requires Canadian banks to maintain an Assets-to-capital multiple (which is calculated by dividing Gross-Adjusted Assets (GAA) by Total capital calculated on a Basel III transitional basis) at or below a maximum level prescribed by OSFI on a continuous basis. All items that are deducted from capital are excluded from total assets.

The following chart provides a summary of the major components of CET1, Tier 1, Tier 2 and Total capital:



(1) First level: The amount by which each of the items exceeds a 10% threshold of CET1 capital (after all deductions but before threshold deductions) will be deducted from CET1 capital. Second level: The aggregate amount of the three items not deducted from the first level above and in excess of 15% of CET1 capital after regulatory adjustments will be deducted from capital, and the remaining balance not deducted will be risk-weighted at 250%.

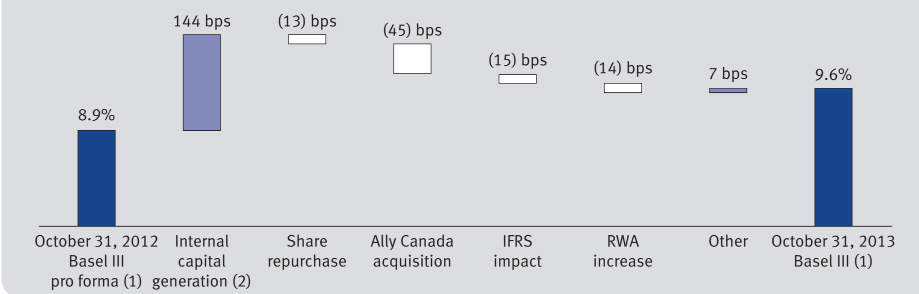
Regulatory capital **Table 65**

(Millions of Canadian dollars, except percentage and otherwise noted)	Basel III All-in basis 2013	Basel II 2012
Common Equity Tier 1 capital: instruments and reserves and regulatory adjustments		
Directly issued qualifying common share capital (and equivalent for non-joint stock companies)	$ 14,607	$ 14,354
Retained earnings	28,124	24,714
Other components of equity (and other reserves)	1,207	195
Common share capital issued by subsidiaries and held by third parties (amount allowed in group CET1)	11	–
Regulatory adjustments applied to Common Equity Tier 1 under Basel 3	(13,408)	–
Common Equity Tier 1 capital (CET1) (1)	30,541	
Additional Tier 1 capital: instruments and regulatory adjustments		
Directly issued qualifying Additional Tier 1 instruments plus related stock surplus	–	7,394
Directly issued capital instruments to phase out from Additional Tier 1	6,652	–
Additional Tier 1 instruments issued by subsidiaries and held by third parties (amount allowed in group AT1)	3	34
Regulatory adjustments applied to Additional Tier 1 under Basel 3	–	(9,884)
Additional Tier 1 capital (AT1)	6,655	
Tier 1 capital (T1 = CET1 + AT1)	$ 37,196	$ 36,807
Tier 2 capital: instruments and provisions and regulatory adjustments		
Directly issued qualifying Tier 2 instruments plus related stock surplus	–	7,495
Directly issued capital instruments subject to phase out from Tier 2	7,234	–
Tier 2 instruments issued by subsidiaries and held by third parties (amount allowed in group Tier 2)	24	–
Collective allowance	262	191
Other	–	221
Regulatory adjustments applied to Tier 2 under Basel 3	–	(2,367)
Tier 2 capital (T2)	$ 7,520	$ 5,540
Total capital (TC = T1 + T2)	$ 44,716	$ 42,347

(1) CET1 capital is a new regulatory measure under the Basel III framework. CET1 capital is not applicable for the prior period as Basel III was adopted prospectively, effective the first quarter of 2013.

2013 (Basel III) vs. 2012 (Pro forma Basel III)

Continuity of CET1 ratio (Basel III)



(1) Represents rounded figures.
(2) Internal capital generation of $4.4 billion represents Net income available to shareholders less common and preferred shares dividends.

Our Basel III CET 1 ratio was 9.6% as at October 31, 2013 as compared to our pro forma CET1 ratio of 8.9% as at October 31, 2012, up 70 bps mainly reflecting internal capital generation, partially offset by the acquisition of Ally Canada, the phase-in impact of IFRS and an increase in RWA. Common share repurchases reduced the CET1 ratio by approximately 13 bps.

We estimated that our Basel III CET 1 ratio as at October 31, 2013 would be reduced by the following two adjustments: (i) approximately 30 bps based on a 57% CET1 phase-in as per OSFI advisory, if the 2014 CVA capital charge was currently in effect; and (ii) approximately 10 bps, if the future accounting changes related to IAS 19 amendments were currently in effect. For further details, refer to Accounting and control matters section and Note 2 of our 2013 Annual Consolidated Financial Statements.

Our Basel III Tier 1 capital ratio of 11.7%, increased 40 bps from our pro forma Basel III Tier 1 capital ratio of 11.3% as at October 31, 2012 largely due to the factors noted in relation to the CET1 capital ratio above. The phase-out of non-qualifying Additional Tier 1 capital as well as the redemption of preferred shares series AH reduced Tier 1 capital ratio by approximately 19 bps and 7 bps respectively.

Our Total capital ratio of 14.0%, increased 10 bps from our pro forma Basel III Total capital ratio of 13.9% as at October 31, 2012, largely due to the factors noted in relation to the Tier 1 capital ratio above.

As at October 31, 2013, our Assets-to-capital multiple was 16.6 times compared to our pro forma Assets-to-capital multiple as at October 31, 2012 of 16.0 times a year ago largely due to higher GAA including the acquisition of Ally Canada, share repurchases and the IFRS transition impact, partially offset by internal capital generation.

Basel III RWA

Under Basel III, the RWA requirement is more stringent than Basel II, largely reflecting the 250% risk-weighted threshold items not deducted from CET1 capital, increased and new capital charges for credit risk related to asset value correlation for financial institutions and exposures cleared through central counterparties, as well as the conversion of certain Basel II capital deductions to RWA.

OSFI requires banks to meet minimum risk-based capital requirements for exposures to credit risk, operational risk, and, where they have significant trading activity, market risk. RWA is calculated for each of these risk types and added together to determine total RWA. In addition, OSFI requires the minimum risk-based capital to be no less than 90% of the capital requirements as calculated under the Basel I standards. If the capital requirement is less than 90%, a transitional adjustment to RWA must be applied as prescribed by OSFI CAR guidelines.

RWA **Table 66**

	Basel III						Basel II
	2013						2012
		Average	Risk-weighted assets				
As at October 31 (Millions of Canadian dollars, except percentage amount)	Exposure (1)	of risk weights (2)	Standardized approach	Advanced approach	Other	Total	Total
Credit risk							
Lending-related and other							
Residential mortgages	$ 183,461	5%	$ 908	$ 7,582	$ –	$ 8,490	$ 8,713
Other retail	219,150	22%	6,198	42,220	–	48,418	38,633
Business	199,344	51%	15,331	86,449	–	101,780	100,357
Sovereign	46,302	8%	1,687	2,223	–	3,910	3,266
Bank	73,492	7%	2,168	3,241	–	5,409	4,801
Total lending-related and other	$ 721,749	23%	$ 26,292	$ 141,715	$ –	$ 168,007	$ 155,770
Trading-related							
Repo-style transactions	$ 251,648	1%	$ 57	$ 2,578	$ 27	$ 2,662	$ 2,235
Derivatives	67,055	25%	3,005	13,095	389	16,489	11,908
Total trading-related	$ 318,703	6%	$ 3,062	$ 15,673	$ 416	$ 19,151	$ 14,143
Total lending-related and other and trading-related	$ 1,040,452	18%	$ 29,354	$ 157,388	$ 416	$ 187,158	$ 169,913
Bank book equities	1,723	99%	–	1,712	–	1,712	1,206
Securitization exposures	40,460	17%	280	6,509	–	6,789	6,584
Regulatory scaling factor	n.a.	n.a.	n.a.	9,813	–	9,813	9,187
Other assets	35,234	77%	n.a.	n.a.	27,169	27,169	22,669
Total credit risk	$ 1,117,869	21%	$ 29,634	$ 175,422	$ 27,585	$ 232,641	$ 209,559
Market risk							
Interest rate			$ 2,509	$ 852	$ –	$ 3,361	$ 6,547
Equity			322	3,008	–	3,330	1,916
Foreign exchange			1,551	110	–	1,661	1,704
Commodities			971	19	–	990	844
Specific risk			16,169	5,779	–	21,948	9,695
Incremental risk charge			–	10,894	–	10,894	9,403
Total market risk			$ 21,522	$ 20,662	$ –	$ 42,184	$ 30,109
Operational risk			$ 44,156	n.a.	n.a.	$ 44,156	$ 40,941
Total risk-weighted assets	$ 1,117,869		$ 95,312	$ 196,084	$ 27,585	$ 318,981	$ 280,609

(1) Total exposure represents exposure at default which is the expected gross exposure upon the default of an obligor. This amount is before any allowance against impaired loans or partial write-offs and does not reflect the impact of credit risk mitigation and collateral held.

(2) Represents the average of counterparty risk weights within a particular category.

2013 (Basel III) vs. 2012 (Pro forma Basel III)

During the year, RWA was $319 billion, up $12 billion, as compared to our pro forma Basel III RWA of $307 billion for 2012, mainly due to higher market risk RWA due to an increase in trading exposures, the impact of foreign exchange in credit risk and the acquisition of Ally Canada. These factors were partially offset by the impact of an update of our risk parameters and our ongoing risk management and balance sheet optimization activities.

Selected capital management activity

The following table provides our selected capital management activity for the year ended October 31, 2013:

Selected capital management activity — **Table 67**

As at October 31 (Millions of Canadian dollars, except number of shares)	2013 Issuance or redemption date	2013 Number of shares (000s)	2013 Amount
Tier 1			
Common shares issued			
Stock options exercised (1)		2,528	$ 121
Purchased for cancellation		(6,775)	(67)
Preferred shares			
Redemption of preferred shares AH series	July 2, 2013	(8,500)	(213)
Tier 2			
Issuance of December 6, 2024 subordinated debentures (2)	December 6, 2012		2,000
Redemption of March 11, 2018 subordinated debentures (2)	March 13, 2013		(1,000)
Redemption of June 6, 2018 subordinated debentures (2)	June 6, 2013		(1,000)

(1) Amounts include cash received for stock options exercised during the period and the fair value adjustments to stock options.
(2) For further details, refer to Note 19 of our 2013 Annual Consolidated Financial Statements.

Dividends

Our common share dividend policy reflects our earnings outlook, payout ratio objective and the need to maintain adequate levels of capital to fund business opportunities. In 2013, our dividend payout ratio was 45%, which met our dividend payout ratio target of 40% to 50%. Common share dividends paid during the year were $3.7 billion.

Selected share data (1) — **Table 68**

(Millions of Canadian dollars, except number of shares)	2013 Number of shares (000s)	2013 Amount	2013 Dividends declared per share	2012 Number of shares (000s)	2012 Amount	2012 Dividends declared per share	2011 Number of shares (000s)	2011 Amount	2011 Dividends declared per share
Common shares outstanding	1,441,056	$ 14,377	$ 2.53	1,445,303	$ 14,323	$ 2.28	1,438,376	$ 14,010	$ 2.08
First preferred shares outstanding									
Non-cumulative Series W (2)	12,000	300	1.23	12,000	300	1.23	12,000	300	1.23
Non-cumulative Series AA	12,000	300	1.11	12,000	300	1.11	12,000	300	1.11
Non-cumulative Series AB	12,000	300	1.18	12,000	300	1.18	12,000	300	1.18
Non-cumulative Series AC	8,000	200	1.15	8,000	200	1.15	8,000	200	1.15
Non-cumulative Series AD	10,000	250	1.13	10,000	250	1.13	10,000	250	1.13
Non-cumulative Series AE	10,000	250	1.13	10,000	250	1.13	10,000	250	1.13
Non-cumulative Series AF	8,000	200	1.11	8,000	200	1.11	8,000	200	1.11
Non-cumulative Series AG	10,000	250	1.13	10,000	250	1.13	10,000	250	1.13
Non-cumulative Series AH	–	–	0.86	8,500	213	1.41	8,500	213	1.41
Non-cumulative Series AJ (3)	16,000	400	1.25	16,000	400	1.25	16,000	400	1.25
Non-cumulative Series AL (3)	12,000	300	1.40	12,000	300	1.40	12,000	300	1.40
Non-cumulative Series AN (3)	9,000	225	1.56	9,000	225	1.56	9,000	225	1.56
Non-cumulative Series AP (3)	11,000	275	1.56	11,000	275	1.56	11,000	275	1.56
Non-cumulative Series AR (3)	14,000	350	1.56	14,000	350	1.56	14,000	350	1.56
Non-cumulative Series AT (3)	11,000	275	1.56	11,000	275	1.56	11,000	275	1.56
Non-cumulative Series AV (3)	16,000	400	1.56	16,000	400	1.56	16,000	400	1.56
Non-cumulative Series AX (3)	13,000	325	1.53	13,000	325	1.53	13,000	325	1.53
Treasury shares – preferred	47	1		42	1		(6)	–	
Treasury shares – common	666	41		543	30		146	8	
Stock options									
Outstanding	10,604			12,304			14,413		
Exercisable	5,711			6,544			8,688		
Dividends									
Common		3,651			3,291			2,979	
Preferred		253			258			258	

(1) For further details about our capital management activity, refer to Note 21 of our Annual Consolidated Financial Statements.
(2) Effective February 24, 2010, we have the right to convert into common shares at our option, subject to certain restrictions.
(3) Dividend rate will reset every five years.

On October 25, 2013, we announced our intention to redeem all outstanding $900 million Trust Capital Securities Series 2013 at par. The redemption is expected to be completed on December 31, 2013 and will be financed out of general corporate funds.

On October 28 2013, we announced that the Toronto Stock Exchange (TSE) approved our normal course issuer bid (NCIB) to purchase up to 30 million of our common shares, commencing on November 1, 2013 and which may continue until October 31, 2014. Purchases may be made through the TSE, the New York Stock Exchange and other designated exchanges and published markets in both Canada and the U.S. The price paid for any repurchased shares will be the prevailing market price at the time of acquisition. We determine the amount and timing of the purchases under the NCIB, subject to prior consultation with OSFI. As at December 4, 2013, we have not purchased any shares under the 2014 NCIB.

Our previous NCIB commenced on November 1, 2012 and expired on October 31, 2013. Over the term of the previous bid, we purchased 6.8 million of our common shares. The total cost of the share repurchase was $408 million, comprised of a book value of $67 million, with an additional $341 million premium paid on repurchase.

On November 4, 2013, we redeemed all outstanding $1 billion subordinated debentures due November 4, 2018 at par plus accrued interest. The redemption was financed out of general corporate funds.

As at November 29, 2013, the number of outstanding common shares and stock options was 1,441,058,114 and 10,601,928, respectively. As at November 29, 2013, the number of Treasury shares – preferred and Treasury shares – common was (48,463) and (950,654), respectively.

Attributed capital

Our methodology for allocating capital to our business segments is based on the higher of fully diversified economic capital and the Basel III regulatory capital requirements. The capital conversion rate is aligned with our target CET1 ratio set in our Capital Plan. Risk-based capital attribution provides a uniform base for performance measurement among business segments, which compares to our overall corporate return objective and facilitates management decisions in resource allocation in conjunction with other factors. Capital attribution to each business segment might vary due to the evolving changes in regulatory requirements such as the delay of the implementation of the CVA capital charge until January 1, 2014, and the D-SIBs surcharge implementation commencing January 1, 2016.

Attributed capital is calculated and attributed on a wider array of risks compared to Basel III regulatory capital requirements, which are calibrated predominantly to target credit, market (trading) and operational risk measures. Economic capital is our internal quantification of risks associated with business activities which is the capital required to remain solvent under extreme market conditions, reflecting our objective to maintain a debt rating of at least AA. Economic capital is calculated based on credit, market (trading and non-trading), operational, business and fixed asset, and insurance risks, along with capital attribution for goodwill and other intangibles. The common risks between the two frameworks are aligned to reflect increased regulatory requirements.

- Business risk is the risk of loss or harm due to variances in volumes, prices and costs caused by competitive forces, regulatory changes, reputation and strategic risks.
- Fixed asset risk is defined as the risk that the value of fixed assets will be less than their book value at a future date.

For further discussion on credit, market, operational and insurance risks, refer to the Risk management section.

Attributed capital is also used to assess the adequacy of our capital base. Our policy is to maintain a level of available capital, defined as common equity and other capital instruments with equity-like loss absorption features such as preferred shares that exceed Economic capital with a comfortable cushion.

The calculation and attribution of capital involves a number of assumptions and judgments by management which are monitored to ensure that the economic capital framework remains comprehensive and consistent. The models are benchmarked to leading industry practices via participation in surveys, reviews of methodologies and ongoing interaction with external risk management industry professionals.

The following provides a discussion of our attributed capital:

Attributed capital — **Table 69**

(Millions of Canadian dollars)	2013	2012
Credit risk	$ 11,800	$ 9,550
Market risk (trading and non-trading)	3,300	3,800
Operational risk	4,050	3,750
Business and fixed asset risk	2,650	2,750
Insurance risk	500	450
Goodwill and intangibles	10,750	9,800
Regulatory capital allocation	3,400	4,100
Attributed capital	$ 36,450	$ 34,200
Under attribution of capital	5,200	2,550
Average common equity from discontinued operations	–	400
Average common equity	**$ 41,650**	$ 37,150

2013 vs. 2012

Attributed capital increased by $2.3 billion largely due to an increase in Credit risk reflecting business growth and rate changes, higher Goodwill and intangible risk reflecting the acquisition of Ally Canada, the recognition of intangibles in certain businesses, and foreign exchange gains. Increased Operational risk due to revenue growth also contributed to the increase. These factors were partly offset by a decrease in Market risk primarily due to the annual revisions to our methodologies and lower regulatory capital adjustment of $0.7 billion resulting from the exclusion of CVA derived by OSFI's decision to delay implementation until 2014.

We remain well capitalized with current levels of available capital exceeding the attributed capital required to underpin all of our material risks. Unattributed capital increased from the prior year as we retained additional capital in anticipation of the additional capital requirements by OSFI for D-SIBs. For further details on the additional capital, refer to table 63 which provides a summary of OSFI regulatory target ratios.

Subsidiary capital

Our capital management framework includes the management of our subsidiary capital. We invest capital across the enterprise to meet local regulators' capital adequacy requirements and maximize returns to our shareholders. We invest in our subsidiaries as appropriate during the year. We set guidelines for defining capital investments in our subsidiaries and manage the relationship between capital invested in subsidiaries and our consolidated capital base to ensure that we can access capital recognized in our consolidated regulatory capital measurements.

Each of our subsidiaries has responsibility for maintaining its compliance with local regulatory capital adequacy requirements, which may include restrictions on the transfer of assets in the form of cash, dividends, loans or advances. Concurrently, Corporate Treasury provides centralized oversight and consolidated capital management across all subsidiary entities.

Other considerations affecting capital

Capital treatment for equity investments in other entities is determined by a combination of accounting and regulatory guidelines based on the size or nature of the investment. Three broad approaches apply as follows:

- Consolidation: entities in which we have a controlling interest are fully consolidated on our Consolidated Balance Sheets, and joint ventures are consolidated on a pro rata basis.

- Deduction: certain holdings are deducted in full from our regulatory capital. These include all unconsolidated "substantial investments," as defined by the *Bank Act* (Canada), as well as all investments in insurance subsidiaries.
- Risk weighting: unconsolidated equity investments that are not deducted from capital are risk weighted at a prescribed rate for determination of capital charges.

Regulatory capital approach for securitization exposures
For our securitization exposures, we use an internal assessment approach (IAA) for exposures related to our ABCP business, and for other securitization exposures we use a combination of approaches including a ratings-based approach and the standardized approach.

While our IAA rating methodologies are based in large part on criteria that are published by External Credit Assessment Institutions (ECAIs) such as S&P and therefore are similar to the methodologies used by these institutions, they are not identical. Our ratings process includes a comparison of the available credit enhancement in a securitization structure to a stressed level of projected losses. The stress level used is determined by the desired risk profile of the transaction. As a result, we stress the cash flows of a given transaction at a higher level in order to achieve a higher rating. Conversely, transactions that only pass lower stress levels achieve lower ratings.

Most of the other securitization exposures (non-ABCP) carry external ratings and we use the lower of our own rating or the lowest external rating for determining the proper capital allocation for these positions. We periodically compare our own ratings to ECAIs ratings to ensure that the ratings provided by ECAIs are reasonable.

GRM has responsibility for providing risk assessments for capital purposes in respect of all our banking book exposures. GRM is independent of the business originating the securitization exposures and performs its own analysis, sometimes in conjunction with but always independent of the applicable business. GRM has developed asset class specific criteria guidelines which provide the rating methodologies for each asset class. The guidelines are reviewed periodically and are subject to the ratings replication process mandated by Pillar I of the Basel rules.

Additional financial information

Exposures to selected financial instruments

Exposure to U.S. subprime and Alt-A through RMBS, CDOs and mortgages — Table 70

	2013				2012			
As at October 31 (Millions of Canadian dollars)	Subprime RMBS	Alt-A RMBS	CDOs that may contain subprime or Alt-A	Total	Subprime RMBS	Alt-A RMBS	CDOs that may contain subprime or Alt-A	Total
Fair value of securities	$ 205	$ 221	$ 15	$ 441	$ 256	$ 207	$ 17	$ 480
Fair value of securities by rating								
AAA	$ 8	$ 8	$ –		$ 48	$ –	$ –	
AA	36	19	–		52	26	–	
A	16	25	–		6	5	–	
BBB	51	11	–		15	1	–	
Below BBB-	94	158	15		135	175	17	
Total	$ 205	$ 221	$ 15	$ 441	$ 256	$ 207	$ 17	$ 480
Fair value of securities by vintage								
2003 (or before)	$ 1	$ 25	$ –		$ 8	$ 11	$ –	
2004	4	43	–		10	22	–	
2005	94	63	15		100	75	17	
2006	38	64	–		88	65	–	
2007 and greater	68	26	–		50	34	–	
Total	$ 205	$ 221	$ 15	$ 441	$ 256	$ 207	$ 17	$ 480
Amortized cost of subprime/Alt-A mortgages (whole loans)	$ 7	$ 26	$ –	$ 33	$ 7	$ 30	$ –	$ 37
Total subprime and Alt-A exposures	$ 212	$ 247	$ 15	$ 474	$ 263	$ 237	$ 17	$ 517

Sensitivities of fair value of securities to changes in assumptions

(Millions of Canadian dollars):		
100bps increase in credit spread	$ (4)	$ (10)
100bps increase in interest rates	(2)	(6)
20% increase in default rates	(5)	(4)
25% decrease in prepayment rates	(1)	–

Exposure to U.S. subprime and Alt-A residential Mortgage-backed securities (RMBS), and collateralized debt obligations (CDOs) and mortgages
Certain activities and transactions we enter into expose us to the risk of default of U.S. subprime and Alt-A residential mortgages. Our exposures to U.S. subprime and Alt-A residential mortgages of $474 million represented less than 0.1% of our total assets as at October 31, 2013, compared to $517 million or 0.1% in the prior year. The decrease of $43 million was primarily due to the sale of securities.

2013 vs. 2012
Our total holdings of RMBS noted in the table above may be exposed to U.S. subprime risk. As at October 31, 2013, our U.S. subprime RMBS exposure of $205 million decreased $51 million or 20% from the prior year, primarily due to the sale of certain securities. Of this exposure, $60 million or 29% of our related holdings were rated A and above, a decrease of $46 million from the prior year due to the sale of certain securities.

As at October 31, 2013, U.S. subprime RMBS holdings rated AAA comprised 4% of our total U.S. subprime RMBS holdings compared with 19% in the prior year due to the sale of securities. As at October 31, 2013, our exposure to U.S. subprime loans of $7 million was unchanged from the prior year.

Of our total portfolio of RMBS, holdings with a fair value of $221 million may be exposed to U.S. Alt-A risk. U.S. Alt-A exposures, increased $14 million from the prior year. Approximately 41% of these RMBS were issued during 2006 and onwards, compared to 48% in the prior year. As at October 31, 2013, our exposure to U.S. Alt-A loans of $26 million decreased $4 million from the prior year.

Of our total portfolio of CDOs, holdings of $15 million may be exposed to U.S. subprime or Alt-A risk, relatively unchanged from the prior year. As at October 31, 2013, the fair value of our corporate CDOs, which were predominately comprised of $1.4 billion of corporate collateralized loan obligations decreased $700 million from the prior year mainly due to the redemption of certain securities.

Off-balance sheet arrangements
For our off-balance sheet arrangements including multi-seller conduits, structured investment vehicles and other variable interest entities as at October 31, 2013, refer to the Off-balance sheet arrangements section.

Leveraged finance
Leveraged finance comprises infrastructure finance, essential services and other types of finance. It excludes investment grade financing and non-investment grade financing where there is no private equity sponsor involvement. This definition is subject to refinement moving forward. As at October 31, 2013, our total commitments, combined funded and unfunded of $13.6 billion, increased $1.5 billion from the prior year, reflecting an increase in client volumes. As at October 31, 2013, our total commitments, combined funded and unfunded represented 1.6% of our total assets similar to the prior year.

Commercial mortgage-backed securities
The fair value of our total direct holdings of commercial mortgage-backed securities was $128 million as at October 31, 2013.

Assets and liabilities measured at fair value
There were significant transfers in or out of levels 1, 2 or 3 in the current year, as classified by the fair value hierarchy set out in IFRS 7, *Financial Instruments – Disclosures*.

For further details, refer to Note 3 of our 2013 Annual Consolidated Financial Statements.

Assets and liabilities measured at fair value — **Table 71**

	As at October 31, 2013				
(Millions of Canadian dollars, except percentage amounts)	Fair value (1)	Level 1 (1)	Level 2 (1)	Level 3 (1)	Total
Financial assets					
Securities at FVTPL	$ 144,023	43%	56%	1%	100%
Available-for-sale	38,271	15%	72%	13%	100%
Loans – Wholesale	1,578	0%	74%	26%	100%
Derivatives	106,012	2%	97%	1%	100%
Other assets	983	53%	46%	1%	100%
Financial liabilities					
Deposits	$ 67,038	0%	93%	7%	100%
Derivatives	108,238	2%	95%	3%	100%

(1) Fair value of assets and liabilities as a percentage of total assets and liabilities measured at fair value on a recurring basis for categories presented in the table above and does not reflect the impact of netting.

Accounting and control matters

Critical accounting policies and estimates

Application of critical accounting policies and estimates
Our significant accounting policies are described in Note 2 to our 2013 Annual Consolidated Financial Statements. Certain of these policies, as well as estimates made by management in applying such policies, are recognized as critical because they require us to make particularly subjective or complex judgments about matters that are inherently uncertain and because of the likelihood that significantly different amounts could be reported under different conditions or using different assumptions. Our critical accounting policies and estimates relate to the fair value of financial instruments, allowance for credit losses, goodwill and other intangible assets, employee benefits, special purpose entities, derecognition of financial assets, and income taxes. Our critical accounting policies and estimates have been reviewed and approved by our Audit Committee, in consultation with management, as part of their review and approval of our significant accounting policies, estimates and judgments.

Fair value of financial instruments
The fair value of a financial instrument is the amount at which the financial instrument could be exchanged in an arm's-length transaction between knowledgeable and willing parties under no compulsion to act. We determine fair value by incorporating all factors that market participants would consider in setting a price and using accepted economic methodologies for pricing financial instruments. We have established policies on approved methodologies and procedures for determining fair value. Valuation techniques are approved for use within our model risk management framework. The framework addresses, among other things, model development standards, validation processes and procedures, and approval authorities. Valuation techniques also include using a documented third-party pricing source list. The third party pricing source list gives priority to those services and prices having the highest and most consistent accuracy. The level of accuracy is developed over time by comparing third-party price values to traders' or system values, to other pricing service values and, when available, to actual trade data.

In determining fair value, a hierarchy is used which prioritizes the inputs to valuation techniques. The fair value hierarchy gives the highest priority to unadjusted quoted prices in active markets for identical assets or liabilities (Level 1) and the lowest priority to unobservable inputs (Level 3). The availability of inputs relevant to the asset or liability and the relative reliability of the inputs might affect the selection of appropriate valuation techniques.

Level 1 inputs are unadjusted quoted prices in active markets for identical assets or liabilities that we have the ability to access at the measurement date. Level 2 inputs are inputs other than quoted prices in Level 1 that are observable for the asset or liability, either directly or indirectly. Level 2 inputs include quoted prices for similar assets or liabilities in active markets or quoted prices for identical or similar assets or liabilities in markets that are not active, and inputs that are derived principally from observable market data. Level 3 inputs are unobservable inputs for the asset or liability. Unobservable inputs are used to measure fair value to the extent that observable inputs are not available at the measurement date.

Where observable prices or inputs are not available, management judgment is required to determine fair values by assessing other relevant sources of information such as historical data, proxy information from similar transactions, and through extrapolation and interpolation techniques. For instruments not traded in an active market, fair value is determined using a valuation technique that maximizes the use of observable market inputs to the extent available. For more complex or illiquid instruments, significant judgment is required in the determination of the model used, the selection of model inputs, and in some cases the application of valuation adjustments to the model value or quoted price for inactively traded financial instruments, as the selection of model inputs may be subjective and the inputs may be unobservable. Unobservable inputs are inherently uncertain as there is little or no market data available from which to determine the level at which an arm's length transaction would occur under normal business circumstances. Appropriate parameter uncertainty and market risk valuation adjustments for such inputs and other model risk valuation adjustments are assessed in all such instances.

We record valuation adjustments to appropriately reflect counterparty credit quality and our own creditworthiness, differences between the overnight index swap (OIS) curve and London Interbank Offered Rates (LIBOR) for collateralized derivatives, unrealized gains or losses at inception of the transaction, bid-offer spreads and unobservable parameters. These adjustments may be subjective as they require significant judgment in the input selection, such as probability of default and recovery rate, and are intended to arrive at fair value that is determined based on assumptions that market participants would use in pricing the financial instrument. The realized price for a transaction may be different from its recorded value that is previously estimated using management judgment, and may therefore impact unrealized gains and losses recognized in Non-interest income – Trading revenue or Other.

Valuation adjustments are recorded for the credit risk of our derivative portfolios in order to arrive at their fair values. Credit Valuation Adjustments (CVA) take into account our creditworthiness and our counterparties' creditworthiness, the current and potential future mark-to-market of the transactions, and the effects of credit mitigants such as master netting and collateral agreements. CVA amounts are derived from estimates of exposure at default, probability of default, recovery rates on a counterparty basis, and market and credit factor correlations. Exposure at default is the amounts of expected derivative related assets and liabilities at the time of default, estimated through modeling using underlying risk factors. Probability of default and recovery rate is generally implied from the market prices for credit protection and credit ratings of the counterparty. Correlation is the statistical measure of how credit and market factors may move in relation to one another, if any. Correlation is estimated using historical data and market data where available. CVA is calculated daily and changes are recorded in Non-interest income – Trading revenue.

In order to reflect recently observed market practice of pricing collateralized over-the-counter (OTC) derivatives using the OIS curve, our valuation approach accounts for the difference between certain OIS rates and LIBOR for derivatives valuation as valuation adjustments. Market practices continue to evolve concerning the use of and construction of OIS curves that best reflect the nature of the underlying collateral and as a result, additional valuation adjustments may be required in the future.

Where required, a valuation adjustment is made to reflect the unrealized gain or loss at inception of a financial instrument contract where the fair value of that financial instrument is not obtained from a quoted market price or cannot be evidenced by other observable market transactions based on a valuation technique incorporating observable market data.

A bid-offer valuation adjustment is required when a financial instrument is valued at the mid-market price, instead of the bid or offer price for asset or liability positions, respectively. The valuation adjustment takes into account the spread from the mid to either the bid or offer price.

Some valuation models require parameter calibration from such factors as market observed option prices. The calibration of parameters may be sensitive to factors such as the choice of instruments or optimization methodology. A valuation adjustment is also estimated to mitigate the uncertainties of parameter calibration.

IFRS requires us to classify our financial instruments measured at fair value into three levels based on the transparency of the inputs used to measure the fair values of the instruments. As at October 31, 2013, we have $296 billion of financial assets (79% of our total financial assets at fair value) (2012 – $302 billion and 80.9%) and $234 billion of financial liabilities (84.8% of our total financial liabilities at fair value) (2012 – $246 billion and 85.5%), which fair values are based on observable inputs (Level 2 instruments). We also have $8 billion of financial assets (2.1% of our total financial assets at fair value) (2012 – $10 billion and 2.7%) and $8 billion of financial liabilities (2.8% of our total financial liabilities at fair value) (2012 – $13 billion and 4.5%), which valuations include significant unobservable inputs (Level 3 instruments).

At each reporting date or more frequently when conditions warrant, we evaluate our AFS securities to determine whether there is any objective evidence of impairment, such as a significant or prolonged decline in the fair value of the security below its cost or when an adverse effect on future cash flows from the security can be reliably estimated. When assessing impairment for debt instruments we primarily considered counterparty ratings and security-specific factors, including collateral, external ratings, subordination and other market factors. For complex debt instruments including U.S. non-agency MBS, ABS and other structured products, we also use cash flow projection models which incorporate actual and projected cash flows for each security using a number of assumptions and inputs that are based on security specific factors. The inputs and assumptions used such as default, prepayment and recovery rates are based on updated market data. For U.S. non-agency MBS, recovery rates are largely dependent upon forecasted property prices which were assessed at the municipal level, provided by a third-party vendor. In addition, we also consider the transaction structure and credit enhancement for the structured securities. If the result indicates that we will not be able to recover the entire principal and interest amount, we do a further review of the security in order to assess whether a loss would ultimately be realized. As equity securities do not have contractual cash flows, they are assessed differently than debt securities. In assessing whether there is any objective evidence that suggests that the security is impaired we consider factors which include the length of time and extent the fair value has been below the cost and the financial condition and near term prospects of the issuer. We also consider the estimated recoverable value and the period of recovery. We conduct further analysis for securities where the fair value had been below cost for greater than twelve months. If an AFS security is impaired, the cumulative unrealized losses previously recognized in Other components of equity are recognized directly in income under Non-interest income. As at October 31, 2013, our gross unrealized losses on AFS securities were $293 million (2012 – $359 million). Refer to Note 4 to our 2013 Annual Consolidated Financial Statements for more information.

Allowance for credit losses

We maintain allowance for credit losses relating to on-balance sheet exposures, such as loans and acceptances, and off-balance sheet items such as letters of credit, guarantees and unfunded commitments, at levels that management considers appropriate to cover credit related losses incurred as at the balance sheet date.

Allowances are determined individually for loans that are individually significant, and collectively for loans that are not individually significant and loans which are significant but for which there is no objective evidence of impairment, using current and historical credit information in both quantitative and qualitative assessments. For further information on allowance for credit losses, refer to Note 5 to our 2013 Annual Consolidated Financial Statements.

Individually assessed loans
Loans which are individually significant are assessed individually for objective indicators of impairment. A loan is considered impaired when management determines that it will not be able to collect all amounts due according to the original contractual terms or the equivalent value.

Credit exposures of individually significant loans are evaluated based on factors including the borrower's overall financial condition, resources and payment record, and where applicable, the realizable value of any collateral. If there is evidence of impairment leading to an impairment loss, then the amount of the loss is recognized in income and is determined as the difference between the carrying amount of the loan, including accrued interest, and the estimated recoverable amount. The estimated recoverable amount is measured as the present value of expected future cash flows discounted at the loan's original effective interest rate, including cash flows that may result from the realization of collateral less costs to sell.

Collectively assessed loans
Loans which are not individually significant, or which are individually assessed and not determined to be impaired, are collectively assessed for impairment. For the purposes of a collective evaluation of impairment, loans are grouped on the basis of similar risk characteristics, taking into account loan type, industry, geographic location, collateral type, past due status and other relevant factors.

The collective impairment allowance is determined by reviewing factors including: (i) historical loss experience, which takes into consideration historical probabilities of default, loss given default and exposure at default, in portfolios of similar credit risk characteristics, and (ii) management's judgment on the level of impairment losses based on historical experience relative to the actual level as reported at the balance sheet date, taking into consideration the current portfolio credit quality trends, business and economic and credit conditions, the impact of policy and process changes, and other supporting factors. Future cash flows for a group of loans are collectively evaluated for impairment on the basis of the contractual cash flows of the loans in the group and historical loss experience for loans with credit risk characteristics similar to those in the group. Historical loss experience is adjusted based on current observable data to reflect the effects of current conditions that did not affect the period on which the historical loss experience is based and to remove the effects of conditions in the historical period that do not currently exist. The methodology and assumptions used for estimating future cash flows are reviewed regularly to reduce any differences between loss estimates and actual loss experience.

Write-off of loans
Loans and the related impairment allowance for credit losses are written off, either partially or in full, when there is no realistic prospect of recovery. Where loans are secured, they are generally written off after receipt of any proceeds from the realization of the collateral. In circumstances where the net realizable value of any collateral has been determined and there is no reasonable expectation of further recovery, write off may be earlier. For credit cards, the balances and related allowance for credit losses are written off when payment is 180 days in arrears. Personal loans are generally written off at 150 days past due.

Total allowance for credit losses
Based on the procedures discussed above, management believes that the total allowance for credit losses of $2,050 million is adequate to absorb estimated credit losses incurred in the lending portfolio as at October 31, 2013 (2012 – $2,088 million). This amount includes $91 million (2012 – $91 million) classified in Provisions under Other Liabilities on our Consolidated Balance Sheets, which relates to letters of credit and guarantees and unfunded commitments.

Goodwill and other intangible assets
We allocate goodwill to groups of cash-generating units (CGU). Goodwill is not amortized and is tested for impairment on an annual basis, or more frequently if there are objective indications of impairment. We test for impairment by comparing the recoverable amount of a CGU with its carrying amount. A CGU's recoverable amount is the higher of its fair value less cost to sell and its value in use. The carrying amount of a CGU comprises the carrying amount of assets, liabilities, and goodwill allocated to the CGU. When the carrying value of a CGU exceeds its recoverable amount, the impairment loss is allocated first to reduce the carrying amount of any goodwill allocated to the CGU and then to the other assets of the CGU proportionally based on the carrying amount of each asset. Any impairment charge is recognized in income in the period it is identified. Subsequent reversals of goodwill impairment are prohibited.

We estimate the value in use and fair value less costs to sell of our CGUs primarily using a discounted cash flow approach which incorporates each CGU's internal forecasts of revenues and expenses. Significant management judgment is applied in the determination of expected future cash flows (uncertainty in timing and amount), discount rates (based on CGU-specific risks) and terminal growth rates. CGU-specific risks include country risk, business/operational risk, geographic risk (including political risk, devaluation risk and government regulation), currency risk and price risk (including product pricing risk and inflation). If the forecast earnings and other assumptions in future periods deviate significantly from the current amounts used in our impairment testing, the value of our goodwill could become impaired.

Other intangible assets with a finite life are amortized on a straight-line basis over their estimated useful lives as follows: computer software – 3 to 10 years and customer relationships – 10 to 20 years. They are tested for impairment when there is an indication that an asset may be impaired. An impairment test is performed by comparing the carrying amount of the intangible asset to its recoverable amount. Where it is not possible to estimate the recoverable amount of an individual asset, we estimate the recoverable amount of the CGU to which the asset belongs. If the recoverable amount of the asset (or CGU) is less than its carrying amount, the carrying amount of the intangible asset is written down to its recoverable amount as an impairment loss. An impairment loss recognized previously is reversed if there is a change in the estimates used to determine the recoverable amount of the asset (or CGU) since the last impairment loss recognized. Significant judgment is applied in estimating the useful lives and recoverable amounts of our intangible assets and assessing whether certain events or circumstances constitute objective evidence of impairment. We do not have any intangible assets with indefinite lives.

As at October 31, 2013, we had $8.4 billion of goodwill (2012 – $7.5 billion) and $2.8 billion of other intangible assets (2012 – $2.7 billion). For further details, refer to Notes 2 and 10 to our 2013 Annual Consolidated Financial Statements.

Employee benefits
We sponsor a number of benefit programs to eligible employees, including registered pension plans, supplemental pension plans, health, dental, disability and life insurance plans.

The calculation of defined benefit expenses and obligations depends on various assumptions such as discount rates, expected rates of return on assets, healthcare cost trend rates, projected salary increases, retirement age, and mortality and termination rates. The discount rate assumption is determined using spot rates from a derived Aa corporate bond yield curve for our Canadian pension and other post-employment plans, and spot rates from an Aa corporate bond yield curve for our U.S. pension and other post-employment plans. All other assumptions are determined by management, applying significant judgment, and are reviewed by the actuaries. Actual experience that differs from the actuarial assumptions will affect the amounts of benefit obligations and expenses that we recognize. As at October 31, 2013, the unrecognized net actuarial losses of our pension and other post-employment plans were $1,033 million and $127 million, respectively (2012 – $1,345 million and $134 million, respectively). The weighted average assumptions used and the sensitivity of key assumptions are presented in Note 17 to our 2013 Annual Consolidated Financial Statements.

Special Purpose Entities

A special purpose entity is an entity created to accomplish a narrow and well-defined objective with limited decision-making powers and pre-established or limited activities. We are required to consolidate an SPE if an assessment of the relevant factors indicates that we control the SPE. Relevant factors include: (i) whether the activities of the SPE are conducted on our behalf according to our specific business needs so that we obtain benefits from the SPE's operation; (ii) whether we have the decision-making powers to obtain a majority of the benefits; (iii) whether we will obtain the majority of the benefits of the activities of the SPE; and (iv) whether we retain the majority of the residual ownership risks related to the assets or SPE in order to obtain the benefits from its activities.

We consider a number of factors in determining whether an entity is an SPE and, if required, analyzing whether we control the SPE. Our approach is generally focused on identifying the significant activities that impact the financial results of the SPE, and determining which party has substantive rights to control the decision making over those activities, and is also exposed to a majority of the SPE's risks and rewards. In certain instances, conditions considered in isolation may indicate control or lack of control over an SPE, but when considered together require a significant degree of judgment to reach a conclusion. For further information on our involvement with SPEs, refer to the Off-balance sheet arrangements section and Note 7 to our 2013 Annual Consolidated Financial Statements.

Derecognition of financial assets

We periodically enter into transactions in which we transfer financial assets such as loans or packaged mortgage-backed securities (MBS) to special purpose entities (SPEs) or trusts that issue securities to investors. We derecognized the assets when our contractual rights to the cash flows from the assets have expired, when we retain the rights to receive the cash flows but assume an obligation to pay those cash flows to a third party subject to certain pass-through requirements, or when we transfer our contractual rights to receive the cash flows and substantially all of the risks and rewards of the assets have been transferred. When we retain substantially all of the risks and rewards of the transferred assets, the transferred assets are not derecognized from our Consolidated Balance Sheets and are accounted for as secured financing transactions. When we neither retain nor transfer substantially all risks and rewards of ownership of the assets, we derecognize the assets if control over the assets is relinquished. If we retain control over the transferred assets, we continue to recognize the transferred assets to the extent of our continuing involvement. Management's judgment is applied in determining whether we have transferred or retained substantially all risk and rewards of ownership of the transferred financial asset.

The majority of assets transferred under repurchase agreements, securities lending agreements, and in our Canadian residential mortgage securitization transactions do not qualify for derecognition; as a result, we continue to record the associated transferred assets on our Consolidated Balance Sheets and no gains or losses are recognized for these securitization activities. Otherwise, a gain or loss is recognized on securitization by comparing the carrying amount of the transferred asset with its fair value at the date of the transfer. As at October 31, 2013, the carrying and fair values of the transferred assets that fail derecognition were $104 billion and $103 billion, respectively (2012 – $110 billion and $110 billion), and the carrying and fair values of the associated liabilities totalled $103 billion and $104 billion, respectively (2012 – $110 billion and $111 billion). For further information on derecognition of financial assets, refer to Note 6 to our 2013 Annual Consolidated Financial Statements.

Income taxes

We are subject to income tax laws in various jurisdictions where we operate, and the complex tax laws are potentially subject to different interpretations by us and the relevant taxation authority. Management's judgment is applied in the interpretation of the relevant tax laws and in the estimation of the provision for current and deferred income taxes, including the expected timing and amount of the realization. A deferred tax asset or liability is determined for each temporary difference based on the tax rates that are expected to be in effect in the period that the asset is realized or the liability is settled. Where the temporary differences will not reverse in the foreseeable future, no deferred tax amount is recognized.

On a quarterly basis, we review whether it is probable that the benefits associated with our deferred tax assets will be realized, using both positive and negative evidence. Refer to Note 24 to our 2013 Annual Consolidated Financial Statements for further information.

Future changes in accounting policies and disclosure

IFRS 10 *Consolidated Financial Statements* (IFRS 10)

In May 2011, the IASB issued IFRS 10, which replaces the consolidation requirements in IAS 27 *Consolidated and Separate Financial Statements* (IAS 27) and SIC-12 *Consolidation – Special Purpose Entities* (SIC-12) and provides a single consolidation model applicable to all types of entities. Under IFRS 10, consolidation is based on control. Three conditions must be satisfied to have control over an investee: (i) decision making power over the relevant activities, (ii) exposure to variable returns, and (iii) a link between power and returns. The determination of control is based on the current facts and circumstances and is continuously assessed. IFRS 10 contains a substantial amount of application guidance that expands on new and existing principles related to the determination of control. IFRS 10 is effective for us on November 1, 2013 with modified retrospective application based on entities in place as at the effective date.

Currently, we consolidate SPEs that we control based on an overall assessment of the purpose and design of the entity, our decision making rights, and our exposure to the majority of the risks and rewards of ownership. IFRS 10 places a greater emphasis on decision making power, which is a required condition for control. It removes the bright lines for assessing exposure to risks and rewards, and introduces new considerations related to our role as a principal or an agent in entities over which we have decision making power.

On adoption of IFRS 10, we expect the consolidation status of certain entities to change. We will deconsolidate RBC Capital Trust II as our involvement does not expose us to variable returns. This will result in the reclassification of $900 million from Trust capital securities to Deposits. See Note 20 for further details on our innovative capital instruments. Additionally, certain mutual funds will be consolidated where our exposure to variability indicates that our power as fund manager is in a principal capacity. The effects of these changes are not expected to have a material impact on our consolidated financial statements.

IFRS 11 *Joint Arrangements* (IFRS 11)
In May 2011, the IASB issued IFRS 11 which requires a party to a joint arrangement to determine the type of joint arrangement in which it is involved by assessing its rights and obligations arising from the arrangement. IFRS 11 requires a joint operator to recognize and measure the assets and liabilities in relation to its interest in the arrangement, and a joint venturer to apply equity method of accounting. IFRS 11 is effective for us on November 1, 2013. The adoption of this standard is not expected to have a material impact on our consolidated financial statements.

IFRS 12 *Disclosure of Interest in Other Entities* (IFRS 12)
In May 2011, the IASB issued IFRS 12, *Disclosure of Interests in Other Entities* (IFRS 12), which provides enhanced guidance on the annual disclosure requirements of a reporting entity's interests in other entities. The standard requires an entity to disclose information that helps users to evaluate the nature of, and risks associated with a reporting entity's interests in subsidiaries, consolidated entities, associates, joint arrangements and, in particular, unconsolidated structured entities (off-balance sheet structures), and the effect of those interests on the entity's financial position, financial performance and cash flows.

IFRS 12 is effective for us on November 1, 2013 with disclosure, including comparative periods, to be presented in our 2014 consolidated financial statements.

IAS 27 *Separate Financial Statements* (IAS 27) and IAS 28 *Investments in Associates and Joint Ventures* (IAS 28)
As a consequence of the new IFRS standards IFRS 10, IFRS 11 and IFRS 12, in May 2012, the IASB issued amended and retitled IAS 27, *Separate Financial Statements and* IAS 28 *Investments in Associates and Joint Ventures*. These new requirements are effective for us on November 1, 2013. The adoption of these standards is not expected to have a material impact on our consolidated financial statements.

IFRS 13 *Fair Value Measurement* (IFRS 13)
In May 2011, the IASB issued IFRS 13 *Fair Value Measurement* which provides a revised definition of fair value and sets out a framework for measuring fair value in a single standard. IFRS 13 also requires more comprehensive disclosure requirements on fair value measurement. The measurement and disclosure requirements of IFRS 13 apply when another standard requires or permits the item to be measured at fair value with limited exceptions. IFRS 13 is effective for us on November 1, 2013 and is required to be applied prospectively from the adoption date. The adoption of this standard is not expected to have a material impact on our consolidated financial statements.

IAS 19 *Employee Benefits* (IAS 19)
In June 2011, the IASB issued amendments to IAS 19 regarding the accounting for pensions and other post-employment benefits. The new requirements are effective for us on November 1, 2013 and will require a restatement of comparative figures. The amendments will alter the accounting for actuarial gains and losses, past service costs, interest expense and return on plan assets. The amended standard eliminates the deferral and amortization of actuarial gains and losses in net income, instead requiring the immediate recognition of actuarial gains and losses in Other comprehensive income (OCI). Past service costs will also be immediately recognized in the period in which a plan amendment occurs. Net interest, calculated by applying the discount rate to the Net defined benefit liability or asset, will replace the Interest cost and Expected return on plan assets components of Defined benefit pension expense. The amendments also introduce a number of enhanced disclosure requirements for defined benefit plans.

The amended standard is expected to impact our Consolidated Balance Sheets, Consolidated Statements of Income and Consolidated Statements of Comprehensive Income for the years ended October 31, 2013 and 2012 by the following amounts:

Impact of IAS 19 amendments **Table 72**

	As at or for the year ended	
(Millions of Canadian dollars)	October 31 2013	October 31 2012
Consolidated Balance Sheets		
(Decrease) in Prepaid pension benefit cost	$ (923)	$ (920)
Increase in Accrued pension and other post-employment benefit expense	268	589
Increase in Other assets – Deferred income tax asset	316	400
(Decrease) in Retained earnings (opening)	(1,108)	(297)
(Decrease) in Retained earnings (closing)	(876)	(1,108)
Consolidated Statements of Income and Comprehensive Income		
(Decrease) in Net income	(87)	(32)
Increase (Decrease) in Total other comprehensive income, net of taxes	319	(779)

IFRS 7 *Disclosure – Offsetting Financial Assets and Financial Liabilities* (IFRS 7)
In December 2011, the IASB issued amendments to IFRS 7, requiring extended disclosures to enable users to assess the effect of offsetting arrangements on an entity's financial position. The amendments require entities to disclose both gross and net amounts associated with master netting agreements and similar arrangements, including the effects of financial collateral, whether or not they are presented net on the balance sheet. The amendments are effective for us on November 1, 2013 and we are required to adopt these disclosures in our 2014 consolidated financial statements.

Controls and procedures

Disclosure controls and procedures

Our disclosure controls and procedures are designed to provide reasonable assurance that information required to be disclosed by us in reports filed or submitted under Canadian and U.S. securities laws is recorded, processed, summarized and reported within the time periods specified under those laws and include controls and procedures that are designed to ensure that information is accumulated and communicated to management, including the President and Chief Executive Officer, and the Chief Administrative Officer and Chief Financial Officer, to allow timely decisions regarding required disclosure.

As of October 31, 2013, management evaluated, under the supervision of and with the participation of the President and Chief Executive Officer and the Chief Administrative Officer and Chief Financial Officer, the effectiveness of our disclosure controls and procedures as defined under rules adopted by the United States Securities and Exchange Commission. Based on that evaluation, the President and Chief Executive Officer and the Chief Administrative Officer and Chief Financial Officer concluded that our disclosure controls and procedures were effective as of October 31, 2013.

Internal control over financial reporting

Management is responsible for establishing and maintaining adequate internal control over financial reporting. Internal control over financial reporting is designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with GAAP. However, because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements on a timely basis. See Management's Report on Internal Control over Financial Reporting and the Report of Independent Registered Chartered Accountants.

No changes were made in our internal control over financial reporting during the year ended October 31, 2013, that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Related party transactions

In the ordinary course of business, we provide normal banking services, operational services, and enter into other transactions with associated and other related corporations, including our joint venture entities, on terms similar to those offered to non-related parties. We grant loans to directors, officers and other employees at rates normally accorded to preferred clients. In addition, we offer deferred share and other plans to non-employee directors, executives and certain other key employees. For further information, refer to Notes 12 and 28 of our 2013 Annual Consolidated Financial Statements.

Net interest income on average assets and liabilities — Table 73

(Millions of Canadian dollars, except for percentage amounts)	Average balances 2013	Average balances 2012 (1)	Average balances 2011 (1)	Interest 2013	Interest 2012 (1)	Interest 2011 (1)	Average rate 2013	Average rate 2012 (1)	Average rate 2011 (1)
Assets									
Deposits with other banks (2)									
Canada	$ 1,355	$ 193	$ 1,437	$ 56	$ 30	$ 21	4.13%	15.54%	1.46 %
U.S.	426	899	305	4	8	8	0.94	0.90	2.62
Other International	7,386	7,081	4,786	13	23	62	0.18	0.32	1.30
	9,167	8,173	6,528	73	61	91	0.80%	0.75%	1.39 %
Securities									
Trading	137,053	122,606	148,307	3,113	3,028	3,910	2.27	2.47	2.64
Available-for-sale	37,818	39,638	41,551	666	846	840	1.76	2.13	2.02
	174,871	162,244	189,858	3,779	3,874	4,750	2.16	2.39	2.50
Asset purchased under reverse repurchase agreements and securities borrowed									
Loans (2), (3)	123,766	104,465	82,353	941	945	736	0.76	0.90	0.89
Canada									
Retail	302,849	292,899	272,999	12,077	11,681	11,672	3.99	3.99	4.28
Wholesale	49,228	37,778	30,583	2,486	2,468	1,548	5.05	6.53	5.06
	352,077	330,677	303,582	14,563	14,149	13,220	4.14	4.28	4.35
U.S.	22,691	18,802	13,329	776	702	895	3.42	3.73	6.71
Other International	21,135	14,251	13,337	1,018	1,121	1,121	4.82	7.87	8.41
	395,903	363,730	330,248	16,357	15,972	15,236	4.13	4.39	4.61
Total interest-earning assets	703,707	638,612	608,987	21,150	20,852	20,813	3.01	3.27	3.42
Non-interest-bearing deposits with other banks	11,716	9,520	6,665	–	–	–	–	–	–
Customers' liability under acceptances	9,663	8,617	7,547	–	–	–	–	–	–
Other assets (2)	128,114	153,851	155,701	–	–	–	–	–	–
Total assets	$ 853,200	$ 810,600	$ 778,900	$ 21,150	$ 20,852	$ 20,813	2.48%	2.57%	2.67 %
Liabilities and shareholders' equity									
Deposits (2), (4)									
Canada	374,962	350,099	306,754	5,190	5,318	5,318	1.38%	1.52 %	1.73 %
U.S.	40,006	36,430	41,638	169	210	232	0.42	0.58	0.56
Other International	48,937	45,139	52,942	283	489	784	0.58	1.08	1.48
	463,905	431,668	401,334	5,642	6,017	6,334	1.22	1.39	1.58
Obligations related to securities sold short	48,980	43,080	56,603	1,579	1,584	2,168	3.22	3.68	3.83
Obligations related to assets sold under repurchase agreements and securities loaned	70,881	55,369	49,724	279	330	473	0.39	0.60	0.95
Subordinated debentures	8,216	8,156	8,821	336	360	399	4.09	4.41	4.52
Other interest-bearing liabilities	1,372	1,327	2,089	63	63	82	4.59	4.75	3.93
Total interest-bearing liabilities	593,354	539,600	518,571	7,899	8,354	9,456	1.33	1.55	1.82
Non-interest-bearing deposits	69,819	64,512	63,983	–	–	–	–	–	–
Acceptances	9,663	8,617	7,547	–	–	–	–	–	–
Other liabilities (2)	132,362	156,339	150,727	–	–	–	–	–	–
Total liabilities	$ 805,198	$ 769,068	$ 740,828	$ 7,899	$ 8,354	$ 9,456	0.98%	1.09%	1.28 %
Equity	48,002	41,532	38,072	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total liabilities and shareholders' equity	$ 853,200	$ 810,600	$ 778,900	$ 7,899	$ 8,354	$ 9,456	0.93%	1.03%	1.21 %
Net interest income and margin	$ 853,200	$ 810,600	$ 778,900	$ 13,251	$ 12,498	$ 11,357	1.55%	1.54%	1.46 %
Net interest income and margin (average earning assets)									
Canada	$ 471,378	$ 442,585	$ 416,817	$ 10,960	$ 10,952	$ 9,693	2.33%	2.47%	2.33 %
U.S.	116,016	87,845	73,404	1,602	957	1,093	1.38	1.09	1.49
Other International	116,313	108,182	118,766	689	589	571	0.59	0.54	0.48
Total	$ 703,707	$ 638,612	$ 608,987	$ 13,251	$ 12,498	$ 11,357	1.88%	1.96 %	1.86 %

(1) On a continuing operations basis.
(2) In 2012, we reclassified cash collateral for 2012 and 2011 paid from Interest bearing deposits with banks and Loans-wholesale to Other assets and cash collateral received from Deposits to Other liabilities.
(3) Interest income includes loan fees of $512 million (2012 – $467 million; 2011 – $434 million).
(4) Deposits include savings deposits with average balances of $123 billion (2012 – $109 billion; 2011 – $97 billion), interest expense of $.7 billion (2012 – $.6 billion; 2011 – $.6 billion) and average rates of .6% (2012 – .6%; 2011 – .6%). Deposits also include term deposits with average balances of $269 billion (2012 – $264 billion; 2011 – $245 billion), interest expense of $4.2 billion (2012 – $4.6 billion; 2011 – $3.4 billion) and average rates of 1.58% (2012 – 1.74%; 2011 – 1.40%).

Change in net interest income						Table 74
	2013 vs. 2012 (1)			2012 vs. 2011 (1)		
	Increase (decrease) due to changes in			Increase (decrease) due to changes in		
(Millions of Canadian dollars)	Average volume (3)	Average rate (3)	Net change	Average volume (3)	Average rate (3)	Net change
Assets						
Deposits with other banks (4)						
Canada (2)	$ 181	$ (155)	$ 26	$ (18)	$ 27	$ 9
U.S. (2)	(4)	–	(4)	16	(16)	–
Other international (2)	1	(11)	(10)	30	(69)	(39)
Securities						
Trading	357	(272)	85	(678)	(204)	(882)
Available-for-sale	(39)	(141)	(180)	(39)	45	6
Asset purchased under reverse repurchase agreements and securities borrowed	175	(179)	(4)	198	11	209
Loans (4)						
Canada						
Retail	397	(1)	396	851	(842)	9
Wholesale	748	(730)	18	364	556	920
U.S.	145	(71)	74	367	(560)	(193)
Other international	542	(645)	(103)	77	(77)	–
Total interest income	$ 2,503	$ (2,205)	$ 298	$ 1,168	$ (1,129)	$ 39
Liabilities						
Deposits (4)						
Canada	378	(506)	(128)	751	(751)	–
U.S.	21	(62)	(41)	(29)	7	(22)
Other international	41	(247)	(206)	(116)	(179)	(295)
Obligations related to securities sold short	217	(222)	(5)	(518)	(66)	(584)
Obligations related to assets sold under repurchase agreements and securities loaned	92	(143)	(51)	54	(197)	(143)
Subordinated debentures	3	(27)	(24)	(30)	(9)	(39)
Other interest-bearing liabilities	2	(2)	–	(30)	11	(19)
Total interest expense	$ 754	$ (1,209)	$ (455)	$ 82	$ (1,184)	$ (1,102)
Net interest income	$ 1,749	$ (996)	$ 753	$ 1,086	$ 55	$ 1,141

(1) On a continuing operations basis.
(2) Geographic classification for selected assets and liabilities is based on the domicile of the booking point of the subject assets and liabilities.
(3) Volume/rate variance is allocated on the percentage relationship of changes in balances and changes in rates to the total net change in net interest income.
(4) In 2012, we reclassified cash collateral for 2012 and 2011 paid from Interest bearing deposits with banks and Loans-wholesale to Other assets and cash collateral received from Deposits to Other liabilities.

Loans and acceptances by geography — Table 75

As at October 31 (Millions of Canadian dollars)	IFRS 2013	IFRS 2012 (1)	IFRS 2011 (1)	Canadian GAAP 2010 (1)	Canadian GAAP 2009 (1)
Canada					
Residential mortgages	$ 206,134	$ 195,552	$ 185,620	$ 124,064	$ 117,292
Personal	87,153	80,897	75,668	69,291	60,493
Credit cards	13,902	13,422	12,723	9,704	8,285
Small business	3,987	2,503	2,481	2,712	2,851
Retail	311,176	292,374	276,492	205,771	188,921
Business	57,724	50,319	45,186	45,217	47,110
Sovereign	3,807	3,751	3,304	2,785	1,394
Bank	823	390	747	808	1,096
Wholesale	$ 62,354	$ 54,460	$ 49,237	$ 48,810	$ 49,600
	$ 373,530	$ 346,834	$ 325,729	$ 254,581	$ 238,521
U.S.					
Retail	3,734	3,138	3,101	4,230	4,163
Wholesale	19,443	17,081	11,094	7,584	9,310
	23,177	20,219	14,195	11,814	13,473
Other International					
Retail	6,768	5,673	5,152	4,936	4,625
Wholesale	17,103	16,900	12,110	11,084	12,964
	23,871	22,573	17,262	16,020	17,589
Total loans and acceptances	$ 420,578	$ 389,626	$ 357,186	$ 282,415	$ 269,583
Total allowance for loan losses	(1,959)	(1,997)	(1,967)	(2,038)	(2,164)
Total loans and acceptances, net of allowance for loan losses	$ 418,619	$ 387,629	$ 355,219	$ 280,377	$ 267,419

Loans and acceptances by portfolio and sector — Table 76

As at October 31 (Millions of Canadian dollars)	IFRS 2013	IFRS 2012 (1)	IFRS 2011 (1)	Canadian GAAP 2010 (1)	Canadian GAAP 2009 (1)
Residential mortgages	$ 209,238	$ 198,324	$ 188,406	$ 126,790	$ 119,945
Personal	94,311	86,697	80,921	75,519	66,405
Credit cards	14,142	13,661	12,937	9,916	8,508
Small business	3,987	2,503	2,481	2,712	2,851
Retail	$ 321,678	$ 301,185	$ 284,745	$ 214,937	$ 197,709
Business					
Agriculture	5,441	5,202	4,880	4,705	4,967
Automotive	6,167	3,585	3,025	3,228	3,282
Consumer goods	6,230	5,432	5,341	5,202	5,323
Energy	8,906	8,802	6,394	5,869	6,984
Non-bank financial services	4,903	3,895	2,007	4,593	3,345
Forest products	893	811	698	726	761
Industrial products	4,038	3,938	3,381	3,143	3,331
Mining & metals	1,074	965	1,122	587	1,746
Real estate & related	24,413	20,650	15,569	12,651	13,308
Technology & media	4,006	4,203	2,712	2,257	2,307
Transportation & environment	5,593	5,221	4,927	3,546	4,184
Other (2)	21,520	20,554	17,011	15,290	17,041
Sovereign	4,396	4,193	4,050	3,765	2,779
Bank	1,320	990	1,324	1,916	2,516
Wholesale	$ 98,900	$ 88,441	$ 72,441	$ 67,478	$ 71,874
Total loans and acceptances	$ 420,578	$ 389,626	$ 357,186	$ 282,415	$ 269,583
Total allowance for loan losses	(1,959)	(1,997)	(1,967)	(2,038)	(2,164)
Total loans and acceptances, net of allowance for loan losses	$ 418,619	$ 387,629	$ 355,219	$ 280,377	$ 267,419

(1) On a continuing operations basis.
(2) Other in 2013 related to other services, $8.1 billion; financing products, $3.1 billion; holding and investments, $5.0 billion; health, $3.8 billion; and other, $1.5 billion.

Impaired loans by portfolio and geography — Table 77

As at October 31 (Millions of Canadian dollars, except for percentage amounts)	IFRS 2013	IFRS 2012 (1)	IFRS 2011 (1)	Canadian GAAP 2010 (1)	Canadian GAAP 2009 (1)
Residential mortgages	$ 691	$ 674	$ 719	$ 691	$ 533
Personal	363	273	289	278	290
Small business	37	33	40	49	59
Retail	1,091	980	1,048	1,018	882
Business					
Agriculture	$ 43	$ 52	$ 75	$ 74	$ 79
Automotive	12	17	38	97	36
Consumer goods	101	83	91	91	111
Energy	14	2	33	104	100
Non-bank financial services	1	5	13	28	197
Forest products	26	30	27	49	47
Industrial products	54	88	38	102	143
Mining & metals	2	2	4	8	18
Real estate & related	367	353	464	560	422
Technology & media	117	251	47	68	114
Transportation & environment	98	73	105	52	20
Other (2)	272	312	311	385	514
Sovereign	–	–	–	9	10
Bank	3	2	33	34	62
Wholesale	1,110	1,270	1,279	1,661	1,873
Total impaired loans (3)	$ 2,201	$ 2,250	$ 2,327	$ 2,679	$ 2,755
Canada					
Residential mortgages	$ 464	$ 475	$ 567	$ 544	$ 441
Personal	229	206	188	174	173
Small business	36	34	40	49	59
Retail	729	715	795	767	673
Business					
Agriculture	38	44	62	71	77
Automotive	9	11	30	87	27
Consumer goods	58	34	48	53	53
Energy	14	–	25	65	5
Non-bank financial services	1	3	1	1	1
Forest products	8	12	7	11	20
Industrial products	40	34	26	99	140
Mining & metals	2	2	2	4	6
Real estate & related	169	153	164	177	232
Technology & media	86	238	43	55	88
Transportation & environment	21	22	12	42	17
Other	80	88	93	106	173
Sovereign	–	–	–	–	–
Bank	–	–	–	–	–
Wholesale	526	641	513	771	839
Total	$ 1,255	$ 1,356	$ 1,308	$ 1,538	$ 1,512
U.S.					
Retail	$ 14	$ 7	$ 6	$ –	$ –
Wholesale	98	162	116	364	719
Total	$ 112	$ 169	$ 122	$ 364	$ 719
Other International					
Retail	$ 348	$ 258	$ 247	$ 251	$ 209
Wholesale	486	467	650	526	315
Total	$ 834	$ 725	$ 897	$ 777	$ 524
Total impaired loans	$ 2,201	$ 2,250	$ 2,327	$ 2,679	$ 2,755
Allowance against impaired loans	(599)	(637)	(605)	(721)	(863)
Net impaired loans	$ 1,602	$ 1,613	$ 1,722	$ 1,958	$ 1,892
Gross impaired loans as a % of loans and acceptances					
Residential mortgages	0.33%	0.34%	0.38%	0.54%	0.44%
Personal	0.39%	0.31%	0.36%	0.37%	0.44%
Small business	0.92%	1.32%	1.61%	1.81%	2.07%
Retail	0.34%	0.33%	0.37%	0.47%	0.45%
Wholesale	1.12%	1.44%	1.77%	2.46%	2.61%
Total	0.52%	0.58%	0.65%	0.95%	1.02%
Allowance against impaired loans as a % of gross impaired loans	27.22%	28.33%	26.00%	26.91%	31.32%

(1) On a continuing operations basis.
(2) Other in 2013 is related to other, $69 million; financing products, $38 million; other services, $101 million; holding and investments, $39 million; and health, $25 million.
(3) Past due loans greater than 90 days not included in impaired loans were $346 million in 2013 (2012 – $393 million; 2011 – $525 million; 2010 – $180 million; 2009 – $312 million).

Provision for credit losses by portfolio and geography					Table 78
	IFRS			Canadian GAAP	
(Millions of Canadian dollars, except for percentage amounts)	2013	2012 (1)	2011 (1)	2010 (1)	2009 (1)
Residential mortgages	$ 41	$ 67	$ 42	$ 25	$ 22
Personal	458	445	438	457	494
Credit cards	354	394	448	399	393
Small business	32	43	35	45	55
Retail	$ 885	$ 949	$ 963	$ 926	$ 964
Business					
Agriculture	$ 4	$ 8	$ 7	$ 18	$ 18
Automotive	3	(2)	(4)	15	21
Consumer goods	17	27	14	29	38
Energy	(6)	(11)	(20)	(6)	13
Non-bank financial services	10	1	(11)	(34)	264
Forest products	4	5	5	3	11
Industrial products	21	32	3	(6)	38
Mining & metals	1	–	–	(1)	7
Real estate & related	62	82	66	184	124
Technology & media	157	102	(3)	5	94
Transportation & environment	35	47	29	10	8
Other (2)	46	63	82	76	296
Sovereign	–	–	–	–	–
Bank	–	–	–	15	20
Wholesale	$ 354	$ 354	$ 168	$ 308	$ 952
Total provision for credit losses on impaired loans	$ 1,239	$ 1,303	$ 1,131	$ 1,234	$ 1,916
Canada					
Residential mortgages	$ 27	$ 34	$ 25	$ 7	$ 18
Personal	391	413	408	444	467
Credit cards	346	391	448	399	393
Small business	32	43	35	45	55
Retail	$ 796	$ 881	$ 916	$ 895	$ 933
Business					
Agriculture	4	8	7	18	18
Automotive	3	(2)	(3)	15	17
Consumer goods	16	13	13	17	26
Energy	(6)	(11)	(9)	3	(4)
Non-bank financial services	–	1	–	(1)	36
Forest products	3	5	4	3	9
Industrial products	14	12	3	(4)	36
Mining & metals	1	–	1	2	2
Real estate & related	37	43	31	35	52
Technology & media	50	98	6	(6)	33
Transportation & environment	2	10	5	10	7
Other	27	32	44	30	204
Sovereign	–	–	–	–	–
Bank	–	–	–	–	–
Wholesale	$ 151	$ 209	$ 102	$ 122	$ 436
Total	$ 947	$ 1,090	$ 1,018	$ 1,017	$ 1,369
U.S.					
Retail	3	4	4	–	–
Wholesale	32	29	(19)	62	455
	$ 35	$ 33	$ (15)	$ 62	$ 455
Other International					
Retail	86	64	43	31	31
Wholesale	171	116	85	124	61
	$ 257	$ 180	$ 128	$ 155	$ 92
Total provision for credit losses on impaired loans	$ 1,239	$ 1,303	$ 1,131	$ 1,234	$ 1,916
Total provision for credit losses on non-impaired loans	–	(2)	2	6	251
Total provision for credit losses	1,239	1,301	1,133	1,240	2,167
Provision for credit losses as a % of average net loans and acceptances	0.31%	0.35%	0.33%	0.40%	0.72%

(1) On a continuing operations basis.
(2) Other in 2013 is related to financing products, $0.4 million; other services, $3.7 million; holdings and investments, $2.0 million; and other, $12.8 million.

Allowance for credit losses by portfolio and geography — Table 79

(Millions of Canadian dollars, except percentage amounts)	IFRS 2013	IFRS 2012 (1)	IFRS 2011 (1)	Canadian GAAP 2010 (1)	Canadian GAAP 2009 (2)
Allowance at beginning of year	$ 2,088	$ 2,058	$ 2,966	$ 2,264	$ 1,734
Allowance at beginning of year – discontinued operations	–	–	(854)	–	–
Provision for credit losses	1,239	1,301	1,133	1,240	2,167
Write-offs by portfolio					
Residential mortgages	(24)	(31)	(16)	(11)	(9)
Personal	(498)	(499)	(515)	(538)	(535)
Credit cards	(466)	(497)	(545)	(463)	(445)
Small business	(35)	(50)	(45)	(56)	(54)
Retail	$ (1,023)	$ (1,077)	$ (1,121)	$ (1,068)	$ (1,043)
Business	$ (450)	$ (291)	$ (226)	$ (478)	$ (805)
Sovereign	–	–	(9)	–	–
Bank	–	(32)	–	–	–
Wholesale	$ (450)	$ (323)	$ (235)	$ (478)	$ (805)
Total write-offs by portfolio	$ (1,473)	$ (1,400)	$ (1,356)	$ (1,546)	$ (1,848)
Recoveries by portfolio					
Residential mortgages	$ 2	$ 1	$ 1	$ 1	$ 1
Personal	96	83	79	79	65
Credit cards	112	102	97	63	52
Small business	9	8	7	7	5
Retail	$ 219	$ 194	$ 184	$ 150	$ 123
Business	$ 51	$ 39	$ 60	$ 51	$ 126
Sovereign	–	–	–	–	–
Bank	–	–	–	–	–
Wholesale	$ 51	$ 39	$ 60	$ 51	$ 126
Total recoveries by portfolio	$ 270	$ 233	$ 244	$ 201	$ 249
Net write-offs	$ (1,203)	$ (1,167)	$ (1,112)	$ (1,345)	$ (1,599)
Adjustments (3)	(74)	(104)	(75)	(33)	(38)
Total allowance for credit losses at end of year	$ 2,050	$ 2,088	$ 2,058	$ 2,126	$ 2,264
Allowance against impaired loans					
Canada					
Residential mortgages	$ 36	$ 41	$ 47	$ 47	$ 39
Personal	97	89	88	88	94
Small business	16	12	15	18	22
Retail	$ 149	$ 142	$ 150	$ 153	$ 155
Business					
Agriculture	$ 6	$ 9	$ 13	$ 14	$ 10
Automotive	4	7	15	27	6
Consumer goods	15	14	17	20	18
Energy	1	1	3	10	1
Non-bank financial services	–	–	–	1	–
Forest products	4	6	3	4	8
Industrial products	15	10	12	36	63
Mining & metals	1	1	1	1	1
Real estate & related	42	45	47	36	44
Technology & media	46	107	20	12	32
Transportation & environment	6	8	5	6	7
Other	30	31	43	40	72
Sovereign	–	–	–	–	–
Bank	–	–	–	–	–
Wholesale	$ 170	$ 239	$ 179	$ 207	$ 262
	$ 319	$ 381	$ 329	$ 360	$ 417
U.S.					
Retail	$ 2	$ 1	$ 1	$ –	$ –
Wholesale	19	38	25	85	251
	$ 21	$ 39	$ 26	$ 85	$ 251
Other International					
Retail	$ 146	$ 96	$ 80	$ 83	$ 74
Wholesale	113	121	170	193	121
	$ 259	$ 217	$ 250	$ 276	$ 195
Total allowance against impaired loans	$ 599	$ 637	$ 605	$ 721	$ 863
Allowance against non-impaired loans					
Residential mortgages	$ 48	$ 48	$ 41	$ 26	$ 24
Personal	405	392	412	480	449
Credit cards	385	403	415	365	313
Small business	45	60	60	60	47
Retail	$ 883	$ 903	$ 928	$ 931	$ 833
Wholesale	$ 477	$ 457	$ 434	$ 386	$ 468
Off-balance sheet and other items	$ 91	$ 91	$ 91	$ 88	$ 100
Total allowance against non-impaired loans	$ 1,451	$ 1,451	$ 1,453	$ 1,405	$ 1,401
Total allowance for credit losses	$ 2,050	$ 2,088	$ 2,058	$ 2,126	$ 2,264
Key ratios					
Allowance for credit losses as a % of loans and acceptances	0.49%	0.54%	0.57%	0.75%	0.84%
Net write-offs as a % of average net loans and acceptances	0.30%	0.28%	0.33%	0.49%	0.60%

(1) On a continuing operations basis.
(2) Opening allowance for credit losses as at November 1, 2008 has been restated due to the implementation of amendments to CICA section 3855.
(3) Under IFRS, other adjustments include $86 million of unwind of discount and $(12) million of changes in exchange rate (2012 – $110 million and $(6) million; 2011 – $78 million and $3 million). For further details, refer to Note 5 of our 2013 Annual Consolidated Financial Statements.

Credit quality information by Canadian province — Table 80

(Millions of Canadian dollars)	IFRS 2013	IFRS 2012 (1)	IFRS 2011 (1)	Canadian GAAP 2010 (1)	Canadian GAAP 2009 (1)
Loans and acceptances (2)					
Atlantic provinces (3)	$ 21,263	$ 19,953	$ 18,481	$ 14,558	$ 13,147
Quebec	48,060	42,920	38,776	33,093	29,994
Ontario	152,074	141,570	141,230	103,179	100,282
Prairie provinces (4)	84,015	77,187	68,468	54,843	49,964
B.C. and territories (5)	68,118	65,204	58,774	48,908	45,134
Total loans and acceptances in Canada	$ 373,530	$ 346,834	$ 325,729	$ 254,581	$ 238,521
Gross impaired loans					
Atlantic provinces (3)	$ 83	$ 67	$ 66	$ 72	$ 57
Quebec	177	180	135	162	190
Ontario	424	502	398	598	647
Prairie provinces (4)	330	338	404	429	300
B.C. and territories (5)	241	269	305	277	318
Total gross impaired loans in Canada	$ 1,255	$ 1,356	$ 1,308	$ 1,538	$ 1,512
Provision for credit losses on impaired loans					
Atlantic provinces (3)	$ 50	$ 62	$ 54	$ 50	$ 56
Quebec	78	96	63	85	90
Ontario	607	706	686	659	942
Prairie provinces (4)	113	120	107	146	138
B.C. and territories (5)	99	106	108	77	143
Total provision for credit losses on impaired loans in Canada	$ 947	$ 1,090	$ 1,018	$ 1,017	$ 1,369

(1) On a continuing operations basis.
(2) Comparative figures have been revised from those previously presented.
(3) Comprises Newfoundland and Labrador, Prince Edward Island, Nova Scotia and New Brunswick.
(4) Comprises Manitoba, Saskatchewan and Alberta.
(5) Comprises British Columbia, Nunavut, Northwest Territories and Yukon.

Small business loans and acceptances in Canada by sector — Table 81

As at October 31 (Millions of Canadian dollars)	IFRS 2013	IFRS 2012 (1)	IFRS 2011 (1)	Canadian GAAP 2010 (1)	Canadian GAAP 2009 (1)
Agriculture	$ 371	$ 334	$ 302	$ 332	$ 304
Automotive	676	662	684	643	666
Consumer goods	2,479	2,415	2,448	2,367	2,261
Energy	522	525	465	393	367
Non-bank financial services	87	77	71	73	66
Forest products	328	309	300	305	316
Industrial products	1,779	1,849	1,830	1,712	1,696
Mining & metals	127	125	140	113	102
Real estate & related	3,916	3,569	3,439	3,205	3,053
Technology & media	443	344	304	318	318
Transportation & environment	1,106	1,137	1,039	941	961
Other (2)	7,214	6,083	5,674	5,360	5,013
Total small business loans	$ 19,048	$ 17,429	$ 16,696	$ 15,762	$ 15,123

(1) On a continuing operations basis.
(2) Other sector in 2013 related primarily to other services, $3.6 billion; health, $2.2 billion; holding and investment, $282 million; financing products, $75 million; and not elsewhere classified, $1.1 billion.

REPORTS AND CONSOLIDATED FINANCIAL STATEMENTS

Management's responsibility for financial reporting

The accompanying consolidated financial statements of Royal Bank of Canada were prepared by management, which is responsible for the integrity and fairness of the information presented, including the many amounts that must of necessity be based on estimates and judgments. These consolidated financial statements were prepared in accordance with the *Bank Act* (Canada) and International Financial Reporting Standards as issued by the International Accounting Standards Board. Financial information appearing throughout our Management's Discussion and Analysis is consistent with these consolidated financial statements.

Our internal controls are designed to provide reasonable assurance that transactions are authorized, assets are safeguarded and proper records are maintained. These controls include quality standards in hiring and training of employees, policies and procedures manuals, a corporate code of conduct and accountability for performance within appropriate and well-defined areas of responsibility.

The system of internal controls is further supported by a compliance function, which is designed to ensure that we and our employees comply with securities legislation and conflict of interest rules, and by an internal audit staff, which conducts periodic audits of all aspects of our operations.

The Board of Directors oversees management's responsibilities for financial reporting through an Audit Committee, which is composed entirely of independent directors. This Committee reviews our consolidated financial statements and recommends them to the Board for approval. Other key responsibilities of the Audit Committee include reviewing our existing internal control procedures and planned revisions to those procedures, and advising the directors on auditing matters and financial reporting issues. Our Chief Compliance Officer and Chief Internal Auditor have full and unrestricted access to the Audit Committee.

The Office of the Superintendent of Financial Institutions Canada (OSFI) examines and inquires into our business and affairs as deemed necessary to determine whether the provisions of the *Bank Act* are being complied with, and that we are in sound financial condition. In carrying out its mandate, OSFI strives to protect the rights and interests of our depositors and creditors.

Deloitte LLP, Independent Registered Chartered Accountants appointed by our shareholders upon the recommendation of the Audit Committee and Board, have performed an independent audit of the consolidated financial statements and their report follows. The auditors have full and unrestricted access to the Audit Committee to discuss their audit and related findings.

Gordon M. Nixon
President and Chief Executive Officer

Janice R. Fukakusa
Chief Administrative Officer and Chief Financial Officer

Toronto, December 4, 2013

Report of Independent Registered Chartered Accountants

To the Shareholders of Royal Bank of Canada

We have audited the accompanying consolidated financial statements of Royal Bank of Canada and subsidiaries (the "Bank"), which comprise the consolidated balance sheets as at October 31, 2013 and October 31, 2012, and the consolidated statements of income, statements of comprehensive income, statements of changes in equity, and statements of cash flows for each of the years in the three-year period ended October 31, 2013, and a summary of significant accounting policies and other explanatory information.

Management's Responsibility for the Consolidated Financial Statements
Management is responsible for the preparation and fair presentation of these consolidated financial statements in accordance with International Financial Reporting Standards as issued by the International Accounting Standards Board, and for such internal control as management determines is necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

Auditor's Responsibility
Our responsibility is to express an opinion on these consolidated financial statements based on our audits. We conducted our audits in accordance with Canadian generally accepted auditing standards and the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the consolidated financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the consolidated financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the consolidated financial statements in order to design audit procedures that are appropriate in the circumstances. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements.

We believe that the audit evidence we have obtained in our audits is sufficient and appropriate to provide a basis for our audit opinion.

Opinion
In our opinion, the consolidated financial statements present fairly, in all material respects, the balance sheets of Royal Bank of Canada and subsidiaries as at October 31, 2013 and October 31, 2012, and their financial performance and cash flows for each of the years in the three-year period ended October 31, 2013 in accordance with International Financial Reporting Standards as issued by the International Accounting Standards Board.

Other Matter
We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the Bank's internal control over financial reporting as of October 31, 2013 based on the criteria established in *Internal Control—Integrated Framework (1992)* issued by the Committee of Sponsoring Organizations of the Treadway Commission and our report dated December 4, 2013 expressed an unqualified opinion on the Bank's internal control over financial reporting.

Deloitte LLP
Independent Registered Chartered Accountants
Licensed Public Accountants
Toronto, Canada
December 4, 2013

Management's Report on Internal Control over Financial Reporting

Management of Royal Bank of Canada is responsible for establishing and maintaining adequate internal control over financial reporting. Internal control over financial reporting is a process designed by, or under the supervision of, the President and Chief Executive Officer and the Chief Administrative Officer and Chief Financial Officer and effected by the Board of Directors, management and other personnel to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. It includes those policies and procedures that:

- Pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions related to and dispositions of our assets
- Provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and our receipts and expenditures are made only in accordance with authorizations of our management and directors
- Provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of our assets that could have a material effect on our financial statements.

Due to its inherent limitations, internal control over financial reporting may not prevent or detect misstatements on a timely basis. Also, projections of any evaluation of the effectiveness of internal control over financial reporting to future periods are subject to the risk that the controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

Management evaluated, under the supervision of and with the participation of the President and Chief Executive Officer and the Chief Administrative Officer and Chief Financial Officer, the effectiveness of our internal control over financial reporting as of October 31, 2013, based on the criteria set forth in *Internal Control – Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission. Based on that evaluation, management concluded that, as of October 31, 2013, internal control over financial reporting was effective based on the criteria established in the *Internal Control – Integrated Framework*. Also, based on the results of our evaluation, management concluded that there were no material weaknesses that have been identified in internal control over financial reporting as of October 31, 2013.

Our internal control over financial reporting as of October 31, 2013 has been audited by Deloitte LLP, Independent Registered Chartered Accountants, who also audited our Consolidated Financial Statements for the year ended October 31, 2013, as stated in the Report of Independent Registered Chartered Accountants, which report expressed an unqualified opinion on the effectiveness of our internal control over financial reporting.

Gordon M. Nixon
President and Chief Executive Officer

Janice R. Fukakusa
Chief Administrative Officer and Chief Financial Officer

Toronto, December 4, 2013

Report of Independent Registered Chartered Accountants

To the Shareholders of Royal Bank of Canada

We have audited the internal control over financial reporting of Royal Bank of Canada and subsidiaries (the "Bank") as of October 31, 2013, based on the criteria established in *Internal Control – Integrated Framework (1992)* issued by the Committee of Sponsoring Organizations of the Treadway Commission. The Bank's management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Management's Report on Internal Control over Financial Reporting. Our responsibility is to express an opinion on the Bank's internal control over financial reporting based on our audit.

We conducted our audit in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

A company's internal control over financial reporting is a process designed by, or under the supervision of, the company's principal executive and principal financial officers, or persons performing similar functions, and effected by the company's board of directors, management, and other personnel to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of the inherent limitations of internal control over financial reporting, including the possibility of collusion or improper management override of controls, material misstatements due to error or fraud may not be prevented or detected on a timely basis. Also, projections of any evaluation of the effectiveness of the internal control over financial reporting to future periods are subject to the risk that the controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

In our opinion, the Bank maintained, in all material respects, effective internal control over financial reporting as of October 31, 2013, based on the criteria established in *Internal Control – Integrated Framework (1992)* issued by the Committee of Sponsoring Organizations of the Treadway Commission.

We have also audited, in accordance with Canadian generally accepted auditing standards and the standards of the Public Company Accounting Oversight Board (United States), the consolidated financial statements as of and for the year ended October 31, 2013 of the Bank and our report dated December 4, 2013 expressed an unqualified opinion on those consolidated financial statements.

Deloitte LLP
Independent Registered Chartered Accountants
Licensed Public Accountants
Toronto, Canada
December 4, 2013

Consolidated Balance Sheets

(Millions of Canadian dollars)	As at October 31 2013	As at October 31 2012
Assets		
Cash and due from banks	$ 15,870	$ 12,617
Interest-bearing deposits with banks	9,061	10,255
Securities (Note 4)		
Trading	144,023	120,783
Available-for-sale	38,695	40,828
	182,718	161,611
Assets purchased under reverse repurchase agreements and securities borrowed	117,517	112,257
Loans (Note 5)		
Retail	321,678	301,185
Wholesale	88,947	79,056
	410,625	380,241
Allowance for loan losses (Note 5)	(1,959)	(1,997)
	408,666	378,244
Investments for account of segregated fund holders (Note 16)	513	383
Other		
Customers' liability under acceptances	9,953	9,385
Derivatives (Note 8)	74,822	91,293
Premises and equipment, net (Note 9)	2,659	2,691
Goodwill (Note 10)	8,361	7,485
Other intangibles (Note 10)	2,796	2,686
Investments in associates (Note 12)	112	125
Prepaid pension benefit cost (Note 17)	1,084	1,049
Other assets (Note 13)	26,687	35,019
	126,474	149,733
Total assets	$ 860,819	$ 825,100
Liabilities and equity		
Deposits (Note 14)		
Personal	$ 194,297	$ 179,502
Business and government	350,640	312,882
Bank	13,543	15,835
	558,480	508,219
Insurance and investment contracts for account of segregated fund holders (Note 16)	513	383
Other		
Acceptances	9,953	9,385
Obligations related to securities sold short	47,128	40,756
Obligations related to assets sold under repurchase agreements and securities loaned	60,416	64,032
Derivatives (Note 8)	76,745	96,761
Insurance claims and policy benefit liabilities (Note 15)	8,034	7,921
Accrued pension and other post-employment benefit expense (Note 17)	1,759	1,729
Other liabilities (Note 18)	39,113	41,371
	243,148	261,955
Subordinated debentures (Note 19)	7,443	7,615
Trust capital securities (Note 20)	900	900
Total liabilities	810,484	779,072
Equity attributable to shareholders (Note 21)		
Preferred shares	4,600	4,813
Common shares (shares issued — 1,441,055,616 and 1,445,302,600)	14,377	14,323
Treasury shares – preferred (shares held – (46,641) and (41,632))	1	1
– common (shares held – (666,366) and (543,276))	41	30
Retained earnings	28,314	24,270
Other components of equity	1,207	830
	48,540	44,267
Non-controlling interests (Note 21)	1,795	1,761
Total equity	50,335	46,028
Total liabilities and equity	$ 860,819	$ 825,100

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

Gordon M. Nixon
President and Chief Executive Officer

Victor L. Young
Director

Consolidated Statements of Income

(Millions of Canadian dollars, except per share amounts)	For the year ended October 31 2013	October 31 2012	October 31 2011
Interest income			
Loans	$ 16,357	$ 15,972	$ 15,236
Securities	3,779	3,874	4,750
Assets purchased under reverse repurchase agreements and securities borrowed	941	945	736
Deposits	73	61	91
	21,150	20,852	20,813
Interest expense			
Deposits	5,642	6,017	6,334
Other liabilities	1,921	1,977	2,723
Subordinated debentures	336	360	399
	7,899	8,354	9,456
Net interest income	13,251	12,498	11,357
Non-interest income			
Insurance premiums, investment and fee income (Note 15)	3,911	4,897	4,474
Trading revenue	867	1,298	655
Investment management and custodial fees	2,514	2,074	1,999
Mutual fund revenue	2,557	2,088	1,975
Securities brokerage commissions	1,337	1,213	1,331
Service charges	1,437	1,376	1,323
Underwriting and other advisory fees	1,569	1,434	1,485
Foreign exchange revenue, other than trading	748	655	684
Card service revenue	967	920	882
Credit fees	1,092	848	707
Net gain on available-for-sale securities (Note 4)	188	120	104
Share of (loss) profit in associates	6	24	(7)
Other	423	327	669
Non-interest income	17,616	17,274	16,281
Total revenue	30,867	29,772	27,638
Provision for credit losses (Note 5)	1,239	1,301	1,133
Insurance policyholder benefits, claims and acquisition expense (Note 15)	2,784	3,621	3,358
Non-interest expense			
Human resources (Note 17 and 22)	10,190	9,287	8,661
Equipment	1,135	1,020	960
Occupancy	1,246	1,170	1,076
Communications	742	764	746
Professional fees	753	695	692
Outsourced item processing	250	254	266
Amortization of other intangibles (Note 10)	566	528	481
Impairment of goodwill and other intangibles (Note 10 and 11)	10	168	–
Other	1,335	1,274	1,285
	16,227	15,160	14,167
Income before income taxes from continuing operations	10,617	9,690	8,980
Income taxes (Note 24)	2,188	2,100	2,010
Net income from continuing operations	8,429	7,590	6,970
Net loss from discontinued operations (Note 11)	–	(51)	(526)
Net income	$ 8,429	$ 7,539	$ 6,444
Net income attributable to:			
Shareholders	$ 8,331	$ 7,442	$ 6,343
Non-controlling interests	98	97	101
	$ 8,429	$ 7,539	$ 6,444
Basic earnings per share (in dollars) (Note 25)	$ 5.60	$ 4.98	$ 4.25
Basic earnings per share from continuing operations (in dollars)	5.60	5.01	4.62
Basic loss per share from discontinued operations (in dollars)	–	(0.03)	(0.37)
Diluted earnings per share (in dollars) (Note 25)	5.54	4.93	4.19
Diluted earnings per share from continuing operations (in dollars)	5.54	4.96	4.55
Diluted loss per share from discontinued operations (in dollars)	–	(0.03)	(0.36)
Dividends per common share (in dollars)	2.53	2.28	2.08

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

Consolidated Statements of Comprehensive Income

(Millions of Canadian dollars)	For the year ended October 31 2013	October 31 2012	October 31 2011
Net income	$ 8,429	$ 7,539	$ 6,444
Other comprehensive income (loss), net of taxes (Note 24)			
Items that will be reclassified subsequently to income:			
Net change in unrealized (losses) gains on available-for-sale securities			
Net unrealized gains (losses) on available-for-sale securities	15	193	(30)
Reclassification of net (gains) losses on available-for-sale securities to income	(87)	(33)	13
	(72)	160	(17)
Foreign currency translation adjustments			
Unrealized foreign currency translation gains (losses)	1,402	113	(625)
Net foreign currency translation (losses) gains from hedging activities	(912)	–	717
Reclassification of losses (gains) on net investment hedging activities to income	–	11	(1)
	490	124	91
Net change in cash flow hedges			
Net (losses) gains on derivatives designated as cash flow hedges	(11)	32	298
Reclassification of (gains) losses on derivatives designated as cash flow hedges to income	(30)	25	132
	(41)	57	430
Total other comprehensive income, net of taxes	377	341	504
Total comprehensive income	$ 8,806	$ 7,880	$ 6,948
Total comprehensive income attributable to:			
Shareholders	$ 8,708	$ 7,782	$ 6,847
Non-controlling interests	98	98	101
	$ 8,806	$ 7,880	$ 6,948

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

Consolidated Statements of Changes in Equity

						Other components of equity						
(Millions of Canadian dollars)	Preferred shares	Common shares	Treasury shares – preferred	Treasury shares – common	Retained earnings	Available-for-sale securities	Foreign currency translation	Cash flow hedges	Total other components of equity	Equity attributable to shareholders	Non-controlling interests	Total equity
Balance at November 1, 2010	$ 4,813	$ 13,378	$ (2)	$ (81)	$ 17,287	$ 277	$ (20)	$ (271)	$ (14)	$ 35,381	$ 2,094	$ 37,475
Changes in equity												
Issues of share capital	–	632	–	–	–	–	–	–	–	632	–	632
Sales of treasury shares	–	–	97	6,074	–	–	–	–	–	6,171	–	6,171
Purchases of treasury shares	–	–	(95)	(5,985)	–	–	–	–	–	(6,080)	(324)	(6,404)
Share-based compensation awards	–	–	–	–	(33)	–	–	–	–	(33)	–	(33)
Dividends on common shares	–	–	–	–	(2,979)	–	–	–	–	(2,979)	–	(2,979)
Dividends on preferred shares and other	–	–	–	–	(258)	–	–	–	–	(258)	(93)	(351)
Other	–	–	–	–	21	–	–	–	–	21	(14)	7
Net income	–	–	–	–	6,343	–	–	–	–	6,343	101	6,444
Total other comprehensive income	–	–	–	–	–	(18)	91	431	504	504	(3)	501
Balance at October 31, 2011	$ 4,813	$ 14,010	$ –	$ 8	$ 20,381	$ 259	$ 71	$ 160	$ 490	$ 39,702	$ 1,761	$ 41,463
Changes in equity												
Issues of share capital	–	313	–	–	–	–	–	–	–	313	–	313
Sales of treasury shares	–	–	98	5,186	–	–	–	–	–	5,284	–	5,284
Purchases of treasury shares	–	–	(97)	(5,164)	–	–	–	–	–	(5,261)	–	(5,261)
Share-based compensation awards	–	–	–	–	(9)	–	–	–	–	(9)	–	(9)
Dividends on common shares	–	–	–	–	(3,291)	–	–	–	–	(3,291)	–	(3,291)
Dividends on preferred shares and other	–	–	–	–	(258)	–	–	–	–	(258)	92	(350)
Other	–	–	–	–	5	–	–	–	–	5	(6)	(1)
Net income	–	–	–	–	7,442	–	–	–	–	7,442	97	7,539
Total other comprehensive income	–	–	–	–	–	160	124	56	340	340	1	341
Balance at October 31, 2012	$ 4,813	$ 14,323	$ 1	$ 30	$ 24,270	$ 419	$ 195	$ 216	$ 830	$ 44,267	$ 1,761	$ 46,028
Changes in equity												
Issues of share capital	–	121	–	–	–	–	–	–	–	121	–	121
Common shares purchased for cancellation	–	(67)	–	–	(341)	–	–	–	–	(408)	–	(408)
Preferred shares redeemed	(213)	–	–	–	(9)	–	–	–	–	(222)	–	(222)
Sales of treasury shares	–	–	127	4,453	–	–	–	–	–	4,580	–	4,580
Purchases of treasury shares	–	–	(127)	(4,442)	–	–	–	–	–	(4,569)	–	(4,569)
Share-based compensation awards	–	–	–	–	(7)	–	–	–	–	(7)	–	(7)
Dividends on common shares	–	–	–	–	(3,651)	–	–	–	–	(3,651)	–	(3,651)
Dividends on preferred shares and other	–	–	–	–	(253)	–	–	–	–	(253)	(94)	(347)
Other	–	–	–	–	(26)	–	–	–	–	(26)	30	4
Net income	–	–	–	–	8,331	–	–	–	–	8,331	98	8,429
Total other comprehensive income	–	–	–	–	–	(72)	490	(41)	377	377	–	377
Balance at October 31, 2013	$ 4,600	$ 14,377	$ 1	$ 41	$ 28,314	$ 347	$ 685	$ 175	$ 1,207	$ 48,540	$ 1,795	$ 50,335

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

Consolidated Statements of Cash Flows

(Millions of Canadian dollars)	For the year ended October 31 2013	October 31 2012	October 31 2011
Cash flows from operating activities			
Net income	$ 8,429	$ 7,539	$ 6,444
Adjustments for non-cash items and others			
Provision for credit losses	1,239	1,418	1,459
Depreciation	464	437	412
Deferred income taxes	(155)	123	(124)
Impairment and amortization of goodwill and other intangibles	576	716	546
(Gain) loss on sale of premises and equipment	(24)	25	106
Gain on available-for-sale securities	(217)	(194)	(278)
Gain on disposition of business	(17)	–	–
Impairment of available-for-sale securities	26	55	247
Share of (loss) profit in associates	(6)	(23)	8
Adjustments for net changes in operating assets and liabilities			
Insurance claims and policy benefit liabilities	113	802	(139)
Net change in accrued interest receivable and payable	(468)	(161)	(115)
Current income taxes	361	(826)	807
Derivative assets	16,475	8,462	6,373
Derivative liabilities	(20,017)	(3,884)	(7,551)
Trading securities	(23,038)	6,818	(905)
Change in loans, net of securitizations	(19,987)	(29,208)	(27,285)
Change in assets purchased under reverse repurchase agreements and securities borrowed	(5,260)	(25,060)	(12,249)
Change in deposits	41,283	15,850	29,059
Change in obligations related to assets sold under repurchase agreements and securities loaned	(3,616)	20,914	7,166
Change in obligations related to securities sold short	6,372	(3,528)	(2,313)
Net change in brokers and dealers receivable and payable	536	537	22
Other	4,173	(2,886)	2,789
Net cash from (used in) operating activities	7,242	(2,074)	4,479
Cash flows from investing activities			
Change in interest-bearing deposits with banks	1,194	457	781
Proceeds from sale of available-for-sale securities	6,476	10,915	14,549
Proceeds from maturity of available-for-sale securities	37,100	47,420	37,882
Purchases of available-for-sale securities	(41,057)	(55,448)	(45,942)
Proceeds from maturity of held-to-maturity securities	401	190	1,179
Purchases of held-to-maturity securities	(284)	(242)	(935)
Net acquisitions of premises and equipment and other intangibles	(946)	(1,351)	(1,452)
Proceeds from dispositions	17	2,677	440
Cash used in acquisitions	(2,537)	(853)	(1,300)
Net cash from investing activities	364	3,765	5,202
Cash flows from financing activities			
Redemption of RBC Trust Capital Securities	–	–	(750)
Issue of subordinated debentures	2,046	–	1,500
Repayment of subordinated debentures	(2,000)	(1,006)	(404)
Issue of common shares	121	126	152
Common shares purchased for cancellation	(408)	–	–
Preferred shares redeemed	(222)	–	–
Sales of treasury shares	4,580	5,284	6,171
Purchase of treasury shares	(4,569)	(5,261)	(6,080)
Dividends paid	(3,810)	(3,272)	(3,032)
Dividends/distributions paid to non-controlling interests	(94)	(92)	(93)
Change in short-term borrowings of subsidiaries	(93)	21	(615)
Net cash used in financing activities	(4,449)	(4,200)	(3,151)
Effect of exchange rate changes on cash and due from banks	96	(18)	76
Net change in cash resources	3,253	(2,527)	6,606
Cash resources at beginning of period (1)	12,617	15,144	8,538
Cash resources at end of period (1)	$ 15,870	$ 12,617	$ 15,144
Cash and due from banks	$ 15,870	$ 12,617	$ 12,428
Cash and due from banks included in assets of discontinued operations	–	–	2,716
Cash resources at end of period (1)	$ 15,870	$ 12,617	$ 15,144
Cash flows from operating activities include:			
Amount of interest paid	$ 7,223	$ 7,872	$ 9,234
Amount of interest received	19,349	19,674	20,471
Amount of dividend received	1,479	1,316	1,350
Amount of income taxes paid	1,524	2,926	1,512

(1) We are required to maintain balances with central banks and other regulatory authorities. The total balances were $2.6 billion as at October 31, 2013 (October 31, 2012 – $2.1 billion; October 31, 2011 – $2.0 billion; November 1, 2010 – $1.8 billion).

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

Note 1 General information

Royal Bank of Canada and its subsidiaries provide diversified financial services including personal and commercial banking, wealth management, insurance, investor services and capital markets products and services on a global basis. Refer to Note 29 for further details on our business segments.

The parent bank, Royal Bank of Canada, is a Schedule I Bank under the *Bank Act* (Canada) incorporated and domiciled in Canada. Our corporate headquarters are located at Royal Bank Plaza, 200 Bay Street, Toronto, Ontario, Canada and our head office is located at 1 Place Ville-Marie, Montreal, Quebec, Canada. Our common shares are listed on the Toronto Stock Exchange and New York Stock Exchange with the ticker symbol RY.

Our Consolidated Financial Statements are prepared in compliance with International Financial Reporting Standards (IFRS) as issued by the International Accounting Standards Board (IASB). The Consolidated Financial Statements are stated in Canadian dollars and have been prepared in accordance with all IFRS issued and in effect as at October 31, 2013. Tabular information is stated in millions of dollars, except per share amounts and percentages. These Consolidated Financial Statements also comply with Subsection 308 of the *Bank Act* (Canada), which states that, except as otherwise specified by the Office of the Superintendent of Financial Institutions (OSFI), our Consolidated Financial Statements are to be prepared in accordance with IFRS. The accounting policies outlined in Note 2 have been consistently applied to all periods presented.

On December 4, 2013, the Board of Directors authorized the Consolidated Financial Statements for issue.

Note 2 Summary of significant accounting policies, estimates and judgments

The significant accounting policies used in the preparation of these Consolidated Financial Statements, including the accounting requirements prescribed by OSFI, are summarized below. These accounting policies conform, in all material respects, to IFRS.

General

Use of estimates and assumptions

In preparing our Consolidated Financial Statements, management is required to make subjective estimates and assumptions that affect the reported amount of assets, liabilities, net income and related disclosures. Estimates made by management are based on historical experience and other assumptions that are believed to be reasonable. Key sources of estimation uncertainty include: consolidation of special purpose entities (SPEs), securities impairment, determination of fair value of financial instruments, the allowance for credit losses, derecognition of financial assets, insurance claims and policy benefit liabilities, pensions and other post-employment benefits, income taxes, carrying value of goodwill and other intangible assets, litigation provisions, and deferred revenue under the credit card customer loyalty reward program. Accordingly, actual results may differ from these and other estimates thereby impacting our future Consolidated Financial Statements. Refer to the relevant accounting policies in this Note for details on our use of estimates and assumptions.

Significant judgments

In preparation of these Consolidated Financial Statements, management is required to make significant judgments that affect the carrying amounts of certain assets and liabilities, and the reported amounts of revenues and expenses recorded during the period. Significant judgments have been made in the following areas and discussed as noted in the Consolidated Financial Statements:

Special purpose entities	Note 2 – page 109 Note 7 – page 136	Securities impairment	Note 2 – page 109 Note 4 – page 129
Fair value of financial instruments	Note 2 – page 110 Note 3 – page 121	Application of the effective interest method	Note 2 – page 112
Allowance for credit losses	Note 2 – page 114 Note 5 – page 132	Derecognition of financial assets	Note 2 – page 115 Note 6 – page 135
Employee benefits	Note 2 – page 116 Note 17 – page 154	Income taxes	Note 2 – page 116 Note 24 – page 165
Goodwill and other intangibles	Note 2 – page 117 Note 10 – page 146 Note 11 – page 148	Provisions	Note 2 – page 118 Note 26 – page 167

Basis of consolidation

Our Consolidated Financial Statements include the assets and liabilities and results of operations of the parent company, Royal Bank of Canada, and its subsidiaries including certain SPEs, after elimination of intercompany transactions, balances, revenues and expenses.

Continuing operations

As described in Note 11, during the second quarter in 2011, we completed the sale of Liberty Life Insurance Company (Liberty Life), our U.S. life insurance business. During the third quarter in 2011, we announced the sale of substantially all of our U.S. regional retail banking operations and completed this sale in the second quarter of 2012.

The sale of Liberty Life and our U.S. regional retail banking operations are reflected as discontinued operations on our Consolidated Financial Statements for all periods presented.

Non-current assets held for sale and discontinued operations

Non-current assets (and disposal groups) are classified as held for sale if their carrying amounts will be recovered principally through a sale transaction rather than through continuing use. This condition is satisfied when the asset is available for immediate sale in its present condition, management is committed to the sale, and it is highly probable to occur within one year. Non-current assets (and disposal groups) classified as held for sale are measured at the lower of their previous carrying amount and fair value less costs to sell and are presented separately from other assets on our Consolidated Balance Sheets.

A disposal group is classified as a discontinued operation if it meets the following conditions: (i) it is a component that can be distinguished operationally and financially from the rest of our operations, and (ii) it represents either a separate major line of business or is part of a single co-ordinated plan to dispose of a separate major line of business or geographical area of operations. Disposal groups classified as discontinued operations are presented separately from our continuing operations in our Consolidated Statements of Income.

Subsidiaries and SPEs
Subsidiaries are those entities over which we have control, where control is defined as the power to govern the financial and operating policies so as to obtain benefits from the entity's activities. We consolidate our subsidiaries from the date control is transferred to us, and cease consolidation when they are no longer controlled by us.

SPEs are entities created to accomplish a narrow and well-defined objective with limited decision-making powers and pre-established or limited activities. These include SPEs that are sponsored for various reasons, including those which were formed to allow clients to invest in alternative assets, for asset securitization transactions, and for buying and selling credit protection.

We consolidate SPEs when an assessment of the relevant factors indicates that we control the SPE. In some circumstances, different factors and conditions may indicate that various parties may control an SPE depending on whether the factors and conditions are assessed in isolation or in totality. Significant judgment is applied by management in assessing these factors and any related conditions in totality when determining whether we control a SPE. Relevant factors include: (i) whether the activities of the SPE are conducted according to our specific business needs so that we obtain the benefits from the SPE's operations, (ii) whether we have the decision-making powers to obtain the majority of the benefits, (iii) whether we will obtain the majority of the benefits of the activities of the SPE, and (iv) whether we retain the majority of the residual ownership risks related to the assets or SPE in order to obtain the benefits from its activities. Our approach generally focuses on identifying the significant activities that impact the financial results of the SPE. We then determine, in light of all relevant facts and circumstances, which party has substantive rights to control the decision making authority over those activities and who is exposed to the majority of risks and rewards resulting from those decisions. Our consolidation conclusions affect the classification and amount of assets, liabilities, revenue and expenses reported in our Consolidated Financial Statements.

Non-controlling interests in subsidiaries and SPEs that we consolidate are shown on our Consolidated Balance Sheets as a separate component of equity which is distinct from our shareholders' equity. The net income attributable to non-controlling interests is separately disclosed in our Consolidated Statements of Income.

Investments in associates
The equity method is used to account for investments in associated corporations and limited partnerships over which we have significant influence. Under the equity method of accounting, investments are initially recorded at cost, and the carrying amount is increased or decreased to recognize our share of the investee's net profit or loss (including net profit or loss recognized directly in equity) subsequent to the date of acquisition.

Interests in joint ventures
The proportionate consolidation method is used to account for our interests in jointly controlled entities, whereby our pro rata share of assets, liabilities, income and expenses is consolidated.

Changes in accounting policies

Amendments to International Accounting Standards (IAS) 1 *Presentation of Financial Statements*
On November 1, 2012, we adopted *IAS 1 Presentation of Financial Statements (amendments to IAS 1)*, issued by the IASB in June 2011. The amendments require items presented in the statement of other comprehensive income to be categorized according to whether the items will or will not be reclassified to income at a future date. The adoption did not impact our financial results.

Amendments to IAS 12 *Income Taxes*
On November 1, 2012, we adopted *IAS 12 Income taxes: Deferred Taxes, Recovery of Underlying Assets (amendments to IAS 12),* issued by the IASB in December 2010. The amendments provided guidance for deferred tax associated with investment property measured using the fair value model and non-depreciable assets measured using the revaluation model. The adoption did not impact our financial results.

Financial instruments – Recognition and measurement

Securities
Securities are classified at inception, based on management's intention, as at fair value through profit or loss (FVTPL), available-for-sale (AFS) or held-to-maturity. Certain debt securities with fixed or determinable payments and which are not quoted in an active market may be classified as loans and receivables.

Trading securities include securities purchased for sale in the near term which are classified as at FVTPL by nature and securities designated as at FVTPL under the fair value option. Obligations to deliver trading securities sold but not yet purchased are recorded as liabilities and carried at fair value. Realized and unrealized gains and losses on these securities are recorded as Trading revenue in Non-interest income. Dividends and interest income accruing on Trading securities are recorded in Interest income. Interest and dividends accrued on interest-bearing and equity securities sold short are recorded in Interest expense.

AFS securities include: (i) securities which may be sold to meet liquidity needs, in response to or in anticipation of changes in interest rates and resulting prepayment risk, changes in foreign currency risk, changes in funding sources or terms, and (ii) loan substitute securities which are client financings that have been structured as after-tax investments rather than conventional loans in order to provide the clients with a borrowing rate advantage. AFS securities are measured at fair value. Unrealized gains and losses arising from changes in fair value are included in Other components of equity. Changes in foreign exchange rates for AFS equity securities are recognized in Other components of equity, while changes in foreign exchange rates for AFS debt securities are recognized in Foreign exchange revenue, other than trading in Non-interest income. When the security is sold, the cumulative gain or loss recorded in Other components of equity is included as Net gain (loss) on AFS securities in Non-interest income. Purchase premiums or discounts on AFS debt securities are amortized over the life of the security using the effective interest method and are recognized in Net interest income.

At each reporting date, and more frequently when conditions warrant, we evaluate our AFS securities to determine whether there is any objective evidence of impairment. Such evidence includes: for debt instruments, when an adverse effect on future cash flows from the asset or group of assets can be reliably estimated; for equity securities, when there is a significant or prolonged decline in the fair value of the investment below its cost.

When assessing impairment for debt instruments we primarily consider counterparty ratings and security-specific factors, including subordination, external ratings, and the value of any collateral held, for which there may not be a readily accessible market. Significant judgment is required in assessing impairment as management is required to consider all available evidence in determining whether objective evidence of impairment exists and whether the principal and interest on the AFS debt security can be fully recovered. For complex debt instruments we use cash flow projection models which incorporate actual and projected cash flows for each security based on security specific factors using a number of assumptions and inputs that involve management judgment, such as default, prepayment and recovery rates. Due to the subjective nature of choosing these inputs and assumptions, the actual amount of the future cash flows and their timing may differ from the estimates used by management and consequently may cause a different conclusion as to the recognition of impairment or measurement of impairment loss.

In assessing whether there is any objective evidence that suggests that equity securities are impaired, we consider factors which include the length of time and extent the fair value has been below cost, along with management's assessment of the financial condition, business and other risks of the issuer. Management weighs all these factors to determine the impairment but to the extent that management judgment may differ from the actual experience of the timing and amount of the recovery of the fair value, the estimate for impairment could change from period to period based upon future events that may or may not occur, the conclusion for the impairment of the equity securities may differ.

If an AFS security is impaired, the cumulative unrealized loss previously recognized in Other components of equity is removed from equity and recognized in Net gain (loss) on AFS securities under Non-interest income. This amount is determined as the difference between the cost/amortized cost and current fair value of the security less any impairment loss previously recognized. Subsequent to impairment, further declines in fair value are recorded in Non-interest income, while increases in fair value are recognized in Other components of equity until sold. For AFS debt securities, reversal of previously recognized impairment losses is recognized in our Consolidated Statements of Income if the recovery is objectively related to a specific event occurring after recognition of the impairment loss.

Held-to-maturity securities are debt securities where we have the intention and the ability to hold the investment until its maturity date. These securities are initially recorded at fair value and are subsequently measured at amortized cost using the effective interest method, less any impairment losses which we assess using the same impairment model as for loans. Interest income and amortization of premiums and discounts on debt securities are recorded in Net interest income. We hold a nominal amount of held-to-maturity securities. All held-to-maturity securities have been included with AFS securities on our Consolidated Balance Sheets.

We account for all of our securities using settlement date accounting and changes in fair value between the trade date and settlement date are reflected in income for securities classified or designated as at FVTPL, and changes in the fair value of AFS securities between the trade and settlement dates are recorded in Other comprehensive income (OCI) except for changes in foreign exchange rates on debt securities, which are recorded in Non-interest income.

Fair value option

A financial instrument can be designated as at FVTPL (the fair value option) on its initial recognition even if the financial instrument was not acquired or incurred principally for the purpose of selling or repurchasing it in the near term. An instrument that is designated as at FVTPL by way of this fair value option must have a reliably measurable fair value and satisfy one of the following criteria: (i) it eliminates or significantly reduces a measurement or recognition inconsistency that would otherwise arise from measuring assets or liabilities, or recognizing gains and losses on them on a different basis; (ii) it belongs to a group of financial assets or financial liabilities or both that are managed, evaluated, and reported to key management personnel on a fair value basis in accordance with our risk management strategy, and we can demonstrate that significant financial risks are eliminated or significantly reduced or (iii) there is an embedded derivative in the financial or non-financial host contract and the derivative is not closely related to the host contract.

Financial instruments designated as at FVTPL are recorded at fair value and any unrealized gain or loss arising due to changes in fair value is included in Trading revenue or Other. These instruments cannot be reclassified out of the FVTPL category while they are held or issued.

To determine the fair value adjustments on our debt designated as at FVTPL, we calculate the present value of the instruments based on the contractual cash flows over the term of the arrangement by using our effective funding rate at the beginning and end of the period with the change in present value recorded in Trading revenue or Other in Non-interest income.

Determination of fair value

The fair value of a financial instrument is the amount at which the financial instrument could be exchanged in an arm's-length transaction between knowledgeable and willing parties under no compulsion to act. We determine fair value by incorporating all factors that market participants would consider in setting a price and using accepted economic methodologies for pricing financial instruments. We have established policies on approved methodologies and procedures for determining fair value. Valuation techniques are approved for use within our model risk management framework. The framework addresses, among other things, model development standards, validation processes and procedures, and approval authorities. Valuation techniques also include using a documented third-party pricing source list. The third party pricing source list gives priority to those services and prices having the highest and most consistent accuracy. The level of accuracy is developed over time by comparing third-party price values to traders' or system values, to other pricing service values and, when available, to actual trade data.

In determining fair value, a hierarchy is used which prioritizes the inputs to valuation techniques. The fair value hierarchy gives the highest priority to unadjusted quoted prices in active markets for identical assets or liabilities (Level 1) and the lowest priority to unobservable inputs (Level 3). The availability of inputs relevant to the asset or liability and the relative reliability of the inputs could affect the selection of appropriate valuation techniques.

Level 1 inputs are unadjusted quoted prices in active markets for identical assets or liabilities that we have the ability to access at the measurement date. Level 2 inputs are inputs other than quoted prices in Level 1 that are observable for the asset or liability, either directly or indirectly. Level 2 inputs include quoted prices for similar assets or liabilities in active markets or quoted prices for identical or similar assets or liabilities in markets that are not active, and inputs that are derived principally from observable market data. Level 3 inputs are unobservable inputs for the asset or liability. Unobservable inputs are used to measure fair value to the extent that observable inputs are not available at the measurement date.

Where observable prices or inputs are not available, management judgment is required to determine fair values by assessing other relevant sources of information such as historical data, proxy information from similar transactions, and through extrapolation and interpolation techniques. For instruments not traded in an active market, fair value is determined using a valuation technique that maximizes the use of observable market inputs to the extent available. For more complex or illiquid instruments, significant judgment is required in the determination of the model used, the selection of model inputs, and in some cases the application of valuation adjustments to the model value or quoted price for inactively traded financial instruments, as the selection of model inputs may be subjective and the inputs may be unobservable. Unobservable inputs are inherently uncertain as there is little or no market data available from which to determine the level at which an arm's length transaction would occur under normal business circumstances. Appropriate parameter uncertainty and market risk valuation adjustments for such inputs and other model risk valuation adjustments are assessed in all such instances.

We record valuation adjustments to appropriately reflect counterparty credit quality and our own creditworthiness, differences between the overnight index swap (OIS) curve and London Interbank Offered Rates (LIBOR) for collateralized derivatives, unrealized gains or losses at inception of the transaction, bid-offer spreads and unobservable parameters. These adjustments may be subjective as they require significant judgment in the input selection, such as probability of default and recovery rate, and are intended to arrive at fair value that is determined based on assumptions that market participants would use in pricing the financial instrument. The realized price for a transaction may be different from its recorded value that is previously estimated using management judgment, and may therefore impact unrealized gains and losses recognized in Non-interest income – Trading revenue or Other.

Valuation adjustments are recorded for the credit risk of our derivative portfolios in order to arrive at their fair values. Credit Valuation Adjustments (CVA) take into account our creditworthiness and our counterparties' creditworthiness, the current and potential future mark-to-market of the transactions, and the effects of credit mitigants such as master netting and collateral agreements. CVA amounts are derived from estimates of exposure at default, probability of default, recovery rates on a counterparty basis, and market and credit factor correlations. Exposure at default is the amounts of expected derivative related assets and liabilities at the time of default, estimated through modeling using underlying risk factors. Probability of default and recovery rate is generally implied from the market prices for credit protection and credit ratings of the counterparty. Correlation is the statistical measure of how credit and market factors may move in relation to one another, if any. Correlation is estimated using historical data and market data where available. CVA is calculated daily and changes are recorded in Non-interest income – Trading revenue.

In order to reflect recently observed market practice of pricing collateralized over-the-counter (OTC) derivatives using the OIS curve, our valuation approach accounts for the difference between certain OIS rates and LIBOR for derivatives valuation as valuation adjustments. Market practices continue to evolve concerning the use of and construction of OIS curves that best reflect the nature of the underlying collateral and as a result, additional valuation adjustments may be required in the future.

Where required, a valuation adjustment is made to reflect the unrealized gain or loss at inception of a financial instrument contract where the fair value of that financial instrument is not obtained from a quoted market price or cannot be evidenced by other observable market transactions based on a valuation technique incorporating observable market data.

A bid-offer valuation adjustment is required when a financial instrument is valued at the mid-market price, instead of the bid or offer price for asset or liability positions, respectively. The valuation adjustment takes into account the spread from the mid to either the bid or offer price.

Some valuation models require parameter calibration from such factors as market observed option prices. The calibration of parameters may be sensitive to factors such as the choice of instruments or optimization methodology. A valuation adjustment is also estimated to mitigate the uncertainties of parameter calibration.

A breakdown of fair values of financial instruments based on the fair value hierarchy (Level 1, 2 and 3) is provided in Note 3. A discussion of the aspects of valuation that require the most significant judgments, including changes in our fair value hierarchy, developing our reasonably possible alternative assumptions, and unrealized gains and losses on AFS securities, is included in Note 3 and Note 4.

The following describes how fair values are determined, what inputs are used and where they are classified in the fair value hierarchy table in Note 3, for our significant assets and liabilities that are measured at fair value on a recurring basis:

Government bonds (Canadian, U.S. and other OECD governments)

Government bonds are included in Canadian government debt, U.S. state, municipal and agencies debt, Other OECD government debt and Obligations related to securities sold short in the fair value hierarchy table. The fair values of government issued or guaranteed debt securities in active markets are determined by reference to recent transaction prices, broker quotes, or third-party vendor prices and is classified as Level 1 in the fair value hierarchy. The fair values of securities that are not traded in active markets are based on either security prices, or valuation techniques using implied yields and risk spreads derived from prices of actively traded and similar government securities. Securities with observable prices or rate inputs as compared to transaction prices, dealer quotes or vendor prices are classified as Level 2 in the hierarchy. Securities where inputs are unobservable are classified as Level 3 in the hierarchy.

Corporate and U.S. municipal bonds

The fair values of corporate and U.S. municipal bonds, which are in Corporate debt and other debt, U.S. state, municipal and agencies debt and Obligations related to securities sold short in the fair value hierarchy table, are determined using either recently executed transaction prices, broker quotes, pricing services, or in certain instances discounted cash flow valuation models using rate inputs such as benchmark yields (Canadian Dealer Offered Rate, LIBOR and other similar reference rates) and risk spreads of comparable securities. Securities with observable prices or rate inputs as compared to transaction prices, dealer quotes or vendor prices are classified as Level 2 in the hierarchy. Securities where inputs are unobservable are classified as Level 3 in the hierarchy.

Asset-backed Securities (ABS) and Mortgage-backed Securities (MBS)

ABS and MBS are in Asset-backed securities, Mortgage-backed securities, Canadian government debt, U.S. state, municipal and agencies debt, and Obligations related to securities sold short in the fair value hierarchy table. ABS are primarily Collateralized Debt Obligations (CDO). Inputs for valuation of MBS and CDO are, when available, traded prices, dealer or lead manager quotes, broker quotes and vendor prices. ABS and MBS are classified as Level 2 or 3 in the hierarchy dependent on the level of pricing transparency. ABS and MBS with observable inputs that are calibrated to transaction prices, dealer quotes or vendor prices are classified as Level 2 in the hierarchy. ABS and MBS where security prices are unobservable are classified as Level 3 in the hierarchy.

Auction Rate Securities (ARS)

ARS are included in U.S. state, municipal and agencies debt, and Asset-backed securities in the fair value hierarchy table. The valuation of ARS involves discounting forecasted cash flows from the underlying student loan collateral and incorporating multiple inputs such as default, repayment, deferment and redemption rates, and credit spreads. These inputs are unobservable, and therefore, ARS are classified as Level 3 in the hierarchy. All relevant data must be assessed and significant judgment is required to determine the appropriate valuation inputs.

Equities

Equities and Obligations related to securities sold short in the fair value hierarchy table consist of listed and unlisted common shares, private equities and hedge funds with certain redemption restrictions. The fair values of common shares are based on quoted prices in active markets, where available, and are classified as Level 1 in the hierarchy. Where quoted prices in active markets are not readily available, fair value is determined based on quoted market prices for similar securities or through valuation techniques, including multiples of earnings and discounted cash flow analysis with forecasted cash flows and discount rate as inputs. Private equities are classified as Level 3 in the hierarchy as their inputs are not observable. Hedge funds are valued using Net Asset Values (NAV). If we can redeem a hedge fund at NAV prior to the next quarter end, the fund is classified as Level 2 in the hierarchy. Otherwise, it is classified as Level 3 in the hierarchy.

Derivatives

The fair values of exchange-traded derivatives, such as interest rate and equity options and futures, are based on quoted market prices and are classified as Level 1 in the fair value hierarchy. OTC derivatives primarily consist of interest rate and cross currency swaps, interest rate options, foreign exchange forward contracts and options, and commodity options and swaps. The exchange-traded or OTC interest-rate, foreign exchange and equity derivatives are included in Interest rate contracts, Foreign exchange contracts and Other contracts in the fair value hierarchy table.

The fair values of OTC derivatives are determined using valuation models when quoted market prices or third-party consensus pricing information are not available. The valuation models, such as discounted cash flows or Black-Scholes option model, incorporate observable or unobservable inputs for interest and foreign exchange rates, equity and commodity prices (including indices), credit spreads, corresponding market volatility levels, and other market-based pricing factors. As previously discussed, other adjustments to fair value include bid-offer, CVA, OIS, parameter and model uncertainties, and unrealized gain or loss at inception of a transaction. A derivative instrument is classified as Level 2 in the hierarchy if observable market inputs are available or the unobservable inputs are not significant to the fair value. Otherwise, it is classified as Level 3 in the hierarchy.

Securities borrowed or purchased under resale agreements and securities lent or sold under repurchase agreements
In the fair value hierarchy table, these instruments are included in Assets purchased under reverse repurchase agreements and securities borrowed, and Obligations related to assets sold under repurchase agreements and securities loaned. Fair value for these contracts is calculated using valuation techniques such as discounted cash flow models using interest rate curves as inputs. They are classified as Level 2 instruments in the hierarchy as the inputs are observable.

Deposits
A majority of our deposits are measured at amortized cost but we designated certain deposits as at FVTPL. These FVTPL deposits are composed of deposits taken, the issuance of certificate of deposits and promissory notes, interest rate and equity linked notes, and are included in Deposits in the fair value hierarchy table. The fair value for these instruments is determined using discounted cash flow and derivative option valuation models. The inputs to the valuation models include benchmark yield curves, credit spreads, interest rates, interest rate and equity volatility, dividends and correlation, where applicable. They are classified as Level 2 or 3 instruments in the hierarchy, depending on the significance of the unobservable credit spreads, volatility, dividend and correlation rates.

Fair values of financial assets and liabilities carried at amortized cost are disclosed in Carrying value and fair value of selected financial instruments table of Note 3 and are determined using the following valuation techniques and inputs:

Retail loans
Retail loans include residential mortgages, personal and small business loans and credit cards. For residential mortgages, and personal and small business loans, we segregate the portfolio based on certain attributes such as product type, contractual interest rate, term to maturity and credit scores, if applicable. Fair values of these loans are determined by the discounted cash flow valuation technique using prevailing interest rates as inputs. The carrying values of short-term or revolving loans, such as credit card receivables, appropriate their fair values.

Wholesale loans
Wholesale loans include Business, Bank and Sovereign loans. Where market prices are available, loans are valued based on market loan prices. Otherwise, fair value is determined by the discounted cash flow valuation technique using (i) market interest rates and market based spreads of assets with similar ratings; (ii) if available, expected default frequency implied from credit default swap prices; and (iii) relevant pricing information such as contractual rate, origination and maturity dates, redemption price, coupon payment frequency and date convention, as inputs.

Deposits
Deposits are composed of demand, notice, and term deposits which include senior deposit notes we have issued to provide long-term funding. Fair values of term deposits are determined by one of several valuation techniques: (i) for guaranteed investment certificates and similar instruments, we use an approach similar to that of the above residential mortgages and personal loans; and (ii) for senior deposit notes, we use actual traded prices, vendor prices or the discounted cash flow valuation technique using a market interest rate curve and our credit spreads as inputs. The carrying values of short-term and revolving demand and notice deposits approximate their fair values.

Subordinated debentures and Trust capital securities
Fair values of Subordinated debentures and Trust capital securities are based on recent transaction prices.

Interest
Interest is recognized in Interest income and Interest expense in the Consolidated Statements of Income for all interest bearing financial instruments using the effective interest method. The effective interest rate is the rate that discounts estimated future cash flows through the expected life of the financial asset or liability to the net carrying amount upon initial recognition.

Transaction costs
Transaction costs are expensed as incurred for financial instruments classified or designated as at FVTPL. For other financial instruments, transaction costs are capitalized on initial recognition. For financial assets and financial liabilities measured at amortized cost, capitalized transaction costs are amortized through Net income over the estimated life of the instrument using the effective interest method. For AFS financial assets measured at fair value that do not have fixed or determinable payments and no fixed maturity, capitalized transaction costs are recognized in Net income when the asset is derecognized or becomes impaired.

Assets purchased under reverse repurchase agreements and sold under repurchase agreements
We purchase securities under agreements to resell (reverse repurchase agreement) and take possession of these securities. Reverse repurchase agreements are treated as collateralized lending transactions whereby we monitor the market value of the securities purchased and additional collateral is obtained when appropriate. We have the right to liquidate the collateral held in the event of counterparty default. We also sell securities under agreements to repurchase (repurchase agreements), which are treated as collateralized borrowing transactions. The securities received under reverse repurchase agreements and securities delivered under repurchase agreements are not recognized on, or derecognized from, our Consolidated Balance Sheets, respectively, unless the risks and rewards of ownership are obtained or relinquished.

Reverse repurchase agreements and repurchase agreements are carried on our Consolidated Balance Sheets at the amounts at which the securities were initially acquired or sold, except when they are designated as at FVTPL and are recorded at fair value. Interest earned on reverse repurchase agreements is included in Interest income, and interest incurred on repurchase agreements is included in Interest expense in our Consolidated Statements of Income. Changes in fair value for reverse repurchase agreements and repurchase agreements designated as at FVTPL are included in Trading revenue or Other in Non-interest income.

Acceptances
Acceptances are short-term negotiable instruments issued by our clients to third parties which we guarantee. The potential liability under acceptances is reported in Other – Acceptances on our Consolidated Balance Sheets. The recourse against our clients in the case of a call on these commitments is reported as a corresponding asset of the same amount in Other – Customers' liability under acceptances. Fees earned are reported in Non-interest income – Credit Fees.

Derivatives
Derivatives are primarily used in sales and trading activities. Derivatives are also used to manage our exposure to interest, currency, credit and other market risks. The most frequently used derivative products are interest rate swaps, interest rate futures, forward rate agreements, interest rate options, foreign exchange forward contracts, cross currency swaps, foreign currency futures, foreign currency options, equity swaps and credit derivatives. All derivative instruments are recorded on our Consolidated Balance Sheets at fair value, including those derivatives that are embedded in financial or non-financial contracts and are not closely related to the host contracts.

When derivatives are embedded in other financial instruments or host contracts, such combinations are known as hybrid instruments with the effect that some of the cash flows of a hybrid instrument vary in a way similar to a stand-alone derivative. If the host contract is not carried at fair value with changes in fair value reported in our Consolidated Statements of Income, the embedded derivative is generally required to be separated from the host contract and accounted for separately as at FVTPL if the economic characteristics and risks of the embedded derivative are not closely related to those of the host contract. All embedded derivatives are presented on a combined basis with the host contracts although they are separated for measurement purposes when conditions requiring separation are met.

When derivatives are used in sales and trading activities, the realized and unrealized gains and losses on these derivatives are recognized in Trading revenue in Non-interest income. Derivatives with a positive fair value are reported as Derivative assets and derivatives with a negative fair value are reported as Derivative liabilities. In accordance with our policy for offsetting financial assets and financial liabilities, as outlined below, the net fair value of certain derivative assets and liabilities are reported as an asset or liability, as appropriate. Market and credit valuation adjustments, and premiums paid are also included in Derivative assets, while premiums received are shown in Derivative liabilities.

When derivatives are used to manage our own exposures, we determine for each derivative whether hedge accounting can be applied, as discussed in the Hedge accounting section below.

Hedge accounting
We use derivatives and non-derivatives in our hedging strategies to manage our exposure to interest rate, currency, credit and other market risks. Where hedge accounting can be applied, a hedge relationship is designated and documented at inception to detail the particular risk management objective and the strategy for undertaking the hedge transaction. The documentation identifies the specific asset, liability or anticipated cash flows being hedged, the risk that is being hedged, the type of hedging instrument used and how effectiveness will be assessed. We assess, both at the inception of the hedge and on an ongoing basis, whether the hedging instruments have been 'highly effective' in offsetting changes in the fair value or cash flows of the hedged items. A hedge is regarded as highly effective only if the following criteria are met: (i) at inception of the hedge and throughout its life, the hedge is expected to be highly effective in achieving offsetting changes in fair value or cash flows attributable to the hedged risk, and (ii) actual results of the hedge are within a pre-determined range. In the case of hedging a forecast transaction, the transaction must have a high probability of occurring and must present an exposure to variations in cash flows that could ultimately affect the reported net profit or loss. Hedge accounting is discontinued when it is determined that the hedging instrument is no longer effective as a hedge, the hedging instrument is terminated or sold, upon the sale or early termination of the hedged item, or when the forecast transaction is no longer deemed highly probable. Refer to Note 8 for the fair value of derivatives and non-derivative instruments categorized by their hedging relationships, as well as derivatives that are not designated in hedging relationships.

Fair value hedges
In a fair value hedging relationship, the carrying value of the hedged item is adjusted for changes in fair value attributable to the hedged risk and recognized in Non-interest income. Changes in fair value of the hedged item, to the extent that the hedging relationship is effective, are offset by changes in the fair value of the hedging derivative, which are also recognized in Non-interest income. When hedge accounting is discontinued, the carrying value of the hedged item is no longer adjusted and the cumulative fair value adjustments to the carrying value of the hedged items are amortized to Net income over the remaining life of the hedged items.

We predominantly use interest rate swaps to hedge our exposure to the changes in a fixed interest rate instrument's fair value caused by changes in interest rates.

Cash flow hedges
In a cash flow hedging relationship, the effective portion of the change in the fair value of the hedging derivative, net of taxes, is recognized in OCI while the ineffective portion is recognized in Non-interest income. When hedge accounting is discontinued, the cumulative amounts previously recognized in Other components of equity are reclassified to Net interest income during the periods when the variability in the cash flows of the hedged item affects Net interest income. Unrealized gains and losses on derivatives are reclassified immediately to Net income when the hedged item is sold or terminated early, or when the forecast transaction is no longer expected to occur.

We predominantly use interest rate swaps to hedge the variability in cash flows related to a variable-rate asset or liability.

Net investment hedges
In hedging a foreign currency exposure of a net investment in a foreign operation, the effective portion of foreign exchange gains and losses on the hedging instruments, net of applicable taxes, is recognized in OCI and the ineffective portion is recognized in Non-interest income. The amounts, or a portion thereof, previously recognized in Other components of equity are recognized in Net income on the disposal, or partial disposal, of the foreign operation.

We use foreign exchange contracts and foreign currency-denominated liabilities to manage our foreign currency exposures to net investments in foreign operations having a functional currency other than the Canadian dollar.

Loans
Loans are non-derivative financial assets with fixed or determinable payments that are not quoted in an active market and which are not classified as AFS. Loans are initially recognized at fair value. When loans are issued at a market rate, fair value is represented by the cash advanced to the borrowers plus direct and incremental costs. Loans are subsequently measured at amortized cost using the effective interest method less impairment, unless we intend to sell them in the near future upon origination or they have been designated as at FVTPL, in which case they are carried at fair value.

We assess at each balance sheet date whether there is objective evidence that the loans are impaired. Evidence of impairment may include indications that the borrower is experiencing significant financial difficulty, probability of bankruptcy or other financial reorganization, as well as a measurable decrease in the estimated future cash flows evidenced by the adverse changes in the payments status of the borrower or economic conditions that correlate with defaults. Whenever a payment is 90 days past due, loans other than credit card balances and loans guaranteed or insured by a Canadian government (Federal or Provincial) or a Canadian government agency (collectively, Canadian government) are classified as impaired unless they are fully secured and collection efforts are reasonably expected to result in repayment of debt within 180 days of the loans becoming past due. Loans guaranteed by a Canadian government are classified as impaired when the loan is contractually 365 days in arrears. Credit card balances are written off when a payment is 180 days in arrears.

Assets acquired to satisfy loan commitments are recorded at their fair value less costs to sell. Fair value is determined based on either current market value where available or discounted cash flows. Any excess of the carrying value of the loan over the fair value of the assets acquired is recognized by a charge to Provision for credit losses.

Interest on loans is recognized in Interest income – Loans using the effective interest method. The estimated future cash flows used in this calculation include those determined by the contractual term of the asset or liability, all fees that are considered to be integral to the effective interest rate, transaction costs and all other premium or discounts. Fees that relate to activities such as originating, restructuring or renegotiating loans are deferred and recognized as Interest income over the expected term of such loans using the effective interest method. Where there is a reasonable expectation that a loan will result, commitment and standby fees are also recognized as interest income over the expected term of the resulting loans using the effective interest method. Otherwise, such fees are recorded as other liabilities and amortized into Non-interest income over the commitment or standby period. Prepayment fees on mortgage loans are not included as part of the effective interest rate at origination as the amounts are not reliably measurable. If prepayment fees are received on a renewal of a mortgage loan, the fee is included as part of the effective interest rate, and if not renewed, the prepayment fee is recognized in interest income at the prepayment date.

Allowance for credit losses

An allowance for credit losses is established if there is objective evidence that we will be unable to collect all amounts due on our loans portfolio according to the original contractual terms or the equivalent value. This 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.

The allowance for credit losses is increased by the impairment losses recognized and decreased by the amount of write-offs, net of recoveries. The allowance for credit losses for on-balance sheet items is included as a reduction to assets, and the allowance for credit losses relating to off-balance sheet items is included in Provisions under Other Liabilities.

We assess whether objective evidence of impairment exists individually for loans that are individually significant and collectively for loans that are not individually significant. If we determine that no objective evidence of impairment exists for an individually assessed loan, whether significant or not, the loan is included in a group of loans with similar credit risk characteristics and collectively assessed for impairment. Loans that are individually assessed for impairment and for which an impairment loss is recognized are not included in a collective assessment of impairment.

Allowance for credit losses represent management's best estimates of losses incurred in our loan portfolio at the balance sheet date. Management's judgment is required in making assumptions and estimations when calculating allowances on both individually and collectively assessed loans. The underlying assumptions and estimates used for both individually and collectively assessed loans can change from period to period and may significantly affect our results of operations.

Individually assessed loans

Loans which are individually significant are assessed individually for objective indicators of impairment. A loan is considered impaired when management determines that it will not be able to collect all amounts due according to the original contractual terms or the equivalent value.

Credit exposures of individually significant loans are evaluated based on factors including the borrower's overall financial condition, resources and payment record, and where applicable, the realizable value of any collateral. If there is evidence of impairment leading to an impairment loss, then the amount of the loss is determined as the difference between the carrying amount of the loan, including accrued interest, and the estimated recoverable amount. The estimated recoverable amount is measured as the present value of expected future cash flows discounted at the loan's original effective interest rate, including cash flows that may result from the realization of collateral less costs to sell. Individually-assessed impairment losses reduce the carrying amount of the loan through the use of an allowance account and the amount of the loss is recognized in Provision for credit losses in our Consolidated Statements of Income. Following impairment, interest income is recognized on the unwinding of the discount from the initial recognition of impairment.

Significant judgment is required in assessing evidence of impairment and estimation of the amount and timing of future cash flows when determining the impairment loss. When assessing objective evidence of impairment we primarily consider specific factors such as the financial condition of the borrower, borrower's default or delinquency in interest or principal payments, local economic conditions and other observable data. In determining the estimated recoverable amount we consider discounted expected future cash flows at the effective interest rate using a number of assumptions and inputs. Management judgment is involved when choosing these inputs and assumptions used such as the expected amount of the loan that will not be recovered and the cost of time delays in collecting principal and/or interest, and when estimating the value of any collateral held for which there may not be a readily accessible market. Changes in the amount expected to be recovered would have a direct impact on the Provision for credit losses and may result in a change in the Allowance for credit losses

Collectively assessed loans

Loans which are not individually significant, or which are individually assessed and not determined to be impaired, are collectively assessed for impairment. For the purposes of a collective evaluation of impairment, loans are grouped on the basis of similar risk characteristics, taking into account loan type, industry, geographic location, collateral type, past due status and other relevant factors.

The collective impairment allowance is determined by reviewing factors including: (i) historical loss experience, which takes into consideration historical probabilities of default, loss given default and exposure at default, in portfolios of similar credit risk characteristics, and (ii) management's judgment on the level of impairment losses based on historical experience relative to the actual level as reported at the balance sheet date, taking into consideration the current portfolio credit quality trends, business and economic and credit conditions, the impact of policy and process changes, and other supporting factors. Future cash flows for a group of loans are collectively evaluated for impairment on the basis of the contractual cash flows of the loans in the group and historical loss experience for loans with credit risk characteristics similar to those in the group. Historical loss experience is adjusted based on current observable data to reflect the effects of current conditions that did not affect the period on which the historical loss experience is based and to remove the effects of conditions in the historical period that do not currently exist. The methodology and assumptions used for estimating future cash flows are reviewed regularly to reduce any differences between loss estimates and actual loss experience. Collectively-assessed impairment losses reduce the carrying amount of the aggregated loan position through an allowance account and the amount of the loss is recognized in Provision for credit losses. Following impairment, interest income is recognized on the unwinding of the discount from the initial recognition of impairment.

The methodology and assumptions used to calculate collective impairment allowances are subject to uncertainty, in part because it is not practicable to identify losses on an individual loan basis due to the large number of individually insignificant loans in the portfolio. Significant judgment is required in assessing historical loss experience, the loss identification period and its relationship to current portfolios including delinquency, and loan balances; and current business, economic and credit conditions including industry specific performance, unemployment and country risks. Changes in these assumptions would have a direct impact on the Provision for credit losses and may result in changes in the related Allowance for credit losses.

Write-off of loans
Loans and the related impairment allowance for credit losses are written off, either partially or in full, when there is no realistic prospect of recovery. Where loans are secured, they are generally written off after receipt of any proceeds from the realization of the collateral. In circumstances where the net realizable value of any collateral has been determined and there is no reasonable expectation of further recovery, write off may be earlier. For credit cards, the balances and related allowance for credit losses are written off when payment is 180 days in arrears. Personal loans are generally written off at 150 days past due.

Derecognition of financial assets
Our various securitization activities generally consist of the transfer of financial assets such as loans or packaged mortgage-backed securities (MBS) to independent SPEs or trusts that issue securities to investors.

Financial assets are derecognized from our Consolidated Balance Sheets when our contractual rights to the cash flows from the assets have expired, when we retain the rights to receive the cash flows of the assets but assume an obligation to pay those cash flows to a third party subject to certain pass-through requirements or when we transfer our contractual rights to receive the cash flows and substantially all of the risk and rewards of the assets have been transferred. When we retain substantially all of the risks and rewards of the transferred assets, the transferred assets are not derecognized from our Consolidated Balance Sheets and are accounted for as secured financing transactions. When we neither retain nor transfer substantially all risks and rewards of ownership of the assets, we derecognize the assets if control over the assets is relinquished. If we retain control over the transferred assets, we continue to recognize the transferred assets to the extent of our continuing involvement.

Management's judgment is applied in determining whether the contractual rights to the cash flows from the transferred assets have expired or whether we retain the rights to receive cash flows on the assets but assume an obligation to pay for those cash flows. We derecognize transferred financial assets if we transfer substantially all the risk and rewards of the ownership in the assets. When assessing whether we have transferred substantially all of the risk and rewards of the transferred assets, management considers the entity exposure before and after the transfer with the variability in the amount and timing of the net cash flows of the transferred assets. In transfers that we retain the servicing rights, management has applied judgment in assessing the benefits of servicing against market expectations. When the benefits of servicing are greater than fair market value, a servicing asset is recognized in Other assets in our Consolidated Balance Sheets. When the benefits of servicing are less than fair market value, a servicing liability is recognized in Other liabilities in our Consolidated Balance Sheets.

Derecognition of financial liabilities
We derecognize a financial liability from our Consolidated Balance Sheets when our obligation specified in the contract expires, or is discharged or cancelled. We recognize the difference between the carrying amount of a financial liability transferred and the consideration paid in our Consolidated Statements of Income.

Guarantees
Financial guarantee contracts are contracts that contingently require us to make specified payments (in cash, other assets, our own shares or provision of services) to reimburse the holder for a loss it incurs because a specified debtor fails to make payment when due in accordance with the original or modified terms of a debt instrument. Liabilities are recognized on our Consolidated Balance Sheets at the inception of a guarantee for the fair value of the obligation undertaken in issuing the guarantee. Financial guarantees are subsequently remeasured at the higher of (i) the amount initially recognized and (ii) our best estimate of the present value of the expenditure required to settle the present obligation at the end of the reporting period.

If the financial guarantee contract meets the definition of a derivative, it is measured at fair value at each balance sheet date and reported under Derivatives on our Consolidated Balance Sheets.

Offsetting financial assets and financial liabilities
Financial assets and financial liabilities are presented net when we have a legally enforceable right to set off the recognized amounts and intend to either settle on a net basis or to realize the asset and settle the liability simultaneously.

Insurance and segregated funds
Premiums from long-duration contracts, primarily life insurance, are recognized when due in Non-interest income – Insurance premiums, investment and fee income. Premiums from short-duration contracts, primarily property and casualty, and fees for administrative services are recognized in Insurance premiums, investment and fee income over the related contract period. Unearned premiums of the short-duration contracts, representing the unexpired portion of premiums, are reported in Other liabilities. Investments made by our insurance operations are classified as AFS or loans and receivables, except for investments supporting the policy benefit liabilities on life and health insurance contracts and a portion of property and casualty contracts. These are designated as at FVTPL with changes in fair value reported in Insurance premiums, investment and fee income.

Insurance claims and policy benefit liabilities represent current claims and estimates for future insurance policy benefits. Liabilities for life insurance contracts are determined using the Canadian Asset Liability Method (CALM), which incorporates assumptions for mortality, morbidity, policy lapses and surrenders, investment yields, policy dividends, operating and policy maintenance expenses, and provisions for adverse deviation. These assumptions are reviewed at least annually and updated in response to actual experience and market conditions. Liabilities for property and casualty insurance represent estimated provisions for reported and unreported claims. Liabilities for life and property and casualty insurance are included in Insurance claims and policy benefit liabilities. Changes in Insurance claims and policy benefit liabilities are included in the Insurance policyholder benefits, claims and acquisition expense in our Consolidated Statements of Income in the period in which the estimates change.

Premiums ceded for reinsurance and reinsurance recoveries on policyholder benefits and claims incurred are reported in income and expense as appropriate. Reinsurance recoverables, which relate to paid benefits and unpaid claims, are included in Other assets.

Acquisition costs for new insurance business consist of commissions, premium taxes, certain underwriting costs and other costs that vary with the acquisition of new business. Deferred acquisition costs for life insurance products are implicitly recognized in insurance claims and policy benefit liabilities by CALM. For property and casualty insurance, these costs are classified as Other assets and amortized over the policy term.

Segregated funds are lines of business in which we issue an insurance contract where the benefit amount is directly linked to the market value of the investments held in the underlying fund. The contractual arrangement is such that the underlying segregated fund assets are registered in our name but the segregated fund policyholders bear the risks and rewards of the funds' investment performance. Liabilities for these contracts are calculated based on contractual obligations using actuarial assumptions and are at least equivalent to the surrender or transfer value calculated by reference to the value of the relevant underlying funds or indices. Segregated funds' assets and liabilities are separately presented on our Consolidated Balance Sheets. Fee income from segregated funds includes management fees, mortality, policy, administration and surrender charges. We provide minimum death benefit and maturity value guarantees on segregated funds. The liability associated with these minimum guarantees is recorded in Insurance claims and policy benefit liabilities.

Liability adequacy tests are performed for all insurance contract portfolios at each balance sheet date to ensure the adequacy of insurance contract liabilities. Current best estimates of future contractual cash flows, claims handling and administration costs, and investment returns from the assets backing the liabilities are taken into account in the tests. When the test results indicate that there is a deficiency in liabilities, the deficiency is charged immediately to our Consolidated Statements of Income by writing down the deferred acquisition costs in Other assets and/or increasing Insurance claims and policy benefit liabilities.

Employee benefits – Pensions and other post-employment benefits

We offer a number of benefit programs which provide pension and other benefits to eligible employees. These plans include registered defined benefit pension plans, supplemental pension plans, defined contribution plans, health, dental, disability and life insurance plans.

Investments held by the pension funds primarily comprise equity and fixed income securities and are valued at fair value. Defined benefit pension costs and the present value of accrued pension and other post-employment benefit obligations are calculated by the plans' actuaries using the Projected Unit Credit Method. Our defined benefit pension expense, which is included in Non-interest expense – Human resources, consists of the cost of employee pension benefits for the current year's service, interest cost on the liability, and expected return on plan assets. Actuarial gains and losses are recognized in profit or loss using the deferral (corridor) approach. Past service costs are charged immediately to income to the extent that the benefits have vested, and are otherwise recognized on a straight-line basis over the average period until the benefits vest. Gains and losses on curtailment or settlement of defined benefit plans are recognized in income when the curtailment or settlement occurs.

For each defined benefit plan, we recognize the present value of our defined benefit obligations less the fair value of the plan assets, together with adjustments for any unrecognized actuarial gains and losses and unrecognized past service costs, as a defined benefit liability reported in Accrued pension and other post-employment benefits on our Consolidated Balance Sheets. For plans where there is a net defined benefit asset, the amount is reported as an asset in Prepaid pension benefit cost. The measurement of the asset is limited to the lower of (i) the defined benefit asset and (ii) the sum of actuarial losses and past service costs not yet recognized, and the present value of any refunds from the plan or reductions in the future contributions to the plan.

The calculation of defined benefit expenses and obligations requires significant judgment as the recognition is dependent on discount rates, expected rates of return on assets, and various actuarial assumptions such as healthcare cost trend rates, projected salary increases, retirement age, and mortality and termination rates. Due to the long-term nature of these plans, such estimates and assumptions are subject to inherent risks and uncertainties. For our pension and other post-employment plans, the discount rate is determined by reference to market yields on high quality corporate bonds. Since the discount rate is based on currently available yields, and involves management's assessment of market liquidity, it is only a proxy for future yields. Management judgment is also required in estimating the expected rate of return on assets, because of possible changes to our asset allocation and the inherent risks in predicting future investment returns. The expected rate of return on assets is a weighted average of expected long-term asset return by asset class and is selected from a range of possible future asset returns. Actuarial assumptions, set in accordance with current practices in the respective countries of our plans, may differ from actual experience as country specific statistics is only an estimate for future employee behaviour. These assumptions are determined by management and are reviewed by actuaries at least annually. Changes to any of the above assumptions may affect the amounts of benefits obligations and expenses that we recognize.

Our contributions to defined contribution plans are expensed when employees have rendered services in exchange for such contributions, generally in the year of contribution. Defined contribution plan expense is included in Non-interest expense – Human resources.

Share-based compensation

We offer share-based compensation plans to certain key employees and to our non-employee directors.

To account for stock options granted to employees, compensation expense is recognized over the applicable vesting period with a corresponding increase in equity. Fair value is determined by using option valuation models, which take into account the exercise price of the option, the current share price, the risk free interest rate, the expected volatility of the share price over the life of the option and other relevant factors. When the options are exercised, the exercise price proceeds together with the amount initially recorded in equity are credited to common shares. Our other compensation plans include performance deferred share plans and deferred share unit plans for key employees (the Plans). The obligations for the Plans are accrued over their vesting periods. The Plans are settled in cash.

For cash-settled awards, our accrued obligations are adjusted to their fair value at each balance sheet date. For share-settled awards, our accrued obligations are based on the fair value of our common shares at the date of grant. Changes in our obligations, net of related hedges, are recorded as Non-interest expense – Human resources in our Consolidated Statements of Income with a corresponding increase in Other liabilities for cash settled awards and in Retained earnings for share-settled awards.

The compensation cost attributable to options and awards granted to employees who are eligible to retire or will become eligible to retire during the vesting period, is recognized immediately if the employee is eligible to retire on the grant date or over the period between the grant date and the date the employee becomes eligible to retire.

Our contributions to the employee savings and share ownership plans are expensed as incurred.

Income taxes

Income tax comprises current tax and deferred tax and is recognized in our Consolidated Statements of Income except to the extent that it relates to items recognized directly in equity, in which case it is recognized in equity.

Current income tax payable on profits is recognized as an expense based on the applicable tax laws in each jurisdiction in the period in which profits arise, calculated using tax rates enacted or substantively enacted by the balance sheet date. Deferred tax is recognized on temporary differences between the carrying amounts of assets and liabilities for accounting purposes compared with tax purposes. A deferred income tax asset or liability is determined for each temporary difference, except for earnings related to our subsidiaries, branches, associates and interests in joint ventures where the temporary differences will not reverse in the foreseeable future and we have the ability to control the timing of reversal. Deferred tax assets and liabilities are determined based on the tax rates that are expected to be in effect in the period that the asset is realized or the liability is settled, based on tax rates and tax laws that have been enacted or substantively enacted at the balance sheet date. Current tax assets and liabilities are offset when they are levied by the same taxation authority on either the same taxable entity or different taxable entities within the same tax reporting group (which intends to settle on a net basis), and when there is a legal right to offset. Deferred tax assets and liabilities are offset when the same conditions are satisfied. Our Consolidated Statements of Income include items that are non-taxable or non-deductible for income tax purposes and, accordingly, this causes the income tax provision to be different from what it would be if based on statutory rates.

Deferred income taxes accumulated as a result of temporary differences and tax loss carryfowards are included in Other assets and Other liabilities. On a quarterly basis, we review our deferred income tax assets to determine whether it is probable that the benefits associated with these assets will be realized; this review involves evaluating both positive and negative evidence.

We are subject to income tax laws in various jurisdictions where we operate, and the complex tax laws are potentially subject to different interpretations by us and the relevant taxation authorities. Significant judgment is required in the interpretation of the relevant tax laws, and the determination of our tax provision which includes our best estimate of tax positions that are under audit or appeal by relevant taxation authorities. We perform a review on a quarterly basis to incorporate our best assessment based on information available, but additional liability and income tax expense could result based on decisions made by the relevant tax authorities.

The determination of our deferred tax asset or liability also requires significant management judgment as the recognition is dependant on our projection of future taxable profits and tax rates that are expected to be in effect in the period the asset is realized or the liability is settled. Any changes in our projection will result in changes in deferred tax assets or liabilities on our Consolidated Balance Sheets, and also deferred tax expense on our Consolidated Statements of Income.

Business combinations, goodwill and other intangibles

All business combinations are accounted for using the acquisition method. Identifiable intangible assets are recognized separately from goodwill and included in Other intangibles. Goodwill represents the excess of the price paid for the business acquired over the fair value of the net identifiable assets acquired on the date of acquisition.

Goodwill

Goodwill is allocated to cash-generating units or groups of cash-generating units (CGU) for the purpose of impairment testing, which is undertaken at the lowest level at which goodwill is monitored for internal management purposes. Impairment testing is performed annually as at August 1, or more frequently if there are objective indicators of impairment, by comparing the recoverable amount of a CGU with its carrying amount. The recoverable amount of a CGU is the higher of its value in use and its fair value less costs to sell. Value in use is the present value of the expected future cash flows from a CGU. Fair value less costs to sell is the amount obtainable from the sale of a CGU in an arm's length transaction between knowledgeable, willing parties, less costs of disposal. The fair value of a CGU is estimated using valuation techniques such as a discounted cash flow approach, adjusted to reflect the considerations of a prospective third-party buyer. External evidence such as binding sale agreements or recent transactions for similar businesses within the same industry is considered to the extent that it is available.

Significant judgment is involved in estimating the model inputs used to determine the recoverable amount of our CGU, in particular future cash flows, discount rates and terminal growth rates, due to the uncertainty in the timing and amount of cash flows and the forward-looking nature of these inputs. Future cash flows are based on financial plans agreed by management which are estimated based on forecast results, business initiatives, planned capital investments and returns to shareholders. Discount rates are based on the bank-wide cost of capital, adjusted for CGU-specific risks and currency exposure as reflected by differences in expected inflation. CGU-specific risks include country risk, business/operational risk, geographic risk (including political risk, devaluation risk, and government regulation), currency risk, and price risk (including product pricing risk and inflation). Terminal growth rates reflect the expected long-term gross domestic product growth and inflation for the countries within which the CGU operates. Changes in these assumptions may impact the amount of impairment loss recognized in Non-interest expense.

The carrying amount of a CGU includes the carrying amount of assets, liabilities and goodwill allocated to the CGU. If the recoverable amount is less than the carrying value, the impairment loss is allocated first to reduce the carrying amount of any goodwill allocated to the CGU and then to the other non-financial assets of the CGU proportionately based on the carrying amount of each asset. Any impairment loss is charged to income in the period in which the impairment is identified. Goodwill is stated at cost less accumulated impairment losses. Subsequent reversals of goodwill impairment are prohibited.

Upon disposal of a portion of a CGU, the carrying amount of goodwill relating to the portion of the CGU sold is included in the determination of gains or losses on disposal. The carrying amount is determined based on the relative fair value of the disposed portion to the total CGU.

Other intangibles

Intangible assets represent identifiable non-monetary assets and are acquired either separately or through a business combination, or generated internally. Intangible assets acquired through a business combination are recognized separately from goodwill when they are separable or arise from contractual or other legal rights, and their fair value can be measured reliably. The cost of a separately acquired intangible asset includes its purchase price and directly attributable costs of preparing the asset for its intended use. In respect of internally generated intangible assets, cost includes all directly attributable costs necessary to create, produce, and prepare the asset to be capable of operating in the manner intended by management. Research and development costs that are not eligible for capitalization are expensed. After initial recognition, an intangible asset is carried at its cost less any accumulated amortization and accumulated impairment losses, if any. Intangible assets with a finite-life are amortized on a straight-line basis over their estimated useful lives as follows: computer software – 3 to 10 years; and customer relationships – 10 to 20 years. We do not have any intangible assets with indefinite lives.

Intangible assets are assessed for indicators of impairment at each reporting period. If there is an indication that a finite-life intangible asset may be impaired, an impairment test is performed by comparing the carrying amount of the intangible asset to its recoverable amount. Where it is not possible to estimate the recoverable amount of an individual asset, we estimate the recoverable amount of the CGU to which the asset belongs. If the recoverable amount of the asset (or CGU) is less than its carrying amount, the carrying amount of the intangible asset is written down to its recoverable amount as an impairment loss.

An impairment loss recognized previously is reversed if there is a change in the estimates used to determine the recoverable amount of the asset (or CGU) since the last impairment loss was recognized. If an impairment loss is subsequently reversed, the carrying amount of the asset (or CGU) is revised to the lower of its recoverable amount and the carrying amount that would have been determined (net of amortization) had there been no prior impairment.

Due to the subjective nature of these estimates, significant judgment is required in determining the useful lives and recoverable amounts of our intangible assets, and assessing whether certain events or circumstances constitute objective evidence of impairment. Estimates of the recoverable amounts of our intangible assets rely on certain key inputs, including future cash flows and discount rates. Future cash flows are based on sales projections and allocated costs which are estimated based on forecast results and business initiatives. Discount rates are based on the bank-wide cost of capital, adjusted for asset-specific risks. Changes in these assumptions may impact the amount of impairment loss recognized in Non-interest expense.

Other

Translation of foreign currencies

Monetary assets and liabilities denominated in foreign currencies are translated into Canadian dollars at rates prevailing at the balance sheet date. Foreign exchange gains and losses resulting from the translation and settlement of these items are recognized in Non-interest income in the Consolidated Statements of Income.

Non-monetary assets and liabilities that are measured at historical cost are translated into Canadian dollars at historical rates. Non-monetary financial assets classified as AFS securities, such as equity instruments, that are measured at fair value are translated into Canadian dollars at rates prevailing at the balance sheet date, and the resulting foreign exchange gains and losses are recorded in Other components of equity until the asset is sold or becomes impaired.

Assets and liabilities of our foreign operations with functional currencies other than Canadian dollars are translated into Canadian dollars at rates prevailing at the balance sheet date, and income and expenses of these foreign operations are translated at average rates of exchange for the reporting period.

Unrealized gains or losses arising as a result of the translation of our foreign operations along with the effective portion of related hedges are reported in Other components of equity on an after-tax basis. Upon disposal or partial disposal of a foreign operation, an appropriate portion of the accumulated net translation gains or losses is included in Non-interest income.

Premises and equipment

Premises and equipment includes land, buildings, leasehold improvements, computer equipment, furniture, fixtures and other equipment, and are stated at cost less accumulated depreciation and accumulated impairment losses. Cost comprises the purchase price, any costs directly attributable to bringing the asset to the location and condition necessary for its intended use, and the initial estimate of any disposal costs. Depreciation is recorded principally on a straight-line basis over the estimated useful lives of the assets, which are 25 to 50 years for buildings, 3 to 10 years for computer equipment, and 7 to 10 years for furniture, fixtures and other equipment. The amortization period for leasehold improvements is the lesser of the useful life of the leasehold improvements or the lease term plus the first renewal period, if reasonably assured of renewal, up to a maximum of 10 years. Land is not depreciated. Gains and losses on disposal are recorded in Non-interest income.

Premises and equipment are assessed for indicators of impairment at each reporting period. If there is an indication that an asset may be impaired, an impairment test is performed by comparing the asset's carrying amount to its recoverable amount. Where it is not possible to estimate the recoverable amount of an individual asset, we estimate the recoverable amount of the CGU to which the asset belongs and test for impairment at the CGU level. An impairment charge is recorded to the extent the recoverable amount of an asset (or CGU), which is the higher of value in use and fair value less costs to sell, is less than its carrying amount. Value in use is the present value of the future cash flows expected to be derived from the asset (or CGU).

After the recognition of impairment, the depreciation charge is adjusted in future periods to reflect the asset's revised carrying amount. If an impairment is later reversed, the carrying amount of the asset is revised to the lower of the asset's recoverable amount and the carrying amount that would have been determined (net of depreciation) had there been no prior impairment loss. The depreciation charge in future periods is adjusted to reflect the revised carrying amount.

Provisions

Provisions are liabilities of uncertain timing or amount and are recognized when we have a present legal or constructive obligation as a result of a past event, it is probable that an outflow of resources will be required to settle the obligation, and a reliable estimate can be made of the amount of the obligation. Provisions are measured as the best estimate of the consideration required to settle the present obligation at the reporting date. Significant judgment is required in determining whether a present obligation exists and in estimating the probability, timing and amount of any outflows. We record provisions related to litigation, asset retirement obligations, and the allowance for off-balance sheet and other items. Provisions are recorded under Other liabilities on our Consolidated Balance Sheets.

We are required to estimate the results of ongoing legal proceedings, expenses to be incurred to dispose of capital assets, and credit losses on undrawn commitments and guarantees. The forward-looking nature of these estimates requires us to use a significant amount of judgment in projecting the timing and amount of future cash flows. We record our provisions on the basis of all available information at the end of the reporting period and make adjustments on a quarterly basis to reflect current expectations. Should actual results differ from our expectations, we may incur expenses in excess of the provisions recognized.

When some or all of the economic benefits required to settle a provision are expected to be recovered from a third party, such as an insurer, a separate asset is recognized if it is virtually certain that reimbursement will be received.

Commissions and fees

Portfolio management and other management advisory and service fees are recognized based on the applicable service contracts. Fees related to provision of services including asset management, wealth management, financial planning and custody services that cover a specified service period, are recognized over the period in which the service is provided. Fees such as underwriting fees and brokerage fees that are related to the provision of specific transaction type services are recognized when the service has been completed.

Dividend income

Dividend income is recognized when the right to receive payment is established. This is the ex-dividend date for listed equity securities, and usually the date when shareholders have approved the dividend for unlisted equity securities.

Leasing

A lease is an agreement whereby the lessor conveys to the lessee the right to use an asset for an agreed upon period of time in return for a payment or series of payments. A finance lease is a lease that transfers substantially all the risks and rewards incidental to ownership of the leased asset to the lessee, where title may or may not eventually be transferred. An operating lease is a lease other than a finance lease.

Operating leases
When we are the lessee in an operating lease, we record rental payments on a straight-line basis over the lease term in Non-interest expense.

Finance leases
When we are the lessee in a finance lease, we initially record both the leased asset and the related lease obligation in Premises and equipment, Other intangibles and Other liabilities on our Consolidated Balance Sheets at an amount equal to the fair value of the leased asset or, if lower, the present value of the minimum lease payments, each determined at the date of inception of the lease. Initial direct costs directly attributed to the lease are recognized as an asset under the finance lease.

Earnings per share
Earnings per share is computed by dividing Net income available to common shareholders by the weighted average number of common shares outstanding for the period. Net income available to common shareholders is determined after deducting dividend entitlements of preferred shareholders, any gain (loss) on redemption of preferred shares net of related income taxes and the net income attributable to non-controlling interests.

Diluted earnings per share reflects the potential dilution that could occur if additional common shares are assumed to be issued under securities or contracts that entitle their holders to obtain common shares in the future, to the extent such entitlement is not subject to unresolved contingencies. For contracts that may be settled in cash or in common shares at our option, diluted earnings per share is calculated based on the assumption that such contracts will be settled in shares. Income and expenses associated with these types of contracts are excluded from the Net income available to common shareholders, and the additional number of shares that would be issued is included in the diluted earnings per share calculation. These contracts include our convertible Preferred Shares and Trust Capital Securities. For stock options whose exercise price is less than the average market price of our common shares, they are assumed to be exercised and the proceeds are used to repurchase common shares at the average market price for the period. The incremental number of common shares issued under stock options and repurchased from proceeds is included in the calculation of diluted earnings per share.

Share capital
We classify a financial instrument that we issue as a financial asset, financial liability or an equity instrument in accordance with the substance of the contractual arrangement.

Our common shares held by us are classified as treasury shares in equity and accounted for at weighted average cost. Upon the sale of treasury shares, the difference between the sale proceeds and the cost of the shares is recognized in Retained earnings. Financial instruments issued by us are classified as equity instruments when there is no contractual obligation to transfer cash or other financial assets. Incremental costs directly attributable to the issue of equity instruments are included in equity as a deduction from the proceeds, net of tax. Financial instruments that will be settled by a variable number of our common shares upon their conversion by the holders as well as the related accrued distributions are classified as liabilities on our Consolidated Balance Sheets. Dividends and yield distributions on these instruments are classified as Interest expense in our Consolidated Statements of Income.

Future changes in accounting policy and disclosure
We are currently assessing the impact of adopting the following standards on our consolidated financial statements:

IFRS 10 *Consolidated Financial Statements* (IFRS 10)
In May 2011, the IASB issued IFRS 10, which replaces the consolidation requirements in IAS 27 *Consolidated and Separate Financial Statements* (IAS 27) and SIC-12 *Consolidation – Special Purpose Entities* (SIC-12) and provides a single consolidation model applicable to all types of entities. Under IFRS 10, consolidation is based on control. Three conditions must be satisfied to have control over an investee: (i) decision making power over the relevant activities, (ii) exposure to variable returns, and (iii) a link between power and returns. The determination of control is based on the current facts and circumstances and is continuously assessed. IFRS 10 contains a substantial amount of application guidance that expands on new and existing principles related to the determination of control. IFRS 10 is effective for us on November 1, 2013 with modified retrospective application based on entities in place as at the effective date.

Currently, we consolidate SPEs that we control based on an overall assessment of the purpose and design of the entity, our decision making rights, and our exposure to the majority of the risks and rewards of ownership. IFRS 10 places a greater emphasis on decision making power, which is a required condition for control. It removes the bright lines for assessing exposure to risks and rewards, and introduces new considerations related to our role as a principal or an agent in entities over which we have decision making power.

On adoption of IFRS 10, we expect the consolidation status of certain entities to change. We will deconsolidate RBC Capital Trust II as our involvement does not expose us to variable returns. This will result in the reclassification of $900 million from Trust capital securities to Deposits. See Note 20 for further details on our innovative capital instruments. Additionally, certain mutual funds will be consolidated where our exposure to variability indicates that our power as fund manager is in a principal capacity. The effects of these changes are not expected to have a material impact on our consolidated financial statements.

IFRS 11 *Joint Arrangements* (IFRS 11)
In May 2011, the IASB issued IFRS 11 which requires a party to a joint arrangement to determine the type of joint arrangement in which it is involved by assessing its rights and obligations arising from the arrangement. IFRS 11 requires a joint operator to recognize and measure the assets and liabilities in relation to its interest in the arrangement, and a joint venturer to apply equity method of accounting. IFRS 11 is effective for us on November 1, 2013. The adoption of this standard is not expected to have a material impact on our consolidated financial statements.

IFRS 12 *Disclosure of Interest in Other Entities* (IFRS 12)
In May 2011, the IASB issued IFRS 12, *Disclosure of Interests in Other Entities* (IFRS 12), which provides enhanced guidance on the annual disclosure requirements of a reporting entity's interests in other entities. The standard requires an entity to disclose information that helps users to evaluate the nature of, and risks associated with a reporting entity's interests in subsidiaries, consolidated entities, associates, joint arrangements and, in particular, unconsolidated structured entities (off-balance sheet structures), and the effect of those interests on the entity's financial position, financial performance and cash flows.

IFRS 12 is effective for us on November 1, 2013 with disclosure, including comparative periods, required to be presented in our 2014 consolidated financial statements.

IAS 27 *Separate Financial Statements* (IAS 27) and IAS 28 *Investments in Associates and Joint Ventures* (IAS 28)
As a consequence of the new IFRS standards IFRS 10, IFRS 11 and IFRS 12, in May 2012, the IASB issued amended and retitled IAS 27, *Separate Financial Statements* and IAS 28, *Investments in Associates and Joint Ventures.* These new requirements are effective for us on November 1, 2013. The adoption of these standards is not expected to have a material impact on our consolidated financial statements.

IFRS 13 *Fair Value Measurement* (IFRS 13)
In May 2011, the IASB issued IFRS 13 *Fair Value Measurement* which provides a revised definition of fair value and sets out a framework for measuring fair value in a single standard. IFRS 13 also requires more comprehensive disclosure requirements on fair value measurement. The measurement and disclosure requirements of IFRS 13 apply when another standard requires or permits the item to be measured at fair value with limited exceptions. IFRS 13 is effective for us on November 1, 2013 and is required to be applied prospectively from the adoption date. The adoption of this standard is not expected to have a material impact on our consolidated financial statements.

IAS 19 *Employee Benefits* (IAS 19)
In June 2011, the IASB issued amendments to IAS 19 regarding the accounting for pensions and other post-employment benefits. The new requirements are effective for us on November 1, 2013 and will require a restatement of comparative figures. The amendments will alter the accounting for actuarial gains and losses, past service costs, interest expense and return on plan assets. The amended standard eliminates the deferral and amortization of actuarial gains and losses in net income, instead requiring the immediate recognition of actuarial gains and losses in OCI. Past service costs will also be immediately recognized in the period in which a plan amendment occurs. Net interest, calculated by applying the discount rate to the Net defined benefit liability or asset, will replace the Interest cost and Expected return on plan assets components of Defined benefit pension expense. The amendments also introduce a number of enhanced disclosure requirements for defined benefit plans.

The amended standard is expected to impact our Consolidated Balance Sheets, Consolidated Statements of Income and Consolidated Statements of Comprehensive Income for the years ended October 31, 2013 and 2012 by the following amounts:

	As at or for the year ended	
(Millions of Canadian dollars)	October 31 2013	October 31 2012
Consolidated Balance Sheets		
(Decrease) in Prepaid pension benefit cost	$ (923)	$ (920)
Increase in Accrued pension and other post-employment benefit expense	268	589
Increase in Other assets – Deferred income tax asset	316	400
(Decrease) in Retained earnings (opening)	(1,108)	(297)
(Decrease) in Retained earnings (closing)	(876)	(1,108)
Consolidated Statements of Income and Comprehensive Income		
(Decrease) in Net income	(87)	(32)
Increase (Decrease) in Total other comprehensive income, net of taxes	319	(779)

IFRS 7 *Disclosure – Offsetting Financial Assets and Financial Liabilities* (IFRS 7)
In December 2011, the IASB issued amendments to IFRS 7, requiring extended disclosures to enable users to assess the effect of offsetting arrangements on an entity's financial position. The amendments require entities to disclose both gross and net amounts associated with master netting agreements and similar arrangements, including the effects of financial collateral, whether or not they are presented net on the balance sheet. The amendments are effective for us on November 1, 2013 and we are required to adopt these disclosures in our 2014 consolidated financial statements.

IAS 32 *Financial Instruments: Presentation* (IAS 32)
In December 2011, the IASB issued amendments to IAS 32 which clarify the existing requirements for offsetting financial assets and financial liabilities. The amendments will be effective for us on November 1, 2014.

IFRS *Interpretations Committee Interpretation 21 Levies* (IFRIC 21)
In May 2013, the IASB issued IFRIC 21 which provides guidance on when to recognize a liability to pay a levy that is accounted for in accordance with IAS 37 *Provisions, Contingent Liabilities and Contingent Assets*. It also addresses the accounting for a liability to pay a levy whose timing and amount is uncertain. IFRIC 21 will be effective for us on November 1, 2014.

IFRS 9 *Financial Instruments* (IFRS 9)
In November 2009, the IASB issued IFRS 9 as part of its plan to replace IAS 39, *Financial Instruments: Recognition and Measurement* (IAS 39). IFRS 9 requires financial assets, including hybrid contracts, to be measured at either fair value or amortized cost.

In October 2010, the IASB added to IFRS 9 the requirements for classification and measurement of financial liabilities previously included in IAS 39. In November 2013, the IASB introduced a new hedge accounting model, and allowed early adoption of the own credit provisions of IFRS 9. It also removed the mandatory effective date of January 1, 2015 and has not proposed a future effective date.

Carrying value and fair value of selected financial instruments

The following tables provide a comparison of the carrying and fair values for each classification of financial instruments.

	As at October 31, 2013							
	Carrying value and fair value			Carrying value	Fair value			
(Millions of Canadian dollars)	Financial instruments classified as at FVTPL	Financial instruments designated as at FVTPL	Available-for-sale instruments measured at fair value	Loans and receivables and non-trading liabilities at amortized cost	Loans and receivables and non-trading liabilities	Held-to-maturity investments measured at amortized cost	Total carrying amount	Total fair value
Financial assets								
Securities								
Trading	$ 135,346	$ 8,677	$ –	$ –	$ –	$ –	$ 144,023	$ 144,023
Available-for-sale	–	–	38,294	–	–	401	38,695	38,695
Total securities	135,346	8,677	38,294	–	–	401	182,718	182,718
Assets purchased under reverse repurchase agreements and securities borrowed	–	82,023	–	35,494	35,494	–	117,517	117,517
Loans								
Retail	–	–	–	320,498	317,613	–	320,498	317,613
Wholesale	614	964	–	86,590	85,929	–	88,168	87,507
Total loans	614	964	–	407,088	403,542	–	408,666	405,120
Other								
Derivatives	74,822	–	–	–		–	74,822	74,822
Other assets	–	983	–	29,147	29,147	–	30,130	30,130
Financial liabilities								
Deposits								
Personal	$ –	$ 9,069		$ 185,228	$ 185,412		$ 194,297	$ 194,481
Business and government (1)	–	56,037		294,603	294,424		350,640	350,461
Bank (2)	–	1,932		11,611	11,611		13,543	13,543
Total deposits	–	67,038		491,442	491,447		558,480	558,485
Other								
Obligations related to securities sold short	47,128	–		–	–		47,128	47,128
Obligations related to assets sold under repurchase agreements and securities loaned	–	53,948		6,468	6,468		60,416	60,416
Derivatives	76,745	–		–	–		76,745	76,745
Other liabilities	(2)	42		38,402	38,402		38,442	38,442
Subordinated debentures	–	109		7,334	7,285		7,443	7,394
Trust capital securities	–	–		900	906		900	906

	As at October 31, 2012							
	Carrying value and fair value			Carrying value	Fair value			
(Millions of Canadian dollars)	Financial instruments classified as at FVTPL	Financial instruments designated as at FVTPL	Available-for-sale instruments measured at fair value	Loans and receivables and non-trading liabilities at amortized cost	Loans and receivables and non-trading liabilities	Held-to-maturity investments measured at amortized cost	Total carrying amount	Total fair value
Financial assets								
Securities								
Trading	$ 111,114	$ 9,669	$ –	$ –	$ –	$ –	$ 120,783	$ 120,783
Available-for-sale	–	–	40,320	–	–	508	40,828	40,828
Total securities	111,114	9,669	40,320	–	–	508	161,611	161,611
Assets purchased under reverse repurchase agreements and securities borrowed	–	86,918	–	25,339	25,339	–	112,257	112,257
Loans								
Retail	–	–	–	300,043	297,490	–	300,043	297,490
Wholesale	–	1,232	–	76,969	76,506	–	78,201	77,738
Total loans	–	1,232	–	377,012	373,996	–	378,244	375,228
Other								
Derivatives	91,293	–	–	–	–	–	91,293	91,293
Other assets	–	705	–	36,487	36,487	–	37,192	37,192
Financial liabilities								
Deposits								
Personal	$ –	$ 7,167		$ 172,335	$ 172,625		$ 179,502	$ 179,792
Business and government (1)	–	49,336		263,546	263,909		312,882	313,245
Bank (2)	–	2,524		13,311	13,311		15,835	15,835
Total deposits	–	59,027		449,192	449,845		508,219	508,872
Other								
Obligations related to securities sold short	40,756	–		–	–		40,756	40,756
Obligations related to assets sold under repurchase agreements and securities loaned	–	58,709		5,323	5,323		64,032	64,032
Derivatives	96,761	–		–	–		96,761	96,761
Other liabilities	101	29		41,352	41,352		41,482	41,482
Subordinated debentures	–	122		7,493	7,405		7,615	7,527
Trust capital securities	–	–		900	941		900	941

(1) Business and government includes deposits from regulated deposit-taking institutions other than regulated banks.
(2) Bank refers to regulated banks.

The following tables present information on loans and receivables designated as at FVTPL, the maximum exposure to credit risk, the extent to which the risk is mitigated by credit derivatives and similar instruments, and changes in the fair value of these assets. We measure the change in the fair value of loans and receivables designated as at FVTPL due to changes in credit risk as the difference between the total change in the fair value of the instrument during the period and the change in fair value calculated using the appropriate risk-free yield curves.

Loans and receivables designated as at fair value through profit or loss

	As at October 31, 2013						
(Millions of Canadian dollars)	Carrying amount of loans and receivables designated as at FVTPL	Maximum exposure to credit risk	Extent to which credit derivatives or similar instruments mitigate credit risk	Change in fair value for the year attributable to changes in credit risk	Cumulative change in fair value since initial recognition attributable to changes in credit risk (1)	Change in fair value of credit derivatives or similar instruments for the year	Cumulative change in fair value of credit derivatives or similar instruments (1)
Interest-bearing deposits with banks	$ 2,424	$ 2,424	$ –	$ –	$ –	$ –	$ –
Assets purchased under reverse repurchase agreements and securities borrowed	82,023	82,023	–	–	–	–	–
Loans – Wholesale	964	964	224	3	1	–	–
Other Assets	463	463	–	–	–	–	–
Total	$ 85,874	$ 85,874	$ 224	$ 3	$ 1	$ –	$ –

(Millions of Canadian dollars)	As at October 31, 2012 Carrying amount of loans and receivables designated as at FVTPL	Maximum exposure to credit risk	Extent to which credit derivatives or similar instruments mitigate credit risk	Change in fair value for the year attributable to changes in credit risk	Cumulative change in fair value since initial recognition attributable to changes in credit risk (1)	Change in fair value of credit derivatives or similar instruments for the year	Cumulative change in fair value of credit derivatives or similar instruments (1)
Interest-bearing deposits with banks	$ 120	$ 120	$ –	$ –	$ –	$ –	$ –
Assets purchased under reverse repurchase agreements and securities borrowed	86,918	86,918	–	–	–	–	–
Loans – Wholesale	1,232	1,232	284	3	(12)	(2)	1
Other assets	311	311	–	–	–	–	–
Total	$ 88,581	$ 88,581	$ 284	$ 3	$ (12)	$ (2)	$ 1

(1) The cumulative change is measured from the later of November 1, 2010, or the initial recognition of the credit derivative or similar instruments.

The following tables present the changes in the fair value of our financial liabilities designated as at FVTPL as well as their contractual maturity and carrying amounts.

Liabilities designated as at fair value through profit or loss

(Millions of Canadian dollars)	As at October 31, 2013 Contractual maturity amount	Carrying value	Difference between carrying value and contractual maturity amount	Changes in fair value for the year attributable to changes in RBC credit spread	Cumulative change in fair value attributable to changes in RBC credit spread (1)
Term deposits					
Personal	$ 8,963	$ 9,069	$ 106	$ (20)	$ (33)
Business and government (2)	56,216	56,037	(179)	36	24
Bank (3)	1,932	1,932	–	–	–
Total term deposits	67,111	67,038	(73)	16	(9)
Obligations related to assets sold under repurchase agreements and securities loaned	53,952	53,948	(4)	–	–
Other liabilities	42	42	–	–	–
Subordinated debentures	106	109	3	6	3
Total	$ 121,211	$ 121,137	$ (74)	$ 22	$ (6)

(Millions of Canadian dollars)	As at October 31, 2012 Contractual maturity amount	Carrying value	Difference between carrying value and contractual maturity amount	Changes in fair value for the year attributable to changes in RBC credit spread	Cumulative change in fair value attributable to changes in RBC credit spread (1)
Term deposits					
Personal	$ 7,152	$ 7,167	$ 15	$ 1	$ (13)
Business and government (2)	49,264	49,336	72	33	(12)
Bank (3)	2,524	2,524	–	–	–
Total term deposits	58,940	59,027	87	34	(25)
Obligations related to assets sold under repurchase agreements and securities loaned	58,710	58,709	(1)	–	–
Other liabilities	29	29	–	–	–
Subordinated debentures	125	122	(3)	4	(3)
Total	$ 117,804	$ 117,887	$ 83	$ 38	$ (28)

(1) The cumulative change is measured from the later of November 1, 2010, or the initial recognition of the liabilities designated as at FVTPL.
(2) Business and government includes deposits from regulated deposit-taking institutions other than regulated banks.
(3) Bank refers to regulated banks.

Fair value of assets and liabilities classified using the fair value hierarchy

The following tables present the financial instruments measured at fair value classified by the fair value hierarchy set out in IFRS 7 *Financial Instruments: Disclosures* (IFRS 7). IFRS 7 requires that all financial instruments measured at fair value be categorized into one of three hierarchy levels, as described below, for disclosure purposes. Each level is based on the transparency of the inputs used to measure the fair values of assets and liabilities:

- Level 1 – inputs are unadjusted quoted prices of identical instruments in active markets.
- Level 2 – inputs other than quoted prices included in Level 1 that are observable for the asset or liability, either directly or indirectly.
- Level 3 – one or more significant inputs used in a valuation technique are unobservable in determining fair values of the instruments.

Determination of fair value and the resulting hierarchy requires the use of observable market data whenever available. The classification of a financial instrument in the hierarchy is based upon the lowest level of input that is significant to the measurement of fair value.

	As at											
	October 31, 2013						October 31, 2012					
	Fair value measurements using (1)			Total gross fair value	Netting adjustments	Assets/ liabilities at fair value	Fair value measurements using (1)			Total gross fair value	Netting adjustments	Assets/ liabilities at fair value
(Millions of Canadian dollars)	Level 1	Level 2	Level 3				Level 1	Level 2	Level 3			
Financial assets												
Interest bearing deposits with banks	$ –	$ 2,424	$ –	$ 2,424	$	$ 2,424	$ –	$ 120	$ –	$ 120	$	$ 120
Securities												
Trading												
Canadian government debt (2)												
Federal	11,978	6,663	–	18,641		18,641	8,158	7,234	–	15,392		15,392
Provincial and municipal	–	12,108	–	12,108		12,108	–	8,465	–	8,465		8,465
U.S. state, municipal and agencies debt (2)	5,480	23,980	22	29,482		29,482	2,287	18,364	99	20,750		20,750
Other OECD government debt	2,815	6,671	370	9,856		9,856	3,781	7,754	375	11,910		11,910
Mortgage-backed securities (2)	–	802	28	830		830	–	693	55	748		748
Asset-backed securities	–											
CDOs (4)	–	–	31	31		31	–	–	59	59		59
Non-CDO securities	–	1,084	260	1,344		1,344	–	700	23	723		723
Corporate debt and other debt	–	26,127	415	26,542		26,542	62	21,972	397	22,431		22,431
Equities	41,874	3,132	183	45,189		45,189	37,924	2,079	302	40,305		40,305
	62,147	80,567	1,309	144,023		144,023	52,212	67,261	1,310	120,783		120,783
Available-for-sale (5)												
Canadian government debt (2)												
Federal	153	9,669	–	9,822		9,822	367	10,914	–	11,281		11,281
Provincial and municipal	–	667	–	667		667	–	1,785	–	1,785		1,785
U.S. state, municipal and agencies debt (2)	26	4,238	2,014	6,278		6,278	23	3,856	1,906	5,785		5,785
Other OECD government debt (3)	5,463	5,319	–	10,782		10,782	6,081	3,744	–	9,825		9,825
Mortgage-backed securities (2)	–	139	–	139		139	–	263	–	263		263
Asset-backed securities												
CDOs	–	1,294	103	1,397		1,397	–	–	1,996	1,996		1,996
Non-CDO securities	–	283	180	463		463	–	180	645	825		825
Corporate debt and other debt	–	5,232	1,673	6,905		6,905	–	5,062	1,446	6,508		6,508
Equities	137	585	969	1,691		1,691	266	603	948	1,817		1,817
Loan substitute securities	103	24	–	127		127	192	25	–	217		217
	5,882	27,450	4,939	38,271		38,271	6,929	26,432	6,941	40,302		40,302
Asset purchased under reverse repurchase agreements and securities borrowed	–	82,023	–	82,023		82,023	–	86,918	–	86,918		86,918
Loans	–	1,164	414	1,578		1,578	–	829	403	1,232		1,232
Other												
Derivatives												
Interest rate contracts	22	78,517	333	78,872		78,872	5	99,062	842	99,909		99,909
Foreign exchange contracts	–	20,709	76	20,785		20,785	–	19,126	118	19,244		19,244
Credit derivatives	–	193	32	225		225	–	167	125	292		292
Other contracts	2,558	3,219	858	6,635		6,635	1,699	2,296	448	4,443		4,443
Valuation adjustments determined on a pooled basis	(2)	(398)	(105)	(505)		(505)	(23)	(321)	(282)	(626)		(626)
Total gross derivatives	2,578	102,240	1,194	106,012		106,012	1,681	120,330	1,251	123,262		123,262
Netting adjustments					(31,190)	(31,190)					(31,969)	(31,969)
Total derivatives						74,822						91,293
Other assets	520	452	11	983		983	394	297	14	705		705
	$ 71,127	$ 296,320	$ 7,867	$ 375,314	$ (31,190)	$ 344,124	$ 61,216	$ 302,187	$ 9,919	$ 373,322	$ (31,969)	$ 341,353
Financial Liabilities												
Deposits												
Personal	$ –	$ 8,033	$ 1,036	$ 9,069	$	$ 9,069	$ –	$ 327	$ 6,840	$ 7,167	$	$ 7,167
Business and government	–	52,104	3,933	56,037		56,037	–	46,817	2,519	49,336		49,336
Bank	–	1,932	–	1,932		1,932	–	2,524	–	2,524		2,524
Other												
Obligations related to securities sold short	31,832	15,280	16	47,128		47,128	27,365	13,383	8	40,756		40,756
Obligations related to assets sold under repurchase agreements and securities loaned	–	53,948	–	53,948		53,948	–	58,709	–	58,709		58,709
Derivatives												
Interest rate contracts	9	74,113	791	74,913		74,913	2	91,180	1,329	92,511		92,511
Foreign exchange contracts	–	22,715	193	22,908		22,908	–	28,016	316	28,332		28,332
Credit derivatives	–	295	37	332		332	–	188	147	335		335
Other contracts	2,379	5,979	1,727	10,085		10,085	1,370	4,501	1,500	7,371		7,371
Total gross derivatives	2,388	103,102	2,748	108,238		108,238	1,372	123,885	3,292	128,549		128,549
Netting adjustments					(31,493)	(31,493)					(31,788)	(31,788)
Total derivatives						76,745						96,761
Other liabilities	–	37	3	40		40	–	29	101	130		130
Subordinated debentures	–	–	109	109		109	–	–	122	122		122
	$ 34,220	$ 234,436	$ 7,845	$ 276,501	$ (31,493)	$ 245,008	$ 28,737	$ 245,674	$ 12,882	$ 287,293	$ (31,788)	$ 255,505

(1) Transfer between Level 1 and Level 2 is dependent on whether fair value is obtained on the basis of quoted market prices in active markets and is assumed to occur at the end of the period. During the year ended October 31, 2013, $1,105 million of certain government bonds reported in Trading U.S. state, municipal and agencies debt, and $1,308 million included in Obligations related to securities sold short were transferred from Level 1 to the corresponding Level 2 balances, and certain government bonds of $122 million reported in Trading Canadian government debt – Federal were transferred from Level 2 to the corresponding Level 1 balances. During the year ended October 31, 2012, certain government bonds of $496 million reported in Trading and AFS Canadian government debt – Federal and U.S. state, municipal and agencies debt, and $1,654 million included in Obligations related to securities sold short were transferred from Level 2 to the corresponding Level 1 balances. In addition, certain government bonds of $1,545 million reported in Trading and AFS Canadian government debt – Federal and U.S. state, municipal and agencies debt, and $253 million included in Obligations related to securities sold short were transferred from Level 1 to the corresponding Level 2 balances.

(2) As at October 31, 2013, residential and commercial mortgage-backed securities (MBS) included in Trading securities were $4,934 million and $93 million (October 31, 2012 – $7,761 million and $78 million), respectively, and in AFS securities, $3,512 million and $35 million (October 31, 2012 – $3,523 and $42 million), respectively.

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

(4) CDOs stand for Collateralized Debt Obligations.

(5) Excludes $23 million and $401 million of AFS and held-to-maturity securities (October 31, 2012 – $18 million and $508 million), respectively, that are carried at cost.

Changes in fair value measurement for instruments categorized in Level 3

The following tables present the changes in fair value measurements for instruments included in Level 3 of the fair value hierarchy. In the tables below, transfers in and out of Level 3 are assumed to occur at the end of the period. For an asset or a liability that transfers into Level 3 during the period, the entire change in fair value for the period is excluded from the Total realized/unrealized gains (losses) included in earnings column of the reconciliation, whereas for transfers out of Level 3 during the period, the entire change in fair value for the period is included in the same column of the reconciliation.

	For the year ended October 31, 2013								
(Millions of Canadian dollars)	Fair value November 1, 2012	Total realized/ unrealized gains (losses) included in earnings	Total unrealized gains (losses) included in other comprehensive income (1)	Purchases of assets/ issuances of liabilities	Sales of assets/ settlements of liabilities and other (2)	Transfers into Level 3	Transfers out of Level 3	Fair value October 31, 2013	Changes in unrealized gains (losses) included in earnings for assets and liabilities for the year ended October 31, 2013 for positions still held
Assets									
Securities									
Trading									
Canadian government debt									
Provincial and municipal	$ –	$ –	$ –	$ –	$ –	$ –	$ –	$ –	$ –
U.S. state, municipal and agencies debt	99	2	2	414	(525)	34	(4)	22	–
Other OECD government debt	375	(1)	6	633	(237)	–	(406)	370	–
Mortgage-backed securities	55	7	2	50	(64)	21	(43)	28	1
Asset-backed securities									
CDOs	59	10	1	16	(48)	–	(7)	31	8
Non-CDO securities	23	(2)	7	4,608	(4,376)	70	(70)	260	(2)
Corporate debt and other debt	397	19	10	634	(655)	96	(86)	415	1
Equities	302	(16)	8	107	(224)	7	(1)	183	(29)
	1,310	19	36	6,462	(6,129)	228	(617)	1,309	(21)
Available-for-sale									
U.S. state, municipal and agencies debt	1,906	–	88	417	(406)	9	–	2,014	n.a.
Asset-backed securities									
CDOs	1,996	–	67	–	(542)	12	(1,430)	103	n.a.
Non-CDO securities	645	4	36	–	(505)	–	–	180	n.a.
Corporate debt and other debt	1,446	(12)	80	1,281	(1,172)	50	–	1,673	n.a.
Equities	948	65	51	27	(122)	–	–	969	n.a.
	6,941	57	322	1,725	(2,747)	71	(1,430)	4,939	n.a.
Loans – Wholesale	403	8	22	288	(307)	–	–	414	–
Other									
Derivatives, net of derivative related liabilities (3)	(2,041)	62	(15)	198	86	(72)	228	(1,554)	280
Other assets	14	(3)	–	–	–	–	–	11	1
	$ 6,627	$ 143	$ 365	$ 8,673	$ (9,097)	$ 227	$ (1,819)	$ 5,119	$ 260
Liabilities									
Deposits									
Personal	$ (6,840)	$ (737)	$ (102)	$ (6,131)	$ 7,213	$ (64)	$ 5,625	$ (1,036)	$ (30)
Business and government	(2,519)	(11)	(95)	(1,738)	165	–	265	(3,933)	(120)
Other									
Obligations related to securities sold short	(8)	10	–	(96)	79	(8)	7	(16)	–
Other liabilities	(101)	98	(3)	–	3	–	–	(3)	98
Subordinated debentures	(122)	(6)	19	–	–	–	–	(109)	(6)
	$ (9,590)	$ (646)	$ (181)	$ (7,965)	$ 7,460	$ (72)	$ 5,897	$ (5,097)	$ (58)

	For the year ended October 31, 2012								
(Millions of Canadian dollars)	Fair value November 1, 2011	Total realized/ unrealized gains (losses) included in earnings	Total unrealized gains (losses) included in other comprehensive income (1)	Purchases of assets/ issuances of liabilities	Sales of assets/ settlements of liabilities and other (2)	Transfers into Level 3	Transfers out of Level 3	Fair value October 31, 2012	Changes in unrealized gains (losses) included in earnings for assets and liabilities for the year ended October 31, 2012 for positions still held
Assets									
Securities									
Trading									
Canadian government debt									
Provincial and municipal	$ 4	$ –	$ –	$ 1	$ (3)	$ 1	$ (3)	$ –	$ –
U.S. state, municipal and agencies debt	86	(6)	–	140	(150)	84	(55)	99	–
Other OECD government debt	47	–	–	85	290	–	(47)	375	–
Mortgage-backed securities	45	–	(1)	38	(27)	–	–	55	–
Asset-backed securities									
CDOs	371	5	1	–	(318)	–	–	59	3
Non-CDO securities	138	–	–	2,421	(2,553)	46	(29)	23	(2)
Corporate debt and other debt	720	34	–	704	(1,069)	99	(91)	397	10
Equities	352	(30)	(2)	47	(106)	53	(12)	302	8
	1,763	3	(2)	3,436	(3,936)	283	(237)	1,310	19
Available-for-sale									
U.S. state, municipal and agencies debt	2,691	4	10	497	(940)	–	(356)	1,906	n.a.
Mortgage-backed securities	184	(1)	11	–	(38)	–	(156)	–	n.a.
Asset-backed securities						–		–	
CDOs	1,932	6	66	–	(8)	–	–	1,996	n.a.
Non-CDO securities	673	(4)	21	23	(68)	–	–	645	n.a.
Corporate debt and other debt	1,478	–	–	633	(665)	–	–	1,446	n.a.
Equities	863	10	73	97	(118)	69	(46)	948	n.a.
	7,821	15	181	1,250	(1,837)	69	(558)	6,941	n.a.
Loans – Wholesale	563	(34)	–	271	(397)	–	–	403	6
Other									
Derivatives, net of derivative related liabilities (3)	(1,936)	(258)	(15)	(33)	164	(4)	41	(2,041)	(513)
Other assets	–	2	–	–	12	–	–	14	11
	$ 8,211	$ (272)	$ 164	$ 4,924	$ (5,994)	$ 348	$ (754)	$ 6,627	$ (477)
Liabilities									
Deposits									
Personal	$ (3,615)	$ (258)	$ 81	$ (6,265)	$ 3,164	$ (6)	$ 59	$ (6,840)	$ (97)
Business and government	(3,435)	(62)	63	(754)	1,003	(443)	1,109	(2,519)	(57)
Other									
Obligations related to securities sold short	–	–	–	(2)	2	(8)	–	(8)	–
Other liabilities	(68)	(35)	1	–	1	–	–	(101)	(33)
Subordinated debentures	(111)	(13)	2	–	–	–	–	(122)	(12)
	$ (7,229)	$ (368)	$ 147	$ (7,021)	$ 4,170	$ (457)	$ 1,168	$ (9,590)	$ (199)

(1) These amounts include the foreign currency translation gains or losses arising on consolidation of foreign subsidiaries relating to the Level 3 instruments, where applicable. The unrealized gains on AFS securities were $79 million for the year ended October 31, 2013 (October 31, 2012 – gains of $162 million), excluding the translation gains or losses arising on consolidation.
(2) Other includes amortization of premiums or discounts recognized in net income.
(3) Net derivatives as at October 31, 2013 included derivative assets of $1,194 million (October 31, 2012 – $1,251 million) and derivative liabilities of $2,748 million (October 31, 2012 – $3,292 million).

During the year ended October 31, 2013, significant transfers included: (i) $5,535 million of certain equity-linked notes in Personal deposits, $113 million and $163 million of assets and liabilities, respectively, relating to equity derivatives in Derivatives, net of derivatives related liabilities, transferred out of Level 3 in the fourth quarter, as the unobservable inputs did not significantly affect fair value measurement of these instruments; (ii) $1,437 million of CDOs transferred out of Level 3 in the third quarter, as a result of increased price transparency evidenced by trade data, dealer data or multiple vendor quotes; (iii) $251 million of Other OECD government debt transferred out of Level 3 in the second quarter, as there was an increase in price transparency due to more issuances in the market; (iv) $155 million in Other OECD government debt transferred out of Level 3 in the first quarter due to increased market activity; (v) certain derivative assets and liabilities were also transferred out of Level 3 in the first quarter, with a majority of the transfers related to derivatives for which pricing became observable as maturity dates became shorter due to the passage of time; (vi) certain equity derivatives with assets and liabilities of $462 million and $485 million, respectively, in Derivatives, net of derivatives related liabilities, were transferred into Level 3 in the fourth quarter, as the unobservable inputs are significant to their fair values; and (vii) $67 million of Non-CDO ABS and $55 million of Corporate debt and other debt transferred into Level 3 in the second quarter, for which pricing inputs are no longer observable.

During the year ended October 31, 2012, there were significant transfers of AFS securities from Level 3 to Level 2, mainly due to increase in price transparency of certain U.S. state, municipal and agencies debt. During the year, certain Business and government deposits were transferred out of Level 3 because their spreads became observable. Certain derivative assets and derivative liabilities were also transferred out of Level 3 in the same period. A majority of the transfers were related to derivatives for which maturity dates became shorter due to passage of time; hence pricing became observable.

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

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

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

	As at					
	October 31, 2013			October 31, 2012		
(Millions of Canadian dollars)	Level 3 fair value	Positive fair value movement from using reasonably possible alternatives	Negative fair value movement from using reasonably possible alternatives	Level 3 fair value	Positive fair value movement from using reasonably possible alternatives	Negative fair value movement from using reasonably possible alternatives
Securities						
Trading						
U.S. state, municipal and agencies debt	$ 22	$ –	$ (1)	$ 99	$ –	$ –
Other OECD government debt	370	–	–	375	–	–
Mortgage-backed securities	28	1	(2)	55	1	(1)
Asset-backed securities	291	3	(3)	82	3	(3)
Corporate debt and other debt	415	42	(32)	397	40	(32)
Equities	183	–	–	302	2	(2)
Available-for-sale						
U.S. state, municipal and agencies debt	2,014	20	(64)	1,906	25	(48)
Asset-backed securities	283	9	(16)	2,641	29	(37)
Corporate debt and other debt	1,673	9	(10)	1,446	13	(12)
Equities	969	24	(20)	948	20	(24)
Loans	414	3	(3)	403	3	(3)
Derivatives	1,194	84	(85)	1,251	106	(117)
Other assets	11	–	–	14	1	(1)
Total	$ 7,867	$ 195	$ (236)	$ 9,919	$ 243	$ (280)
Deposits	(4,969)	60	(39)	(9,359)	84	(84)
Derivatives	(2,748)	77	(100)	(3,292)	41	(60)
Other, securities sold short, other liabilities and subordinated debentures	(128)	1	–	(231)	8	(8)
Total	$ (7,845)	$ 138	$ (139)	$ (12,882)	$ 133	$ (152)

Sensitivity results

As at October 31, 2013, the effects of applying other reasonably possible alternative assumptions to the Level 3 asset positions would be an increase of $195 million and a reduction of $236 million in fair value, of which $62 million and $110 million would be recorded in Other components of equity. The effects of applying these assumptions to the Level 3 liability positions would result in a decrease of $138 million and an increase of $139 million in fair value.

Level 3 valuation inputs and approaches to developing reasonably possible alternative assumptions

As at October 31, 2013, Level 3 financial instruments primarily include ABS including CDOs, ARS, municipal bonds, Other OECD government debt, non-OECD government and corporate debt with long-dated maturities and significant unobservable spreads, hedge fund investments with certain redemption restrictions, certain structured debt securities, private equities, equity-linked structured notes, OTC equity options, commodity derivatives, interest rate and hedge fund swaps, bank-owned life insurance (BOLI), and deposit notes with long-dated maturities and significant unobservable spreads. In the prior year, the Level 3 instruments also included interest-rate-linked structured notes.

The following is a summary of the unobservable inputs of the Level 3 instruments and our approach to develop reasonably possible alternative assumptions used to determine sensitivity.

The fair value of CDOs, corporate bonds and loans, floating-rate notes, non-OECD countries' government debt and municipal bonds are determined using prices from pricing services and/or brokers. These securities are classified as Level 3 due to a lack of market observable pricing. The positive and negative sensitivities are determined based on plus or minus one standard deviation of the bid-offer spreads or input prices if a sufficient number of prices is received, or using high and low vendor prices as reasonably possible alternative assumptions.

The fair value of certain municipal and student loan ARS is determined by discounted cash flow valuation technique. Cash flows of the underlying ARS assets are forecasted based on unobservable parameters such as defaults, prepayments and delinquencies, and are discounted using a market observable interest rate and an unobservable discount margin. In calculating the sensitivity of these ARS, we decreased the discount margin between .2% and 1.2% and increased the discount margin between .5% and 2.0%, depending on the specific reasonable range of fair value uncertainty for each particular financial instrument's market.

Trading Equities primarily consist of hedge fund units with certain redemption restrictions. The NAVs of the funds and the corresponding equity derivatives in the Derivatives (Liability) referenced to NAVs are not considered observable because we cannot redeem certain of these hedge funds at NAV prior to the next quarter end. The NAVs of the AFS private equities are also unobservable due to the few recent market transactions to support their values. We have not applied another reasonably possible alternative assumption to these private equity positions as the NAVs are provided by the fund managers. This approach also applies to our hedge fund and related equity derivatives.

Derivative assets and liabilities mainly consist of commodity derivatives, equity derivatives including hedge fund swaps or options, interest-rate swaps and BOLI. The derivative values are adjusted for derivative CVAs. Commodity derivatives inputs are contract prices and prices for certain long-term contracts in which prices are not observable. For our commodity derivatives sensitivity, we apply one standard deviation to the commodity prices. Interest rate swaps are classified as Level 3 if the interest rates are unobservable for longer terms. The unobservable inputs for interest rate and cross currency swaps include interest rates and the sensitivity is derived using plus or minus one standard deviation of these inputs and an amount based on model and parameter uncertainty, where applicable. The unobservable inputs for equity derivatives are volatility, dividends, and correlation between stocks or indices. The sensitivity is derived by shifting the unobservable inputs by plus or minus one standard deviation. For BOLI, the unobservable inputs include default rates, prepayment rates, probability of surrender, and loss severity rates. For sensitivity, the range of values is determined by adjusting a combination of one or more of the following: default rates, prepayment rates, probability of surrender, and loss severity rates by up to 20%. For derivative CVAs, the unobservable inputs include certain counterparty and our credit spreads and credit correlation. The sensitivity for the derivative CVA is calculated using a combination of increasing the relative credit spread by 11%, and an amount for model uncertainty.

Interest-rate-linked and equity-linked structured notes, as well as promissory notes with significant unobservable spreads and limited market activities are included in Deposits. For interest-rate-linked structured notes, model inputs include interest rate parameters, correlation and funding curve. For equity-linked structured notes, model inputs include equity volatility, equity correlation and dividends. The sensitivities for interest-rate-linked and equity-linked structured notes are derived by adjusting inputs by plus or minus one standard deviation, and for other deposits, by shifting the funding curve by plus or minus certain basis points.

Note 4 Securities

Carrying value of securities

The following table presents the financial instruments that we held at the end of the period, measured at carrying value:

	As at October 31, 2013						
	Term to maturity (1)						
(Millions of Canadian dollars)	Within 3 months	3 months to 1 year	1 to 5 years	5 years to 10 years	Over 10 years	With no specific maturity	Total
Trading account (2)							
Canadian government debt	$ 3,341	$ 8,871	$ 7,932	$ 4,204	$ 6,401	$ –	$ 30,749
U.S. government debt	2,415	9,852	8,655	3,376	5,184	–	29,482
Other OECD government debt	1,181	1,915	5,044	709	1,007	–	9,856
Mortgage-backed securities (3)	2	6	46	136	640	–	830
Asset-backed securities (3)	90	38	351	206	690	–	1,375
Corporate debt and other debt (3)							
Bankers' acceptances	678	–	–	–	–	–	678
Certificates of deposit	22	493	1,042	19	12	–	1,588
Other (4)	1,319	2,241	13,839	3,115	3,762	–	24,276
Equities	–	–	–	–	–	45,189	45,189
	9,048	23,416	36,909	11,765	17,696	45,189	144,023
Available-for-sale securities (2)							
Canadian government debt							
Federal							
Amortized cost	852	512	4,927	3,189	4	–	9,484
Fair value	853	519	5,007	3,439	4	–	9,822
Yield (5)	2.6%	2.6%	2.1%	3.6%	4.8%	–	2.7%
Provincial and municipal							
Amortized cost	250	175	181	39	19	–	664
Fair value	250	175	182	40	20	–	667
Yield (5)	1.4%	1.4%	2.5%	4.3%	4.9%	–	2.0%
U.S. state, municipal and agencies debt							
Amortized cost	158	68	521	534	5,142	–	6,423
Fair value	157	68	522	533	4,998	–	6,278
Yield (5)	0.4%	0.1%	2.5%	0.4%	0.7%	–	0.8%
Other OECD government debt							
Amortized cost	5,263	1,273	2,835	1,403	–	–	10,774
Fair value	5,262	1,277	2,838	1,405	–	–	10,782
Yield (5)	0.1%	0.6%	0.7%	0.4%	–	–	0.3%
Mortgage-backed securities							
Amortized cost	–	–	–	25	105	–	130
Fair value	–	–	–	26	113	–	139
Yield (5)	–	–	–	3.5%	2.5%	–	2.7%
Asset-backed securities							
Amortized cost	8	–	279	1,194	409	–	1,890
Fair value	5	–	291	1,237	327	–	1,860
Yield (5)	2.6%	–	1.0%	0.5%	1.1%	–	0.7%
Corporate debt and other debt							
Amortized cost	1,387	993	3,551	617	333	–	6,881
Fair value	1,394	1,000	3,557	621	333	–	6,905
Yield (5)	1.3%	1.9%	1.7%	2.8%	4.5%	–	1.9%
Equities							
Cost	–	–	–	–	–	1,415	1,415
Fair value	–	–	–	–	–	1,714	1,714
Loan substitute							
Cost	–	–	–	–	–	125	125
Fair value	–	–	–	–	–	127	127
Yield (5)	–	–	–	–	–	4.0%	4.0%
Amortized cost	7,918	3,021	12,294	7,001	6,012	1,540	37,786
Fair value	7,921	3,039	12,397	7,301	5,795	1,841	38,294
Held-to-maturity securities (2)							
Amortized cost	140	141	76	44	–	–	401
Fair value	140	141	76	44	–	–	401
Total carrying value of securities (2)	$ 17,109	$ 26,596	$49,382	$ 19,110	$ 23,491	$ 47,030	$182,718

	As at October 31, 2012						
	Term to maturity (1)						
(Millions of Canadian dollars)	Within 3 months	3 months to 1 year	1 to 5 years	5 years to 10 years	Over 10 years	With no specific maturity	Total
Trading account (2)							
Canadian government debt	$ 3,696	$ 6,085	$ 6,351	$ 1,674	$ 6,051	$ –	$ 23,857
U.S. government debt	1,580	4,461	5,537	1,649	7,523	–	20,750
Other OECD government debt	1,400	2,116	4,696	2,150	1,548	–	11,910
Mortgage-backed securities (3)	–	7	37	114	590	–	748
Asset-backed securities (3)	29	68	312	166	207	–	782
Corporate debt and other debt (3)							
Bankers' acceptances	925	14	–	–	–	–	939
Certificates of deposit	377	559	611	9	9	–	1,565
Other (4)	2,524	2,697	9,207	2,254	3,245	–	19,927
Equities	–	–	–	–	–	40,305	40,305
	10,531	16,007	26,751	8,016	19,173	40,305	120,783
Available-for-sale securities (2)							
Canadian government debt							
Federal							
Amortized cost	310	851	6,234	3,348	25	–	10,768
Fair value	312	858	6,358	3,725	28	–	11,281
Yield (5)	0.8%	3.1%	2.2%	3.5%	4.0%	–	2.7%
Provincial and municipal							
Amortized cost	43	804	895	12	20	–	1,774
Fair value	43	810	897	13	22	–	1,785
Yield (5)	0.8%	3.1%	1.6%	5.4%	4.8%	–	2.3%
U.S. state, municipal and agencies debt							
Amortized cost	46	50	285	418	5,130	–	5,929
Fair value	46	50	286	417	4,986	–	5,785
Yield (5)	0.4%	0.1%	0.3%	0.9%	0.8%	–	0.8%
Other OECD government debt							
Amortized cost	6,218	1,605	1,598	385	–	–	9,806
Fair value	6,217	1,610	1,607	391	–	–	9,825
Yield (5)	0.2%	0.6%	1.1%	2.4%	–	–	0.5%
Mortgage-backed securities							
Amortized cost	–	–	–	21	232	–	253
Fair value	–	–	–	22	241	–	263
Yield (5)	–	–	–	4.5%	2.3%	–	2.4%
Asset-backed securities							
Amortized cost	69	95	217	1,621	873	–	2,875
Fair value	68	97	225	1,665	766	–	2,821
Yield (5)	0.7%	0.7%	1.0%	0.7%	1.1%	–	0.8%
Corporate debt and other debt							
Amortized cost	3,611	917	1,319	294	366	–	6,507
Fair value	3,630	919	1,316	296	347	–	6,508
Yield (5)	1.0%	1.2%	2.5%	4.9%	4.9%	–	1.7%
Equities							
Cost	–	–	–	–	–	1,584	1,584
Fair value	–	–	–	–	–	1,835	1,835
Loan substitute							
Cost	–	–	–	–	–	209	209
Fair value	–	–	–	–	–	217	217
Yield (5)	–	–	–	–	–	3.6%	3.6%
Amortized cost	10,297	4,322	10,548	6,099	6,646	1,793	39,705
Fair value	10,316	4,344	10,689	6,529	6,390	2,052	40,320
Held-to-maturity securities (2)							
Amortized cost	131	186	112	78	1	–	508
Fair value	131	186	112	78	1	–	508
Total carrying value of securities (2)	$ 20,978	$ 20,537	$37,552	$ 14,623	$ 25,564	$ 42,357	$161,611

(1) Actual maturities may differ from contractual maturities shown above since borrowers may have the right to prepay obligations with or without prepayment penalties.
(2) Trading securities and AFS securities are recorded at fair value. Held-to-maturity securities are recorded at amortized cost.
(3) Includes CDOs which are presented as Asset-backed securities – CDOs in the table entitled Fair value of assets and liabilities classified using the fair value hierarchy in Note 3.
(4) Primarily composed of corporate debt, supra-national debt, and commercial paper.
(5) The weighted average yield is derived using the contractual interest rate and the carrying value at the end of the year for the respective securities.

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

(Millions of Canadian dollars)	October 31, 2013 Cost/ Amortized cost	October 31, 2013 Gross unrealized gains	October 31, 2013 Gross unrealized losses	October 31, 2013 Fair value	October 31, 2012 Cost/ Amortized cost	October 31, 2012 Gross unrealized gains	October 31, 2012 Gross unrealized losses	October 31, 2012 Fair value
Canadian government debt								
Federal	$ 9,551	$ 340	$ (2)	$ 9,889	$ 10,927	$ 513	$ –	$11,440
Provincial and municipal	665	3	(1)	667	1,774	11	–	1,785
U.S. state, municipal and agencies debt (3)	6,422	9	(153)	6,278	5,929	13	(157)	5,785
Other OECD government debt	10,826	12	(4)	10,834	9,856	25	(6)	9,875
Mortgage-backed securities	130	10	(1)	139	253	13	(3)	263
Asset-backed securities								
CDOs	1,343	58	(4)	1,397	1,943	61	(8)	1,996
Non-CDO securities	545	3	(85)	463	932	12	(119)	825
Corporate debt and other debt	7,165	51	(29)	7,187	6,806	49	(48)	6,807
Equities	1,415	312	(13)	1,714	1,584	269	(18)	1,835
Loan substitute securities	125	3	(1)	127	209	8	–	217
	$ 38,187	$ 801	$ (293)	$38,695	$ 40,213	$ 974	$ (359)	$40,828

(1) Includes $401 million held-to-maturity securities as at October 31, 2013 (October 31, 2012 – $508 million).

(2) The majority of the MBS are residential. Cost/Amortized cost, gross unrealized gains, gross unrealized losses and fair value related to commercial MBS are $34 million, $1 million, a nominal amount, and $35 million, respectively as at October 31, 2013 (October 31, 2012 – $41 million, $1 million, $nil, and $42 million).

(3) Includes securities issued by U.S. non-agencies backed by government insured assets, and MBS and ABS issued by U.S. government agencies.

Net gain and loss on available-for-sale securities (1)

(Millions of Canadian dollars)	For the year ended October 31 2013	October 31 2012	October 31 2011
Realized gains	$ 231	$ 242	$ 283
Realized losses	(17)	(74)	(63)
Impairment losses	(26)	(48)	(116)
Net gain (loss) on available-for-sale securities	$ 188	$ 120	$ 104

(1) The following related to our insurance operations are excluded from Net gain (loss) on AFS securities and included in Insurance premiums, investment and fee income on the Consolidated Statement of Income: Realized gains for the year ended October 31, 2013 were $3 million (October 31, 2012 – $9 million; October 31, 2011 – $25 million). There were no realized losses or impairment losses related to our insurance operations for the years ended October 31, 2013 and October 31, 2012 (October 31, 2011 – $1 million and $14 million of realized losses and impairment losses, respectively).

AFS securities are assessed for objective evidence of impairment at each reporting date and more frequently when conditions warrant. Our impairment review is primarily based on the factors described in Note 2. Depending on the nature of the securities under review, we apply specific methodologies to assess whether the cost/amortized cost of the security would be recovered. As at October 31, 2013, our gross unrealized losses on AFS securities were $293 million (October 31, 2012 – $359 million).

The total cost/amortized cost of the AFS portfolio, as at October 31, 2013, decreased by $2 billion or 5% compared to October 31, 2012. The decrease is largely due to net sales and maturities of Canadian government debt and redemptions and restructurings of certain Asset-backed securities, partially offset by an increase in Other OECD government debt.

Gross unrealized gains of $801 million, as of October 31, 2013, decreased by $173 million or 18% compared to October 31, 2012. This decrease mainly reflects the fair value declines due to increasing interest rates on Canadian government debt, partially offset by fair value improvements on certain Equities.

Gross unrealized losses of $293 million, as of October 31, 2013, decreased by $66 million or 18% compared to October 31, 2012. This decrease mainly reflects redemptions and restructurings of Asset-backed securities that were in a loss position and fair value improvements on Corporate debt and other debt from tightening credit spreads.

Management believes that there is no objective evidence of impairment on the above-mentioned securities that are in an unrealized loss position as at October 31, 2013.

Held-to-maturity securities

Held-to-maturity securities stated at amortized cost are subject to periodic impairment review and are classified as impaired when, in management's opinion, there is no longer reasonable assurance of the timely collection of the full amount of principal and interest. The impairment review of held-to-maturity securities is primarily based on the impairment model for loans. Management believes that there is no objective evidence of impairment on our held-to-maturity securities as at October 31, 2013.

Net gain (loss) on available-for-sale securities

During the year ended October 31, 2013, $188 million of net gains were recognized in Non-interest income as compared to $120 million in the prior year. The current year reflects net realized gain on sales of $214 million mainly comprised of distributions from and gains on sale of certain Equities, sale of Canadian government debt, and redemption and restructurings of certain Asset-backed securities. Partially offsetting the net realized gains are $26 million of impairment losses primarily on certain Equities. This compares to net realized gains for the year ended October 31, 2012 of $168 million which was partially offset by $48 million of impairment losses.

Reclassification of financial Instruments

The following table provides information regarding certain securities that we reclassified in prior reporting periods:

Financial instruments reclassified in prior periods

	As at	
	October 31 2013 (1)	October 31 2012 (1)
(Millions of Canadian dollars)	**Total carrying value and fair value**	Total carrying value and fair value
Financial assets – FVTPL reclassified to available-for-sale		
CDOs	$ 1,154	$ 1,801
Mortgage-backed securities	59	75
	$ 1,213	$ 1,876

	For the year ended					
	October 31, 2013		October 31, 2012		October 31, 2011	
(Millions of Canadian dollars)	**Change in fair value during the period** (2)	**Interest income/gains (losses) recognized in net income during the period**	Change in fair value during the period (2)	Interest income/gains (losses) recognized in net income during the period	Change in fair value during the period (2)	Interest income gains (losses) recognized in net income during the period
FVTPL reclassified to available-for-sale						
CDOs	$ (5)	$ 59	$ 60	$ 76	$ (4)	$ 5
Mortgage-backed securities	–	8	2	8	–	–
	$ (5)	$ 67	$ 62	$ 84	$ (4)	$ 5

(1) On October 1, 2011 and November 1, 2011 we reclassified $1,872 million and $255 million, respectively, of certain CDOs and U.S. non-agency MBS from classified as at FVTPL to AFS.
(2) This change represents the fair value gain or loss that would have been recognized in profit or loss had the assets not been reclassified.

Note 5 Loans

	As at							
	October 31, 2013				October 31, 2012			
(Millions of Canadian dollars)	Canada	United States	Other International	Total	Canada	United States	Other International	Total
Retail (1)								
Residential mortgages	$ 206,134	$ 378	$ 2,726	$ 209,238	$ 195,552	$ 275	$ 2,497	$ 198,324
Personal	87,153	3,306	3,852	94,311	80,897	2,825	2,975	86,697
Credit cards	13,902	50	190	14,142	13,422	38	201	13,661
Small business (2)	3,987	–	–	3,987	2,503	–	–	2,503
	$ 311,176	$ 3,734	$ 6,768	$ 321,678	$ 292,374	$ 3,138	$ 5,673	$ 301,185
Wholesale (1)								
Business (3)	49,887	19,395	16,009	85,291	42,894	16,755	16,121	75,770
Bank (4)	823	28	469	1,320	390	304	296	990
Sovereign (5)	1,747	–	589	2,336	1,854	–	442	2,296
	$ 52,457	$ 19,423	$ 17,067	$ 88,947	$ 45,138	$ 17,059	$ 16,859	$ 79,056
Total loans	$ 363,633	$ 23,157	$ 23,835	$ 410,625	$ 337,512	$ 20,197	$ 22,532	$ 380,241
Allowance for loan losses	(1,482)	(105)	(372)	(1,959)	(1,542)	(125)	(330)	(1,997)
Total loans net of allowance for loan losses	$ 362,151	$ 23,052	$ 23,463	$ 408,666	$ 335,970	$ 20,072	$ 22,202	$ 378,244

(1) Geographic information is based on residence of borrower.
(2) Includes small business exposure managed on a pooled basis.
(3) Includes small business exposure managed on an individual client basis.
(4) Bank refers primarily to regulated deposit-taking institutions and securities firms.
(5) Sovereign refers to all central governments and agencies, central banks, as well as other qualifying public sector entities and multilateral development banks.

Loans maturity and rate sensitivity

	As at October 31, 2013							
	Maturity term (1)				**Rate sensitivity**			
(Millions of Canadian dollars)	**Under 1 year** (2)	**1 to 5 years**	**Over 5 years**	**Total**	**Floating**	**Fixed Rate**	**Non-rate-sensitive**	**Total**
Retail	$ 176,437	$ 133,754	$ 11,487	$ 321,678	$ 126,442	$ 190,073	$ 5,163	$ 321,678
Wholesale	72,164	11,695	5,088	88,947	46,455	40,982	1,510	88,947
Total loans	$ 248,601	$ 145,449	$ 16,575	$ 410,625	$ 172,897	$ 231,055	$ 6,673	$ 410,625
Allowance for loan losses				(1,959)				(1,959)
Total loans net of allowance for loan losses				$ 408,666				$ 408,666

	As at October 31, 2012							
	Maturity term (1)				Rate sensitivity			
(Millions of Canadian dollars)	Under 1 year (2)	1 to 5 years	Over 5 years	Total	Floating	Fixed Rate	Non-rate-sensitive	Total
Retail	$ 172,309	$ 114,597	$ 14,279	$ 301,185	$ 153,531	$ 144,177	$ 3,477	$ 301,185
Wholesale	60,583	12,149	6,324	79,056	37,572	40,214	1,270	79,056
Total loans	$ 232,892	$ 126,746	$ 20,603	$ 380,241	$ 191,103	$ 184,391	$ 4,747	$ 380,241
Allowance for loan losses				(1,997)				(1,997)
Total loans net of allowance for loan losses				$ 378,244				$ 378,244

(1) Generally, based on the earlier of contractual repricing or maturity date.
(2) Includes variable rate loans that can be repriced at the clients' discretion without penalty.

Allowance for credit losses

	For the year ended October 31, 2013						
(Millions of Canadian dollars)	**Balance at beginning of period**	**Provision for credit losses**	**Write-offs**	**Recoveries**	**Unwind of discount**	**Exchange rate changes/ other**	**Balance at end of period**
Retail							
Residential mortgages	**$ 124**	**$ 41**	**$ (24)**	**$ 2**	**$ (24)**	**$ 32**	**$ 151**
Personal	**543**	**455**	**(498)**	**96**	**(17)**	**4**	**583**
Credit cards	**403**	**354**	**(466)**	**112**	**–**	**(18)**	**385**
Small business	**72**	**32**	**(35)**	**9**	**(2)**	**(15)**	**61**
	1,142	**882**	**(1,023)**	**219**	**(43)**	**3**	**1,180**
Wholesale							
Business	**853**	**357**	**(450)**	**51**	**(43)**	**9**	**777**
Bank (1)	**2**	**–**	**–**	**–**	**–**	**–**	**2**
	855	**357**	**(450)**	**51**	**(43)**	**9**	**779**
Total allowance for loan losses	**1,997**	**1,239**	**(1,473)**	**270**	**(86)**	**12**	**1,959**
Allowance for off-balance sheet and other items (2)	**91**	**–**	**–**	**–**	**–**	**–**	**91**
Total allowance for credit losses	**$ 2,088**	**$ 1,239**	**$ (1,473)**	**$ 270**	**$ (86)**	**$ 12**	**$ 2,050**
Individually assessed	**298**	**287**	**(346)**	**31**	**(28)**	**(2)**	**240**
Collectively assessed	**1,790**	**952**	**(1,127)**	**239**	**(58)**	**14**	**1,810**
Total allowance for credit losses	**$ 2,088**	**$ 1,239**	**$ (1,473)**	**$ 270**	**$ (86)**	**$ 12**	**$ 2,050**

	For the year ended October 31, 2012						
(Millions of Canadian dollars)	Balance at beginning of period	Provision for credit losses	Write-offs	Recoveries	Unwind of discount	Exchange rate changes/ other	Balance at end of period
Retail							
Residential mortgages	$ 112	$ 64	$ (32)	$ 1	$ (34)	$ 13	$ 124
Personal	557	437	(499)	83	(23)	(12)	543
Credit cards	415	403	(496)	102	–	(21)	403
Small business	75	43	(50)	8	(2)	(2)	72
	1,159	947	(1,077)	194	(59)	(22)	1,142
Wholesale							
Business	775	354	(291)	39	(51)	27	853
Bank (1)	33	–	(32)	–	–	1	2
	808	354	(323)	39	(51)	28	855
Total allowance for loan losses	1,967	1,301	(1,400)	233	(110)	6	1,997
Allowance for off-balance sheet and other items (2)	91	–	–	–	–	–	91
Total allowance for credit losses	$ 2,058	$ 1,301	$ (1,400)	$ 233	$ (110)	$ 6	$ 2,088
Individually assessed	252	244	(202)	19	(26)	11	298
Collectively assessed	1,806	1,057	(1,198)	214	(84)	(5)	1,790
Total allowance for credit losses	$ 2,058	$ 1,301	$ (1,400)	$ 233	$ (110)	$ 6	$ 2,088

(Millions of Canadian dollars)	For the year ended October 31, 2011							
	Balance at beginning of period	Less allowances related to discontinued operations	Provision for credit losses	Write-offs	Recoveries	Unwind of discount	Exchange rate changes/ other	Balance at end of period
Retail								
Residential mortgages	$ 154	$ (63)	$ 43	$ (16)	$ 1	$ (30)	$ 23	$ 112
Personal	891	(258)	440	(515)	79	(11)	(69)	557
Credit cards	434	(19)	447	(545)	97	–	1	415
Small business	78	–	35	(45)	7	(1)	1	75
	1,557	(340)	965	(1,121)	184	(42)	(44)	1,159
Wholesale								
Business	1,267	(503)	168	(226)	60	(36)	45	775
Sovereign (3)	9	–	–	(9)	–	–	–	–
Bank (1)	34	–	–	–	–	–	(1)	33
	1,310	(503)	168	(235)	60	(36)	44	808
Total allowance for loan losses	2,867	(843)	1,133	(1,356)	244	(78)	–	1,967
Allowance for off-balance sheet and other items (2)	99	(11)	–	–	–	–	3	91
Total allowance for credit losses	$ 2,966	$ (854)	$ 1,133	$ (1,356)	$ 244	$ (78)	$ 3	$ 2,058
Individually assessed	415	(130)	61	(129)	43	(10)	2	252
Collectively assessed	2,551	(724)	1,072	(1,227)	201	(68)	1	1,806
Total allowance for credit losses	$ 2,966	$ (854)	$ 1,133	$ (1,356)	$ 244	$ (78)	$ 3	$ 2,058

(1) Bank refers primarily to regulated deposit-taking institutions and securities firms.
(2) The allowance for off-balance sheet and other items is reported separately in Other liabilities – Provisions.
(3) Sovereign refers to all central governments and agencies, central banks, as well as other qualifying public sector entities and multilateral development banks.

Net interest income after provision for credit losses

	For the year ended		
	October 31 2013	October 31 2012	October 31 2011
Net interest income	**$ 13,251**	$ 12,498	$ 11,357
Provision for credit losses	**1,239**	1,301	1,133
Net interest income after provision for credit losses	**$ 12,012**	$ 11,197	$ 10,224

Loans past due but not impaired

(Millions of Canadian dollars)	As at							
	October 31, 2013				October 31, 2012			
	1 to 29 days	**30 to 89 days**	**90 days and greater**	**Total**	1 to 29 days	30 to 89 days	90 days and greater	Total
Retail	**$ 2,953**	**$ 1,358**	**$ 329**	**$ 4,640**	$ 2,954	$ 1,350	$ 393	$ 4,697
Wholesale	**624**	**303**	**17**	**944**	416	221	–	637
Total	**$ 3,577**	**$ 1,661**	**$ 346**	**$ 5,584**	$ 3,370	$ 1,571	$ 393	$ 5,334

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

(Millions of Canadian dollars)	As at	
	October 31 2013	October 31 2012
Retail	**$ 71**	$ –
Wholesale		
Business	**815**	981
Sovereign (2)	**–**	–
Bank (3)	**3**	2
Total	**$ 889**	$ 983

(1) Average balance of gross individually assessed impaired loans for the year ended October 31, 2013 was $887 million (October 31, 2012 – $929 million).
(2) Sovereign refers to all central governments and agencies, central banks, as well as other qualifying public sector entities and multilateral development banks.
(3) Bank refers primarily to regulated deposit-taking institutions and securities firms.

Note 6 Derecognition of financial assets

We enter into transactions in which we transfer financial assets such as loans or securities to SPE's or non-SPE third parties. The transferred financial assets are derecognized from our Consolidated Balance Sheets when we transfer substantially all of the risks and rewards of ownership of the financial assets. When we are exposed to substantially all of the risks and rewards of the assets, or when we have neither transferred nor retained substantially all of the risks and rewards but retain control of the financial assets, we continue to recognize the financial assets on our Consolidated Balance Sheets and a liability is recognized for the cash proceeds received.

The majority of assets transferred under repurchase agreements, securities lending agreements, and in our Canadian residential mortgage securitization transactions do not qualify for derecognition.

Transferred financial assets not derecognized

Securitization of Canadian residential mortgage loans

We securitize insured Canadian residential mortgage loans through the creation of MBS pools under the National Housing Act MBS (NHA MBS) program. All loans securitized under the NHA MBS program are required to be insured by the Canadian Mortgage Housing Corporation (CMHC) or a third-party insurer. We require the borrower to pay the insurance for mortgages in which the loan amount is greater than 80% of the original appraised value of the property (loan-to-value ratio (LTV)). For residential mortgage loans with an LTV ratio less than 80% and securitized under this program we are required to insure the mortgages at our own expense. Under the NHA-MBS program, we are responsible for making all payments due on our issued MBS, regardless of whether we collect the necessary funds from the mortgagor or the insurer. When the borrower defaults on the mortgage payment, we submit a claim to the insurer if the amount recovered from the collection or foreclosure process is lower than the sum of the principal balance, accrued interest and collection costs on the outstanding loan. The insurance claim process is managed by the insurance provider in accordance with the insurer's policies and covers the entire unpaid loan balance plus generally up to 12 months of interest, selling costs and other eligible expenses. If an insurance claim is denied, a loss is recognized in Provision for credit losses in our Consolidated Statements of Income. The amount recorded as a loss is not significant to our Consolidated Financial Statements and no significant losses were incurred due to legal action arising from a mortgage default during 2013 and 2012.

We sell the NHA MBS pools primarily to a government-sponsored SPE under the Canada Mortgage Bond (CMB) program. The SPE periodically issues CMB, which are guaranteed by the government, and sells them to third-party investors. Proceeds of the CMB issuances are used by the SPE to purchase the NHA MBS pools from eligible NHA MBS issuers who participate in the issuance of a particular CMB series. Our continuing involvement includes servicing, either ourselves or through a third party servicer, the underlying residential mortgage loans we have securitized. We also act as counterparty in interest rate swap agreements where we pay the SPE the interest due to CMB investors and receive the interest on the underlying MBS and reinvested assets. As part of the swap, we are also required to maintain a principal reinvestment account for principal payments received on the underlying mortgage loans to meet the repayment obligation upon maturity of the CMB. We reinvest the collected principal payments in permitted investments as outlined in the swap agreement.

We have determined that all of the NHA MBS program loans transferred to the SPE do not qualify for derecognition as we have not transferred substantially all of the risks and rewards of ownership. As a result, these transferred MBS continue to be classified as residential mortgage loans and recognized on our Consolidated Balance Sheets. The cash received for these transferred MBS is treated as a secured borrowing and a corresponding liability recorded in Deposits – Business and government on our Consolidated Balance Sheets.

Securities sold under repurchase agreements and securities loaned

We also enter into transactions such as repurchase agreements and securities lending agreements where we transfer assets under agreements to repurchase them on a future day and retain substantially all of the credit, interest rate and foreign exchange risks and rewards associated with the assets. These transferred assets remain on our Consolidated Balance Sheets and are accounted for as collateralized borrowing transactions.

The following table provides information on the carrying amount and fair value of the transferred assets that did not qualify for derecognition, and their associated liabilities.

	As at							
	October 31, 2013				October 31, 2012			
(Millions of Canadian dollars)	**Canadian residential mortgage loans** (1) (2)	**Securities sold under repurchase agreements** (3)	**Securities loaned** (3)	**Total**	Canadian residential mortgage loans (1) (2)	Securities sold under repurchase agreements (3)	Securities loaned (3)	Total
Carrying amount of transferred assets that fail derecognition	$ 43,092	$ 55,715	$ 4,701	$103,508	$ 45,973	$ 59,332	$ 4,700	$110,005
Carrying amount of associated liabilities	43,019	55,715	4,701	103,435	45,878	59,332	4,700	109,910
Fair value of transferred assets	$ 42,921	$ 55,715	$ 4,701	$103,337	$ 45,994	$ 59,332	$ 4,700	$110,026
Fair value of associated liabilities	43,418	55,715	4,701	103,834	47,014	59,332	4,700	111,046
Fair value of net position	$ (497)	$ –	$ –	$ (497)	$ (1,020)	$ –	$ –	$ (1,020)

(1) Includes Canadian residential mortgages loans transferred primarily to Canada Housing Trust at the initial securitization and other permitted investments used for funding requirements after the initial securitization.
(2) CMB investors have legal recourse only to the transferred assets, and do not have recourse to our general assets.
(3) Does not include over-collateralization of assets pledged.

Note 7 Special purpose entities

Consolidated special purpose entities

The following table presents the assets and liabilities of consolidated special purpose entities recorded on our Consolidated Balance Sheets.

	As at October 31, 2013				
(Millions of Canadian dollars)	Securitization and funding vehicles (1)	Structured finance	Investment funds	Other	Total
Consolidated assets (2), (3)					
Cash and due from banks and interest bearing deposits with banks	$ –	$ 15	$ 3	$ 5	$ 23
Securities	3	4,396	375	317	5,091
Other assets	–	29	–	16	45
	$ 3	$ 4,440	$ 378	$ 338	$ 5,159
Consolidated liabilities					
Deposit	$ 11,874	$ 741	$ –	$ 9	$ 12,624
Other liabilities (4)	876	3,736	–	98	4,710
Non-controlling interests	1,731	–	–	–	1,731
	$ 14,481	$ 4,477	$ –	$ 107	$ 19,065

	As at October 31, 2012				
(Millions of Canadian dollars)	Securitization and funding vehicles (1)	Structured finance	Investment funds	Other	Total
Consolidated assets (2), (3)					
Cash and due from banks and interest bearing deposits with banks	$ –	$ 24	$ 8	$ 4	$ 36
Securities	–	3,878	371	79	4,328
Other assets	15	37	–	18	70
	$ 15	$ 3,939	$ 379	$ 101	$ 4,434
Consolidated liabilities					
Deposit	$ 7,046	$ 816	$ –	$ 20	$ 7,882
Other liabilities (4)	850	3,146	–	84	4,080
Non-controlling interests	1,711	–	–	–	1,711
	$ 9,607	$ 3,962	$ –	$ 104	$ 13,673

(1) We transferred credit card and auto loan receivables to securitization vehicles and mortgages to RBC Capital Trust and RBC Covered Bond Guarantor Limited Partnership (Guarantor LP). These transferred assets were not derecognized from our Consolidated Balance Sheets and the consideration received was recorded as liabilities to the SPEs, as we retain control over substantially all of the risks and rewards of the transferred assets. Upon consolidation of the SPEs, only the notes and the innovative capital instruments issued to the third-party investors are reported in the above table.

(2) As at October 31, 2013, our consolidated compensation vehicles held none of our common shares (October 31, 2012 – $15 million), which are reported as Treasury shares and this amount represents the total assets of these vehicles. The obligation to provide our common shares to employees is recorded as an increase to Retained earnings as the expense for the corresponding share-based compensation plan is recognized.

(3) Investors generally have recourse only to the assets of the related consolidated SPEs and do not have recourse to our general assets unless we breach our contractual obligations to those SPEs. In the ordinary course of business, the assets of each consolidated SPE can generally only be used to settle the obligations of the SPE. We may also provide liquidity facilities or credit enhancement facilities to, or enter into derivative transactions with, the SPEs.

(4) Other liabilities generally represent notes issued by the SPEs.

Unconsolidated special purpose entities

We also hold significant interests in certain SPEs that we do not consolidate but in respect of which we have recorded on our Consolidated Balance Sheets assets and liabilities arising from our transactions and involvement with these SPEs. In addition, we may be a sponsor of certain SPEs in which we have interests. In determining whether we are a sponsor of an SPE, we consider both qualitative and quantitative factors, including the purpose and nature of the SPE, our continuing involvement in the SPE and whether we hold subordinated interests in the SPE.

The following table presents assets and liabilities recorded on our Consolidated Balance Sheets related to unconsolidated SPEs that we sponsor or in which we hold a significant interest. It also presents the total assets of these SPEs and our maximum exposure to loss from our involvement with these SPEs.

	As at October 31, 2013					
(Millions of Canadian dollars)	Multi-seller conduits (1)	Structured finance	Investment funds	Third-party securitization vehicles	Other (2)	Total
On-balance sheet assets						
Securities	$ 14	$ –	$ 808	$ 322	$ 51	$ 1,195
Loans	896	–	–	774	–	1,670
Derivatives	–	20	–	–	–	20
Other assets	–	680	1	–	195	876
	$ 910	$ 700	$ 809	$ 1,096	$ 246	$ 3,761
On-balance sheet liabilities						
Derivatives	6	–	–	2	–	8
Other liabilities	236	–	1	–	–	237
	$ 242	$ –	$ 1	$ 2	$ –	$ 245
Total assets of unconsolidated special purpose entities	$ 31,075	$ 3,895	$ 1,621	$ 8,098	$ 173,279	$ 217,968
Maximum exposure to loss (3)	$ 31,556	$ 1,272	$ 1,461	$ 992	$ 125	$ 35,406

	As at October 31, 2012					
(Millions of Canadian dollars)	Multi-seller conduits (1)	Structured finance	Investment funds	Third-party securitization vehicles	Other (2)	Total
On-balance sheet assets						
Securities	$ 26	$ –	$ 1,077	$ 118	$ 76	$ 1,297
Loans	1,391	–	–	1,074	–	2,465
Derivatives	2	97	–	–	–	99
Other assets	–	1,111	1	–	169	1,281
	$ 1,419	$ 1,208	$ 1,078	$ 1,192	$ 245	$ 5,142
On-balance sheet liabilities						
Derivatives	11	–	–	–	–	11
Other liabilities	247	–	43	–	–	290
	$ 258	$ –	$ 43	$ –	$ –	$ 301
Total assets of unconsolidated special purpose entities	$ 29,582	$ 5,039	$ 1,584	$ 6,811	$ 153,007	$ 196,023
Maximum exposure to loss (3)	$ 30,029	$ 1,760	$ 1,082	$ 1,266	$ 314	$ 34,451

(1) Total assets of unconsolidated SPEs represent maximum assets that may have to be purchased by the conduits under purchase commitments outstanding. Actual assets held by these conduits as at October 31, 2013, were $18.8 billion (October 31, 2012 – $17.1 billion).
(2) Includes tax credit funds and mutual funds that we sponsor which are described in our Other significant vehicles discussion.
(3) The maximum exposure to loss resulting from our significant interests in these SPEs consists mostly of investments, loans, fair value of derivatives, liquidity and credit enhancement facilities. The maximum exposure to loss of the multi-seller conduits is higher than the on-balance sheet assets primarily by the notional amounts of the backstop liquidity and credit enhancement facilities. Refer to Note 26.

Securitization and funding vehicles

Credit card securitization vehicle

We securitize a portion of our credit card receivables through an SPE on a revolving basis. The SPE is financed through the issuance of senior and subordinated notes collateralized by the underlying credit card receivables. The senior notes are issued to third-party investors and the subordinated notes are owned by us. The third-party investors have recourse only to the transferred assets.

We continue to service the credit card receivables sold to the SPE and perform an administrative role for the SPE. We also provide first-loss protection to the SPE through our ownership of all the subordinated notes issued by the SPE and our interest in the excess spread (residual net interest income after all trust expenses) which is subordinated to the SPE's obligations to the senior noteholders.

Additionally, we may own some senior notes as investments or for market-making activities; we retain a cash reserve account of the SPE from time to time; we provide subordinated loans to the SPE to pay upfront expenses; and we act as counterparty to interest rate and cross currency swap agreements which hedge the SPE's interest rate and currency risk exposure.

We consolidate the SPE because the significant activities of the SPE were predetermined by us at inception and we control the timing and size of new issuances, obtain significant funding benefits from the SPE and are exposed to the majority of the residual ownership risks through the credit support provided.

Auto loan securitization vehicles

We obtained control of certain auto loan securitization vehicles as a result of the acquisition of the Canadian auto finance and deposit business of Ally Financial Inc. completed in 2013. See Note 11 for further details. The SPEs issued senior and subordinated notes collateralized by auto loan receivables originated and transferred to the SPEs by Ally Financial Inc. We continue to provide credit enhancement to the outstanding notes through overcollateralization, cash reserve accounts and our interest in the excess spread, which is subordinated to the noteholders. We also act as swap counterparty for one of the SPE's interest rate swap agreements which hedge its interest rate risk exposure. The third-party investors have recourse only to the transferred assets.

We consolidate these SPEs because we have the decision making powers to obtain the majority of the benefits of the SPEs and are exposed to the majority of the residual ownership risks. As at October 31, 2013, there were $943 million of deposits outstanding related to these structures.

Collateralized commercial paper vehicle
During the year, we established a funding vehicle that provides loans to us and finances those loans by issuing commercial paper to third party investors. The SPE's commercial paper carries an equivalent credit rating to RBC because we are obligated to advance funds to the SPE in the event there are insufficient funds from other sources to settle maturing commercial paper. We pledge collateral to secure the loans and are exposed to the market and credits risks of the pledged securities. We administer the SPE and earn an administration fee for providing these services. We consolidate the SPE because we have decision making power to obtain the majority of the benefits of the SPE, are the sole borrower from the structure, and are exposed to majority of the residual ownership risks through the credit support provided.

Funding vehicles
RBC Capital Trust (Trust), RBC Capital Trust II (Trust II) and Guarantor LP were created to issue innovative capital instruments, or guarantees of covered bonds. With the proceeds, we issued senior deposit notes to Trust II and transferred our mortgages to the Trust and Guarantor LP. These mortgages are not derecognized from our Consolidated Balance Sheets and the transfers are accounted for as secured financing transactions as we retain control over substantially all of the risks and rewards of the transferred assets. The covered bonds issued by Guarantor LP are direct, unsecured and unconditional obligations of RBC; therefore, investors may have recourse to our general assets if the mortgage assets in Guarantor LP are insufficient to satisfy its liabilities.

We consolidate the trusts and Guarantor LP as, through our roles as trustee, administrative agent and equity investor, we have the decision making power to retain the majority of the benefits of the trusts and Guarantor LP. Upon consolidation of the SPEs, all the intercompany balances are eliminated except for the innovative capital instruments issued to the third-party investors.

Structured finance
U.S. ARS Trusts
We purchased U.S. ARS from certain trusts (U.S. ARS Trusts) which fund their long-term investments in student loans by issuing short-term senior and subordinated notes. We are subject to losses on these U.S. ARS Trusts if defaults are experienced on the underlying student loans; however, in the majority of these structures, the principal and accrued interest on the student loans is guaranteed by U.S. government agencies. We act as auction agent for some of these entities but have no legal obligation to purchase the notes issued by these entities in the auction process.

We do not consolidate these U.S. ARS Trusts as we do not have decision making rights over the investing and financing activities of the Trusts and are not exposed to the majority of residual ownership risks. We have significant interests in certain of these entities through our note holdings.

ARS TOB programs
We also sold ARS into Tender Option Bond (TOB) programs, where each program consists of a credit enhancement (CE) trust and a TOB trust. Each ARS sold to the TOB program is supported by a letter of credit and liquidity facility issued by us, which requires us to extend funding if there are any losses on the ARS. The CE trust certificate is deposited into a TOB trust which provides the financing of the purchase of the underlying security through the issuance of floating-rate certificates to short-term investors and a residual certificate to a single third-party investor. Both the CE and the TOB trusts are SPEs. We are the remarketing agent for the floating-rate certificates and we provide liquidity facilities to each of the ARS TOB programs to purchase any floating-rate certificates that have been tendered but not successfully remarketed. We receive market-based fees for acting as the remarketing agent and providing the letters of credit and liquidity facilities.

We consolidate these ARS TOB programs as we control the CE trust and are exposed to the majority of the residual ownership risks of the underlying ARS through our provision of the credit enhancement and the liquidity facility.

Municipal bond TOB programs
We utilize the TOB funding vehicle to finance other taxable and tax-exempt municipal bond assets within our Capital Markets segment. The structure of municipal bond TOB programs that we are involved with is similar to the structure of the ARS TOB programs described above. However, in certain municipal bond TOB programs, we also purchase residual certificates issued by these TOB vehicles which expose us to credit risk of the underlying bonds as well as interest rate risk of the structure. Where we own the residual certificate, the assets transferred into the TOB vehicle continue to be recorded on our Consolidated Balance Sheets as we have not transferred substantially all of the risks and rewards of ownership. We consolidate programs in which we are the holder of the residual certificate as we have decision making power over the selection of the underlying municipal bonds and the ability to terminate the structure, and are exposed to the majority of the residual ownership risks.

In certain other municipal bond TOB programs, the residual certificates are held by third-parties and we do not provide credit enhancement of the underlying assets but only provide liquidity facilities on the floating-rate certificates; therefore, we do not consolidate these programs. The assets transferred into these programs are derecognized from our Consolidated Balance Sheets.

Investment funds
We enter into fee-based equity derivative transactions with third parties including mutual funds, unit investment trusts and other investment funds. These transactions provide their investors with the desired exposure to a reference fund, and we economically hedge our exposure to these derivatives by investing in those reference funds. We also act as custodian or administrator for several funds. We do not consolidate those reference funds that are managed by third parties as we do not have power to direct their investing activities.

We also enter into certain fee-based equity derivative transactions similar to those described above except that our investments in the reference funds are held by an intermediate limited partnership entity (intermediate entity) in which we hold a substantial majority of the SPE's equity interests. We consolidate the intermediate entity because we have the decision making power to direct all the activities of the entity and are exposed to a majority of the risks and rewards through our equity investments.

Starting in 2013, we provide liquidity facilities to certain third-party investment funds. The funds issued unsecured variable-rate preferred shares and invest in portfolios of tax-exempt municipal bonds. Undrawn liquidity commitments expose us to liquidity risk of the preferred shares and drawn commitments expose us to the credit risk of the underlying municipal bonds. We do not consolidate these third-party managed funds as we do not have power to direct their investing activities.

Multi-seller conduits
We administer five multi-seller asset-backed commercial paper (ABCP) conduit programs (multi-seller conduits) – two in Canada and three in the U.S. These conduits primarily purchase financial assets from clients and finance those purchases by issuing ABCP.

We do not maintain any ownership or retained interests in the multi-seller conduits that we administer and have no rights to, or control of, their assets. As the administrative agent, we earn a residual fee for providing services such as coordinating funding activities, transaction structuring, documentation, execution and monitoring of transactions. The ABCP issued by each multi-seller conduit is in the conduit's own name with recourse to the financial assets owned by each multi-seller conduit, and is non-recourse to us except through our participation in liquidity and/or credit enhancement facilities. We may purchase ABCP issued by our multi-seller conduits from time to time in our capacity as placement agent in order to facilitate the overall program liquidity.

We provide transaction-specific and program-wide liquidity facilities to the multi-seller conduits. In addition, we provide program-wide credit enhancement to the multi-seller conduits which obligate us to purchase assets or advance funds in the event the multi-seller conduit does not otherwise have funds from other sources, such as from the liquidity facilities, to settle maturing ABCP. In some cases, we or another third party may provide transaction-specific credit enhancement which can take various forms. We receive market-based fees for providing these liquidity and credit facilities.

Each transaction is structured with transaction-specific first loss protection provided by the third-party seller. This enhancement can take various forms, including but not limited to overcollateralization, excess spread, subordinated classes of financial assets, guarantees or letters of credit. The amount of this enhancement varies but is generally sized to cover a multiple of loss experience.

An unrelated third party (expected loss investor) absorbs credit losses, up to a maximum contractual amount, that may occur in the future on the assets in the multi-seller conduits before the multi-seller conduits' debt holders and us. In return for assuming this multi-seller conduit first-loss position, each multi-seller conduit pays the expected loss investor a return commensurate with its risk position. The expected loss investor has substantive power to direct the majority of the activities which significantly impact the conduit's economic performance, including initial selection and approval of the asset purchase commitments and liquidity facilities, approval of renewal and amendment of these transactions and facilities, sale or transfer of assets, ongoing monitoring of asset performance, mitigation of credit losses, and management of the ABCP liabilities.

We do not consolidate these multi-seller conduits as we do not have the decision-making power to direct the significant activities noted above in order to obtain the majority of the benefits of the SPE.

Third-party securitization vehicles

We hold significant interests in certain third-party securitization vehicles which are SPEs. We, as well as other financial institutions, are obligated to provide funding up to our maximum commitment level and are exposed to credit losses on the underlying assets after various credit enhancements. Enhancement can take various forms, including but not limited to overcollateralization, excess spread, subordinated classes of financial assets, guarantees or letters of credit. The amount of this enhancement varies but is generally sized to cover a multiple of loss experience. We do not consolidate these entities as we do not have decision making rights over the investing and financing activities of the SPEs and are not exposed to a majority of the residual ownership risks.

We also invest in the securities issued by unconsolidated third-party SPEs, including government-sponsored SPEs, as part of our trading activities. These investments do not carry a funding commitment; therefore our maximum exposure to loss is limited to our investment. We do not consolidate these entities as we do not have any decision making rights over the activities of the SPEs and are not exposed to a majority of the residual ownership risks.

Other

Credit investment products

We use SPEs to generally transform credit derivatives into cash instruments, to distribute credit risk and to create customized credit products to meet investors' specific requirements. We enter into derivative contracts, including credit derivatives, to purchase protection from these SPEs (credit protection) and convert various risk factors such as yield, currency or credit risk of underlying assets to meet the needs of the investors. We act as sole arranger and swap provider for certain SPEs and, in some cases, fulfil other administrative functions for the SPEs.

We do not consolidate these credit investment product SPEs as we do not have decision making power over the significant activities, which include selection of the collateral and reference portfolio, and are not exposed to a majority of the benefits or risks of the SPE.

Tax credit funds

We created certain funds to pass through tax credits received from underlying low-income housing or historic rehabilitation real estate projects to third parties (tax credit funds). We are sponsors of the tax credit funds as a result of our responsibility to manage the funds, arrange the financing, and perform the administrative duties of these tax credit funds. We do not consolidate the tax credit funds as the investors in these funds have the decision making power to select the underlying investments and are exposed to the majority of the residual ownership and tax risks of the funds.

Mutual and pooled funds

We are also sponsors of our mutual and pooled funds as a result of our ability to influence the investment decisions of the mutual funds and our continuing involvement in the administration of these funds. We consolidate certain mutual and pooled funds in which we have direct investment or seed capital representing greater than 50% of the fund units as we have both decision making power over the fund's investment activities and exposure to the majority of the benefits and residual ownership risks of the fund due to our direct investment or seed capital.

Compensation trusts

We use compensation trusts, which primarily hold our own common shares, to economically hedge our obligation to certain employees under some of our share-based compensation programs. We consolidate these trusts because we have the decision making power over the activities of the trusts, obtain the majority of the benefits of the trusts to hedge our share-based compensation programs, and are exposed to the majority of the residual ownership risks.

Note 8 Derivative financial instruments and hedging activities

Derivative instruments are categorized as either financial or non-financial derivatives. Financial derivatives are financial contracts whose value is derived from an underlying interest rate, foreign exchange rate, credit risk, and equity or equity index. Non-financial derivatives are contracts whose value is derived from a precious metal, commodity instrument or index. Notional amount of derivatives represents the contract amount used as a reference point to calculate payments. Notional amounts are generally not exchanged by counterparties, and do not reflect our exposure at default.

Financial derivatives

Forwards and futures

Forward contracts are effectively non-standardized agreements that are transacted between counterparties in the over-the-counter market, whereas futures are standardized contracts with respect to amounts and settlement dates, and are traded on regular futures exchanges. Examples of forwards and futures are described below:

Interest rate forwards (forward rate agreements) and futures are contractual obligations to buy or sell an interest-rate sensitive financial instrument on a predetermined future date at a specified price.

Foreign exchange forwards and futures are contractual obligations to exchange one currency for another at a specified price for settlement at a predetermined future date.

Equity forwards and futures are contractual obligations to buy or sell at a fixed value (the specified price) of an equity index, a basket of stocks or a single stock at a predetermined future date.

Swaps

Swaps are over-the-counter contracts in which two counterparties exchange a series of cash flows based on agreed upon rates to a notional amount. Examples of swap agreements are described below.

Interest rate swaps are agreements where two counterparties exchange a series of payments based on different interest rates applied to a notional amount in a single currency. Cross currency swaps involve the exchange of fixed payments in one currency for the receipt of fixed payments in another currency. Cross currency interest rate swaps involve the exchange of both interest and notional amounts in two different currencies.

Equity swaps are contracts in which one counterparty agrees to pay or receive from the other cash flows based on changes in the value of an equity index, a basket of stocks or a single stock.

Options

Options are contractual agreements under which the seller (writer) grants the purchaser the right, but not the obligation, either to buy (call option) or sell (put option), a security, exchange rate, interest rate, or other financial instrument or commodity at a predetermined price, at or by a specified future date. The seller (writer) of an option can also settle the contract by paying the cash settlement value of the purchaser's right. The seller (writer) receives a premium from the purchaser for this right. The various option agreements that we enter into include but are not limited to interest rate options, foreign currency options, equity options and index options.

Credit derivatives

Credit derivatives are over-the-counter contracts that transfer credit risk related to an underlying financial instrument (referenced asset) from one counterparty to another. Examples of credit derivatives are described below.

Credit default swaps provide protection against the decline in value of the referenced asset as a result of specified credit events such as default or bankruptcy. They are similar in structure to an option, whereby the purchaser pays a premium to the seller of the credit default swap in return for payment contingent on a credit event affecting the referenced asset.

Credit default baskets are similar to credit default swaps except that the underlying referenced financial instrument is a group of assets instead of a single asset.

Total return swaps are contracts where one counterparty agrees to pay or receive from the other cash flows based on changes in the value of the referenced asset.

Other derivative products

Certain warrants and loan commitments that meet the definition of derivative are also included as derivative instruments.

Non-financial derivatives

We also transact in non-financial derivative products including precious metal and commodity derivative contracts in both the over-the-counter and exchange markets.

Derivatives issued for trading purposes

Most of our derivative transactions relate to sales and trading activities. Sales activities include the structuring and marketing of derivative products to clients to enable them to transfer, modify or reduce current or expected risks. Trading involves market-making, positioning and arbitrage activities. Market-making involves quoting bid and offer prices to other market participants with the intention of generating revenue based on spread and volume. Positioning involves managing market risk positions with the expectation of profiting from favourable movements in prices, rates or indices. Arbitrage activities involve identifying and profiting from price differentials between markets and products.

Derivatives issued for other-than-trading purposes

We also use derivatives for purposes other than trading, primarily for hedging, in conjunction with the management of interest rate, credit, equity and foreign exchange risk related to our funding, lending, investment activities and asset/liability management.

Interest rate swaps are used to manage our exposure to interest rate risk by modifying the repricing or maturity characteristics of existing and/or forecasted assets and liabilities, including funding and investment activities. Purchased options are used to hedge redeemable deposits and other options embedded in consumer products. We manage our exposure to foreign currency risk with cross currency swaps and foreign exchange forward contracts. We predominantly use credit derivatives to manage our credit exposures. We mitigate industry sector concentrations and single-name exposures related to our credit portfolio by purchasing credit derivatives to transfer credit risk to third parties.

Certain derivatives and cash instruments are specifically designated and qualify for hedge accounting. We apply hedge accounting to minimize volatility in earnings and capital caused by changes in interest rates or foreign exchange rates. Interest rate and currency fluctuations will either cause assets and liabilities to appreciate or depreciate in market value or cause variability in forecasted cash flows. When a hedging relationship is effective, gains, losses, revenue and expenses of the hedging instrument will offset the gains, losses, revenue and expenses of the hedged item. We largely assess and measure the effectiveness of a hedging relationship based on the change in fair value of the derivative hedging instrument relative to the change in fair value of the hedged item. When cash instruments are designated as hedges of currency risks, only changes in their value due to currency risk are included in the assessment and measurement of hedge effectiveness.

From time to time, we also enter into derivative transactions to economically hedge certain exposures that do not otherwise qualify for hedge accounting, or where hedge accounting is not considered economically feasible to implement. In such circumstances, changes in fair value are reflected in Non-interest income.

After-tax unrealized gains relating to de-designated hedges of $46 million (before-tax unrealized gains of $62 million) included in Other components of equity as at October 31, 2013, are expected to be reclassified to Net interest income within the next 12 months.

The following table presents the fair values of the derivative and non-derivative instruments categorized by their hedging relationships, as well as derivatives that are not designated in hedging relationships.

Derivatives and non-derivative instruments

	As at							
	October 31, 2013				October 31, 2012			
	Designated as hedging instruments in hedging relationships				Designated as hedging instruments in hedging relationships			
(Millions of Canadian dollars)	Cash flow hedges	Fair value hedges	Net investment hedges	Not designated in a hedging relationship	Cash flow hedges	Fair value hedges	Net investment hedges	Not designated in a hedging relationship
Assets								
Derivative instruments	$ 555	$ 1,461	$ 32	$ 72,774	$ 837	$ 1,894	$ 5	$ 88,557
Liabilities								
Derivative instruments	$ 460	$ 376	$ 95	$ 75,814	$ 680	$ 284	$ 144	$ 95,653
Non-derivative instruments	–	–	17,499	–	–	–	16,777	–

Results of hedge activities recorded in Net income and Other comprehensive income

	For the year ended								
	October 31, 2013			October 31, 2012			October 31, 2011		
(Millions of Canadian dollars)	Net gains (losses) included in Non-interest income	Net gains (losses) included in Net interest income	After-tax unrealized gains (losses) included in OCI	Net gains (losses) included in Non-interest income	Net gains (losses) included in Net interest income	After-tax unrealized gains (losses) included in OCI	Net gains (losses) included in Non-interest income	Net gains (losses) included in Net interest income	After-tax unrealized gains (losses) included in OCI
Fair value hedges									
(Losses) gains on hedging instruments	$ (551)	$ n.a.	$ n.a.	$ (66)	$ n.a.	$ n.a.	$ 148	$ n.a.	$ n.a.
Gains (losses) on hedged items attributable to the hedged risk	459	n.a.	n.a.	(15)	n.a.	n.a.	(134)	n.a.	n.a.
Ineffective portion	(92)	n.a.	n.a.	(81)	n.a.	n.a.	14	n.a.	n.a.
Cash flow hedges									
Ineffective portion	(13)	n.a.	n.a.	(4)	n.a.	n.a.	14	n.a.	n.a.
Effective portion	n.a.	n.a.	(11)	n.a.	n.a.	32	n.a.	n.a.	298
Reclassified to income during the period (1)	n.a.	40	n.a.	n.a.	(35)	n.a.	n.a.	(161)	n.a.
Net investment hedges									
Ineffective portion	1	n.a.	n.a.	1	n.a.	n.a.	4	n.a.	n.a.
Foreign currency Gains (losses)	n.a.	n.a.	1,402	n.a.	n.a.	113	n.a.	n.a.	(625)
(Losses) gains from hedges	n.a.	n.a.	(912)	n.a.	n.a.	–	n.a.	n.a.	717
	$ (104)	$ 40	$ 479	$ (84)	$ (35)	$ 145	$ 32	$ (161)	$ 390

(1) After-tax gains of $30 million were reclassified from Other components of equity to income during the year ended October 31, 2013 (October 31, 2012 – losses of $25 million; October 31, 2011 – losses of $132 million).

n.a. not applicable

Notional amount of derivatives by term to maturity (absolute amounts)

	As at October 31, 2013					
	Term to maturity					
(Millions of Canadian dollars)	Within 1 year	1 to 5 years	Over 5 years (1)	Total	Trading	Other than Trading
Over-the-counter contracts						
Interest rate contracts						
Forward rate agreements	$ 364,918	$ 93,570	$ –	$ 458,488	$ 458,488	$ –
Swaps	1,218,382	2,718,313	1,369,003	5,305,698	5,095,519	210,179
Options purchased	59,272	83,085	27,178	169,535	169,337	198
Options written	59,921	81,222	33,000	174,143	174,112	31
Foreign exchange contracts						
Forward contracts	887,156	30,991	1,079	919,226	858,547	60,679
Cross currency swaps	6,054	14,420	13,796	34,270	34,270	–
Cross currency interest rate swaps	131,805	308,927	144,779	585,511	555,841	29,670
Options purchased	19,217	10,917	4,732	34,866	34,866	–
Options written	19,737	11,729	4,682	36,148	36,148	–
Credit derivatives (2)	1,650	11,498	8,961	22,109	20,704	1,405
Other contracts (3)	57,593	42,101	20,647	120,341	120,336	5
Exchange–traded contracts						
Interest rate contracts						
Futures – long positions	10,332	6,809	–	17,141	17,103	38
Futures – short positions	20,727	13,952	–	34,679	34,604	75
Options purchased	13,831	3,557	–	17,388	17,388	–
Options written	11,371	1,277	–	12,648	12,648	–
Foreign exchange contracts						
Futures – long positions	6,092	9,646	102	15,840	15,840	–
Futures – short positions	11,381	12,617	–	23,998	23,998	–
Other contracts (3)	140,471	29,786	387	170,644	170,641	3
	$ 3,039,910	$ 3,484,417	$ 1,628,346	$ 8,152,673	$ 7,850,390	$ 302,283

(Millions of Canadian dollars)	As at October 31, 2012					
	Term to maturity					
	Within 1 year	1 to 5 years	Over 5 years (1)	Total	Trading	Other than Trading
Over-the-counter contracts						
Interest rate contracts						
Forward rate agreements	$ 366,587	$ 133,964	$ –	$ 500,551	$ 500,551	$ –
Swaps	1,301,121	2,052,851	1,042,643	4,396,615	4,228,985	167,630
Options purchased	35,703	46,715	23,264	105,682	105,682	–
Options written	35,768	72,150	31,162	139,080	139,080	–
Foreign exchange contracts						
Forward contracts	862,743	32,382	656	895,781	849,800	45,981
Cross currency swaps	5,339	13,850	10,236	29,425	29,027	398
Cross currency interest rate swaps	125,668	279,675	129,317	534,660	512,654	22,006
Options purchased	18,781	7,678	3,643	30,102	30,099	3
Options written	17,839	7,976	3,411	29,226	29,220	6
Credit derivatives (2)	2,139	6,572	8,360	17,071	15,477	1,594
Other contracts (3)	58,635	33,471	26,883	118,989	117,868	1,121
Exchange-traded contracts						
Interest rate contracts						
Futures – long positions	8,248	10,002	47,269	65,519	65,519	–
Futures – short positions	41,530	13,187	66,388	121,105	121,105	–
Options purchased	8,367	252	15,678	24,297	24,297	–
Options written	3,679	247	1	3,927	3,927	–
Foreign exchange contracts						
Futures – long positions	172	–	–	172	172	–
Futures – short positions	299	–	–	299	299	–
Other contracts (3)	106,205	37,883	7,262	151,350	151,350	–
	$ 2,998,823	$ 2,748,855	$ 1,416,173	$ 7,163,851	$ 6,925,112	$ 238,739

(1) Includes contracts maturing in over 10 years with a notional value of $501 billion (October 31, 2012 – $402 billion). The related gross positive replacement cost is $25 billion (October 31, 2012 –$32.3 billion).

(2) Credit derivatives include credit default swaps, total return swaps and credit default baskets, including credit derivatives given guarantee treatment for OSFI regulatory reporting purposes. Credit derivatives with a notional value of $1.4 billion (October 31, 2012 – $1.6 billion) are economic hedges. Trading credit derivatives comprise protection purchased of $11.0 billion (October 31, 2012 – $8.7 billion) and protection sold of $9.7 billion (October 31, 2012 – $6.8 billion).

(3) Other contracts include precious metal, commodity, stable value and equity derivative contracts.

The following tables indicate the periods when the cash flows are expected to occur and when they are expected to affect profit or loss for cash flow hedges:

(Millions of Canadian dollars)	As at October 31, 2013					
	Within 1 year	1 to 2 years	2 to 3 years	3 to 5 years	Over 5 years	Total
Cash inflows from assets	$ 267	$ 232	$ 218	$ 314	$ 321	$ 1,352
Cash outflows from liabilities	(533)	(531)	(495)	(602)	(122)	(2,283)
Net cash flows	$ (266)	$ (299)	$ (277)	$ (288)	$ 199	$ (931)

(Millions of Canadian dollars)	As at October 31, 2012					
	Within 1 year	1 to 2 years	2 to 3 years	3 to 5 years	Over 5 years	Total
Cash inflows from assets	$ 329	$ 314	$ 314	$ 274	$ 85	$ 1,316
Cash outflows from liabilities	(370)	(250)	(211)	(261)	(272)	(1,364)
Net cash flows	$ (41)	$ 64	$ 103	$ 13	$ (187)	$ (48)

Fair value of derivative instruments

	As at							
	October 31, 2013				October 31, 2012			
	Average fair value for year ended (1)		Year end fair value		Average fair value for year ended (1)		Year end fair value	
(Millions of Canadian dollars)	Positive	Negative	Positive	Negative	Positive	Negative	Positive	Negative
Held or issued for trading purposes								
Interest rate contracts								
Forward rate agreements	$ 505	$ 347	$ 348	$ 262	$ 729	$ 544	$ 690	$ 429
Swaps	80,490	78,156	73,164	69,897	89,881	84,214	93,908	87,908
Options purchased	2,792	–	3,253	–	2,527	–	2,516	–
Options written	–	3,619	–	3,966	–	3,519	–	3,408
	83,787	82,122	76,765	74,125	93,137	88,277	97,114	91,745
Foreign exchange contracts								
Forward contracts	9,229	9,381	6,774	7,629	8,622	8,314	6,288	6,251
Cross currency swaps	1,505	1,053	1,432	944	1,665	1,371	1,665	1,267
Cross currency interest rate swaps	9,692	16,333	9,308	12,058	10,361	19,219	8,637	18,841
Options purchased	1,900	–	2,234	–	1,632	–	1,557	–
Options written	–	1,704	–	1,744	–	1,420	–	1,373
	22,326	28,471	19,748	22,375	22,280	30,324	18,147	27,732
Credit derivatives (2)	229	254	225	276	459	484	287	306
Other contracts (3)	5,203	8,275	6,635	10,085	5,331	7,991	4,351	7,369
	111,545	119,122	103,373	106,861	121,207	127,076	119,899	127,152
Held or issued for other than trading purposes								
Interest rate contracts								
Swaps			2,106	787			2,795	766
Options purchased			1	–			–	–
Options written			–	1			–	–
			2,107	788			2,795	766
Foreign exchange contracts								
Forward contracts			194	194			232	142
Cross currency swaps			–	–			4	19
Cross currency interest rate swaps			843	339			861	439
Options purchased			–	–			–	–
Options written			–	–			–	–
			1,037	533			1,097	600
Credit derivatives (2)			–	56			5	29
Other contracts (3)			–	–			92	2
			3,144	1,377			3,989	1,397
Total gross fair values before netting (4)			106,517	108,238			123,888	128,549
Valuation adjustments determined on a pooled basis			(505)				(626)	
Impact of netting agreements that qualify for balance sheet offset			(31,190)	(31,493)			(31,969)	(31,788)
			74,822	76,745			91,293	96,761
Impact of netting agreements that do not qualify for balance sheet offset (5)			(51,653)	(51,653)			(67,849)	(67,849)
Total			$ 23,169	$ 25,092			$ 23,444	$ 28,912

(1) Average fair value amounts are calculated based on monthly balances.
(2) Credit derivatives include credit default swaps, total return swaps and credit default baskets, including credit derivatives given guarantee treatment for OSFI regulatory reporting purposes.
(3) Other contracts include precious metal, commodity, stable value and equity derivative contracts.
(4) Total gross fair values before netting include market and credit valuation adjustments that are determined on an instrument-specific basis.
(5) Additional impact of offsetting credit exposures on contracts that do not qualify for balance sheet offset.

Fair value of derivative instruments by term to maturity

	As at							
	October 31, 2013				October 31, 2012			
(Millions of Canadian dollars)	Less than 1 year	1 to 5 years	Over 5 years	Total	Less than 1 year	1 to 5 years	Over 5 years	Total
Derivative assets	$ 13,695	$ 27,340	$33,787	$ 74,822	$ 12,958	$ 29,957	$ 48,378	$ 91,293
Derivative liabilities	15,672	29,104	31,969	76,745	14,429	35,362	46,970	96,761

Derivative-related credit risk

Credit risk from derivative transactions is generated by the potential for the counterparty to default on its contractual obligations when one or more transactions have a positive market value to us. Therefore, derivative-related credit risk is represented by the positive fair value of the instrument and is normally a small fraction of the contract's notional amount.

We subject our derivative-related credit risk to the same credit approval, limit and monitoring standards that we use for managing other transactions that create credit exposure. This includes evaluating the creditworthiness of counterparties, and managing the size, diversification and maturity structure of the portfolio. Credit utilization for all products is compared with established limits on a continual basis and is subject to a standard exception reporting process. We utilize a single internal rating system for all credit risk exposure. In most cases, these internal ratings approximate the external risk ratings of public rating agencies.

Netting is a technique that can reduce credit exposure from derivatives and is generally facilitated through the use of master netting agreements. A master netting agreement provides for a single net settlement of all financial instruments covered by the agreement in the event of default. However, credit risk is reduced only to the extent that our financial obligations to the same counterparty can be set off against obligations of the counterparty to us. We maximize the use of master netting agreements to reduce derivative-related credit exposure. Our overall exposure to credit risk that is reduced through master netting agreements may change substantially following the reporting date as the exposure is affected by each transaction subject to the agreement as well as by changes in underlying market rates. Measurement of our credit exposure arising out of derivative transactions is reduced to reflect the effects of netting in cases where the enforceability of that netting is supported by appropriate legal analysis as documented in our trading credit risk policies.

The use of collateral is another significant credit mitigation technique for managing derivative-related counterparty credit risk. Mark-to-market provisions in our agreements with some counterparties, typically in the form of a Credit Support Annex, provide us with the right to request that the counterparty pay down or collateralize the current market value of its derivatives positions when the value passes a specified threshold amount.

Replacement cost represents the total fair value of all outstanding contracts in a gain position after factoring in the master netting agreements. The credit equivalent amount is defined as the sum of the replacement cost plus an add-on amount for potential future credit exposure as defined by OSFI. The risk-weighted amount is determined by applying the standard OSFI-defined measures of counterparty risk to the credit equivalent amount.

Derivative-related credit risk

	As at					
	October 31, 2013 (1)			October 31, 2012 (1)		
(Millions of Canadian dollars)	Replacement cost	Credit equivalent amount (2)	Risk-weighted equivalent (3)	Replacement cost	Credit equivalent amount (2)	Risk-weighted equivalent (3)
Over-the-counter contracts						
Interest rate contracts						
Forward rate agreements	**$ 94**	**$ 278**	**$ 48**	$ 81	$ 273	$ 116
Swaps	**13,133**	**20,914**	**5,465**	15,722	13,114	5,798
Options purchased	**399**	**634**	**363**	211	396	153
Foreign exchange contracts						
Forward contracts	**2,463**	**6,891**	**2,232**	2,859	7,778	2,143
Swaps	**2,500**	**6,262**	**1,946**	1,748	6,664	1,529
Options purchased	**259**	**444**	**221**	224	634	283
Credit derivatives (4)	**106**	**1,480**	**719**	121	588	244
Other contracts (5)	**1,864**	**6,838**	**3,519**	981	3,958	1,642
Exchange traded contracts (6)	**2,867**	**11,186**	**224**	—	—	—
Total	**$ 23,685**	**$ 54,927**	**$ 14,737**	$ 21,947	$ 33,405	$ 11,908

(1) The amounts presented as at October 31, 2013 and 2012 are net of master netting agreements in accordance with Basel III and Basel II, respectively.
(2) The total credit equivalent amount includes collateral applied of $9.6 billion (October 31, 2012 – $10.7 billion).
(3) The risk-weighted balances as at October 31, 2013 and 2012 were calculated in accordance with Basel III and Basel II, respectively.
(4) Credit derivatives include credit default swaps, total return swaps and credit default baskets. The above excludes credit derivatives issued for other-than-trading purposes related to bought protection with a replacement cost of $nil (October 31, 2012 – $5 million).
(5) Other contracts include precious metal, commodity, stable value, and equity derivatives contracts.
(6) In accordance with Basel III, exchange-traded instruments were included in the calculation of credit risk as at October 31, 2013. Under Basel II, exchange-traded instruments were deemed to have no credit risk because of daily margin requirements; therefore, exchange-traded instruments with a replacement cost of $2.1 billion were excluded from the calculation of credit risk as at October 31, 2012.

Replacement cost of derivative instruments by risk rating and by counterparty type

	As at October 31, 2013								
	Risk rating (1)					Counterparty type (2)			
(Millions of Canadian dollars)	AAA, AA	A	BBB	BB or lower	Total	Banks	OECD governments	Other	Total
Gross positive replacement cost	$ 20,610	$ 68,471	$ 11,604	$ 5,844	$ 106,529	$ 48,730	$ 10,634	$ 47,165	$ 106,529
Impact of master netting agreements	14,345	60,780	6,829	890	82,844	37,070	6,734	39,040	82,844
Replacement cost (after netting agreements) (3)	$ 6,265	$ 7,691	$ 4,775	$ 4,954	$ 23,685	$ 11,660	$ 3,900	$ 8,125	$ 23,685

	As at October 31, 2012								
	Risk rating (1)					Counterparty type (2)			
(Millions of Canadian dollars)	AAA, AA	A	BBB	BB or lower	Total	Banks	OECD governments	Other	Total
Gross positive replacement cost	$ 24,404	$ 77,490	$ 15,006	$ 4,873	$ 121,773	$ 59,859	$ 13,074	$ 48,840	$ 121,773
Impact of master netting agreements	19,332	70,193	9,113	1,183	99,821	49,353	10,485	39,983	99,821
Replacement cost (after netting agreements) (3)	$ 5,072	$ 7,297	$ 5,893	$ 3,690	$ 21,952	$ 10,506	$ 2,589	$ 8,857	$ 21,952

(1) Our internal risk ratings for major counterparty types approximate those of public ratings agencies. Ratings of AAA, AA, A and BBB represent investment grade ratings and ratings of BB or lower represent non-investment grade ratings.
(2) Counterparty type is defined in accordance with the capital adequacy requirements of OSFI.
(3) Includes credit derivatives issued for other-than-trading purposes with a total replacement cost of $nil (October 31, 2012 – $5 million).

Note 9 Premises and equipment

(Millions of Canadian dollars)	Land	Buildings	Computer equipment	Furniture, fixtures and other equipment	Leasehold improvements	Work in process	Total
Cost							
Balance at October 31, 2012	$ 128	$ 1,275	$ 1,494	$ 1,392	$ 1,871	$ 199	$ 6,359
Additions (1)	3	12	120	43	40	234	452
Acquisitions through business combinations	–	–	1	21	–	–	22
Transfers from work in process	2	44	31	52	155	(284)	–
Disposals	(1)	(3)	(78)	(57)	(6)	(3)	(148)
Foreign exchange translation	2	6	13	7	16	2	46
Other	–	25	1	–	(29)	(35)	(38)
Balance at October 31, 2013	$ 134	$ 1,359	$ 1,582	$ 1,458	$ 2,047	$ 113	$ 6,693
Accumulated depreciation							
Balance at October 31, 2012	$ –	$ 456	$ 1,092	$ 968	$ 1,152	$ –	$ 3,668
Depreciation	–	42	190	92	140	–	464
Impairment loss (reversal)	–	–	–	–	–	–	–
Disposals	–	(2)	(71)	(49)	(5)	–	(127)
Foreign exchange translation	–	2	9	4	8	–	23
Other	–	2	(15)	19	–	–	6
Balance at October 31, 2013	$ –	$ 500	$ 1,205	$ 1,034	$ 1,295	$ –	$ 4,034
Net carrying amount at October 31, 2013	$ 134	$ 859	$ 377	$ 424	$ 752	$ 113	$ 2,659

(Millions of Canadian dollars)	Land	Buildings	Computer equipment	Furniture, fixtures and other equipment	Leasehold improvements	Work in process	Total
Cost							
Balance at October 31, 2011	$ 116	$ 801	$ 1,815	$ 1,353	$ 1,684	$ 532	$ 6,301
Additions (1)	13	20	203	67	50	380	733
Acquisitions through business combinations	–	–	1	9	1	–	11
Transfers from work in process	–	448	46	42	98	(634)	–
Disposals	(1)	(17)	(423)	(36)	(29)	(3)	(509)
Foreign exchange translation	–	(1)	(10)	–	1	(1)	(11)
Other	–	24	(138)	(43)	66	(75)	(166)
Balance at October 31, 2012	$ 128	$ 1,275	$ 1,494	$ 1,392	$ 1,871	$ 199	$ 6,359
Accumulated depreciation							
Balance at October 31, 2011	$ –	$ 427	$ 1,432	$ 907	$ 1,045	$ –	$ 3,811
Depreciation	–	21	182	86	139	–	428
Impairment loss (reversal)	–	–	–	–	–	–	–
Disposals	–	(5)	(422)	(34)	(25)	–	(486)
Foreign exchange translation	–	(2)	(8)	–	3	–	(7)
Other	–	15	(92)	9	(10)	–	(78)
Balance at October 31, 2012	$ –	$ 456	$ 1,092	$ 968	$ 1,152	$ –	$ 3,668
Net carrying amount at October 31, 2012	$ 128	$ 819	$ 402	$ 424	$ 719	$ 199	$ 2,691

(1) At October 31, 2013, we had total contractual commitments of $41 million to acquire premises and equipment (October 31, 2012 – $96 million; October 31, 2011 – $154 million).

Goodwill

The following table presents changes in the carrying amount of goodwill by CGU for the year ended October 31, 2013 and 2012.

(Millions of Canadian dollars)	Canadian Banking	Caribbean Banking	Canadian Wealth Management	Global Asset Management	U.S. Wealth Management	International Wealth Management	Insurance	Investor Services	Investor & Treasury Services (1)	Capital Markets	Total
At October 31, 2011	$ 1,953	$ 1,451	$ 542	$ 1,881	$ 516	$ 118	$ 118	$ 144	$ –	$ 887	$ 7,610
Acquisitions	–	–	–	–	–	8	–	–	–	–	8
Transfers	–	–	–	–	–	–	–	–	52	(52)	–
Impairment losses	–	–	–	–	–	–	–	(142)	–	–	(142)
Currency translations	–	–	–	8	1	–	–	(2)	–	2	9
Other changes	(2)	–	1	–	–	1	–	–	–	–	–
At October 31, 2012	$ 1,951	$ 1,451	$ 543	$ 1,889	$ 517	$ 127	$ 118	$ –	$ 52	$ 837	$ 7,485
Acquisitions	**598**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**96**	**11**	**705**
Transfers	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**
Impairment losses	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**
Currency translations	**1**	**59**	**5**	**48**	**22**	**5**	**–**	**–**	**1**	**30**	**171**
Other changes	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**
At October 31, 2013	**$ 2,550**	**$ 1,510**	**$ 548**	**$ 1,937**	**$ 539**	**$ 132**	**$ 118**	**$ –**	**$ 149**	**$ 878**	**$ 8,361**

(1) Effective October 31, 2012, Investor & Treasury Services is a newly created CGU that includes our former Investor Services CGU and certain related businesses that were part of our Capital Markets CGU. The transfer of goodwill was based on the relative fair value of the transferred businesses. See Note 29 for further details on our business segments.

Key inputs and assumptions

We perform our annual impairment test by comparing the carrying amount of each CGU to its recoverable amount. The recoverable amount of a CGU is represented by its value in use, except in circumstances where the carrying amount of a CGU exceeds its value in use. In such cases, we determine the CGU's fair value less costs to sell and its recoverable amount is the greater of its value in use and fair value less costs to sell.

In our annual impairment tests performed as at August 1, 2013 and August 1, 2012, the recoverable amounts of our CGUs were based on value in use, except for our Caribbean Banking CGU, whose recoverable amount was based on fair value less costs to sell.

We calculate value in use using a five-year discounted cash flow (DCF) method. Future cash flows are based on financial plans agreed by management for a five-year period, estimated based on forecast results, business initiatives, planned capital investments and returns to shareholders. Key drivers of future cash flows include net interest margins and average interest-earning assets. The values assigned to these drivers over the forecast period are based on past experience, external and internal economic forecasts, and management's expectations of the impact of economic conditions on our financial results. Beyond the initial five-year period, cash flows are assumed to increase at a constant rate using a nominal long-term growth rate (terminal growth rate). Terminal growth rates are based on the current market assessment of gross domestic product and inflation for the countries within which the CGU operates. The discount rates used to determine the present value of each CGU's projected future cash flows are based on the bank-wide cost of capital, adjusted for the risks to which each CGU is exposed. CGU-specific risks include: country risk, business/operational risk, geographic risk (including political risk, devaluation risk, and government regulation), currency risk, and price risk (including product pricing risk and inflation).

The estimation of value in use involves significant judgment in the determination of inputs to the DCF model and is the most sensitive to changes in future cash flows, discount rates and terminal growth rates applied to cash flows beyond the forecast period. These key inputs and assumptions used to determine the recoverable amount of each CGU using value in use were tested for sensitivity by applying a reasonably possible change to those assumptions. The post-tax discount rates were increased by 1%, terminal growth rates were decreased by 0.5%, and future cash flows were reduced by 10%. As at August 1, 2013, no change in an individual key input or assumption, as described, would result in a CGU's carrying amount exceeding its recoverable amount based on value in use.

For our Caribbean Banking CGU, we calculated fair value less costs to sell using a DCF method that projects future cash flows over a 10-year period, which represents the duration of the economic cycle to which the CGU is sensitive. The 10-year DCF method aims to approximate the considerations of a prospective third-party buyer in assessing the profitability of the CGU and its ability to create value over time, independent from current macroeconomic conditions. Cash flows beyond the initial 10-year period are assumed to increase at a constant rate using a nominal long-term growth rate. Future cash flows, terminal growth rates, and discount rates are based on the same factors noted above.

The estimation of fair value less costs to sell also involves significant judgment and due to the longer time period used for our cash flow projections, the ultimate outcome of the cash flow projections has greater uncertainty than those used in our value in use model. Variability in timing and amount of future cash flows, discount rates and terminal growth rates applied to cash flows beyond the forecast period are therefore more likely. For our Caribbean Banking CGU, the recoverable amount, based on fair value less costs to sell, was 110% of its carrying amount. If projected cash flows decreased by 9.1% or the pre-tax discount rate increased to 13.7%, holding other individual factors constant, the recoverable amount based on fair value less costs to sell would be equal to the carrying amount.

The terminal growth rates and pre-tax discount rates used in our annual impairment tests are summarized below.

	As at			
	August 1, 2013		August 1, 2012	
	Discount rate (1)	Terminal growth rate	Discount rate (1)	Terminal growth rate
Group of Cash Generating Units				
Canadian Banking	10.6%	3.0%	9.9%	3.0%
Caribbean Banking	12.9	4.2	12.4	4.1
Canadian Wealth Management	11.9	3.0	11.2	3.0
Global Asset Management	11.8	3.0	10.5	3.0
U.S. Wealth Management	15.9	3.0	14.9	3.0
International Wealth Management	11.8	3.0	10.5	3.0
Insurance	10.2	3.0	9.5	3.0
Investor & Treasury Services	12.5	3.0	n.a.	n.a.
Capital Markets	15.6	3.0	14.4	3.0

(1) Pre-tax discount rates are determined implicitly based on post-tax discount rates.
n.a. The Investor & Treasury Services CGU was created after August 1, 2012

Other intangible assets
The following table presents the carrying amount of our other intangible assets:

	As at October 31, 2013					
(Millions of Canadian dollars)	Internally generated software	Other software	Core deposit intangibles	Customer list and relationships	In process software	Total
Gross carrying amount						
Balance at October 31, 2012	$ 2,258	$ 986	$ 150	$ 1,370	$ 650	$ 5,414
Additions	34	67	–	126	581	808
Transfers	400	122	–	–	(522)	–
Dispositions	(2)	(2)	–	–	–	(4)
Impairment	(7)	(4)	–	–	(2)	(13)
Currency translations	15	9	7	25	2	58
Other changes	(92)	(36)	–	12	2	(114)
Balance at October 31, 2013	$ 2,606	$ 1,142	$ 157	$ 1,533	$ 711	$ 6,149
Accumulated amortization						
Balance at October 31, 2012	$ (1,485)	$ (740)	$ (90)	$ (413)	$ –	$(2,728)
Amortization charge for the year	(361)	(66)	(22)	(117)	–	(566)
Dispositions	1	1	–	–	–	2
Impairment losses	3	–	–	–	–	3
Currency translations	(9)	(7)	(5)	(11)	–	(32)
Other changes	(10)	(10)	–	(12)	–	(32)
Balance at October 31, 2013	$ (1,861)	$ (822)	$ (117)	$ (553)	$ –	$(3,353)
Net balance, at October 31, 2013	$ 745	$ 320	$ 40	$ 980	$ 711	$ 2,796

	As at October 31, 2012					
(Millions of Canadian dollars)	Internally generated software	Other software	Core deposit intangibles	Customer list and relationships (1)	In process software	Total
Gross carrying amount						
Balance at October 31, 2011	$ 1,926	$ 855	$ 150	$ 1,356	$ 306	$ 4,593
Additions	15	41	–	337	587	980
Transfers	233	42	–	–	(275)	–
Dispositions	(21)	(27)	–	(175)	(1)	(224)
Currency translations	1	1	–	10	2	14
Other changes	104	74	–	(158)	31	51
Balance at October 31, 2012	$ 2,258	$ 986	$ 150	$ 1,370	$ 650	$ 5,414
Accumulated amortization						
Balance at October 31, 2011	$ (1,182)	$ (690)	$ (68)	$ (538)	$ –	$(2,478)
Amortization charge for the year	(306)	(86)	(22)	(114)	–	(528)
Dispositions	18	25	–	155	–	198
Impairment losses	–	–	–	(26)	–	(26)
Currency translations	–	(6)	–	(6)	–	(12)
Other changes	(15)	17	–	116	–	118
Balance at October 31, 2012	$ (1,485)	$ (740)	$ (90)	$ (413)	$ –	$(2,728)
Net balance, at October 31, 2012	$ 773	$ 246	$ 60	$ 957	$ 650	$ 2,686

(1) The impairment loss in our customer list and relationships intangibles in 2012 related to our acquisition of the remaining 50% interest in RBC Dexia.

Note 11 Significant acquisitions and dispositions

Acquisitions

Personal & Commercial Banking

On February 1, 2013, we completed the acquisition of the Canadian auto finance and deposit business of Ally Financial Inc. (Ally Canada) for cash consideration of $3.7 billion. Ally Canada's operations represent a developed and scalable auto finance business.

Our purchase price allocation assigns $12.2 billion to assets, including $115 million of customer relationship intangible assets, and $9.1 billion to liabilities on the acquisition date. Goodwill of $598 million reflects the expected synergies from the combined operations which will allow us to grow our existing automotive financing business and effectively service the banking needs of automotive dealerships. Goodwill is not expected to be deductible for tax purposes. The following table presents the fair value of the assets acquired and liabilities assumed as at the date of the acquisition.

(Millions of Canadian dollars, except percentage)	
Percentage of shares acquired	100%
Purchase consideration	$ 3,717
Fair value of identifiable assets acquired	
Cash and deposits with banks	$ 1,136
Securities	417
Loans (1) (2)	10,293
Other assets (3)	345
Fair value of liabilities assumed	
Deposits (4)	(9,033)
Other liabilities	(39)
Fair value of identifiable net assets acquired	$ 3,119
Goodwill	598
Total purchase consideration	$ 3,717

(1) The fair value for loans reflects the expected credit losses at the acquisition date. Gross contractual receivables amount to $10.5 billion.
(2) Subsequent to the acquisition, we sold loans with a carrying amount of $197 million resulting in a loss of $0.7 million.
(3) Other assets include $115 million of customer lists and relationships which are amortized on a straight-line basis over an estimated useful life of 10 years.
(4) Deposits include $5.1 billion related to consolidated securitization vehicles, of which $3.5 billion have been redeemed following the acquisition.

Since the acquisition date, Ally Canada increased our consolidated revenue and net income by $222 million and $65 million, respectively. Had the business combination been effective on November 1, 2012, the additional three months of ownership of Ally Canada would have added consolidated revenue and net income of approximately $70 million and $18 million, respectively, to our results for the year ended October 31, 2013.

All results of operations are included in our Personal & Commercial Banking segment and goodwill is allocated to our Canadian Banking CGU.

Investor & Treasury Services

On July 27, 2012, we completed the acquisition of the 50% interest that we did not already own in RBC Dexia Investor Services Limited (RBC Dexia). During the second quarter of 2013, we revised our preliminary purchase price allocation. Consequently, we decreased the fair value of the software intangibles by $118 million, partially offset by an increase to deferred tax and other assets of $22 million. The changes result in the recognition of goodwill of $96 million which reflects the strategic value in owning 100% of RBC Dexia and its complementary businesses. Goodwill is not expected to be deductible for tax purposes.

All results of operations are included in our Investor & Treasury Services segment and goodwill is allocated to our Investor & Treasury Services CGU. Adjustments have been applied on a prospective basis.

Dispositions

Personal & Commercial Banking

On March 2, 2012, we completed the sale of our U.S. regional retail banking operations to the PNC Financial Services Group, Inc. (PNC) announced on June 20, 2011. An estimated loss on sale of $304 million after-tax was recorded in Net loss from discontinued operations in our 2011 Consolidated Statement of Income. A reduction to loss on sale of $7 million after-tax was recorded in the first quarter of 2012. Upon closing of the sale, we revised our loss on sale to $294 million after tax. The difference of $3 million was recorded as a reduction to Net loss from discontinued operations in the second quarter of 2012.

We also had previously classified certain of our U.S. regional banking assets as discontinued operations when announced on June 20, 2011, because we committed to selling them within a year. Certain of these assets which were not sold within the year were reclassified in the third quarter of 2012 to continuing operations in our Corporate Support segment. The assets were not material to our Personal & Commercial Banking or Corporate Support segments.

The results of the operations sold to PNC and certain of our U.S. regional banking assets have been presented in our Consolidated Financial Statements as discontinued operations for all periods presented. Select financial information is set out in the tables below.

Insurance

On April 29, 2011, we completed the sale of Liberty Life, our U.S. life insurance business, to Athene Holding Ltd, as announced on October 22, 2010. The loss on sale after-tax was $104 million. The results of operations of Liberty Life sold to Athene Holding Ltd. have been presented in our Consolidated Financial Statements as discontinued operations for all periods presented. Select financial information is set out in the tables below.

Total discontinued operations – Statements of Income

(Millions of Canadian dollars)	For the year ended October 31 2013	October 31 2012	October 31 2011
Net interest income	$ –	$ 200	$ 683
Non-interest income	–	68	328
Total Revenue	–	268	1,011
Provision for credit losses	–	117	326
Insurance policyholder benefits, claims and actuarial expenses	–	–	240
Non-interest expense	–	258	834
Net (loss) income before income taxes	–	(107)	(389)
Net (loss) income	–	(61)	(234)
Gain (loss) on sale	–	10	(292)
Net (loss) gain from discontinued operations			
U.S. regional retail banking operations sold to PNC	–	(36)	(479)
Other U.S. regional banking assets	–	(15)	(77)
Liberty Life sold to Athene Holding Ltd.	–	–	30
Total	$ –	$ (51)	$ (526)

Total discontinued operations – Statements of Cash Flows

(Millions of Canadian dollars)	For the year ended October 31 2013	October 31 2012	October 31 2011
Net cash (used in) from operating activities	$ –	$ (6,727)	$ 1,179
Net cash from investing activities	–	4,054	586
Net cash (used in) from financing activities	–	(24)	64
Effect of exchange rate changes on cash and due from banks	–	(19)	(3)
Net change in cash and due from banks (1)	–	(2,716)	1,826
Cash and due from banks at beginning of year	–	2,716	890
Cash and due from banks at end of year	$ –	$ –	$ 2,716

(1) Net change in cash and due from banks of Liberty Life for the year ended October 31, 2013 were $nil (October 31, 2012 – $nil, October 31, 2011 – $(2) million).

Note 12 Joint ventures and associated companies

Joint ventures

As at October 31, 2013, our principal joint venture is a 50% interest in Moneris Solutions, which provides payment processing services to merchants across North America.

Previously, our principal joint ventures included a 50% interest in RBC Dexia. In the third quarter of 2012, we completed the acquisition of RBC Dexia and as a result, RBC Dexia is no longer a joint venture.

The following table summarizes the assets, liabilities, income and expense recognized in our Consolidated Balance Sheets and Consolidated Income Statements related to our interests in joint ventures.

	RBC Dexia (1)			Other			Total		
	As at or for the year ended								
(Millions of Canadian dollars)	October 31 2013	October 31 2012	October 31 2011	October 31 2013	October 31 2012	October 31 2011	October 31 2013	October 31 2012	October 31 2011
Consolidated Balance Sheets									
Assets	$ n.a.	$ –	$ 11,949	$ 764	$ 1,044	$ 770	$ 764	$ 1,044	$ 12,719
Liabilities	n.a.	–	11,998	765	1,050	788	765	1,050	12,786
Consolidated Income Statements									
Total revenue	n.a.	428	680	337	336	333	337	764	1,013
Net income	n.a.	7	96	133	131	125	133	138	221

(1) Revenues and income for the year ended October 31, 2012 reflect our share of the revenues and income of RBC Dexia up to July 27, 2012, the date we completed our acquisition of the remaining 50% interest that we did not already own.

Associated companies

The following tables summarize the carrying value of our investments in associated companies and present selected aggregate financial information about our associated companies.

(Millions of Canadian dollars)	As at October 31 2013	As at October 31 2012
Carrying amount at the beginning of the year	$ 125	$ 142
Additions (disposals)	15	4
Our share of investees' net income (loss) (1)	6	24
Dividends/distributions	(15)	(36)
Foreign currency translation	2	–
Other	(21)	(9)
Carrying amount at the end of the year	$ 112	$ 125

(1) The aggregate financial information of our significant investees reflects balances that are based on accounts made up to October 31. While the year end dates of our significant investees are different from ours, financial information is obtained as at October 31 in order to report on a consistent basis with our year-end date.

(Millions of Canadian dollars)	As at or for the year ended October 31 2013	October 31 2012 (1)	October 31 2011 (1)
Total assets	$ 700	$ 681	$ 755
Total liabilities	338	314	373
Total revenue	746	705	679
Total profit for the year	61	59	(21)

(1) Certain amounts have been revised from results previously reported.

Note 13 Other assets

(Millions of Canadian dollars)	As at October 31 2013	As at October 31 2012
Cash collateral and margin deposits	$ 11,689	$ 18,323
Accounts receivable and prepaids	3,862	4,289
Receivable from brokers, dealers and clients	1,474	1,939
Insurance-related assets	2,182	2,003
Deferred income tax asset	1,852	1,707
Accrued interest receivable	1,789	1,467
Taxes receivable	1,252	1,450
Precious metals	173	996
Other	2,414	2,845
	$ 26,687	$ 35,019

Note 14 Deposits

The following table details our deposit liabilities:

	As at							
	October 31, 2013				October 31, 2012			
(Millions of Canadian dollars)	Demand (1)	Notice (2)	Term (3)	Total	Demand (1)	Notice (2)	Term (3)	Total
Personal	$ 110,920	$ 15,732	$ 67,645	$ 194,297	$ 104,079	$ 13,893	$ 61,530	$ 179,502
Business and government	147,631	1,209	201,800	350,640	128,943	1,393	182,546	312,882
Bank	5,734	11	7,798	13,543	4,621	18	11,196	15,835
	$ 264,285	$ 16,952	$ 277,243	$ 558,480	$ 237,643	$ 15,304	$ 255,272	$ 508,219
Non-interest-bearing (4)								
Canada	$ 60,201	$ 3,282	$ –	$ 63,483	$ 55,133	$ 2,836	$ –	$ 57,969
United States	1,444	7	–	1,451	1,188	6	–	1,194
Europe (5)	3,810	1	–	3,811	3,935	1	–	3,936
Other International	4,684	315	–	4,999	3,332	439	–	3,771
Interest-bearing (4)								
Canada	158,743	9,604	222,506	390,853	138,276	8,270	204,507	351,053
United States	3,488	202	39,134	42,824	3,410	584	33,303	37,297
Europe (5)	28,985	45	7,992	37,022	29,143	50	10,072	39,265
Other International	2,930	3,496	7,611	14,037	3,226	3,118	7,390	13,734
	$ 264,285	$ 16,952	$ 277,243	$ 558,480	$ 237,643	$ 15,304	$ 255,272	$ 508,219

(1) Deposits payable on demand include all deposits for which we do not have the right to notice of withdrawal. These deposits include both savings and chequing accounts.
(2) Deposits payable after notice include all deposits for which we can legally require notice of withdrawal. These deposits are primarily savings accounts.
(3) Term deposits include deposits payable on a fixed date. These deposits include term deposits, guaranteed investment certificates and similar instruments. As at October 31, 2013, the balance of term deposits also include senior deposit notes we have issued to provide long-term funding of $134 billion (October 31, 2012 – $114 billion).
(4) The geographical splits of the deposits are based on the point of origin of the deposits and where the revenue is recognized.
(5) Europe includes the United Kingdom, Switzerland and the Channel Islands.

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

(Millions of Canadian dollars)	As at October 31 2013	October 31 2012
Within 1 year:		
less than 3 months	$ 42,556	$ 55,274
3 to 6 months	36,314	22,493
6 to 12 months	33,149	43,286
1 to 2 years	54,665	49,920
2 to 3 years	34,784	24,011
3 to 4 years	21,763	21,134
4 to 5 years	25,596	18,568
Over 5 years	28,416	20,586
	$ 277,243	$ 255,272
Aggregate amount of term deposits in denominations of $100,000 or more	$ 244,000	$ 223,000

The following table presents the average deposit balances and average rates of interest during 2013, 2012 and 2011.

	For the year ended					
	October 31, 2013		October 31, 2012		October 31, 2011	
(Millions of Canadian dollars, except for percentage amounts)	Average balances	Average rates	Average balances	Average rates	Average balances	Average rates
Canada	$ 434,938	1.19%	$ 404,656	1.31%	$ 358,094	1.49%
United States	41,442	0.41	38,792	0.54	42,766	0.54
Europe (1)	38,746	0.27	33,394	0.63	45,740	1.00
Other International	18,598	0.96	19,338	1.44	18,717	1.75
	$ 533,724	1.06%	$ 496,180	1.21%	$ 465,317	1.36%

(1) Europe includes the United Kingdom, Switzerland and the Channel Islands.

Note 15 Insurance

Insurance assets

(Millions of Canadian dollars)	As at October 31 2013	October 31 2012
Collateral loans	$ 1,273	$ 1,176
Policy loans	132	120
Reinsurance assets	422	336
Other	355	371
Total	$ 2,182	$ 2,003

Reinsurance

In the ordinary course of business, our insurance operations reinsure risks to other insurance and reinsurance companies in order to lower our risk profile, limit loss exposure to large risks, and provide additional capacity for future growth. These ceding reinsurance arrangements do not relieve our insurance subsidiaries from their direct obligations to the insureds. We evaluate the financial condition of the reinsurers and monitor our concentrations of credit risks to minimize our exposure to losses from reinsurer insolvency. Reinsurance amounts (ceded premiums) included in Non-interest income are shown in the table below.

Net premiums and claims

	For the year ended		
(Millions of Canadian dollars)	October 31 2013	October 31 2012	October 31 2011
Gross premiums	$ 4,785	$ 4,739	$ 4,552
Premiums ceded to reinsurers	(1,111)	(1,034)	(1,019)
Net premiums	$ 3,674	$ 3,705	$ 3,533
Gross claims and benefits	$ 2,768	$ 3,472	$ 3,155
Reinsurers' share of claims and benefits	(442)	(417)	(398)
Net claims	$ 2,326	$ 3,055	$ 2,757

Risk Management

Insurance risk is the risk of fluctuations in the timing, frequency or severity of insured events, relative to our expectations at the time of underwriting. Due to our geographic diversity and business mix, we have a well diversified portfolio of insurance risks resulting in reduced concentration risk. We manage underwriting and pricing risk through the use of underwriting guidelines which detail the class, nature and type of business that may be accepted, pricing policies by product line and centralized control of policy wordings. The risk that claims are handled or paid inappropriately is mitigated using a range of IT system controls and manual processes conducted by experienced staff. These, together with a range of detailed policies and procedures, ensure that all claims are handled in a timely, appropriate and accurate manner.

Insurance claims and policy benefit liabilities

All actuarial assumptions are set in conjunction with Canadian Institute of Actuaries Standards of Practice and OSFI requirements. The assumptions that have the greatest effect on the measurement of insurance liabilities, the processes used to determine them and the assumptions used as at October 31, 2013 are as follows:

Life insurance

Mortality and morbidity – Mortality estimates are based on standard industry and national mortality tables, adjusted where appropriate to reflect our own experience. Morbidity assumptions are made with respect to the rates of claim incidence and claim termination for health insurance policies and are based on a combination of industry and our own experience.

Future investment yield – Assumptions are based on the current yield rate, a reinvestment assumption and an allowance for future credit losses for each line of business, and are developed using interest rate scenario testing, including prescribed scenarios for determination of minimum liabilities as set out in the actuarial standards.

Policyholder behaviour – Under certain policies, the policyholder has a contractual right to change benefits and premiums, as well as convert policies to permanent forms of insurance. All policyholders have the right to terminate their policies through lapse. Lapses represent the termination of policies due to non-payment of premiums. Lapse assumptions are primarily based on our recent experience adjusted for emerging industry experience where applicable.

Non-life insurance

Assumptions related to unpaid claims concern the patterns of development of claims from inception to ultimate settlement. The reserving assumptions, based on historical paid/incurred development patterns adjusted for changes in products, claims processes and legislative trends, result in a collective loss ratio when compared with earned premium.

The portfolio assumptions that have the greatest effect on the net liabilities included in our Consolidated Balance Sheets are listed below:

	As at	
	October 31 2013	October 31 2012
Life Insurance		
Canadian Insurance		
Mortality rates (1)	**0.12%**	0.12%
Morbidity rates (2)	**1.99**	1.90
Reinvestment yield (3)	**3.15**	3.15
Lapse rates (4)	**0.50**	0.50
International Insurance		
Mortality rates (1)	**0.46**	0.43
Reinvestment yield (3)	**2.29**	2.49
Non-life Insurance		
Expected loss ratio (5)	**79.5**	74.0

(1) Average annual death rate for the largest portfolio of insured policies
(2) Average net settlement rate for the individual and group disability insurance portfolio
(3) Ultimate reinvestment rate of the insurance operations
(4) Ultimate policy termination rate (lapse rate) for the largest permanent life insurance portfolio that relies on higher termination rate to maintain its profitability (lapse-supported policies)
(5) Ratio of incurred claim losses and claim expenses to Net premiums of the property and casualty business, measuring the profitability or loss experience on our total book of business

The following table summarizes our gross and reinsurers' share of insurance liabilities at the end of the year.

Insurance claims and policy benefit liabilities

	As at					
	October 31, 2013			October 31, 2012		
(Millions of Canadian dollars)	**Gross**	**Ceded**	**Net**	Gross	Ceded	Net
Life insurance policyholder liabilities						
Life, health and annuity	**$ 7,029**	**$ 300**	**$ 6,729**	$ 6,988	$ 206	$ 6,782
Investment contracts (1)	**1**	**–**	**1**	1	–	1
	$ 7,030	**$ 300**	**$ 6,730**	$ 6,989	$ 206	$ 6,783
Non-life insurance policyholder liabilities						
Unearned premium provision (1)	**$ 410**	**$ –**	**$ 410**	$ 421	$ –	$ 421
Unpaid claims provision	**1,005**	**21**	**984**	933	27	906
	$ 1,415	**$ 21**	**$ 1,394**	$ 1,354	$ 27	$ 1,327
Total	**$ 8,445**	**$ 321**	**$ 8,124**	$ 8,343	$ 233	$ 8,110

(1) Insurance claims and policy benefit liabilities include Investment contracts and Unearned premium provision, both of which are reported in Other liabilities on the Consolidated Balance Sheets.

Reconciliation of life insurance policyholder liabilities

(Millions of Canadian dollars)	October 31, 2013 Gross	Ceded	Net	October 31, 2012 Gross	Ceded	Net
Balances, beginning of the year	$ 6,989	$ 206	$ 6,783	$ 6,291	$ 252	$ 6,039
New and in-force policies	(67)	94	(161)	697	(46)	743
Changes in assumption and methodology	108	–	108	3	–	3
Net change in investment contracts	–	–	–	(2)	–	(2)
Balances, end of the year	$ 7,030	$ 300	$ 6,730	$ 6,989	$ 206	$ 6,783

Reconciliation of non-life insurance policyholder liabilities

(Millions of Canadian dollars)	October 31, 2013 Gross	Ceded	Net	October 31, 2012 Gross	Ceded	Net
Balances, beginning of the year	$ 1,354	$ 27	$ 1,327	$ 1,248	$ 10	$ 1,238
Changes in unearned premiums provision						
Written Premiums	980	32	948	1,006	13	993
Less: Net premiums earned	(990)	(32)	(958)	(1,001)	(13)	(988)
Changes in unpaid claims provision and adjustment expenses						
Incurred claims	652	33	619	619	14	605
Less: Claims paid	(581)	(39)	(542)	(518)	3	(521)
Balances, end of the year	$ 1,415	$ 21	$ 1,394	$ 1,354	$ 27	$ 1,327

The net increase in Insurance claims and policy benefit liabilities over the prior year consists of the net increase in life and health, reinsurance and property and casualty liabilities attributable to business growth, partially offset by the decrease due to market movements on assets backing life and health insurance liabilities. During the year, we reviewed all key actuarial methods and assumptions which are used in determining the policy benefit liabilities. This review resulted in a net increase in life and health insurance liabilities of $108 million which includes: (i) an increase of $160 million as a result of proposed legislation in Canada impacting policyholders' tax treatment of certain individual life insurance policies; (ii) a reduction of $29 million for assumption updates due to interest rate and market conditions; and (iii) a decrease of $23 million largely relating to mortality, morbidity, maintenance and expense assumption changes. The increase in our liability due to the change in legislation discussed above is largely dependent upon transition decisions of our policyholders. The change to the liability due to this transition may differ from actual results. A 10% reduction in the transition assumption used to determine the charge is estimated to result in a further increase to policy benefit liabilities of $34 million.

Sensitivity analysis

The following table presents the sensitivity of the level of insurance policyholder liabilities disclosed in this note to reasonably possible changes in the actuarial assumptions used to calculate them. The percentage change in variable is applied to a range of existing actuarial modelling assumptions to derive the possible impact on net profit after tax. The disclosure is not intended to explain the impact of a percentage change in the insurance assets and liabilities disclosed above. The analyses are performed where a single assumption is changed while holding other assumptions constant, which is unlikely to occur in practice.

Sensitivity

		Net income after-tax impact for year ended	
(Millions of Canadian dollars, except for percentage amounts)	Change in variable	October 31 2013	October 31 2012
Increase in market interest rates (1)	1%	$ 27	$ 8
Decrease in market interest rates (1)	1	(35)	(17)
Increase in equity market values	10	8	17
Decrease in equity market values	10	(2)	(17)
Increase in maintenance expenses	5	(30)	(31)
Life Insurance			
Adverse change in annuitant mortality rates	2	(53)	(49)
Adverse change in assurance mortality rates	2	(46)	(45)
Adverse change in morbidity rates	5	(191)	(198)
Adverse change in lapse	10	(170)	(180)
Non-life Insurance			
Increase in expected loss ratio	5	(11)	(12)

(1) Sensitivities for market interest rates have been calculated by increasing or decreasing 100 basis points at all points on the yield curve, with changes persisting for one year, along with a corresponding impact of 15 basis points on the ultimate reinvestment rate.

Note 16 Segregated funds

We offer certain individual variable insurance contracts that allow policyholders to invest in segregated funds. The investment returns on these funds are passed directly to the policyholders. Amounts invested are at the policyholders' risk, except where the policyholders have selected options providing maturity and death benefit guarantees. A liability for the guarantees is recorded in Insurance claims and policy benefit liabilities.

Segregated funds net assets are recorded at fair value. All of our segregated funds net assets are categorized as Level 1 in the fair value hierarchy. The fair value of the segregated funds liabilities is equal to the fair value of the segregated funds net assets. Segregated funds net assets and segregated funds liabilities are presented on separate lines on the Consolidated Balance Sheets. The following tables present the composition of net assets and the change in net assets for the year.

Note 16 Segregated Funds (continued)

Segregated funds net assets

(Millions of Canadian dollars)	As at October 31 2013	As at October 31 2012
Cash	$ 6	$ 5
Investment in mutual funds	509	379
Other liabilities, net	(2)	(1)
	$ 513	$ 383

Change in net assets

(Millions of Canadian dollars)	For the year ended October 31 2013	For the year ended October 31 2012
Net assets, beginning of year	$ 383	$ 320
Additions (deductions):		
Deposits from policyholders	188	128
Net realized and unrealized gains (losses)	45	16
Interest and dividend	13	9
Payment to policyholders	(105)	(81)
Management administrative fees	(11)	(9)
Net assets, end of year	$ 513	$ 383

Note 17 Pension and other post-employment benefits

We sponsor a number of programs, which provide pension and post-employment benefits to eligible employees.

Our defined benefit pension plans provide benefits based on years of service, contributions and average earnings at retirement. The majority of the plans' beneficiaries are located in Canada, the United States and the United Kingdom. We measure our benefit obligations and pension assets as at October 31 each year. All plans are valued using the projected unit-credit method. The actual return on plan assets for the year ended October 31, 2013 was $996 million (October 31, 2012 – $665 million).

We fund our registered defined benefit pension plans in accordance with actuarially determined amounts required to satisfy employee benefit obligations under current pension regulations. For our principal pension plan, the most recent funding actuarial valuation was completed on January 1, 2013, and the next valuation will be completed on January 1, 2014.

Our primary other post-employment benefit plans provide health, dental, disability and life insurance coverage and cover a number of current and retired employees who are mainly located in Canada and the United States. The majority of these plans are unfunded.

For 2013, total company contributions to our pension plans (defined benefit and defined contribution plans) and other post-employment plans were $389 million and $55 million (2012 – $952 million and $55 million), respectively. For 2014, total contributions to pension plans and other post-employment benefit plans are expected to be approximately $449 million and $68 million, respectively.

The following table presents financial information related to all of our material pension and other post-employment plans worldwide, including executive retirement arrangements.

	As at or for the year ended			
	October 31, 2013		October 31, 2012	
(Millions of Canadian dollars)	Defined benefit pension plans (1)	Other post-employment plans	Defined benefit pension plans (1)	Other post-employment plans
Change in fair value of plan assets				
Opening fair value of plan assets	$ 9,348	$ 1	$ 8,092	$ 1
Expected return on plan assets	569	–	517	–
Actuarial gain (loss)	427	–	148	–
Company contributions	272	55	861	55
Plan participant contributions	52	12	46	10
Benefits paid	(430)	(65)	(406)	(65)
Acquisition (2)	–	–	88	–
Change in foreign currency exchange rate	33	–	2	–
Other	(5)	–	–	–
Closing fair value of plan assets	$ 10,266	$ 3	$ 9,348	$ 1
Change in benefit obligation				
Opening benefit obligation	$ 9,857	$ 1,651	$ 8,337	$ 1,461
Current service cost	300	28	222	25
Interest cost	437	73	444	78
Plan participant contributions	52	12	46	10
Actuarial (gain) loss	166	(9)	1,165	126
Benefits paid	(430)	(65)	(406)	(65)
Acquisition (2)	–	–	99	23
Disposal (3)	–	–	(52)	–
Prior service cost	(1)	–	–	(1)
Curtailment	(1)	(3)	–	(4)
Change in foreign currency exchange rate	38	4	2	–
Other	(5)	–	–	(2)
Closing benefit obligation	$ 10,413	$ 1,691	$ 9,857	$ 1,651
Unfunded obligation	$ 27	$ 1,553	$ 29	$ 1,503
Wholly or partly funded obligation	10,386	138	9,828	148
Total benefit obligation	$ 10,413	$ 1,691	$ 9,857	$ 1,651
Reconciliation of funded status				
Net (deficit) surplus	$ (147)	$ (1,688)	$ (509)	$ (1,650)
Unrecognized net actuarial loss (gain)	1,033	127	1,345	134
Net amount recognized	$ 886	$ (1,561)	$ 836	$ (1,516)
Amounts recognized in our Consolidated Balance Sheets				
Prepaid pension benefit cost	$ 1,084	$ –	$ 1,049	$ –
Accrued pension and other post-employment benefit expense	(198)	(1,561)	(213)	(1,516)
Net amount recognized	$ 886	$ (1,561)	$ 836	$ (1,516)

(1) For pension plans with funding deficits, the benefit obligations and fair value of plan assets as at October 31, 2013 were $8,996 million and $8,688 million, respectively (October 31, 2012 – $8,573 million and $7,935 million, respectively).
(2) Acquisition for 2012 reflects the additional amounts relating to the acquisition of the remaining 50% interest in our previous joint venture RBC Dexia.
(3) Disposal for 2012 is related to the transfer of our U.S. non-qualified pension and other post-employment plans obligations to PNC on the sale of our U.S. regional retail banking operations. See Note 11.

The following table presents the history of the funded status of our material pension and post-employment benefits plans and the history of experience gains (losses) on our benefit obligation and plan assets:

	Defined benefit pension plans			Other post-employment plans		
	As at or for the year ended (1)					
(Millions of Canadian dollars)	October 31 2013	October 31 2012	October 31 2011	October 31 2013	October 31 2012	October 31 2011
Defined benefit obligation	$ 10,413	$ 9,857	$ 8,337	$ 1,691	$ 1,651	$ 1,461
Fair value of plan assets	10,266	9,348	8,092	3	1	1
(Deficit) Surplus	$ (147)	$ (509)	$ (245)	$ (1,688)	$ (1,650)	$ (1,460)
Experience (gain) loss adjustments on defined benefit obligation	$ 48	$ 7	$ 43	$ 4	$ –	$ 50
Experience gain (loss) adjustment on assets	427	148	(258)	–	–	40

(1) Historical data will be built up over time to give a five year history.

Pension and other post-employment benefit expense
The following table presents the composition of our pension and other post-employment benefit expense.

	Pension plans			Other post-employment plans		
	For the year ended					
(Millions of Canadian dollars)	**October 31 2013**	October 31 2012	October 31 2011	**October 31 2013**	October 31 2012	October 31 2011
Service cost	**$ 300**	$ 222	$ 203	**$ 28**	$ 25	$ 23
Interest cost	**437**	444	425	**73**	78	75
Expected return on plan assets	**(569)**	(517)	(498)	**–**	–	(1)
Recognition of past service cost	**–**	1	(1)	**–**	–	–
Amortization of net (gain) loss	**51**	10	–	**(3)**	2	(1)
Curtailment (gain) loss	**(1)**	–	–	**(3)**	(5)	(1)
Defined benefit pension expense	**$ 218**	$ 160	$ 129	**$ 95**	$ 100	$ 95
Defined contribution pension expense	**117**	91	87	**–**	–	–
Total benefit expense recognized	**$ 335**	$ 251	$ 216	**$ 95**	$ 100	$ 95

Investment policy and strategies
Defined benefit pension plan assets are invested prudently in order to meet our longer term pension obligations at a reasonable cost. The asset mix policy was developed within an asset/liability framework. Factors taken into consideration in developing our asset allocation include but are not limited to the following:
(i) the nature of the underlying benefit obligations, including the duration and term profile of the liabilities;
(ii) the member demographics, including normal retirements, terminations, and deaths;
(iii) the financial position of the pension plans;
(iv) the diversification benefits obtained by the inclusion of multiple asset classes; and
(v) expected asset returns, including assets and liability volatility and correlations.

To implement our asset allocation policy, we may invest in equities, fixed income securities, alternative investments and derivative instruments. Our holdings in certain investments, including common shares, emerging market equities, fixed income securities rated lower than BBB and residential and commercial mortgages, cannot exceed a defined percentage of the market value of our defined benefit pension plans assets. We may use derivative instruments as either a synthetic investment to more efficiently replicate the performance of an underlying security, or as a hedge against financial risks associated with the underlying portfolio. To manage our credit risk exposure, counterparties of our derivative instruments are required to meet minimum credit ratings and enter into collateral agreements, and counterparty exposures are monitored and reported to management on an ongoing basis.

Composition of defined benefit pension plan assets
The defined benefit pension plan assets are primarily composed of equity and fixed income securities. As at October 31, 2013, the assets include 1 million (October 31, 2012 – 1 million) of our common shares having a fair value of $84 million (October 31, 2012 – $57 million) and $13 million (October 31, 2012 – $6 million) of our debt securities. For the year ended October 31, 2013, dividends received on our common shares held in the plan assets were $3 million (October 31, 2012 – $2 million). The following table presents the allocation of the plan assets by securities category, and the allocation is determined based on the fair value of the total plan assets:

Asset allocation of defined benefit pension plans

	As at	
	October 31 2013	October 31 2012
Equity securities	**42%**	39%
Debt securities	**41**	46
Other	**17**	15
	100%	100%

Significant assumptions
Our methodologies to determine significant assumptions used in calculating the defined benefit pension and other post-employment expense are as follows:

Overall expected long-term rate of return on assets
The assumed expected rate of return on assets is determined by considering long-term returns on fixed income securities combined with an estimated equity risk premium. The expected long-term return for each asset class is then weighted based on the target asset allocation to develop the expected long-term rate of return on assets assumption for the portfolio.

Discount rate
For the Canadian pension and other post-employment plans, all future expected benefit payments at each measurement date are discounted at spot rates from a derived Aa corporate bond yield curve. The derived curve is based on observed rates for Aa corporate bonds with maturities less than six years and a projected Aa corporate curve based on spreads between observed Aa corporate bonds and Aa provincial bonds for periods greater than six years. For the U.S. pension and other post-employment plans, all future expected benefit payments at each measurement date are discounted at spot rates from an Aa corporate bond yield curve. Spot rates beyond 30 years are set to equal the 30-year spot rate. The discount rate is the equivalent single rate that produces the same discounted value as that determined using the entire discount curve. This methodology does not rely on assumptions regarding reinvestment returns.

Summary of significant assumptions

	As at					
	Defined benefit pension plans			Other post-employment plans		
	October 31 2013	October 31 2012	October 31 2011	**October 31 2013**	October 31 2012	October 31 2011
Weighted average assumptions to determine benefit obligation						
Discount rate	**4.60%**	4.40%	5.30%	**4.70%**	4.50%	5.50%
Rate of increase in future compensation	**3.30%**	3.30%	3.30%	**n.a.**	n.a.	n.a.
Healthcare cost trend rates						
– Medical (1)	**n.a.**	n.a.	n.a.	**3.80%**	3.90%	4.50%
– Dental	**n.a.**	n.a.	n.a.	**4.00%**	4.00%	4.00%
Weighted average assumptions to determine benefit expense						
Discount rate	**4.40%**	5.30%	5.40%	**4.50%**	5.50%	5.50%
Assumed long-term rate of return on plan assets	**6.25%**	6.25%	6.50%	**0.00%**	0.00%	6.50%
Rate of increase in future compensation	**3.30%**	3.30%	3.30%	**n.a.**	n.a.	n.a.
Healthcare cost trend rates						
– Medical	**n.a.**	n.a.	n.a.	**3.90%**	4.50%	4.50%
– Dental	**n.a.**	n.a.	n.a.	**4.00%**	4.00%	4.00%

(1) For our other post-employment plans, the assumed medical healthcare cost trend rates used to measure the expected cost of benefits were 3.8% for the next year decreasing to an ultimate rate of 2.6% in 2029.

n.a. not applicable

Mortality assumptions

Mortality assumptions are significant in measuring our obligations under the defined benefit plans. These assumptions have been set based on country specific statistics. Future longevity improvements have been considered and included where appropriate. The following table summarizes the mortality assumptions used for major plans.

	October 31, 2013				October 31, 2012			
	Life expectancy at 65 for a member currently at				Life expectancy at 65 for a member currently at			
	Age 65		**Age 45**		Age 65		Age 45	
(In years)	**Male**	**Female**	**Male**	**Female**	Male	Female	Male	Female
Country								
Canada	**22.4**	**23.2**	**23.5**	**24.1**	20.3	22.1	21.8	22.9
United States	**20.5**	**22.8**	**21.0**	**23.3**	20.3	22.1	21.8	22.9
United Kingdom	**23.8**	**25.1**	**26.0**	**27.5**	23.6	25.0	25.9	27.3

Sensitivity analysis

Assumptions adopted can have a significant effect on the obligations and expense for defined benefit pension and post-employment benefit plans. The following table presents the sensitivity analysis of key assumptions for 2013:

(Millions of Canadian dollars)	**Increase (decrease) in obligation**	**Increase (decrease) in expense**
Defined benefit pension plans		
Impact of .25% decrease in discount rate	**$ 354**	**$ 46**
Impact of .25% increase in rate of increase in future compensation	**28**	**6**
Impact of .25% decrease in the long-term rate of return on plan assets	**–**	**24**
Other post-employment plans		
Impact of .25% decrease in discount rate	**$ 60**	**$ –**
Impact of .25% increase in rate of increase in future compensation	**4**	**–**
Impact of 1% increase in health care cost trend rate	**123**	**7**
Impact of 1% decrease in health care cost trend rate	**(102)**	**(6)**

Note 18 Other liabilities

(Millions of Canadian dollars)	As at October 31 2013	October 31 2012
Cash collateral	$ 8,855	$ 10,843
Accounts payable and accrued expenses	6,996	6,214
Payroll and related compensation	5,911	5,002
Negotiable instruments	2,172	2,282
Payable to brokers, dealers and clients	1,821	1,750
Accrued interest payable	1,795	1,878
Deferred income	1,783	1,580
Taxes payable	1,482	1,312
Dividends payable	1,027	932
Precious metals certificates	677	967
Insurance related liabilities	566	559
Provisions	271	235
Deferred income taxes	195	176
Other	5,562	7,641
	$ 39,113	$ 41,371

Note 19 Subordinated debentures

The debentures are unsecured obligations and are subordinated in right of payment to the claims of depositors and certain other creditors. All redemptions, cancellations and exchanges of subordinated debentures are subject to the consent and approval of OSFI. All subordinated debentures are redeemable at our option. The amounts presented below include the impact of fair value hedging for interest rate risk and are net of our holdings in these securities which have not been cancelled and are still outstanding.

(Millions of Canadian dollars, except percentage and foreign currency) Maturity	Earliest par value redemption date	Interest rate	Denominated in foreign currency (millions)	As at October 31 2013	October 31 2012
November 14, 2014		10.00%		$ 217	$ 233
March 11, 2018	March 11, 2013 (1)	4.84% (2)		–	1,005
June 6, 2018	June 6, 2013 (3)	5.00% (4)		–	1,004
November 4, 2018	November 4, 2013 (5)	5.45% (6)		1,000	1,033
June 15, 2020	June 15, 2015	4.35% (7)		1,508	1,556
November 2, 2020	November 2, 2015	3.18% (8)		1,488	1,524
June 8, 2023		9.30%		110	110
December 6, 2024	December 6, 2019	2.99% (9)		1,947	–
November 1, 2027	November 1, 2022	4.75%	TT$300	49	–
June 26, 2037	June 26, 2017	2.86%	JPY 10,000	109	122
October 1, 2083	Any interest payment date	(10)		224	224
June 29, 2085	Any interest payment date	(11)	US$174	181	173
June 18, 2103	June 18, 2009 (12)	5.95% (13)		615	636
				$ 7,448	$ 7,620
Deferred financing costs				(5)	(5)
				$ 7,443	$ 7,615

The terms and conditions of the debentures are as follows:

(1) All $1 billion outstanding subordinated debentures were redeemed on March 13, 2013 for 100% of their principal amount plus accrued interest to the redemption date.
(2) Interest at stated interest rate until earliest par value redemption date, and thereafter at a rate of 2.00% above the 90-day Bankers' Acceptance rate.
(3) All $1 billion outstanding subordinated debentures were redeemed on June 6, 2013 for 100% of their principal amount plus accrued interest to the redemption date.
(4) Interest at stated interest rate until earliest par value redemption date, and thereafter at a rate 2.15% above the 90-day Bankers' Acceptance rate.
(5) All $1 billion outstanding subordinated debentures were redeemed on November 4, 2013 for 100% of their principal amount plus accrued interest to the redemption date.
(6) Interest at stated interest rate until earliest par value redemption date, and thereafter at a rate of 1.00% above the 90-day Bankers' Acceptance rate.
(7) Interest at stated interest rate until earliest par value redemption date, and thereafter at a rate of 1.41% above the 90-day Bankers' Acceptance rate.
(8) Interest at stated interest rate until earliest par value redemption date, and thereafter at a rate of 1.21% above the 90-day Bankers' Acceptance rate.
(9) Interest at stated interest rate until earliest par value redemption date, and thereafter at a rate of 1.10% above the 90-day Bankers' Acceptance rate.
(10) Interest at a rate of 40 basis points above the 30-day Bankers' Acceptance rate.
(11) Interest at a rate of 25 basis points above the U.S. dollar 3-month LIMEAN. In the event of a reduction of the annual dividend we declare on our common shares, the interest payable on the debentures is reduced pro rata to the dividend reduction and the interest reduction is payable with the proceeds from the sale of newly issued common shares.
(12) Redeemable on June 18, 2009, or every fifth anniversary of such date at par value. Redeemable on any other date at the greater of par and the yield on a non-callable Government of Canada bond plus 21 basis points if redeemed prior to June 18, 2014, or 43 basis points if redeemed at any time after June 18, 2014.
(13) Interest at a rate of 5.95% until earliest par value redemption date and every 5 years thereafter at a rate of 1.72% above the 5-year Government of Canada yield.

Maturity schedule

The aggregate maturities of subordinated debentures, based on the maturity dates under the terms of issue, are as follows:

(Millions of Canadian dollars)	October 31 2013
Within 1 year	$ –
1 to 5 years	217
5 to 10 years	4,105
Thereafter	3,126
	$ 7,448

Note 20 Trust capital securities

We issued innovative capital instruments, RBC Trust Capital Securities (RBC TruCS) and RBC Trust Subordinated Notes (RBC TSNs), through three SPEs: RBC Capital Trust (Trust), RBC Capital Trust II (Trust II) and RBC Subordinated Notes Trust (Trust III). Trust III was wound up in 2013 after the redemption of the RBC TSNs.

Trust has issued non-voting RBC Trust Capital Securities Series 2010, 2011, 2015 and 2008-1 (RBC TruCS 2010, 2011, 2015 and 2008-1). RBC TruCS 2010 and 2011 were redeemed in 2010 and 2011, respectively.

The holders of RBC TruCS 2015 and 2008-1 do not have any conversion rights or any other redemption rights. As a result, upon consolidation of the Trust, RBC TruCS 2015 and 2008-1 are classified as Non-controlling interests. Holders of RBC TruCS 2015 and 2008-1 are eligible to receive semi-annual non-cumulative fixed cash distributions until December 31, 2015 and June 30, 2018, respectively, and a floating-rate cash distribution thereafter.

Trust II, an open-end trust, has issued non-voting RBC TruCS 2013, the proceeds of which were used to purchase a senior deposit note from us. Upon consolidation of Trust II, the senior deposit note and all of our financial interests in the SPE are eliminated, and RBC TruCS 2013 is classified as Trust capital securities. Holders of RBC TruCS 2013 are eligible to receive semi-annual non-cumulative fixed cash distributions. On October 25, 2013, we announced that Trust II will redeem all of its issued and outstanding $900 million principal amount RBC TruCS 2013 for cash at a redemption price of $1,000 per unit on December 31, 2013.

No cash distributions will be payable by the trusts on RBC TruCS if we fail to declare regular dividends (i) on our preferred shares, or (ii) on our common shares if no preferred shares are then outstanding. In this case, the net distributable funds of the trusts will be distributed to us as holders of residual interest in the trusts. Should the trusts fail to pay the semi-annual distributions in full, we will not declare dividends of any kind on any of our preferred or common shares for a specified period of time.

The table below presents the significant terms and conditions of RBC TruCS.

Significant terms and conditions of RBC Trust Capital Securities

(Millions of Canadian dollars, except for percentage amounts)	Issuance date	Distribution dates	Annual yield	Earliest redemption date At the option of the issuer	Conversion date At the option of the holder	As at October 31 2013 Principal amount	As at October 31 2012 Principal amount
RBC Capital Trust (1),(2),(3),(4),(5),(6),(7)							
Included in Non-controlling interests							
1,200,000 Trust Capital Securities - Series 2015	October 28, 2005	June 30, December 31	4.87%(8)	December 31, 2010	n.a.	$ 1,200	$ 1,200
500,000 Trust Capital Securities - Series 2008-1	April 28, 2008	June 30, December 31	6.82%(8)	June 30, 2013	n.a.	500	500
RBC Capital Trust II (2),(3),(4),(6),(7),(9)							
Included in Trust capital securities							
900,000 Trust Capital Securities - Series 2013	July 23, 2003	June 30, December 31	5.812%	December 31, 2008	Any time	$ 900	$ 900

The significant terms and conditions of the RBC TruCS are as follows:

(1) Subject to the approval of OSFI, Trust may, on the Earliest redemption date specified above, and on any Distribution date thereafter, redeem in whole (but not in part) the RBC TruCS 2008-1 and 2015, without the consent of the holders.

(2) Subject to the approval of OSFI, upon occurrence of a special event as defined, prior to the Earliest redemption date specified above, the trusts may redeem in whole (but not in part) the RBC TruCS 2008-1, 2013 or 2015 without the consent of the holders.

(3) Issuer Redemption Price: The RBC TruCS 2008-1 may be redeemed for cash equivalent to (i) the Early Redemption Price if the redemption occurs prior to June 30, 2018 or (ii) the Redemption Price if the redemption occurs on or after June 30, 2018. The RBC TruCS 2013 and 2015 may be redeemed for cash equivalent to (i) the Early Redemption Price if the redemption occurs prior to December 31, 2013 and 2015, respectively, or (ii) the Redemption Price if the redemption occurs on or after December 31, 2013 and 2015, respectively. Redemption Price refers to an amount equal to $1,000 plus the unpaid distributions to the Redemption date. Early Redemption Price refers to an amount equal to the greater of (i) the Redemption Price and (ii) the price calculated to provide an annual yield, equal to the yield on a Government of Canada bond issued on the Redemption date with a maturity date of June 30, 2018, plus 77 basis points, for RBC TruCS 2008-1, and a maturity date of December 31, 2013 and 2015, plus 23 basis points and 19.5 basis points, for RBC TruCS 2013 and 2015, respectively.

(4) Automatic Exchange Event: Without the consent of the holders, each RBC TruCS 2008-1, 2013 and 2015 will be exchanged automatically for 40 of our non-cumulative redeemable First Preferred Shares Series AI, T and Z, respectively, upon occurrence of any one of the following events: (i) proceedings are commenced for our winding-up; (ii) OSFI takes control of us; (iii) we have Tier 1 capital ratio of less than 5% or Total capital ratio of less than 8%; or (iv) OSFI has directed us to increase our capital or provide additional liquidity and we elect such automatic exchange or we fail to comply with such direction. The First Preferred Shares Series AI, T and Z pay semi-annual non-cumulative cash dividends and Series T is convertible at the option of the holder into a variable number of common shares.

(5) From time to time, we purchase some of the innovative capital instruments and hold them temporarily. As at October 31, 2012, we held $20 million of RBC TruCS 2015 as treasury holdings which were deducted from regulatory capital.

(6) Regulatory capital: In accordance with OSFI Capital Adequacy Requirements, effective January 2013, RBC TruCS no longer qualify as additional tier 1 capital due to their lack of non-viability contingent capital terms and conditions. As such, outstanding RBC TruCS are being phased out of regulatory capital in accordance with OSFI guidelines. As at October 31, 2012, $2,580 million represents Tier 1 Capital, none for Tier 2B capital, and $20 million of our treasury holdings of innovative capital was deducted for regulatory capital purposes.

(7) Holder Exchange Right: Holders of RBC TruCS 2013 may, at any time, exchange all or part of their holdings for 40 non-cumulative redeemable First Preferred Shares Series U, for each RBC TruCS 2013 held. The First Preferred Shares Series U pay semi-annual non-cumulative cash dividends as and when declared by our Board of Directors and are convertible at the option of the holder into a variable number of common shares. Holders of RBC TruCS 2008-1 and RBC TruCS 2015 do not have similar exchange rights.

(8) The non-cumulative cash distribution on the RBC TruCS 2015 will be 4.87% paid semi-annually until December 31, 2015, and at one half of the sum of 180-day Bankers' Acceptance rate plus 1.5%, thereafter. The non-cumulative cash distribution on the RBC TruCS 2008-1 will be 6.821% paid semi-annually until June 30, 2018, and at one half of the sum of 180-day Bankers' Acceptance rate plus 3.5% thereafter.

(9) Subject to the approval of OSFI, Trust II may, in whole or in part, on the Earliest redemption date specified above, and on any distribution date thereafter, redeem any outstanding RBC TruCS 2013 without the consent of the holders.

n.a. not applicable

Note 21 Equity

Share capital

Authorized share capital

Preferred – An unlimited number of First Preferred Shares and Second Preferred Shares without nominal or par value, issuable in series; the aggregate consideration for which all the First Preferred Shares and all the Second Preferred Shares that may be issued may not exceed $20 billion and $5 billion, respectively.

Common – An unlimited number of shares without nominal or par value may be issued.

Outstanding share capital

The following table details our common and preferred shares outstanding.

	As at					
	October 31, 2013			October 31, 2012		
(Millions of Canadian dollars, except the number of shares and dividends per share)	Number of shares (thousands)	Amount	Dividends declared per share	Number of shares (thousands)	Amount	Dividends declared per share
Preferred shares						
First preferred (1)						
Non-cumulative Series W	12,000	$ 300	$ 1.23	12,000	$ 300	$ 1.23
Non-cumulative Series AA	12,000	300	1.11	12,000	300	1.11
Non-cumulative Series AB	12,000	300	1.18	12,000	300	1.18
Non-cumulative Series AC	8,000	200	1.15	8,000	200	1.15
Non-cumulative Series AD	10,000	250	1.13	10,000	250	1.13
Non-cumulative Series AE	10,000	250	1.13	10,000	250	1.13
Non-cumulative Series AF	8,000	200	1.11	8,000	200	1.11
Non-cumulative Series AG	10,000	250	1.13	10,000	250	1.13
Non-cumulative Series AH (2)	–	–	0.86	8,500	213	1.41
Non-cumulative, 5-Year Rate Reset Series AJ	16,000	400	1.25	16,000	400	1.25
Non-cumulative, 5-Year Rate Reset Series AL	12,000	300	1.40	12,000	300	1.40
Non-cumulative, 5-Year Rate Reset Series AN	9,000	225	1.56	9,000	225	1.56
Non-cumulative, 5-Year Rate Reset Series AP	11,000	275	1.56	11,000	275	1.56
Non-cumulative, 5-Year Rate Reset Series AR	14,000	350	1.56	14,000	350	1.56
Non-cumulative, 5-Year Rate Reset Series AT	11,000	275	1.56	11,000	275	1.56
Non-cumulative, 5-Year Rate Reset Series AV	16,000	400	1.56	16,000	400	1.56
Non-cumulative, 5-Year Rate Reset Series AX	13,000	325	1.53	13,000	325	1.53
		$ 4,600			$ 4,813	
Common shares						
Balance at beginning of year	1,445,303	$ 14,323		1,438,376	$ 14,010	
Issued under dividend reinvestment plan (3)	–	–		3,752	187	
Issued under the stock option plan (4)	2,528	121		3,175	126	
Purchased for cancellation (5)	(6,775)	(67)		–	–	
Balance at end of year	1,441,056	$ 14,377	$ 2.53	1,445,303	$ 14,323	$ 2.28
Treasury shares – Preferred shares						
Balance at beginning of year	42	$ 1		(6)	$ –	
Sales	4,892	127		3,706	98	
Purchases	(4,887)	(127)		(3,658)	(97)	
Balance at end of year	47	$ 1		42	$ 1	
Treasury shares – Common shares						
Balance at beginning of year	543	$ 30		146	$ 8	
Sales	71,361	4,453		99,008	5,186	
Purchases	(71,238)	(4,442)		(98,611)	(5,164)	
Balance at end of year	666	$ 41		543	$ 30	

(1) First Preferred Shares Series were issued at $25 per share.

(2) On July 2, 2013, we redeemed all 8.5 million of issued and outstanding Non-Cumulative First Preferred Shares Series AH for cash at a redemption price of $26 per share plus declared dividends. This amount is comprised of the $25 per share original issue price plus a $1 per share redemption premium.

(3) During 2013, the requirements of our dividend reinvestment plan (DRIP) were satisfied through open market share purchases. During 2012, the requirements of our DRIP were satisfied through open market share purchases and treasury share issuances.

(4) Includes fair value adjustments to stock options of $14 million (2012 – $17 million).

(5) During the year end October 31, 2013, we purchased for cancellation 7 million common shares at an average cost of $60.34 per share and a book value of $9.94 per share.

	Dividend per share (1)	Initial Period Annual Yield	Dividend Reset Premium (2)	Earliest redemption date (3)	Issue Date	Redemption price (3), (4)	Conversion date (6) At the option of the bank (3), (5)	At the option of the holder
Preferred shares								
First preferred								
Non-cumulative Series W	$ .306250	4.90%		February 24, 2010	January 31, 2005	$ 25.25	February 24, 2010	Not convertible
Non-cumulative Series AA	.278125	4.45%		May 24, 2011	April 4, 2006	25.50	Not convertible	Not convertible
Non-cumulative Series AB	.293750	4.70%		August 24, 2011	July 20, 2006	25.50	Not convertible	Not convertible
Non-cumulative Series AC	.287500	4.60%		November 24, 2011	November 1, 2006	25.50	Not convertible	Not convertible
Non-cumulative Series AD	.281250	4.50%		February 24, 2012	December 13, 2006	25.75	Not convertible	Not convertible
Non-cumulative Series AE	.281250	4.50%		February 24, 2012	January 19, 2007	25.75	Not convertible	Not convertible
Non-cumulative Series AF	.278125	4.45%		May 24, 2012	March 14, 2007	25.75	Not convertible	Not convertible
Non-cumulative Series AG	.281250	4.50%		May 24, 2012	April 26, 2007	25.75	Not convertible	Not convertible
Non-cumulative, 5-Year Rate Reset Series AJ	.312500	5.00%	1.93%	February 24, 2014	September 16, 2008	25.00	Not convertible	Not convertible
Non-cumulative, 5-Year Rate Reset Series AL	.350000	5.60%	2.67%	February 24, 2014	November 3, 2008	25.00	Not convertible	Not convertible
Non-cumulative, 5-Year Rate Reset Series AN	.390625	6.25%	3.50%	February 24, 2014	December 8, 2008	25.00	Not convertible	Not convertible
Non-cumulative, 5-Year Rate Reset Series AP	.390625	6.25%	4.19%	February 24, 2014	January 14, 2009	25.00	Not convertible	Not convertible
Non-cumulative, 5-Year Rate Reset Series AR	.390625	6.25%	4.50%	February 24, 2014	January 29, 2009	25.00	Not convertible	Not convertible
Non-cumulative, 5-Year Rate Reset Series AT	.390625	6.25%	4.06%	August 24, 2014	March 9, 2009	25.00	Not convertible	Not convertible
Non-cumulative, 5-Year Rate Reset Series AV	.390625	6.25%	4.42%	August 24, 2014	April 1, 2009	25.00	Not convertible	Not convertible
Non-cumulative, 5-Year Rate Reset Series AX	.381250	6.10%	4.13%	November 24, 2014	April 29, 2009	25.00	Not convertible	Not convertible

(1) Non-cumulative preferential dividends of each Series are payable quarterly, as and when declared by the Board of Directors, on or about the 24th day of February, May, August and November.

(2) The dividend rate will reset on the earliest redemption date and every fifth year thereafter at a rate equal to the 5-year Government of Canada bond yield plus the premium indicated. The holders have the option to convert their shares into non-cumulative floating rate First Preferred Shares subject to certain conditions on the earliest redemption date and every fifth year thereafter at a rate equal to the three-month Government of Canada Treasury Bill rate plus the premium indicated.

(3) The redemption price represents the price as at October 31, 2013 or the contractual redemption price, whichever is applicable. Subject to the consent of OSFI and the requirements of the *Bank Act* (Canada), we may, on or after the dates specified above, redeem First Preferred Shares. In the case of Series W, AA, AB, AC, AD, AE, AF and AG, these may be redeemed for cash at a price per share of $26 if redeemed during the 12 months commencing on the earliest redemption date and decreasing by $0.25 each 12-month period thereafter to a price per share of $25 if redeemed four years from the earliest redemption date or thereafter. In the case of Series AJ, AL, AN, AP, AR, AT, AV and AX, these may be redeemed for cash at a price per share of $25 if redeemed on the earliest redemption date and on the same date every fifth year thereafter.

(4) Subject to the consent of OSFI and the requirements of the *Bank Act* (Canada), we may purchase the First Preferred Shares of each Series for cancellation at the lowest price or prices at which, in the opinion of the Board of Directors, such shares are obtainable.

(5) Subject to the approval of the Toronto Stock Exchange, we may, on or after the dates specified above, convert First Preferred Shares Series W into our common shares. First Preferred Shares may be converted into that number of common shares determined by dividing the then-applicable redemption price by the greater of $2.50 and 95% of the weighted average trading price of common shares at such time.

(6) The conversion date refers to the date of conversion to common shares.

Restrictions on the payment of dividends

We are prohibited by the *Bank Act* (Canada) from declaring any dividends on our preferred or common shares when we are, or would be placed as a result of the declaration, in contravention of the capital adequacy and liquidity regulations or any regulatory directives issued under the Act. We may not pay dividends on our common shares at any time unless all dividends to which preferred shareholders are then entitled have been declared and paid or set apart for payment. We have agreed that if Trust or Trust II fail to pay any required distribution on the trust capital securities in full, we will not declare dividends of any kind on any of our preferred or common shares. Refer to Note 20. Currently, these limitations do not restrict the payment of dividends on our preferred or common shares.

We have also agreed that if, on any day we report financial results for a quarter, (i) we report a cumulative consolidated net loss for the immediately preceding four quarters; and (ii) during the immediately preceding quarter we fail to declare any cash dividends on all of our outstanding preferred and common shares, we may defer payments of interest on the Series 2014-1 Reset Subordinated Notes (matures on June 18, 2103). During any period while interest is being deferred, (i) interest will accrue on these notes but will not compound; (ii) we may not declare or pay dividends (except by way of stock dividend) on, or redeem or repurchase, any of our preferred or common shares; and (iii) we may not make any payment of interest, principal or premium on any debt securities or indebtedness for borrowed money issued or incurred by us that rank subordinate to these notes.

Dividend reinvestment plan

Our DRIP provides registered common shareholders with a means to receive additional common shares rather than cash dividends. The plan is only open to registered shareholders residing in Canada or the United States. The requirements of our DRIP are satisfied through either open market share purchases or shares issued from treasury.

Shares available for future issuances
As at October 31, 2013, 46 million common shares are available for future issue relating to our DRIP and potential exercise of stock options outstanding. In addition, we may issue up to 39 million common shares from treasury under the RBC Umbrella Savings and Securities Purchase Plan that was approved by shareholders on February 26, 2009.

Non-controlling interests

(Millions of Canadian dollars)	As at October 31 2013	As at October 31 2012
RBC Trust Capital Securities (1)		
Series 2015	$ 1,220	$ 1,200
Series 2008-1	511	511
Others	64	50
	$ 1,795	$ 1,761

(1) As at October 31, 2013, RBC TruCS Series 2015 includes $20 million of accrued interest (October 31, 2012 – $20 million), net of $nil of treasury holdings (October 31, 2012 – $20 million). Series 2008-1 includes $11 million of accrued interest (October 31, 2012 – $11 million), net of $nil of treasury holdings (October 31, 2012 – $nil).

Note 22 Share-based compensation

We offer share-based compensation to certain key employees and to our non-employee directors. We use derivatives and compensation trusts to manage our exposure to volatility in the price of our common shares under many of these plans. The share-based compensation amounts recorded in Non-interest expense – Human resources in our Consolidated Statements of Income are net of the impact of these derivatives.

Stock option plans
We have stock option plans for certain key employees. Under the plans, options are periodically granted to purchase common shares. The exercise price for each grant is determined as the higher of the volume-weighted average of the trading prices per board lot (100 shares) of our common shares on the Toronto Stock Exchange (i) on the day preceding the day of grant; and (ii) the five consecutive trading days immediately preceding the day of grant. The options vest over a four-year period for employees and are exercisable for a period not exceeding 10 years from the grant date.

The compensation expense recorded for the year ended October 31, 2013, in respect of the stock option plans was $7 million (October 31, 2012 – $7 million; October 31, 2011 – $13 million). The compensation expense related to non-vested awards was $5 million at October 31, 2013 (October 31, 2012 – $7 million; October 31, 2011 – $9 million), to be recognized over the weighted average period of 1.1 years (October 31, 2012 – 1.5 years; October 31, 2011 – 1.8 years).

Analysis of the movement in the number and weighted average exercise price of options is set out below:

A summary of our stock option activity and related information

	October 31, 2013		October 31, 2012		October 31, 2011	
(Canadian dollars per share except share amounts)	Number of options (thousands)	Weighted average exercise price	Number of options (thousands)	Weighted average exercise price	Number of options (thousands)	Weighted average exercise price
Outstanding at beginning of year	12,304	$ 48.12	14,413	$ 45.06	15,659	$ 40.90
Granted	906	58.65	1,161	48.93	1,815	52.60
Exercised (1), (2)	(2,528)	42.22	(3,174)	34.36	(2,954)	27.76
Forfeited in the year	(78)	53.27	(96)	52.37	(100)	44.04
Expired in the year	–	–	–	–	(7)	24.64
Outstanding at end of year	10,604	$ 50.39	12,304	$ 48.12	14,413	$ 45.06
Exercisable at end of year	5,711	$ 47.80	6,544	$ 45.43	8,688	$ 41.64
Available for grant	12,140		12,968		14,033	

(1) Cash received for options exercised during the year was $107 million (October 31, 2012 – $109 million; October 31, 2011 – $82 million) and the weighted average share price at the date of exercise was $63.17 (October 31, 2012 – $54.48; October 31, 2011 – $55.61).
(2) New shares were issued for all stock options exercised in 2013, 2012 and 2011. See Note 21.

Options outstanding as at October 31, 2013 by range of exercise price

	Options outstanding			Options exercisable	
(Canadian dollars per share except share amounts)	Number outstanding (thousands)	Weighted average exercise price (1)	Weighted average remaining contractual life	Number exercisable (thousands)	Weighted average exercise price (1)
$29.68 – $35.37	1,607	$ 34.75	4.59	1,607	$ 34.75
$44.13 – $48.93	1,701	47.32	6.07	571	44.13
$50.55 – $52.94	2,895	52.69	5.88	1,153	52.82
$54.99 – $58.65	4,401	55.78	5.81	2,380	55.06
	10,604	$ 50.39	5.68	5,711	$ 47.80

(1) The weighted average exercise prices have been revised to reflect the conversion of foreign currency-denominated options at the exchange rate as at our Consolidated Balance Sheet date.

The weighted average fair value of options granted during 2013 was estimated at $5.33 (2012 – $4.42; 2011 – $7.30). This was determined by applying the Black-Scholes model on the date of grant, taking into account the specific terms and conditions under which the options are granted, such as the vesting period and expected share price volatility estimated by considering both historic average share price volatility and implied volatility derived from traded options over our common shares of similar maturity to those of the employee options. The following assumptions were used to determine the fair value of options granted:

Weighted average assumptions

	For the year ended		
(Canadian dollars per share except percentages)	**October 31 2013**	October 31 2012	October 31 2011
Weighted average assumptions			
Share price at grant date	**$ 58.65**	$ 48.19	$ 52.60
Risk-free interest rate	**1.38%**	1.38%	2.72%
Expected dividend yield	**4.19%**	3.93%	3.62%
Expected share price volatility	**18%**	18%	20%
Expected life of option	**6 years**	6 years	6 years

Employee savings and share ownership plans

We offer many employees an opportunity to own our common shares through savings and share ownership plans. Under these plans, the employees can generally contribute between 1% and 10% of their annual salary or benefit base for commissioned based employees. For each contribution between 1% and 6%, we will match 50% of the employee contributions in our common shares. For the RBC Dominion Securities Savings Plan, our maximum annual contribution is $4,500 per employee. For the RBC U.K. Share Incentive Plan, our maximum annual contribution is £1,500 per employee. In 2013, we contributed $77 million (2012 – $75 million; 2011 – $72 million), under the terms of these plans, towards the purchase of our common shares. As at October 31, 2013, an aggregate of 38 million common shares were held under these plans (October 31, 2012 – 37 million common shares; October 31, 2011 – 36 million common shares).

Deferred share and other plans

We offer deferred share unit plans to executives, non-employee directors and to certain key employees. Under these plans, the executives or directors may choose to receive all or a percentage of their annual variable short-term incentive bonus or directors' fee in the form of deferred share units (DSUs). The executives or directors must elect to participate in the plan prior to the beginning of the year. DSUs earn dividend equivalents in the form of additional DSUs at the same rate as dividends on common shares. The participant is not allowed to convert the DSUs until retirement, permanent disability or termination of employment/directorship. The cash value of the DSUs is equivalent to the market value of common shares when conversion takes place.

We have a deferred bonus plan for certain key employees within Capital Markets. Under this plan, a percentage of each employee's annual incentive bonus is deferred and accumulates dividend equivalents at the same rate as dividends on common shares. The employee will receive the deferred bonus amounts within 90 days of the three following year end dates. The value of the deferred bonus paid will be equivalent to the original deferred bonus adjusted for dividends and changes in the market value of common shares at the time the bonus is paid.

We offer performance deferred share award plans to certain key employees, all of which vest at the end of three years. Upon vesting, the award is paid in cash and is based on the original number of RBC share units granted plus accumulated dividends valued using the average closing price of RBC common shares during the five days immediately preceding the vesting date. A portion of the award under certain plans can be increased or decreased up to 25%, depending on our total shareholder return compared to a defined peer group of global financial institutions. We previously offered deferred compensation to certain employees in the form of common shares that were held in trust and accumulated dividends during the three year vesting period. We held a nominal number of common shares in trust as at October 31, 2013 (October 31, 2012 – 0.3 million; October 31, 2011 – 0.7 million).

We maintain a non-qualified deferred compensation plan for key employees in the United States under an arrangement called the RBC U.S. Wealth Accumulation Plan. This plan allows eligible employees to defer a portion of their annual income and allocate the deferrals among various fund choices, which include a share unit fund that tracks the value of our common shares. Certain deferrals may also be eligible for matching contributions, all of which are allocated to the RBC share unit fund.

For other stock-based plans, the number of our common shares held under these plans was nil as at October 31, 2013 (October 31, 2012 – 0.1 million; October 31, 2011 – 0.1 million).

Our liabilities for the awards granted under the deferred share and other plans are measured at fair value, determined based on the quoted market price of our common shares. The following tables present our obligations under the deferred share and other plans, and the related compensation expenses (recoveries) recognized for the year.

Obligation under deferred share and other plans

	October 31, 2013			October 31, 2012			October 31, 2011		
	Units granted during the year		**Units outstanding at the end of the year**	Units granted during the year		Units Outstanding at the end of the year	Units granted during the year		Units outstanding at the end of the year
(Millions of Canadian dollars except units and per unit amounts)	**Number granted (thousands)**	**Weighted average fair value**	**Carrying amount**	Number granted (thousands)	Weighted average fair value	Carrying amount	Number granted (thousands)	Weighted average fair value	Carrying amount
Deferred share unit plans	**265**	**$ 60.83**	**$ 307**	302	$ 59.60	$ 229	228	$ 64.74	$ 187
Deferred bonus plan	**5,215**	**69.45**	**1,517**	8,917	56.72	1,494	7,314	49.50	1,116
Performance deferred share award plans	**2,337**	**58.62**	**393**	2,570	49.03	307	2,360	52.60	299
RBC U.S. Wealth Accumulation Plan	**374**	**62.84**	**355**	458	51.61	305	390	59.45	263
Other share-based plans	**809**	**60.47**	**76**	437	51.34	45	401	53.70	26
	9,000	**$ 65.30**	**$ 2,648**	12,684	$ 54.86	$ 2,380	10,693	$ 51.03	$ 1,891

Compensation expenses (recoveries) recognized under deferred share and other plans

(Millions of Canadian dollars)	For the year ended October 31 2013	October 31 2012	October 31 2011
Deferred share unit plans	$ 53	$ 29	$ (8)
Deferred bonus plan	284	185	(60)
Performance deferred share award plans	249	151	147
RBC U.S. Wealth Accumulation Plan	211	136	33
Other share-based plans	46	29	11
	$ 843	$ 530	$ 123

Note 23 Income and expenses from selected financial instruments

Gains and losses arising from financial instruments held at FVTPL, except for those supporting our insurance operations, are reported in Non-interest income. Related interest and dividend income are reported in Net interest income.

Net gains(losses) from financial instruments held at fair value through profit or loss (1)

(Millions of Canadian dollars)	For the year ended October 31 2013	October 31 2012 (3)	October 31 2011 (3)
Net gains (losses)			
Classified as at fair value through profit or loss (2)	$ 875	$ 1,210	$ 10
Designated as at fair value through profit or loss	(30)	(54)	599
	$ 845	$ 1,156	$ 609
By product line			
Interest rate and credit	$ 593	$ 796	$ 321
Equities	(55)	(8)	(38)
Foreign exchange and commodities	307	368	326
	$ 845	$ 1,156	$ 609

(1) The following related to our insurance operations are excluded from Non-interest income and included in Insurance premiums, investment and fee income on the Consolidated Statements of Income: Net gains(losses) from financial instruments designated as at FVTPL were $(496) million (2012 – $439 million; 2011 – $213 million).
(2) Excludes derivatives designated in a hedging relationship. See Note 8 for net gains (losses) on these derivatives.
(3) Amounts have been revised from those previously presented.

Net interest income from financial instruments (1)

(Millions of Canadian dollars)	For the year ended October 31 2013	October 31 2012	October 31 2011
Interest income			
Financial instruments held as at fair value through profit or loss	$ 3,959	$ 4,957	$ 5,250
Other categories of financial instruments (2)	17,191	15,895	15,563
	21,150	20,852	20,813
Interest expense			
Financial instruments held as at fair value through profit or loss	$ 2,260	$ 3,029	$ 3,827
Other categories of financial instruments	5,639	5,325	5,629
	7,899	8,354	9,456
Net interest income	$ 13,251	$ 12,498	$ 11,357

(1) The following related to our insurance operations are excluded from Net-interest income and included in Insurance premiums, investment and fee income on the Consolidated Statements of Income: Interest income of $470 million (2012 – $466 million; 2011 – $456 million).
(2) See Note 5 for interest income accrued on impaired financial assets.

Income from other categories of financial instruments (1), (2)

(Millions of Canadian dollars)	For the year ended October 31 2013	October 31 2012	October 31 2011
Net gains (losses) arising from financial instruments measured at amortized cost (3)	$ –	$ (4)	$ (1)
Net fee income which does not form an integral part of the effective interest rate of financial assets and liabilities	4,204	3,784	3,528
Net fee income arising from trust and other fiduciary activities	7,990	6,855	6,812

(1) See Note 4 for net gains (losses) on AFS securities.
(2) See Note 4 for impairment losses on AFS and held-to-maturity securities, and Note 5 for impairment losses on loans.
(3) Financial instruments measured at amortized cost include held-to-maturity securities, loans and financial liabilities measured at amortized cost.

Note 24 Income taxes

The components of tax expense are as follows:

(Millions of Canadian dollars)	For the year ended October 31 2013	October 31 2012	October 31 2011
Income taxes (recoveries) in Consolidated Statements of Income			
Current tax			
Tax expense (recoveries) for current year	$ 2,566	$ 2,217	$ 2,074
Adjustments for prior years	(289)	(184)	(8)
(Recoveries) arising from previously unrecognized tax loss, tax credit or temporary difference of a prior period	(2)	–	–
	2,275	2,033	2,066
Deferred tax			
Origination and reversal of temporary difference	(67)	(86)	(66)
Effects of changes in tax rates	(1)	2	36
Adjustments for prior years	(5)	167	(26)
(Recoveries) arising from previously unrecognized tax loss, tax credit or temporary difference of a prior period	(46)	(16)	–
Write-down, or (reversal of a previous write-down)	32	–	–
	(87)	67	(56)
	2,188	2,100	2,010
Income taxes in Consolidated Statements of Comprehensive Income and Changes in Equity			
Other comprehensive income			
Net unrealized gains (losses) on available-for-sale securities	3	72	(56)
Reclassification of (gains) losses on available-for-sale securities to income	(20)	(2)	45
Unrealized foreign currency translation gains (losses)	2	1	–
Foreign currency translation (losses) gains from hedging activities	(322)	39	279
Reclassification of gains on net investment hedging activities	–	(59)	–
Net unrealized (losses) gains on derivatives designated as cash flow hedges	(4)	11	137
Reclassification of (gains) losses on derivatives designated as cash flow hedges to income	(11)	10	29
	(352)	72	434
Total income taxes	$ 1,836	$ 2,172	$ 2,444

Our effective tax rate changed from 21.7% for 2012 to 20.6% for 2013, principally due to a decrease of 0.2% in our Canadian statutory rate and the differences itemized in the table below.

The following is an analysis of the differences between the income tax expense reflected in the Consolidated Statements of Income and the amounts calculated at the Canadian statutory rate:

Reconciliation to statutory tax rate

(Millions of Canadian dollars, except for percentage amounts)	For the year ended October 31, 2013		October 31, 2012		October 31, 2011	
Income taxes at Canadian statutory tax rate	$ 2,782	26.2%	$ 2,558	26.4%	$ 2,523	28.1%
(Decrease) increase in income taxes resulting from						
Lower average tax rate applicable to subsidiaries	(186)	(1.8)	(289)	(3.0)	(271)	(3.0)
Goodwill Impairment	–	–	37	0.4	–	–
Tax-exempt income from securities	(294)	(2.8)	(330)	(3.4)	(355)	(4.0)
Tax rate change	(1)	–	2	–	36	0.4
Effect of previously unrecognized tax loss, tax credit or temporary differences	(48)	(0.4)	(16)	(0.1)	–	–
Other	(65)	(0.6)	138	1.4	77	0.9
Income taxes reported in Consolidated Statements of Income / effective tax rate	$ 2,188	20.6%	$ 2,100	21.7%	$ 2,010	22.4%

Deferred tax assets and liabilities result from tax loss carry-forwards and temporary differences between the tax basis of assets and liabilities and their carrying amounts on our Consolidated Balance Sheets.

Significant components of deferred tax assets and liabilities

	As at October 31, 2013						
(Millions of Canadian dollars)	Net Asset November 1, 2012	Change through equity	Change through profit or loss	Exchange rate differences	Acquisitions/ disposals	Other	Net Asset October 31, 2013
Net deferred tax asset/(liability)							
Allowance for credit losses	$ 418	$ –	$ (55)	$ (1)	$ 58	$ (7)	$ 413
Deferred compensation	989	–	270	33	–	(1)	1,291
Business realignment charges	39	–	(33)	–	–	–	6
Tax loss carryforwards	72	1	(13)	–	–	2	62
Deferred income	97	–	2	–	(57)	–	42
Available-for-sale securities	140	(1)	(39)	2	–	–	102
Derivatives designated as cash flow hedges	–	–	–	–	–	–	–
Premises and equipment	(151)	–	(82)	1	–	5	(227)
Deferred expense	(81)	–	1	–	–	–	(80)
Pension and post-employement related	155	–	21	–	–	–	176
Intangibles	(227)	–	(17)	(7)	(31)	4	(278)
Other	80	1	32	1	31	5	150
	$ 1,531	$ 1	$ 87	$ 29	$ 1	$ 8	$ 1,657
Comprising							
Deferred tax assets	$ 1,707						$ 1,852
Deferred tax liabilities	(176)						(195)
	$ 1,531						$ 1,657

	As at October 31, 2012						
(Millions of Canadian dollars)	Net Asset November 1, 2011	Change through equity	Change through profit or loss	Exchange rate differences	Acquisitions/ disposals	Other	Net Asset October 31, 2012
Net deferred tax asset/(liability)							
Allowance for credit losses	$ 374	$ –	$ 5	$ –	$ –	$ 39	$ 418
Deferred compensation	878	–	106	5	–	–	989
Business realignment charges	26	–	13	–	–	–	39
Tax loss carryforwards	34	–	30	(2)	10	–	72
Deferred income	251	(11)	(143)	–	–	–	97
Available-for-sale securities	173	(21)	(3)	2	–	(11)	140
Derivatives designated as cash flow hedges	(3)	–	3	–	–	–	–
Premises and equipment	(193)	–	42	–	–	–	(151)
Deferred expense	(65)	–	(16)	–	–	–	(81)
Pension and post-employement related	316	–	(172)	–	11	–	155
Intangibles	(180)	–	8	(1)	(54)	–	(227)
Other	17	–	60	1	3	(1)	80
	$ 1,628	$ (32)	$ (67)	$ 5	$ (30)	$ 27	$ 1,531
Comprising							
Deferred tax assets	$ 1,894						$ 1,707
Deferred tax liabilities	(266)						(176)
	$ 1,628						$ 1,531

The tax loss carry-forwards amount of deferred tax assets was related to losses in our Trinidad and Tobago, Luxembourg, U.S., U.K. and Japanese operations. Deferred tax assets of $62 million (October 31, 2012 – $72 million) were recognized at October 31, 2013 in respect of tax losses incurred in current or preceding years which recognition is dependent on the projection of future taxable profits. Management's forecasts support the assumption that it is probable that the results of future operations will generate sufficient taxable income to utilize the deferred tax assets. The forecasts rely on continued liquidity and capital support to our business operations, including tax planning strategies implemented in relation to such support.

As at October 31, 2013, unused tax losses and tax credits of $514 million and $183 million (October 31, 2012 – $359 million and $393 million) available to be offset against potential tax adjustments or future taxable income were not recognized as deferred tax assets. This amount includes unused tax losses of $168 million (October 31, 2012 – $11 million) which expire in two to four years, and $346 million (October 31, 2012 – $348 million) which expire after four years. There are $183 million of tax credits (October 31, 2012 – $393 million) that will expire after four years.

The amount of temporary differences associated with investments in subsidiaries, branches and associates and interests in joint ventures for which deferred tax liabilities have not been recognized in parent bank is $7.7 billion as at October 31, 2013 (October 31, 2012 – $7 billion).

Note 25 Earnings per share

(Millions of Canadian dollars, except share and per share amounts)	For the year ended October 31 2013	October 31 2012	October 31 2011
Basic earnings per share			
Net Income	$ 8,429	$ 7,539	$ 6,444
Net loss from discontinued operations	–	(51)	(526)
Net income from continuing operations	8,429	7,590	6,970
Preferred share dividends	(253)	(258)	(258)
Net income attributable to non-controlling interest	(98)	(97)	(101)
Net income available to common shareholders from continuing operations	8,078	7,235	6,611
Weighted average number of common shares (in thousands)	1,443,735	1,442,167	1,430,722
Basic earnings (loss) per share			
Continuing operations (in dollars)	$ 5.60	$ 5.01	$ 4.62
Discontinued operations (in dollars)	–	(0.03)	(0.37)
Total	$ 5.60	$ 4.98	$ 4.25
Diluted earnings per share			
Net income available to common shareholders from continuing operations	$ 8,078	$ 7,235	$ 6,611
Dilutive impact of exchangeable shares	53	53	78
Net income from continuing operations available to common shareholders including dilutive impact of exchangeable shares	8,131	7,288	6,689
Net loss from discontinued operations available to common shareholders	–	(51)	(526)
Weighted average number of common shares (in thousands)	1,443,735	1,442,167	1,430,722
Stock options (1)	2,320	1,626	2,941
Issuable under other share-based compensation plans	74	433	1,043
Exchangeable shares (2)	20,400	24,061	36,787
Average number of diluted common shares (in thousands)	1,466,529	1,468,287	1,471,493
Diluted earnings (loss) per share			
Continuing operations (in dollars)	$ 5.54	$ 4.96	$ 4.55
Discontinued operations (in dollars)	–	(0.03)	(0.36)
Total	$ 5.54	$ 4.93	$ 4.19

(1) The dilutive effect of stock options was calculated using the treasury stock method. When the exercise price of options outstanding is greater than the average market price of our common shares, the options are excluded from the calculation of diluted earnings per share. The following amounts were excluded from the calculation of diluted earnings per share: for 2013 – no outstanding options were excluded from the calculation of diluted earnings per share; for 2012 – an average of 3,992,229 outstanding options with an exercise price of $55.05; for 2011 – an average of 4,052,267 outstanding options with an average exercise price of $55.05.

(2) Includes exchangeable preferred shares and trust capital securities.

Note 26 Guarantees, commitments, pledged assets and contingencies

Guarantees and commitments

We utilize guarantees and other off-balance sheet credit instruments to meet the financing needs of our clients.

The table below summarizes our maximum exposure to credit losses related to our guarantees and commitments provided to third parties. The maximum exposure to credit risk relating to a guarantee is the maximum risk of loss if there was a total default by the guaranteed parties, without consideration of possible recoveries under recourse provisions, insurance policies or from collateral held or pledged. The maximum exposure to credit risk relating to a loan commitment is the full amount of the commitment. In both cases, the maximum risk exposure is significantly greater than the amount recognized as a liability in our Consolidated Balance Sheets.

(Millions of Canadian dollars)	Maximum exposure to credit losses, As at October 31 2013	October 31 2012
Financial guarantees		
Financial standby letters of credit	$ 15,592	$ 14,683
Commitments to extend credit		
Backstop liquidity facilities	32,142	30,317
Credit enhancements	3,181	3,708
Documentary and commercial letters of credit	139	186
Other commitments to extend credit	117,704	94,198
Other commitments		
Securities lending indemnifications	57,749	56,141
Performance guarantees	5,221	5,396

Our credit review process, our policy for requiring collateral security, and the types of collateral security held are generally the same for guarantees and commitments as for loans. Our clients generally have the right to request settlement of, or draw on, our guarantees and commitments within one year. However, certain guarantees can only be drawn if specified conditions are met. These conditions, along with collateral requirements, are described below. We believe that it is highly unlikely that all or substantially all of the guarantees and commitments will be drawn or settled within one year, and contracts may expire without being drawn or settled.

Financial guarantees

Financial standby letters of credit

Financial standby letters of credit represent irrevocable assurances that we will make payments in the event that a client cannot meet its obligations to the third party. For certain guarantees, the guaranteed party can request payment from us even though the client has not defaulted on its obligations. The term of these guarantees can range up to eight years. Our policy for requiring collateral security with respect to these instruments and the types of collateral security held is generally the same as for loans.

When collateral security is taken, it is determined on an account-by-account basis according to the risk of the borrower and the specifics of the transaction. Collateral security may include cash, securities and other assets pledged.

Commitments to extend credit

Backstop liquidity facilities

Backstop liquidity facilities are provided to asset-backed commercial paper conduit programs administered by us and third parties, as an alternative source of financing in the event that such programs are unable to access commercial paper markets, or in limited circumstances, when predetermined performance measures of the financial assets owned by these programs are not met. The average term of these liquidity facilities is approximately three years.

Backstop liquidity facilities are also provided to non-asset backed programs such as variable rate demand notes issued by third parties. These standby facilities provide liquidity support to the issuer to buy the notes if the issuer is unable to remarket the notes, as long as the instrument and/or the issuer maintain the investment grade rating.

The terms of the backstop liquidity facilities do not require us to advance money to these programs in the event of bankruptcy or insolvency events and generally do not require us to purchase non-performing or defaulted assets.

Credit enhancements

We provide partial credit enhancement to multi-seller programs administered by us to protect commercial paper investors in the event that the collection on the underlying assets, the transaction-specific credit enhancement or the liquidity proves to be insufficient to pay for maturing commercial paper. Each of the asset pools is structured to achieve a high investment-grade credit profile through credit enhancements from us and other third parties related to each transaction. The average term of these credit facilities is approximately three years.

Documentary and commercial letters of credit

Documentary and commercial letters of credit, which are written undertakings by us on behalf of a client authorizing a third party to draw drafts on us up to a stipulated amount under specific terms and conditions, are collateralized by the underlying shipment of goods to which they relate.

Other commitments to extend credit

Commitments to extend credit represent unused portions of authorizations to extend credit in the form of loans, bankers' acceptances or letters of credit.

Other commitments

Securities lending indemnifications

In securities lending transactions, we act as an agent for the owner of a security, who agrees to lend the security to a borrower for a fee, under the terms of a pre-arranged contract. The borrower must fully collateralize the security loaned at all times. As part of this custodial business, an indemnification may be provided to securities lending customers to ensure that the fair value of securities loaned will be returned in the event that the borrower fails to return the borrowed securities and the collateral held is insufficient to cover the fair value of those securities. These indemnifications normally terminate without being drawn upon. The term of these indemnifications varies, as the securities loaned are recallable on demand. Collateral held for our securities lending transactions typically includes cash or securities that are issued or guaranteed by the Canadian government, U.S. government or other OECD countries.

Prior to the third quarter of 2012, securities lending transactions were generally transacted through our former joint venture, RBC Dexia. RBC Dexia, renamed RBC Investor Services, is now a wholly-owned subsidiary.

Performance guarantees

Performance guarantees represent irrevocable assurances that we will make payments to third-party beneficiaries in the event that a client fails to perform under a specified non-financial contractual obligation. Such obligations typically include works and service contracts, performance bonds, and warranties related to international trade. The term of these guarantees can range up to eight years. Our policy for requiring collateral security with respect to these instruments and the types of collateral security held is generally the same as for loans.

When collateral security is taken, it is determined on an account-by-account basis according to the risk of the borrower and the specifics of the transaction. Collateral security may include cash, securities and other assets pledged.

Indemnifications

In the normal course of our operations, we provide indemnifications which are often standard contractual terms to counterparties in transactions such as purchase and sale contracts, fiduciary, agency, licensing and service agreements, director/officer contracts and leasing transactions. These indemnification agreements may require us to compensate the counterparties for costs incurred as a result of changes in laws and regulations (including tax legislation) or as a result of litigation claims or statutory sanctions that may be suffered by the counterparty as a consequence of the transaction. The terms of these indemnification agreements will vary based on the contract. The nature of the indemnification agreements prevents us from making a reasonable estimate of the maximum potential amount we could be required to pay to counterparties. Historically, we have not made any significant payments under such indemnifications.

Uncommitted amounts

Uncommitted amounts represent undrawn credit facilities for which we have the ability to unilaterally withdraw the credit extended to the borrower. These include both retail and commercial commitments. As at October 31, 2013, the total balance of uncommitted amounts was $183 billion (October 31, 2012 – $172 billion).

Pledged assets and collateral

In the ordinary course of business, we pledge assets and enter in collateral agreements with terms and conditions that are usual and customary to our regular lending, borrowing and trading activities recorded on our Consolidated Balance Sheets. The following are examples of our general terms and conditions on pledged assets and collateral:

- The risks and rewards of the pledged assets reside with the pledgor.
- The pledged asset is returned to the pledgor when the necessary conditions have been satisfied.
- The right of the pledgee to sell or re-pledge the asset is dependent on the specific agreement under which the collateral is pledged.
- If there is no default, the pledgee must return the comparable asset to the pledgor upon satisfaction of the obligation.

We are also required to provide intraday pledges to the Bank of Canada when we use the Large Value Transfer System (LVTS), which is a real-time electronic wire transfer system that continuously processes all Canadian dollar large-value or time-critical payments throughout the day. The pledged assets earmarked for LVTS activities are normally released back to us at the end of the settlement cycle each day. Therefore, the pledged assets amount is not included in the table below. For the year ended October 31, 2013, we had on average $3.0 billion of assets pledged intraday to the Bank of Canada on a daily basis (October 31, 2012 – $3.2 billion). There are infrequent occasions where we are required to take an overnight advance from the Bank of Canada to cover a settlement requirement, in which case an equivalent value of the pledged assets would be used to secure the advance. There were no overnight advances taken on October 31, 2013 and October 31, 2012.

Details of assets pledged against liabilities and collateral assets held or re-pledged are shown in the following tables:

(Millions of Canadian dollars)	As at October 31 2013	As at October 31 2012 (1)
Sources of pledged assets and collateral		
Bank assets		
Cash and due from banks	$ 204	$ 94
Interest-bearing deposits with banks	83	424
Cash collateral for securities borrowed	4,701	4,818
Loans	74,138	65,077
Securities	42,918	38,438
Other assets	11,678	19,411
	$ 133,722	$ 128,262
Client assets		
Collateral received and available for sale or re-pledging	175,050	166,642
Less: not sold or re-pledged	(64,121)	(53,217)
	110,929	113,425
	244,651	241,687
Uses of pledged assets and collateral		
Securities lent	$ 19,535	$ 17,775
Securities borrowed	28,796	30,011
Obligations related to securities sold short	47,128	40,756
Obligations related to securities lent or sold under repurchase agreements	56,580	58,943
Securitization	49,899	51,959
Covered bonds	22,750	13,276
Derivative transactions	14,363	22,124
Foreign governments and central banks	1,928	2,608
Clearing systems, payment systems and depositories	3,672	4,235
	$ 244,651	$ 241,687

(1) Certain amounts have been revised from results previously reported.

Lease commitments

Finance lease commitments

We lease computer equipment from third parties under finance lease arrangements. The leases have various terms, escalation and renewal rights. The future minimum lease payments under the finance leases are as follows:

	As at					
	October 31, 2013			October 31, 2012		
(Millions of Canadian dollars)	Total future minimum lease payments	Future interest charges	Present value of finance lease commitments	Total future minimum lease payments	Future interest charges	Present value of finance lease commitments
Future minimum lease payments						
No later than one year	$ 69	$ (8)	$ 61	$ 62	$ (6)	$ 56
Later than one year and no later than five years	86	(10)	76	108	(12)	96
Later than five years	–	–	–	–	–	–
	$ 155	$ (18)	$ 137	$ 170	$ (18)	$ 152

The net carrying amount of computer equipment held under finance lease as at October 31, 2013 was $153 million (October 31, 2012 – $156 million).

Operating lease commitments
We are obligated under a number of non-cancellable operating leases for premises and equipment. These leases have various terms, escalation and renewal rights. The minimum future lease payments under non-cancellable operating leases are as follows.

	As at			
	October 31, 2013		October 31, 2012	
(Millions of Canadian dollars)	**Land and buildings**	**Equipment**	Land and buildings	Equipment
Future minimum lease payments				
No later than one year	$ 586	$ 138	$ 566	$ 131
Later than one year and no later than five years	1,752	314	1,663	449
Later than five years	1,349	–	1,256	4
	3,687	452	3,485	584
Less: Future minimum sublease payments to be received	(25)	–	(20)	(1)
Net future minimum lease payments	$ 3,662	$ 452	$ 3,465	$ 583

Litigation
We are a large global institution that is subject to many different complex legal and regulatory requirements. As a result, Royal Bank of Canada and its subsidiaries are and have been subject to a variety of claims and investigations in various jurisdictions. Management reviews the status of all proceedings on an ongoing basis and will exercise its judgment in resolving them in such manner as management believes to be in the Bank's best interest. The following is a description of our significant legal proceedings. We are vigorously defending ourselves in each of these matters.

LIBOR inquiries and litigation
Various regulators and competition and enforcement authorities around the world, including in Canada, the UK, and the U.S., are conducting investigations related to certain past submissions made by panel banks in connection with the setting of the U.S. dollar London interbank offered rate (LIBOR). As Royal Bank of Canada is a member of certain LIBOR panels, including the U.S. dollar LIBOR panel, we have been the subject of regulatory demands for information and are cooperating with those investigations. In addition, Royal Bank of Canada and other U.S. dollar panel banks have been named as defendants in private lawsuits filed in the U.S. with respect to the setting of LIBOR, including a number of class action lawsuits which have been consolidated before the U.S. District Court for the Southern District of New York (the Court). The complaints in those actions assert claims against us and other panel banks under various U.S. laws including U.S. antitrust laws, the U.S. Commodity Exchange Act (CEA), and state law. In March 2013, the Court dismissed the federal antitrust and racketeering claims of certain U.S. dollar LIBOR plaintiffs and a portion of their claims brought under the CEA. The Court declined to dismiss certain other CEA claims and declined to exercise jurisdiction over certain state and common law claims. Plaintiffs will have the opportunity to replead certain claims that have been dismissed. Based on the facts currently known, it is not possible at this time for us to predict the resolution of these regulatory investigations or private lawsuits, including the timing and potential impact on Royal Bank of Canada.

CFTC litigation
Royal Bank of Canada is a defendant in a civil lawsuit brought by the Commodity Futures Trading Commission (CFTC) in the U.S. The lawsuit alleges that certain inter-affiliate transactions were improper wash trades and effected in a non competitive manner. Further, the complaint alleges that we wilfully made false, fictitious or fraudulent statements to the Chicago Mercantile Exchange about the manner in which we intended to, and did, structure these transactions. It is not possible to predict the outcome of these proceedings, nor the timing of their resolution; however, we strongly deny these allegations. At this time, management does not believe that the ultimate resolution of this matter will have a material adverse effect on our consolidated financial position or results of operations.

Wisconsin school districts litigation
Royal Bank of Canada is a defendant in a lawsuit relating to our role in transactions involving investments made by a number of Wisconsin school districts in certain collateralized debt obligations. These transactions were also the subject of a regulatory investigation. Despite reaching a settlement with the Securities and Exchange Commission in September 2011, which was paid to the school districts through a Fair Fund, the lawsuit is continuing. It is not possible to predict the ultimate outcome of these proceedings or the timing of their resolution; however, management believes the ultimate resolution of these proceedings will not have a material adverse effect on our consolidated financial position or results of operations.

Other matters
We are a defendant in a number of other actions alleging that certain of our practices and actions were improper. The lawsuits involve a variety of complex issues and the timing of their resolution is varied and uncertain. Management believes that we will ultimately be successful in resolving these lawsuits, to the extent that we are able to assess them, without material financial impact to the Bank. This is, however, an area of significant judgment and the potential liability resulting from these lawsuits could be material to our results of operations in any particular period.

Various other legal proceedings are pending that challenge certain of our other practices or actions. We consider that the aggregate liability, to the extent that we are able to assess it, resulting from these other proceedings will not be material to our consolidated financial position or results of operations.

Note 27 Contractual repricing and maturity schedule

The following table details our exposure to interest rate risk. The carrying amounts of financial assets and financial liabilities are reported below based on the earlier of their contractual repricing date or maturity date.

The following table does not incorporate management's expectation of future events where expected repricing or maturity dates differ significantly from the contractual dates. We incorporate these assumptions in the management of interest rate risk exposure. These assumptions include expected repricing of trading instruments and certain loans and deposits. Taking into account these assumptions on the consolidated contractual repricing and maturity schedule at October 31, 2013, would result in a change in the under-one-year gap from $15.5 billion to $72 billion.

	As at October 31, 2013							
(Millions of Canadian dollars)	Immediately interest rate-sensitive	Under 3 months	3 to 6 months	6 to 12 months	1 to 5 years	Over 5 years	Non-rate-sensitive	Total
Assets								
Cash and deposits with banks	$ 14,048	$ 4,239	$ –	$ –	$ –	$ –	$ 6,644	$ 24,931
Securities								
Trading	6,122	20,729	8,745	10,697	26,190	26,328	45,212	144,023
Available-for-sale	–	23,514	1,234	1,298	6,338	4,470	1,841	38,695
Assets purchased under reverse repurchase agreements and securities borrowed	1,178	96,639	13,476	2,929	369	–	2,926	117,517
Loans (net of allowance for loan losses)	172,898	42,149	11,131	22,423	145,449	9,902	4,714	408,666
Derivatives	74,822	–	–	–	–	–	–	74,822
Investments for account of segregated fund holders	–	–	–	–	–	–	513	513
Other assets	7,051	1,585	–	–	–	132	42,884	51,652
	$ 276,119	$ 188,855	$ 34,586	$ 37,347	$ 178,346	$ 40,832	$ 104,734	$ 860,819
Liabilities								
Deposits	$ 223,411	$ 94,253	$ 20,729	$ 33,169	$ 93,931	$ 19,243	$ 73,744	$ 558,480
Obligations related to assets sold under repurchase agreements and securities loaned	700	56,878	1,308	1,167	–	–	363	60,416
Obligations related to securities sold short	–	759	1,117	1,219	10,403	12,671	20,959	47,128
Derivatives	76,745	–	–	–	–	–	–	76,745
Insurance and investment contracts for account of segregated fund holders	–	–	–	–	–	–	513	513
Other liabilities	2,652	465	100	145	1,229	6,470	47,798	58,859
Subordinated debentures	–	1,410	–	603	3,156	2,274	–	7,443
Trust capital securities	–	900	–	–	–	–	–	900
Non-controlling interests	–	–	–	–	1,731	–	64	1,795
Shareholders' equity	–	200	2,350	1,125	926	–	43,939	48,540
	$ 303,508	$ 154,865	$ 25,604	$ 37,428	$ 111,376	$ 40,658	$ 187,380	$ 860,819
Total gap	$ (27,389)	$ 33,990	$ 8,982	$ (81)	$ 66,970	$ 174	$ (82,646)	$ –
Canadian dollar	$ (11,033)	$ (8,390)	$ (2,235)	$ (1,054)	$ 85,687	$ (1,552)	$ (61,375)	$ 48
Foreign currency	(16,356)	42,380	11,217	973	(18,717)	1,726	(21,271)	(48)
Total gap	$ (27,389)	$ 33,990	$ 8,982	$ (81)	$ 66,970	$ 174	$ (82,646)	$ –

Note 28 Related party transactions

Related parties

Related parties include associated companies, post-employment benefit plans for the benefit of our employees, key management personnel, the Board of Directors (Directors), close family members of key management personnel and Directors, and entities which are, directly or indirectly, controlled by, jointly controlled by or significantly influenced by key management personnel, Directors or their close family members.

Key management personnel and Directors

Key management personnel are defined as those persons having authority and responsibility for planning, directing and controlling our activities, directly or indirectly. They include the senior members of our organization called the Group Executive. The Group Executive is comprised of the Chief Executive Officer and individuals that report directly to him, including the Chief Administrative Officer and Chief Financial Officer, Chief Human Resource Officer, Chief Risk Officer, and heads of our business units. The Directors do not plan, direct, or control the activities of the entity; they oversee the management of the business and provide stewardship.

Compensation of key management personnel and Directors

The following tables present the compensation paid, shareholdings and options held by key management personnel and Directors.

	For the year ended		
(Millions of Canadian dollars)	**October 31 2013**	October 31 2012	October 31 2011
Salaries and other short-term employee benefits (1)	**$ 23**	$ 21	$ 23
Post-employment benefits	**3**	2	2
Share-based payments	**30**	25	24
	$ 56	$ 48	$ 49

(1) Includes the portion of the annual variable short-term incentive bonus that certain executives elected to receive in the form of DSUs. Refer to Note 22 for further details.

Shareholdings and options held by key management personnel, Directors and their close family members

	As at			
	October 31, 2013		October 31, 2012	
(Millions of Canadian dollars, except number of shares)	**No. of units held**	**Value**	No. of units held	Value
Stock options	**4,566,316**	**$ 84**	5,402,931	$ 40
Other non-option stock based awards (1)	**2,467,532**	**173**	2,516,276	143
RBC common shares	**1,485,843**	**104**	1,593,328	91
	8,519,691	**$ 361**	9,512,535	$ 274

(1) 2012 number of units held has been revised from those previously presented.

Transactions, arrangements and agreements involving key management personnel, Directors and their close family members

In the normal course of business, we provide certain banking services to key management personnel, Directors, and their close family members. These transactions were made on substantially the same terms, including interest rates and security, as for comparable transactions with persons of a similar standing and did not involve more than the normal risk of repayment or present other unfavourable features.

As at October 31, 2013, total loans to key management personnel, Directors and their close family members are $6 million (October 31, 2012 – $6 million). No guarantees, pledges or commitments have been given to key management personnel, Directors or their close family members.

Subsidiaries, associates and joint ventures

In the normal course of business, we provide certain banking and financial services to subsidiaries, associates and joint ventures, including loans, interest and non-interest bearing deposits. These transactions meet the definition of related party transactions and were made on substantially the same terms as for comparable transactions with third-party counterparties.

As at October 31, 2013, loans and deposits from joint ventures and associates were $48 million and $12 million, respectively (October 31, 2012 – $48 million and $12 million, respectively).

Other transactions, arrangements or agreements involving joint ventures or associates

	As at or for the year ended		
(Millions of Canadian dollars)	**October 31 2013**	October 31 2012 (1)	October 31 2011 (1)
Guarantees provided	**$ –**	$ –	$ 483
Commitments and other contingencies	**240**	349	294
Other fees received for services rendered	**47**	84	93
Other fees paid for services received	**191**	245	266

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

Restricted net assets

Certain of our subsidiaries and joint ventures are subject to regulatory requirements of the jurisdictions in which they operate. When these subsidiaries and joint ventures are subject to such requirements, they may be restricted from transferring to us, our share of their assets in the form of cash dividends, loans or advances. At October 31, 2013, restricted net assets of these subsidiaries and joint ventures were $16.2 billion (October 31, 2012 – $13.6 billion).

Note 29 Results by business segment

Composition of business segments

For management purposes, based on the products and services offered, we are organized into five business segments: Personal & Commercial Banking, Wealth Management, Insurance, Investor & Treasury Services and Capital Markets.

Personal & Commercial Banking comprises our personal and business banking operations as well as certain retail investment businesses and is operated through four business lines: Personal Financial Services, Business Financial Services and Cards and Payment Solutions (Canadian Banking), and Caribbean & U.S. Banking. In Canada we provide a broad suite of financial products and services to our individual and business clients through our extensive branch, automated teller machines, online and telephone banking networks, as well as through a large number of proprietary sales professionals. In the Caribbean we offer a broad range of financial products and services to individuals, business clients and public institutions in their respective markets. In the United States, we serve the cross-border banking needs of Canadian clients within the United States, as well as the banking needs of our U.S. wealth management clients.

Wealth Management comprises Canadian Wealth Management, U.S. & International Wealth Management and Global Asset Management. We serve affluent, high net worth and ultra-high net worth clients in Canada, the United States, the United Kingdom, Europe, Asia, and emerging markets 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 as well as through RBC distribution channels and third-party distributors.

Insurance comprises our insurance operations in Canada and globally and operates 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 branches, our field sales representatives, call centers and online network, as well as through independent insurance advisors and affinity relationships. Outside North America, we operate in reinsurance markets globally.

Investor & Treasury Services offers global custody, fund and pension administration, as well as an integrated suite of products to institutional investors worldwide. We also provide cash management, correspondent banking and trade finance services to financial institutions globally and funding and liquidity management for RBC as well as other select institutions.

Capital Markets comprises a majority of our global wholesale banking businesses providing public and private companies, institutional investors, governments and central banks with a wide range of products and services across our two main business lines, Global Markets and Corporate and Investment Banking. 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 have a select presence in the U.K., Europe, and Asia Pacific, where we offer a diversified set of capabilities in our key sectors of expertise such as energy, mining and infrastructure.

All other enterprise level activities that are not allocated to these five business segments, such as enterprise funding, securitizations, net charges associated with unattributed capital, and consolidation adjustments, including the elimination of the Taxable equivalent basis (Teb) gross-up amounts, are included in Corporate Support. Teb adjustments gross up Net interest income from certain tax-advantaged sources (Canadian taxable corporate dividends) to their effective tax equivalent value with the corresponding offset recorded in the provision for income taxes. Management believes that these adjustments are necessary for Capital Markets to reflect how it is managed. The use of the Teb adjustments enhances the comparability of revenue across our taxable and tax-advantaged sources. Our use of Teb adjustments may not be comparable to similarly adjusted amounts at other financial institutions. The Teb adjustment for the year ended October 31, 2013 was $380 million (October 31, 2012 – $431 million, October 31, 2011 – $459 million).

Geographic segments

For geographic reporting, our segments are grouped into Canada, United States and Other International. Transactions are primarily recorded in the location that best reflects the risk due to negative changes in economic conditions and prospects for growth due to positive economic changes. This location frequently corresponds with the location of the legal entity through which the business is conducted and the location of our clients. Transactions are recorded in the local currency and are subject to foreign exchange rate fluctuations with respect to the movement in the Canadian dollar.

Management reporting framework

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 our business segments are managed. This approach is intended to ensure that our business segments' results reflect all relevant revenue and expenses associated with the conduct of their businesses. Management regularly monitors these segments' results for the purpose of making decisions about resource allocation and performance assessment. These items do not impact our consolidated results.

The expenses in each business segment may include costs or services directly incurred or provided on their behalf at the enterprise level. For other costs not directly attributable to one of our business segments, we use a management reporting framework that uses assumptions, estimates and methodologies for allocating overhead costs and indirect expenses to our business segments and that assists in the attribution of capital and the transfer pricing of funds to our business segments in a manner that fairly and consistently measures and aligns the economic costs with the underlying benefits and risks of that specific business segment. Activities and business conducted between our business segments are generally at market rates. All other enterprise level activities that are not allocated to our five business segments are reported under Corporate Support.

Our assumptions and methodologies used in our management reporting framework are periodically reviewed by management to ensure that they remain valid. The capital attribution methodologies involve a number of assumptions and estimates that are revised periodically.

	For the year ended October 31, 2013									
(Millions of Canadian dollars)	Personal & Commercial Banking	Wealth Management	Insurance	Investor & Treasury Services (4)	Capital Markets (3)	Corporate Support (3)	Total	Canada	United States	Other International
Net interest income (1), (2)	$ 9,435	$ 396	$ –	$ 671	$ 2,872	$ (123)	$ 13,251	$ 10,960	$ 1,602	$ 689
Non-interest income	3,788	5,091	3,928	1,133	3,708	(32)	17,616	8,855	3,834	4,927
Total revenue	13,223	5,487	3,928	1,804	6,580	(155)	30,867	19,815	5,436	5,616
Provision for credit losses	997	51	–	–	188	3	1,239	898	77	264
Insurance policyholder benefits, claims and acquisition expense	–	–	2,784	–	–	–	2,784	1,425	10	1,349
Non-interest expense	6,240	4,201	549	1,343	3,844	50	16,227	9,345	3,677	3,205
Net income (loss) before income taxes	5,986	1,235	595	461	2,548	(208)	10,617	8,147	1,672	798
Income taxes (recoveries)	1,548	336	(2)	118	838	(650)	2,188	1,754	402	32
Net income from continuing operations	4,438	899	597	343	1,710	442	8,429	6,393	1,270	766
Net income from discontinued operations	–	–	–	–	–	–	–	–	–	–
Net income	$ 4,438	$ 899	$ 597	$ 343	$ 1,710	$ 442	$ 8,429	$ 6,393	$ 1,270	$ 766
Non-interest expense includes:										
Depreciation and amortization	$ 300	$ 135	$ 13	$ 56	$ 24	$ 502	$ 1,030	$ 857	$ 36	$ 137
Impairment of goodwill and other intangibles	1	–	–	5	–	4	10	10	–	–
Restructuring provisions	21	–	–	44	–	–	65	9	–	56
Total assets from continuing operations	$ 364,300	$ 23,400	$ 12,300	$ 90,600	$ 358,100	$ 12,100	$ 860,800	$ 495,200	$ 181,800	$ 183,800
Total assets from operations that are now discontinued							–	–	–	–
Total assets							$ 860,800	$ 495,200	$ 181,800	$ 183,800
Total assets include:										
Additions to property, plant, equipment and intangibles	$ 498	$ 90	$ 13	$ 35	$ 107	$ 517	$ 1,260	$ 996	$ 132	$ 132
Total liabilities from continuing operations	$ 363,300	$ 23,300	$ 12,300	$ 90,800	$ 357,900	$(37,100)	$ 810,500	$ 444,800	$ 181,900	$ 183,800
Total liabilities from operations that are now discontinued							–	–	–	–
Total liabilities							$ 810,500	$ 444,800	$ 181,900	$ 183,800

	For the year ended October 31, 2012									
(Millions of Canadian dollars)	Personal & Commercial Banking	Wealth Management	Insurance	Investor & Treasury Services	Capital Markets (3)	Corporate Support (3)	Total	Canada	United States	Other International
Net interest income (1), (2)	$ 9,061	$ 393	$ –	$ 668	$ 2,559	$ (183)	$ 12,498	$ 10,413	$ 1,308	$ 777
Non-interest income	3,582	4,442	4,897	657	3,629	67	17,274	9,378	3,564	4,332
Total revenue	12,643	4,835	4,897	1,325	6,188	(116)	29,772	19,791	4,872	5,109
Provision for credit losses	1,167	(1)	–	–	135	–	1,301	1,021	90	190
Insurance policyholder benefits, claims and acquisition expense	–	–	3,621	–	–	–	3,621	2,320	16	1,285
Non-interest expense	5,932	3,796	515	1,134	3,746	37	15,160	8,809	3,404	2,947
Net income (loss) before income taxes	5,544	1,040	761	191	2,307	(153)	9,690	7,641	1,362	687
Income taxes (recoveries)	1,456	277	47	106	726	(512)	2,100	1,600	519	(19)
Net income from continuing operations	4,088	763	714	85	1,581	359	7,590	6,041	843	706
Net income from discontinued operations	–	–	–	–	–	–	(51)	–	(51)	–
Net income	$ 4,088	$ 763	$ 714	$ 85	$ 1,581	$ 359	$ 7,539	$ 6,041	$ 792	$ 706
Non-interest expense includes:										
Depreciation and amortization	$ 273	$ 136	$ 14	$ 54	$ 27	$ 452	$ 956	$ 782	$ 38	$ 136
Impairment of goodwill and other intangibles	–	–	–	168	–	–	168	100	–	68
Restructuring provisions	–	–	–	–	–	–	–	–	–	–
Total assets from continuing operations	$ 343,100	$ 22,000	$ 12,300	$ 77,300	$ 355,200	$ 15,200	$ 825,100	$ 459,700	$ 173,200	$ 192,200
Total assets from operations that are now discontinued						–	–	–	–	–
Total assets							$ 825,100	$ 459,700	$ 173,200	$ 192,200
Total assets include:										
Additions to property, plant, equipment and intangibles	$ 256	$ 133	$ 11	$ 308	$ 128	$ 877	$ 1,713	$ 1,089	$ 145	$ 479
Total liabilities from continuing operations	$ 342,000	$ 22,000	$ 12,400	$ 77,300	$ 355,000	$ (29,600)	$ 779,100	$ 413,700	$ 173,300	$ 192,100
Total liabilities from operations that are now discontinued							–	–	–	–
Total liabilities							$ 779,100	$ 413,700	$ 173,300	$ 192,100

	For the year ended October 31, 2011									
(Millions of Canadian dollars)	Personal & Commercial Banking	Wealth Management	Insurance	Investor & Treasury Services	Capital Markets (3)	Corporate Support (3)	Total	Canada	United States	Other International
Net interest income (1), (2)	$ 8,515	$ 365	$ –	$ 573	$ 2,197	$ (293)	$ 11,357	$ 9,641	$ 1,091	$ 625
Non-interest income	3,510	4,343	4,475	569	3,127	257	16,281	9,270	2,815	4,196
Total revenue	12,025	4,708	4,475	1,142	5,324	(36)	27,638	18,911	3,906	4,821
Provision for credit losses	1,142	–	–	–	(14)	5	1,133	1,016	(12)	129
Insurance policyholder benefits, claims and acquisition expense	–	–	3,358	–	–	–	3,358	2,124	21	1,213
Non-interest expense	5,682	3,586	498	821	3,487	93	14,167	8,376	3,159	2,632
Net income (loss) before income taxes	5,201	1,122	619	321	1,851	(134)	8,980	7,395	738	847
Income taxes (recoveries)	1,461	311	19	91	559	(431)	2,010	1,728	259	23
Net income from continuing operations	3,740	811	600	230	1,292	297	6,970	5,667	479	824
Net income from discontinued operations	–	–	–	–	–	–	(526)	–	(526)	–
Net income	$ 3,740	$ 811	$ 600	$ 230	$ 1,292	$ 297	$ 6,444	$ 5,667	$ (47)	$ 824
Non-interest expense includes:										
Depreciation and amortization	$ 260	$ 138	$ 20	$ 48	$ 24	$ 378	$ 868	$ 705	$ 37	$ 126
Impairment of goodwill and other intangibles	–	–	–	–	–	–	–	–	–	–
Restructuring provisions	–	–	–	–	–	–	–	–	–	–
Total assets from continuing operations	$321,100	$ 23,700	$11,100	$75,200	$320,900	$ 14,600	$766,600	$452,200	$134,400	$ 180,000
Total assets from operations that are now discontinued						–	27,200	–	27,200	–
Total assets							$793,800	$452,200	$161,600	$ 180,000
Total assets include:										
Additions to property, plant, equipment and intangibles	$ 325	$ 347	$ 9	$ 26	$ 133	$ 963	$ 1,803	$ 1,152	$ 164	$ 487
Total liabilities from continuing operations	$319,800	$ 23,800	$11,100	$75,200	$321,300	$(18,900)	$732,300	$409,200	$142,900	$ 180,200
Total liabilities from operations that are now discontinued							20,100	–	20,100	–
Total liabilities							$752,400	$409,200	$163,000	$ 180,200

(1) Inter-segment revenue and share of profits in associates are not material.
(2) Interest revenue is reported net of interest expense as management relies primarily on net interest income as a performance measure.
(3) Taxable equivalent basis (Teb).
(4) During the second quarter of 2013, Investor Services incurred a restructuring provision of $44 million. The majority of the provision was incurred for severance related to our European operations.

Revenue by business line

(Millions of Canadian dollars)	For the year ended October 31 2013	October 31 2012	October 31 2011
Personal Financial Services	$ 6,948	$ 6,591	$ 6,192
Business Financial Services	2,990	2,894	2,750
Cards and Payment Solutions	2,484	2,330	2,257
Caribbean & U.S. Banking	801	828	826
Canadian Wealth Management	1,889	1,741	1,724
U.S. & International Wealth Management	2,225	1,977	1,948
Global Asset Management	1,373	1,117	1,036
Insurance	3,928	4,897	4,475
Investor & Treasury services	1,804	1,325	1,142
Global Markets	3,492	3,635	3,143
Corporate and Investment Banking	3,014	2,533	2,371
Other Capital Markets	74	20	(190)
Corporate Support	(155)	(116)	(36)
	$ 30,867	$ 29,772	$ 27,638

Note 30 Nature and extent of risks arising from financial instruments

We are exposed to credit, market and liquidity and funding risks as a result of holding financial instruments. Our risk measurement and objectives, policies and methodologies for managing these risks are disclosed in the shaded text along with those tables specifically marked with an asterisk (*) on pages 49 to 74 of the Management Discussion and Analysis. These shaded text and tables are an integral part of these Consolidated Financial Statements.

Concentrations of credit risk exist if a number of our clients are engaged in similar activities, are located in the same geographic region or have comparable economic characteristics such that their ability to meet contractual obligations would be similarly affected by changes in economic, political or other conditions.

Concentrations of credit risk indicate the relative sensitivity of our performance to developments affecting a particular industry or geographic location. The amounts of credit exposure associated with our on- and off-balance sheet financial instruments are summarized in the following table.

	As at October 31, 2013								
(Millions of Canadian dollars, except percentage amounts)	Canada	%	United States	%	Europe	%	Other International	%	Total
On-balance sheet assets other than derivatives (1)	$ 401,022	74%	$ 62,739	12%	$ 42,935	8%	$ 31,399	6%	$ 538,095
Derivatives before master netting agreement (2), (3)	10,842	10	18,249	17	71,085	67	6,353	6	106,529
	$ 411,864	64%	$ 80,988	12%	$114,020	18%	$ 37,752	6%	$ 644,624
Off-balance sheet credit instruments (4)									
Committed and uncommitted (5)	$ 213,602	64%	$ 86,834	26%	$ 24,020	7%	$ 8,242	3%	$ 332,698
Other	43,173	55	20,840	27	11,361	14	3,188	4	78,562
	$ 256,775	62%	$ 107,674	26%	$ 35,381	9%	$ 11,430	3%	$ 411,260

	As at October 31, 2012 (6)								
(Millions of Canadian dollars, except percentage amounts)	Canada	%	United States	%	Europe	%	Other International	%	Total
On-balance sheet assets other than derivatives (1)	$ 372,021	74%	$ 63,474	13%	$ 36,845	7%	$ 29,543	6%	$ 501,883
Derivatives before master netting agreement (2), (3)	14,549	12	20,617	17	79,810	66	6,761	5	121,737
	$ 386,570	62%	$ 84,091	13%	$116,655	19%	$ 36,304	6%	$ 623,620
Off-balance sheet credit instruments (4)									
Committed and uncommitted (5)	$ 192,841	65%	$ 76,269	26%	$ 18,260	6%	$ 9,379	3%	$ 296,749
Other	43,038	57	15,315	20	13,943	18	3,924	5	76,220
	$ 235,879	63%	$ 91,584	24%	$ 32,203	9%	$ 13,303	4%	$ 372,969

(1) Includes assets purchased under reverse repurchase agreements and securities borrowed, loans and customers' liability under acceptances. The largest concentrations in Canada are Ontario at 45% (October 31, 2012 – 45%), the Prairies at 21% (October 31, 2012 – 21%), British Columbia and the territories at 17% (October 31, 2012 – 17%) and Quebec at 12% (October 31, 2012 – 12%). No industry accounts for more than 31% (October 31, 2012 – 29%) of total on-balance sheet credit instruments.
(2) The largest concentration of credit exposure by counterparty type is banks at 46% (October 31, 2012 – 49%).
(3) Excludes credit derivatives classified as other than trading with a replacement cost of $nil (October 31, 2012 – $5 million).
(4) Represents financial instruments with contractual amounts representing credit risk.
(5) Retail and wholesale commitments comprise 39% (October 31, 2012 – 40%) and 61% (October 31, 2012 – 60%), respectively, of our total commitments. The largest sector concentrations in the wholesale portfolio relate to Energy at 18% (October 31, 2012 – 17%), Financing products at 16% (October 31, 2012 – 17%), Non-bank financial services at 10% (October 31, 2012 – 9%), Sovereign at 7% (October 31, 2012 – 9%), and Real estate and related at 9% (October 31, 2012 – 8%).
(6) Certain amounts have been revised from results previously reported.

Note 31 Capital management

Regulatory capital and capital ratios

Effective the first quarter of 2013, we are required to calculate our capital ratios and Assets-to-capital multiple using the Basel III framework. Under Basel III, regulatory capital includes Common Equity Tier 1 (CET1), Tier 1 and Tier 2 capital. CET1 capital mainly consists of common shares, retained earnings and other components of equity. Regulatory adjustments under Basel III include full deductions of intangibles (excluding mortgage servicing rights), certain deferred tax assets, defined benefit pension fund assets and liabilities, and non-significant investments in banking, financial and insurance entities. Tier 1 capital comprises predominantly CET1, with additional items that consist of capital instruments such as certain preferred shares, and certain non-controlling interests in subsidiaries. Tier 2 capital includes subordinated debentures that meet certain criteria and certain loan loss allowances. Total Capital is the sum of CET1, additional Tier 1 capital and Tier 2 capital. Regulatory capital ratios are calculated by dividing CET1, Tier 1 and Total capital by risk-weighted assets.

OSFI formally establishes risk-based capital targets for deposit-taking institutions in Canada. These targets are currently a CET1 ratio of greater than or equal to 7%, a Tier 1 capital ratio of greater than or equal to 6% and a Total capital ratio of greater than or equal to 8%. In addition, Canadian banks are required to ensure that their Assets-to-capital multiple, which is calculated by dividing gross adjusted assets by Total capital, does not exceed a maximum level prescribed by OSFI. During 2013 and 2012, we have complied with all capital requirements imposed by OSFI.

	Basel III	Basel II
	As at	
(Millions of Canadian dollars, except percentage and multiple amounts)	**October 31 2013**	October 31 2012
Capital		
Common equity Tier 1 capital	**$ 30,541**	$ n.a.
Tier 1 capital	**37,196**	36,807
Total capital	**44,716**	42,347
Risk-weighted assets		
Credit risk	**$ 232,641**	$ 209,559
Market risk	**42,184**	30,109
Operational risk	**44,156**	40,941
Total risk-weighted assets	**$ 318,981**	$ 280,609
Capital ratios and multiples		
Common Equity Tier 1 ratio	**9.6%**	n.a.
Tier 1 capital ratio	**11.7%**	13.1%
Total capital ratio	**14.0%**	15.1%
Assets-to-capital multiple (1)	**16.6X**	16.7X

(1) Effective the first quarter of 2013, Assets-to-capital multiple is calculated on a transitional basis as per OSFI guidelines. The transitional methodology is defined as capital calculated according to the current year's phase-in of regulatory adjustments and phase-out of non-qualifying capital instruments.

n.a. not applicable

Note 32 Recovery and settlement of on-balance sheet assets and liabilities

The table below presents an analysis of assets and liabilities recorded on our Consolidated Balance Sheets by amounts to be recovered or settled within one year and after one year, as at the balance sheet date, based on contractual maturities and certain other assumptions outlined in the footnotes below. As warranted, we manage the liquidity risk of various products based on historical behavioural patterns that are often not aligned with contractual maturities. Amounts to be recovered or settled within one year, as presented below, may not be reflective of management's long-term view of the liquidity profile of certain balance sheet categories.

	As at					
	October 31, 2013			October 31, 2012		
(Millions of Canadian dollars)	Within one year	After one year	Total	Within one year	After one year	Total
Assets						
Cash and due from banks (1)	$ 13,930	$ 1,940	$ 15,870	$ 11,020	$ 1,597	$ 12,617
Interest-bearing deposits with banks (1)	9,061	–	9,061	10,255	–	10,255
Securities						
Trading (2)	135,484	8,539	144,023	112,406	8,377	120,783
Available-for-sale	11,388	27,307	38,695	15,305	25,523	40,828
Assets purchased under reverse repurchase agreements and securities borrowed	116,366	1,151	117,517	110,052	2,205	112,257
Loans						
Retail	43,932	277,746	321,678	47,193	253,992	301,185
Wholesale	39,202	49,745	88,947	30,555	48,501	79,056
Allowance for loan losses			(1,959)			(1,997)
Investments for account of segregated fund holders	–	513	513	–	383	383
Other						
Customers' liability under acceptances	5,626	4,327	9,953	5,198	4,187	9,385
Derivatives (2)	13,695	61,127	74,822	12,958	78,335	91,293
Premises and equipment, net	3	2,656	2,659	–	2,691	2,691
Goodwill	–	8,361	8,361	–	7,485	7,485
Other intangibles	–	2,796	2,796	–	2,686	2,686
Assets of discontinued operations	–	–	–	–	–	–
Investments in associates	–	112	112	–	125	125
Prepaid pension benefit cost	–	1,084	1,084	–	1,049	1,049
Other assets	23,266	3,421	26,687	32,010	3,009	35,019
	$ 411,953	$ 450,825	$ 860,819	$ 386,952	$ 440,145	$ 825,100
Liabilities						
Deposits (3)	$ 393,256	$ 165,224	$ 558,480	$ 374,000	$ 134,219	$ 508,219
Insurance and investment contracts for account of segregated fund holders	–	513	513	–	383	383
Other						
Acceptances	5,626	4,327	9,953	5,198	4,187	9,385
Obligations related to securities sold short	44,231	2,897	47,128	38,751	2,005	40,756
Obligations related to assets sold under repurchase agreements and securities loaned	58,916	1,500	60,416	64,032	–	64,032
Derivatives (2)	15,671	61,074	76,745	14,429	82,332	96,761
Insurance claims and policy benefit liabilities	338	7,696	8,034	232	7,689	7,921
Liabilities of discontinued operations	–	–	–	–	–	–
Accrued pension and other post-employment benefit expense	–	1,759	1,759	–	1,729	1,729
Other liabilities	32,594	6,519	39,113	33,994	7,377	41,371
Subordinated debentures	–	7,443	7,443	2,007	5,608	7,615
Trust capital securities	900	–	900	–	900	900
	$ 551,532	$ 258,952	$ 810,484	$ 532,643	$ 246,429	$ 779,072

(1) Cash and due from banks and Interest bearing deposits with banks are assumed to be recovered within one year, except for cash balances not available for use by the bank.
(2) Trading securities classified as at FVTPL and trading derivatives not designated in hedging relationships are presented as within one year as this best represents in most instances the short-term nature of our trading activities. Non-trading derivatives designated in hedging relationships are presented according to the recovery or settlement of the related hedged item.
(3) Demand deposits of $264 billion (October 31, 2012 – $237 billion) are presented as within one year due to their being repayable on demand or at short notice on a contractual basis. In practice, these deposits relate to a broad range of individuals and customer-types which form a stable base for our operations and liquidity needs.

Note 33 Parent company information

The following table presents information regarding the legal entity of Royal Bank of Canada with its subsidiaries presented on an equity accounted basis.

Condensed Balance Sheets

(Millions of Canadian dollars)	As at October 31 2013	As at October 31 2012
Assets		
Cash and due from banks	$ 3,561	$ 3,126
Interest-bearing deposits with banks	2,707	1,160
Securities	100,574	83,704
Investments in bank subsidiaries and associated corporations	24,327	24,668
Investments in other subsidiaries and associated corporations	42,383	37,973
Assets purchased under reverse repurchase agreements	14,578	10,909
Loans, net of allowances for loan losses	384,906	356,079
Other assets	105,750	129,879
	$ 678,786	$ 647,498
Liabilities and shareholders' equity		
Deposits	$ 455,621	$ 422,893
Net balances due to bank subsidiaries	4,892	2,719
Net balances due from other subsidiaries	35,921	18,062
Other liabilities	126,418	151,942
	622,852	595,616
Subordinated debentures	7,394	7,615
Shareholders' equity	48,540	44,267
	$ 678,786	$ 647,498

Condensed Statements of Income

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(Millions of Canadian dollars)	For the year ended October 31 2013	October 31 2012	October 31 2011
Interest income (1)	$ 18,520	$ 18,788	$ 17,681
Interest expense	5,742	6,860	7,357
Net interest income	12,778	11,928	10,324
Non-interest income (2)	4,625	1,733	3,685
Total revenue	17,403	13,661	14,009
Provision for credit losses	1,147	1,139	1,009
Insurance policyholder benefits and acquisition expense	–	–	2
Non-interest expense	7,205	6,904	6,760
Income before income taxes	9,051	5,618	6,238
Income taxes	1,563	1,440	1,394
Net income before equity in undistributed income of subsidiaries	7,488	4,178	4,844
Equity in undistributed income of subsidiaries	941	3,361	1,600
Net income	$ 8,429	$ 7,539	$ 6,444

(1) Includes dividend income from investments in subsidiaries and associated corporations of $1,313 million (2012 – $1,292 million; 2011 – $1,314 million).
(2) Includes loss from associated corporations of $9 million (2012 – gain of $2 million; 2011 – loss of $6 million).

Condensed Statements of Cash Flows

(Millions of Canadian dollars)	As at October 31 2013	October 31 2012	October 31 2011
Cash flows from operating activities			
Net income	$ 8,429	$ 7,539	$ 6,444
Adjustments to determine net cash from operating activities:			
Change in undistributed earnings of subsidiaries	(941)	(3,361)	(1,600)
Change in deposits	31,183	9,772	28,762
Change in loans, net of loan securitizations	(18,927)	(29,324)	(26,884)
Proceeds from loan securitizations	–	20	207
Change in trading securities	(19,048)	9,440	(7,611)
Change in obligations related to assets sold under repurchase agreements and securities loaned	1,730	(229)	(1,690)
Change in assets purchased under reverse repurchase agreements and securities borrowed	(3,668)	(2,164)	(2,378)
Change in obligations related to securities sold short	388	(2,713)	3,864
Other operating activities, net	(8,282)	(2,640)	(9,046)
Net cash used in operating activities	(9,136)	(13,660)	(9,932)
Cash flows from investing activities			
Change in interest-bearing deposits with banks	(1,548)	400	(287)
Proceeds from sale of available-for-sale securities	1,641	3,991	8,401
Proceeds from maturity of available-for-sale securities	28,056	28,994	22,898
Purchases of available-for-sale securities	(26,392)	(29,307)	(18,054)
Net acquisitions of premises and equipment and other intangibles	(754)	(867)	(691)
Change in cash invested in subsidiaries	(7,323)	163	(8,393)
Change in net funding provided to subsidiaries	20,164	10,158	11,458
Net cash from investing activities	13,844	13,532	15,332
Cash flows from financing activities			
Issue of subordinated debentures	2,046	–	1,500
Repayment of subordinated debentures	(2,000)	(1,006)	(404)
Redemption of preferred shares for cancellation	(222)	–	–
Issue of common shares	121	126	152
Redemption of common shares for cancellation	(408)	–	–
Dividends paid	(3,810)	(3,272)	(3,032)
Net cash used in financing activities	(4,273)	(4,152)	(1,784)
Net change in cash and due from banks	435	(4,280)	3,616
Cash and due from banks at beginning of year	3,126	7,406	3,790
Cash and due from banks at end of year	$ 3,561	$ 3,126	$ 7,406
Supplemental disclosure of cash flow information			
Amount of interest paid in year	$ 5,943	$ 7,372	$ 6,752
Amount of interest received in year	17,281	17,502	16,758
Amount of dividends received in year	1,313	1,302	1,277
Amount of income taxes (recovered) paid in year	265	1,951	1,012

Note 34 Subsequent events

On November 4, 2013, we redeemed all $1 billion outstanding 5.45% subordinated debentures due on November 4, 2018 for 100% of their principal amount plus accrued interest to the redemption date.

On October 25, 2013, we announced our intention to redeem all issued and outstanding $900 million principal amount of RBC TruCS 2013 for cash at a redemption price of $1,000 per unit. The redemption is expected to be completed on December 31, 2013.

Glossary

Acceptances
A bill of exchange or negotiable instrument drawn by the borrower for payment at maturity and accepted by a bank. The acceptance constitutes a guarantee of payment by the bank and can be traded in the money market. The bank earns a "stamping fee" for providing this guarantee.

Allowance for credit losses
The amount deemed adequate by management to absorb identified credit losses as well as losses that have been incurred but are not yet identifiable as at the balance sheet date. This allowance is established to cover the lending portfolio including loans, acceptances, guarantees, letters of credit, and unfunded commitments. The allowance is increased by the provision for credit losses, which is charged to income and decreased by the amount of write-offs, net of recoveries in the period.

Alt-A assets
A term used in the U.S. to describe assets (mainly mortgages) with a borrower risk profile between the prime and subprime categorizations. Categorization of assets as Alt-A (as opposed to prime) varies, such as limited verification or documentation of borrowers' income or a limited credit history.

Asset-backed securities (ABS)
Securities created through the securitization of a pool of assets, for example auto loans or credit card loans.

Assets-to-capital multiple
Total assets plus specified off-balance sheet items, as defined by OSFI, divided by total regulatory capital.

Assets under administration (AUA)
Assets administered by us, which are beneficially owned by clients, as at October 31, unless otherwise noted. Services provided in respect of assets under administration are of an administrative nature, including safekeeping, collecting investment income, settling purchase and sale transactions, and record keeping.

Assets under management (AUM)
Assets managed by us, which are beneficially owned by clients, as at October 31, unless otherwise noted. Services provided in respect of assets under management include the selection of investments and the provision of investment advice. We have assets under management that are also administered by us and included in assets under administration.

Auction rate securities (ARS)
Securities issued through special purpose entities that hold long-term assets funded with long-term debt. In the U.S., these securities are issued by sponsors such as municipalities, student loan authorities or other sponsors through bank-managed auctions.

Bank-owned life insurance contracts (BOLI)
Our legacy portfolio includes BOLI where we provided banks with BOLI stable value agreements ("wraps"), which insure the life insurance policy's cash surrender value from market fluctuations on the underlying investments, thereby allowing us to guarantee a minimum tax-exempt return to the counterparty. These wraps allow us to account for the underlying assets on an accrual basis instead of a mark-to-market basis.

Basis point (bp)
One one-hundredth of a percentage point (.01%).

Capital adequacy
The level of capital that is sufficient to underpin risk and accommodate potential unexpected increases in risk within specified regulatory targets while maintaining our business plans. This includes risks for which minimum regulatory capital requirements may not be specified.

Collateral
Assets pledged as security for a loan or other obligation. Collateral can take many forms, such as cash, highly rated securities, property, inventory, equipment and receivables.

Collateralized debt obligation (CDO)
Securities with multiple tranches that are issued by special purpose entities and collateralized by debt obligations including bonds and loans. Each tranche offers a varying degree of risk and return so as to meet investor demand.

Collateralized loan obligation (CLO)
Securities that are backed by a pool of commercial or personal loans, structured so that there are several classes of bonds with varying maturities, called tranches.

Commercial mortgage-backed securities (CMBS)
Securities created through the securitization of commercial mortgages.

Commitments to extend credit
Unutilized amount of credit facilities available to clients either in the form of loans, bankers' acceptances and other on-balance sheet financing, or through off-balance sheet products such as guarantees and letters of credit.

Common Equity Tier 1 (CET1) capital
The sum of common shares issued that meet regulatory criteria, share premium from the issuances and other contributed surplus, retained earnings, accumulated other comprehensive income and other disclosed reserves, and common shares issued by consolidated subsidiaries held by third parties; less dividends removed from CET1 in accordance with applicable accounting standards.

Common Equity Tier 1 capital ratio
CET1 capital less regulatory adjustments or deductions divided by risk-weighted assets.

Covered bonds
Full recourse on-balance sheet obligations issued by banks and credit institutions that are also fully collateralized by assets over which investors enjoy a priority claim in the event of an issuer's insolvency.

Credit default swaps (CDS)
A derivative contract that provides the purchaser with a one-time payment should the referenced entity/entities default (or a similar triggering event occur).

Derivative
A contract between two parties, which requires little or no initial investment and where payments between the parties are dependent upon the movements in price of an underlying instrument, index or financial rate. Examples of derivatives include swaps, options, forward rate agreements and futures. The notional amount of the derivative is the contract amount used as a reference point to calculate the payments to be exchanged between the two parties, and the notional amount itself is generally not exchanged by the parties.

Dividend payout ratio
Common dividends as a percentage of net income after preferred share dividends.

Earnings per share (EPS), basic
Calculated as net income less preferred share dividends divided by the average number of shares outstanding.

Earnings per share (EPS), diluted
Calculated as net income less preferred share dividends divided by the average number of shares outstanding adjusted for the dilutive effects of stock options and other convertible securities.

Economic capital
An estimate of the amount of equity capital required to underpin risks. It is calculated by estimating the level of capital that is necessary to support our various businesses, given their risks, consistent with our desired solvency standard and credit ratings. The identified risks for which we calculate Economic Capital are credit, market (trading and non-trading), operational, business, fixed asset, and insurance. Additionally, Economic Capital includes goodwill and intangibles, and allows for diversification benefits across risks and business segments.

Fair value
The amount of consideration that would be agreed upon in an arm's length transaction between knowledgeable, willing parties who are under no compulsion to act.

Gross-adjusted assets (GAA)
GAA are used in the calculation of the Assets-to-capital multiple. They represent our total assets including specified off-balance sheet items and net of prescribed deductions. Off balance sheet items for this calculation are direct credit substitutes, including letters of credit and guarantees, transaction-related contingencies, trade-related contingencies and sale and repurchase agreements.

Guarantees and standby letters of credit
These primarily represent irrevocable assurances that a bank will make payments in the event that its client cannot meet its financial obligations to third parties. Certain other guarantees, such as bid and performance bonds, represent non-financial undertakings.

Hedge
A risk management technique used to mitigate exposure from market, interest rate or foreign currency exchange risk arising from normal banking operations. The elimination or reduction of such exposure is accomplished by establishing offsetting positions. For example, assets denominated in foreign currencies can be offset with liabilities in the same currencies or through the use of foreign exchange hedging instruments such as futures, options or foreign exchange contracts.

Hedge funds
A type of investment fund, marketed to accredited high net worth investors, that is subject to limited regulation and restrictions on its investments compared to retail mutual funds, and that often utilize aggressive strategies such as selling short, leverage, program trading, swaps, arbitrage and derivatives.

Home equity products
This is comprised of residential mortgages and secured personal loans whereby the borrower pledges real estate as collateral.

International Financial Reporting Standards (IFRS)
IFRS are principles-based standards, interpretations and the framework adopted by the International Accounting Standards Board.

Impaired loans
Loans are classified as impaired when there has been a deterioration of credit quality to the extent that management no longer has reasonable assurance of timely collection of the full amount of principal and interest in accordance with the contractual terms of the loan agreement. Credit card balances are not classified as impaired as they are directly written off after payments are 180 days past due.

Innovative capital instruments
Innovative capital instruments are capital instruments issued by Special Purpose Entities (SPEs), whose primary purpose is to raise capital. We previously issued innovative capital instruments, RBC Trust Capital Securities (RBC TruCS) and RBC Trust Subordinated Notes (RBC TSNs), through three SPEs: RBC Capital Trust, RBC Capital Trust II and RBC Subordinated Notes Trust. As per OSFI Basel III guidelines, non-qualifying innovative capital instruments treated as additional Tier 1 capital are subject to phase out over a ten year period beginning on January 1, 2013.

Loan-to-value (LTV) ratio
Calculated based on the total facility amount for the residential mortgage and homeline product divided by the value of the related residential property.

Master netting agreement
An agreement between us and a counterparty designed to reduce the credit risk of multiple derivative transactions through the creation of a legal right of offset of exposure in the event of a default.

Net interest income
The difference between what is earned on assets such as loans and securities and what is paid on liabilities such as deposits and subordinated debentures.

Net interest margin (average assets)
Net interest income as a percentage of total average assets.

Normal course issuer bid (NCIB)
A program for the repurchase of our own shares for cancellation through a stock exchange that is subject to the various rules of the relevant stock exchange and securities commission.

Notional amount
The contract amount used as a reference point to calculate payments for derivatives.

Off-balance sheet financial instruments
A variety of arrangements offered to clients, which include credit derivatives, written put options, backstop liquidity facilities, stable value products, financial standby letters of credit, performance guarantees, credit enhancements, mortgage loans sold with recourse, commitments to extend credit, securities lending, documentary and commercial letters of credit, note issuances and revolving underwriting facilities, securities lending indemnifications and indemnifications.

Office of the Superintendent of Financial Institutions Canada (OSFI)
The primary regulator of federally chartered financial institutions and federally administered pension plans in Canada. OSFI's mission is to safeguard policyholders, depositors and pension plan members from undue loss.

Operating leverage
The difference between our revenue growth rate and non-interest expense growth rate.

Options
A contract or a provision of a contract that gives one party (the option holder) the right, but not the obligation, to perform a specified transaction with another party (the option issuer or option writer) according to specified terms.

Primary dealer
A formal designation provided to a bank or securities broker-dealer permitted to trade directly with a country's central bank. Primary dealers participate in open market operations, act as market-makers of government debt and provide market information and analysis to assist with monetary policy.

Provision for credit losses (PCL)
The amount charged to income necessary to bring the allowance for credit losses to a level determined appropriate by management. This includes both specific and general provisions.

Repurchase agreements
These involve the sale of securities for cash and the simultaneous repurchase of the securities for value at a later date. These transactions normally do not constitute economic sales and therefore are treated as collateralized financing transactions.

Residential mortgage-backed securities (RMBS)
Securities created through the securitization of residential mortgage loans.

Return on common equity (ROE)
Net income less preferred share dividends, expressed as a percentage of average common equity.

Reverse repurchase agreements
These involve the purchase of securities for cash and the simultaneous sale of the securities for value at a later date. These transactions normally do not constitute economic sales and therefore are treated as collateralized financing transactions.

Risk-weighted assets (RWA)
Assets adjusted by a regulatory risk-weight factor to reflect the riskiness of on and off-balance sheet exposures. Certain assets are not risk-weighted, but deducted from capital. The calculation is defined by guidelines issued by OSFI based on Basel III, effective the first quarter of 2013. For more details, refer to the Capital management section.

Securities lending
Transactions in which the owner of a security agrees to lend it under the terms of a prearranged contract to a borrower for a fee. The borrower must collateralize the security loan at all times. An intermediary such as a bank often acts as agent for the owner of the security. There are two types of securities lending arrangements: lending with and without credit or market risk indemnification. In securities lending without indemnification, the bank bears no risk of loss. For transactions in which the bank provides an indemnification, it bears the risk of loss if the borrower defaults and the value of the collateral declines concurrently.

Securities sold short
A transaction in which the seller sells securities and then borrows the securities in order to deliver them to the purchaser upon settlement. At a later date, the seller buys identical securities in the market to replace the borrowed securities.

Securitization
The process by which various financial assets are packaged into newly issued securities backed by these assets.

Special purpose entities (SPEs)
Special purpose entities, which may take the form of a corporation, trust, partnership or unincorporated entity, typically are created to accomplish a narrow and well-defined objective with legal arrangements that impose strict limits on the decision-making powers of their governing board, trustee or management over its operations. Frequently these provisions specify that the policy guiding the ongoing activities of the SPEs cannot be modified, other than perhaps by its creator or sponsor.

Standardized Approach
Risk weights prescribed by OSFI are used to calculate risk-weighted assets for the credit risk exposures. Credit assessments by OSFI-recognized external credit rating agencies of S&P, Moody's, Fitch and DBRS are used to risk-weight our Sovereign and Bank exposures based on the standards and guidelines issued by OSFI. For our Business and Retail exposures, we use the standard risk weights prescribed by OSFI.

Structured investment vehicles
Managed investment vehicle that holds mainly highly rated asset-backed securities and funds itself using the short-term commercial paper market as well as the medium-term note (MTN) market.

Subprime loans
Subprime lending is the practice of making loans to borrowers who do not qualify for the best market interest rates because of their deficient credit history. Subprime lending carries more risk for lenders due to the combination of higher interest rates for the borrowers, poorer credit histories, and adverse financial situations usually associated with subprime applicants.

Taxable equivalent basis (teb)
Income from certain specified tax advantaged sources is increased to a level that would make it comparable to income from taxable sources. There is an offsetting adjustment in the tax provision, thereby generating the same after-tax net income.

Tier 1 capital
Tier 1 capital comprises predominantly CET1, with additional Tier 1 items such as preferred shares and non-controlling interests in subsidiaries Tier 1 instruments.

Tier 2 capital
Tier 2 capital consists mainly of subordinated debentures that meet certain criteria, certain loan loss allowances and non-controlling interests in subsidiaries' Tier 2 instruments.

Total capital and total capital ratio
Total capital is defined as the total of Tier 1 and Tier 2 capital. The total capital ratio is calculated by dividing total capital by risk-weighted assets.

Tranche
A security class created whereby the risks and returns associated with a pool of assets are packaged into several classes of securities offering different risk and return profiles from those of the underlying asset pool. Tranches are typically rated by ratings agencies, and reflect both the credit quality of underlying collateral as well as the level of protection based on the tranches' relative subordination.

Trust Capital Securities (RBC TruCS)
Transferable trust units issued by special purpose entities RBC Capital Trust or RBC Capital Trust II for the purpose of raising innovative Tier 1 capital.

Trust Subordinated Notes (RBC TSNs)
Transferable trust units issued by RBC Subordinated Notes Trust for the purpose of raising innovative Tier 2 capital.

Value-at-Risk (VaR)
A generally accepted risk-measurement concept that uses statistical models based on historical information to estimate within a given level of confidence the maximum loss in market value we would experience in our trading portfolio from an adverse one-day movement in market rates and prices.

Exhibit 3

CONSENT OF INDEPENDENT REGISTERED CHARTERED ACCOUNTANTS

We consent to the incorporation by reference in Registration Statement Nos. 333-12036, 333-12050, 333-13052, 333-13112, 333-14144, 333-110953, 333-117922 and 333-178350 on Form S-8 and Nos. 333-181552 and 333-189888 on Form F-3, and to the use in this Annual Report on Form 40-F of our reports dated December 4, 2013 relating to the consolidated financial statements of Royal Bank of Canada and the effectiveness of Royal Bank of Canada's internal control over financial reporting for the year ended October 31, 2013.

/s/ Deloitte LLP
Independent Registered Chartered Accountants
Licensed Public Accountants
Toronto, Canada
December 5, 2013

Exhibit 4

RBC

Our Code of Conduct

...ual resp... ...fidentiality • fairness • corporate responsibility • honouring our trust in you • objectivity

GUIDING PRINCIPLES

respect

integrity

honouring our trust in you

fairness

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Foreword

Dear Colleague,

The very essence of the financial services industry demands that we consistently maintain the highest possible standards of honest and ethical behaviour. In keeping with this objective, RBC has eight Guiding Principles that express these high standards and they form the foundation for Our Code of Conduct.

Our Code of Conduct is integral to the way we do business at RBC, defining who we are and providing all employees with the same frame of reference for dealing with issues that can be both sensitive and complex.

Our Code of Conduct broadly addresses a variety of ethical and legal concerns that many of us face on a day-to-day basis – it does not replace established manuals or policies, nor does it answer many of the specific questions you may have. Our Code of Conduct is established to guide your judgment and to help you better understand the ethical demands and constraints related to your work. Each of us is accountable for putting these principles into practice, demonstrating the character and personal integrity that are a prerequisite for success in every RBC company. Our ability to achieve and to sustain quality earnings in this industry depends upon the trust which each of us earns every day from our clients, colleagues, communities and shareholders.

Please review this document carefully, to ensure that you understand it fully. You play an important role in representing our organization both on and off the job and in advancing our reputation with clients and the public at large.

Gord M. Nixon
President and Chief Executive Officer

Introduction

Based on the eight Guiding Principles established by RBC, Our Code of Conduct is for all RBC companies and applies equally to all employees.

As every employee contributes to the process of compliance, it is your responsibility to familiarize yourself with the contents of this Code and with any of the more detailed policies that may directly affect you or your work.

If, at any time, you are uncertain about the proper course of action, we urge you to discuss your concerns with your manager. Should you feel that this is not appropriate for some reason, you may also contact any of the key contacts listed in the Appendix.

The importance of Our Code of Conduct cannot be overemphasized. Your understanding of it and your cooperation in adhering to it is critical to the integrity of our industry and to maintaining the trust that our clients have placed in RBC. Accordingly, any employee who fails to meet the standards set out in this Code will be subject to corrective or disciplinary action, including immediate or eventual dismissal.

The term "RBC" has been used throughout this document to refer collectively to all RBC companies. In some instances, it may refer to individual employers.

Multiple Jurisdictions
Our Code of Conduct and the eight Guiding Principles govern the actions of every employee regardless of the specific company for which they work and regardless of the legal jurisdiction or location of that company. It extends to every employee in every location worldwide. References to specific regulatory bodies should be interpreted to mean the relevant entity or organization in your jurisdiction.

Waivers
Royal Bank of Canada's Board of Directors must approve any waiver of a departure from Our Code of Conduct involving a Royal Bank of Canada director or certain executive officers, and any approved waiver must be disclosed publicly in accordance with applicable legal or regulatory requirements and relevant RBC policies. RBC's Chief Human Resources Officer and Chief Compliance Officer must approve any other waiver of a departure from Our Code of Conduct in accordance with relevant RBC policy.

1. Upholding the Law

Every RBC company and employee will, at all times, abide by the law and respect its intent in the best interests of our clients, employees and shareholders.

Laws, Rules and Regulations
Numerous laws, rules and regulations have been established to govern the operations of financial institutions. RBC companies and employees are subject to, and are expected to comply with, the laws, rules and regulations of all countries in which they operate, as well as the expectations and requirements of our various regulators. These laws include, but are not limited to, banking laws, securities laws and regulations, laws prohibiting the corruption of foreign officials, laws designed to combat money laundering and terrorist financing, as well as lobbying and employment legislation.

We have designed all of our policies and procedures to ensure compliance with these laws, regulations, rules, requirements and expectations. As an employee, your adherence to these policies and procedures is essential to ensuring we fulfill our obligations. In some cases, you will be required to review and understand policies, procedures and other guidance around compliance issues that relate to your job responsibilities and your obligations as an RBC employee. If in doubt, discuss with your manager.

As an employee:
- You are not to take any action that violates any applicable law, rule or regulation. To avoid or minimize legal or compliance difficulties, seek any necessary advice at the onset of your business dealings.

- You have a duty to cooperate with valid internal and external investigations, audits and regulatory examinations in a forthright manner and to provide honest, accurate and timely information.

- You must refer all external authorities requesting information about RBC to your Manager or Global Compliance or RBC Law Group before providing any information in response to the request.

Inside Information

Through your work, you may sometimes be privy to confidential information concerning the affairs of an RBC company, a client, a potential client, a supplier, or other company whose securities are publicly traded on a stock exchange. This knowledge is referred to as “inside information” when two specific conditions are met:

- the information has not been generally disclosed to the public
- the information is “material”

In this situation, “material” refers to information that an investor could consider important in deciding whether or not to buy or sell that company’s stock or securities. Examples might include knowledge of a potential merger or acquisition, a valuable natural resource or scientific/technological discovery, the financial stability of the company, etc.

Possession of inside information is legal – the misuse of it is illegal. Those who have access to inside information should clearly recognize this distinction.

“Tipping” is the act of passing inside information to another person who has no right or need to have it, and it is illegal.

All employees – regardless of their role, level, department or area – are to scrupulously avoid using, sharing or disclosing non-public information about any RBC company, its subsidiaries, affiliates or clients (both current and prospective), except in the legitimate course of doing business.

Policies, procedures, standards and guidelines have been established to limit the potential for the misuse of inside information and to offer protection to you and RBC. You are to refer to the policies, procedures and guidelines that deal with information barriers and compliance issues. If in doubt, seek guidance from your manager.

As an employee:

- You are not to discuss or pass on inside information unless the exchange is necessary for a specific business purpose. Adherence to this practice will reduce the chances of inadvertent tipping. Please refer to the Confidentiality section of this document for further guidance.

- You are not to trade in stock or securities, or recommend or advise others to do so, on the basis of inside information you have acquired through your job. It is unethical and usually illegal.

- Before investing in RBC securities, employees are to familiarize themselves with our policies, procedures and guidelines on personal trading, including insider trading laws and RBC securities trading policies, as well as the effect that the perception of wrongdoing may have. If you have any doubts, do not trade.

- Executive officers and other “insiders” identified by RBC are to refer to RBC’s Inside Information and Information Barriers Policy and Personal Trading Policy for reporting instructions for further guidance. Directors of Royal Bank of Canada are to refer to the Insider Trading and Reporting Policy and Procedures for Directors of Royal Bank of Canada. Non-executive directors of subsidiaries of Royal Bank of Canada who are not otherwise officers, employees or directors of Royal Bank of Canada, are to refer to the Policy on Inside Information and Personal Trading for Non-executive Directors of Subsidiaries of Royal Bank of Canada.

Copyright
Most printed, broadcast, recorded material and software, including RBC’s name, logo and other RBC trademarks, are protected by copyright laws. The prior approval of the copyright holder may be required before making copies of such material. If in doubt, consult guidelines issued by the RBC Law Group or contact the RBC Law Group.

As an employee:
- You are required to follow the specific terms of the licensing agreement issued by the publisher of any computer software program used in the course of business or on a computer owned by an RBC company.

- You must exercise care when making copies of printed or recorded material and software, and you are to respect any prior approval requests required by the copyright holder.

- Under no circumstances, are you to:

- *install or use any software not licensed for use by RBC companies on any company-owned computer*
- *copy software programs licensed to RBC companies for use by others, except as permitted by the copyright or licensing agreement. The use of any copies is to strictly comply with the licensing agreement and RBC guidelines*
- *use RBC’s name or logo to identify yourself in non-business social media forums*

Workplace Safety
Safety and health in the workplace is a shared responsibility of RBC, managers and employees. Managers are responsible for ensuring that employees are aware of any potential work hazards, are trained in safe work practices and are expected to comply with the safety and health laws, rules and regulations of the country in which they operate. All employees are to take every reasonable and necessary precaution to ensure personal safety and health as well as that of their colleagues.

Management approval is to be obtained before alcohol can be served on company premises. At any function or event sponsored by an RBC employer at which alcohol is served, the senior officer hosting the event is to ensure that all applicable permits have been obtained and that employee safety is maintained.

As an employee:

- You are not to possess or use illegal drugs on company premises under any circumstances, nor are you to be under the influence of illegal drugs or misuse prescription drugs. You are not to encourage, persuade, or coerce a fellow employee to engage in illegal drug use, sell or transfer prescription medication, or in any way contribute to such use, either on or off company premises.

- You are not to threaten, intimidate or endanger anyone associated with RBC, either verbally or through your actions.

- You are not to have a weapon of any kind in your possession while on company premises. This includes handguns, rifles, knives, explosives, or any other dangerous implement or material. RBC employers may require any person in possession of such an item to leave the property immediately.

2. Confidentiality

Clients and employees have a right to privacy and to the security of their personal information. RBC companies and employees will respect and preserve this right.

Client Privacy
Respect for the privacy rights of clients is a fundamental principle in the financial services industry. As such, you are expected to have a thorough knowledge of our Enterprise Privacy & Information Risk Management Policy.

As an employee:
- You are to comply with the Enterprise Privacy & Information Risk Management Policy at all times and respect the confidentiality of client information.

- You are to safeguard and handle client information with care at all times in accordance with RBC's Client Privacy View.

- If, in your position, you have access to client information from more than one RBC company, you are to ensure that proper client consent is in place before sharing that information with member companies.

Employee Privacy
Employees have the right to privacy as well. Many employees have both an employment relationship as well as a client relationship with RBC companies. Personal information about you as a client is confidential and is treated in the same manner as any other client. As with any other client, cross-referrals or product/service promotions require your prior written consent. Similarly, personal information about you as an employee is confidential. Any sharing or use of this information for client-related purposes needs your prior consent.

As an employee:
- Any inquiries you may receive about an employee or requests for employee information – including those concerning former employees – is to be handled in strict compliance with our Employee Privacy View.

Protection of Proprietary Information and Intellectual Property
Certain information concerning the plans, methods, practices and activities of RBC companies is proprietary and classified either as Restricted, Confidential or RBC Internal. Such information is to be protected in keeping with RBC's Information Handling Scenarios View.

Client lists and information (i.e. computer/electronic files, paper records, etc.) are the property of RBC.

Intellectual property, including inventions, improvements, works of authorship, developments, concepts or ideas, data, processes, computer software programs, and discoveries, created by employees during their employment belongs to and remains the exclusive property of RBC.

As an employee:
- You are not to access, use or disclose any Restricted, Confidential or RBC Internal information about an RBC company without the proper authorization. Requests for this type of information are to be forwarded to your manager who, if necessary, will direct it to the appropriate corporate function.

- You are not to remove any proprietary information from company premises without permission from your manager.

- You are not to give testimony about RBC or general industry policies or business practices in a legal proceeding not involving RBC as a party without prior authorization from the Law Group.

- Should you leave the service of an RBC employer, you are obliged to continue safeguarding the privacy of both clients and employees, and to protect the confidentiality of the company's business indefinitely. Specific client information – including names, lists, profiles, data, etc. – is not to be used in subsequent employment situations. Any client or proprietary information you have in your possession is to be returned to the organization when you leave.

- Should you leave the service of an RBC employer, any intellectual property you create for RBC or while using RBC resources remains RBC's exclusive property.

Information Shared with Third Parties
In the course of regular business activities, RBC companies frequently enter into arrangements with a variety of outside parties including vendors, suppliers, service providers, etc., often resulting in the exchange of information.

As an employee:
- You are to share Restricted, Confidential or RBC Internal information only in accordance with RBC's Information Handling Scenarios View. Similarly, you are not to share any confidential information about an outside party (vendor, supplier, service provider, etc.) except to satisfy the obligations outlined in the arrangement. Once again, this information is only to be shared with those who need to know.

Solicitation
Employees should be able to enjoy a work environment where others do not unduly solicit them on issues unrelated to their legitimate work.

As an employee:
- You are not to solicit employees for non-RBC-related business on company premises without first receiving approval from your manager.

3. Fairness

In all our dealings, we strive to treat people fairly, carefully weighing our responsibilities to all stakeholders. Business relationships – whether cooperative or competitive – will be pursued freely, fairly and openly.

Equal Opportunity
RBC companies are committed to promoting equal opportunity in all dealings with employees, clients, suppliers and others.

RBC companies abide by the non-discrimination or human rights legislation in the various jurisdictions where we operate. These laws often prohibit discrimination on various grounds, with some examples being race, colour, religion/creed, age, gender, marital status, sexual orientation and disability. This is not a complete list and managers and employees are required to be familiar with those that apply in their jurisdiction.

Where laws do not prohibit discrimination, or where they allow for differential treatment, RBC companies are still committed to non-discrimination principles and will ensure that they do not operate in a way that simply continues stereotypes or establishes barriers. An example of where differential treatment may be necessary could be where a sound legitimate business need exists and where accommodations cannot effectively address the business need and the individual. If in doubt, seek guidance from Human Resources or the Law Group (refer to key contacts).

RBC employers will also respect and accommodate the diversity of their clients and workforce when determining appropriate dress codes.

As an employee:
- You are not to engage in discriminatory practices that are contrary to applicable laws or the policies, procedures and standards established for RBC companies.

Free Competition
RBC companies are committed to free competition and do not support any agreements, actions or concerted practices that restrict or impede fair competition. It is recognized that this is a complex area, particularly for sales and front-line staff. Employees who work in a sales function should familiarize themselves with policies on tied selling and associated compliance manuals and instructions.

As an employee:
- You are to avoid any collusive, anti-competitive discussions and/or agreements with competitors.

- *You are to use only fair and honest sales and negotiating methods. At the same time, you are to avoid any sales practices that could be misconstrued as an attempt to impose undue pressure on or coerce a client into obtaining a product or service from an RBC company as a condition of closing a sale.*

- *If in doubt, you are to seek guidance from your manager, Global Compliance or the Law Group.*

4. Corporate Responsibility

It is our duty as a corporate citizen to add value to society while earning a profit for our shareholders. RBC companies take responsibility for the effects of their actions, both social and economic.

Political Contributions
RBC companies will make only those contributions permitted by law to a political party, candidate, or campaign and only as an expression of responsible citizenship – not to “purchase” favours or to gain improper advantage. Contributions to political parties, riding associations, and candidates are not included in the corporate philanthropy program. Head Office decides on and reports such contributions separately for RBC companies.

Employees are encouraged to take their citizenship seriously and to participate in general political processes such as school board, municipal, provincial and/or federal elections, etc.

As an employee:
- You are not to make political contributions in the name of an RBC company unless you are specifically and explicitly mandated by the company to do so.

- Should you choose to become involved in political activity, you do so on your own behalf and not as a representative of RBC. You are not, in any way, to use your affiliation with RBC in a marketing fashion.

Social Responsibility
RBC companies accept responsibility and are accountable for the social and economic effects of their business actions and decisions.

As an employee:
- You need to recognize and conscientiously evaluate these factors whenever you make a business decision. If in doubt, seek the assistance or advice of a senior manager.

Environmental Responsibility
RBC companies believe human welfare depends upon sound economic growth and the maintenance of a healthy environment. We are committed to managing our businesses to promote these aims.

As an employee:
- You need to manage all aspects of your work to ensure environmental laws and recognized standards are met or exceeded.

5. Honouring Our Trust in You

The funds, property, information and services entrusted to our care belong to RBC companies and their clients alone. Using these assets carelessly, inappropriately, or for personal gain is a violation of this trust.

Misappropriation

RBC companies are obliged to safeguard the assets of their clients and member companies at all times, and to protect them from all forms of misuse.

Terms used to describe misappropriation might include theft, fraud, embezzlement, unauthorized “borrowing”, or “kiting” (taking advantage through any means of the time delay required for a cheque to clear at one financial institution and be charged back to another) *or obtaining funds through false pretences such as depositing a cheque known to be NSF (Non-Sufficient Funds) or making an “empty envelope deposit” in an Automated Banking Machine*.

As an employee:

- You must not, under any circumstances, misappropriate funds, property or other assets, or knowingly assist another individual to do so. Similarly, you are not to convert any assets that do not belong to you, or use them for the benefit of yourself or anyone other than the rightful owners. You are not to knowingly assist another in this pursuit.

- If you have access to a company expense account, you are to claim only those expenses that are eligible for reimbursement under RBC’s expense guidelines. Intentional use of expense accounts for personal purposes represents misappropriation of company funds.

Information Technology Use/Information Security

RBC provides employees with equipment and access to systems, technology, the Internet and information about RBC and its clients as tools to support its business needs. All equipment, systems, technology and information provided by RBC remain the property of RBC. RBC monitors employees’ access to and use of systems and technology, including Internet use and electronic mail.

As an employee:

- You are required to follow RBC policies, procedures and standards relating to Information Technology, Information Security and Privacy. Any observed or suspected Information Technology, Information Security or Privacy incidents or lapses are to be reported promptly to your local information security or technology department or other responsible unit.

- When using RBC equipment, you must not access, transmit or download games or obscene or offensive material, nor, except for the occasional incidental use, use the Internet or electronic mail for personal reasons.

Employee as a Client

As a result of their employment with RBC companies, some employees have access to cash, negotiable instruments, systems and processes which are not available to regular clients.

As an employee:

- Any personal business or transaction of yours, or of someone with whom you are personally associated, including friends and relatives, is to be handled at arm's length, and on a strictly "business/client" basis. You are to ensure that all personal transactions are handled by another employee according to standard operating procedures and that they receive the same treatment and scrutiny as any normal client transaction.

Reporting Breaches of Our Code of Conduct and Other Irregularities and Dishonesty

Employees also share responsibility for ensuring that honesty and integrity prevail within the workplace, and for protecting the rights and assets of clients and the reputation of RBC companies.

You will be protected from any adverse repercussions arising from reporting irregularities in good faith.

As an employee:

- If you become aware of any dishonest or illegal activities, of any material transaction or relationship that reasonably could be expected to give rise to a conflict of interest, of the falsification of records or returns by another employee, of any breach or material waiver of this Code of Conduct, or of any other serious infraction that has occurred either inside or outside the company, you must promptly report the facts to your manager, to senior management or to any of the key contacts, each of whom is then required to report the issue through the Code of Conduct Centralized Reporting Process. Should you wish to report anonymously, you may use the RBC Reporting Hotline to do so (see key contacts for information regarding the RBC Reporting Hotline).

- At the same time, anything unusual that you might notice about a client's affairs that could affect an RBC company is also to be promptly reported to your manager, to senior management or to any of the key contacts listed in the Appendix.

- If you are unsure of the proper course of action, or are uncomfortable or unable to talk to your manager, you are required to bring your concerns to the attention of any of the key contacts listed in the Appendix.

- *Employees must not take any retaliatory action against another employee for making a report in good faith under this provision of the Code of Conduct.*

Compliance with RBC Policies, Procedures and Standards
Employees of RBC companies are expected to perform the work they have been assigned and as requested, consistent with the authorities they have been granted and with the applicable policies, procedures and standards.

As an employee:
- You are expected to work within the boundaries of what you have been authorized to perform such as lending, signing, delegated authorities, and comply with policies, procedures and standards relevant to your job responsibilities.

Compliance with Instructions
Employees of RBC companies are expected to comply with instructions provided by their supervisors.

As an employee:
- You are expected to comply promptly with all instructions received from a supervisor, unless the instruction specifically violates a law, regulation or RBC policy, procedure or standard, or could result in an out-of-the-ordinary health or safety risk.

6. Objectivity

The judgments we make as employees will be independent of personal interests arising from other business dealings or obligations created by social relationships or personal favours.

In general, employees should consider all of the following factors in making business decisions:
- is this legal
- is this fair, ethical and moral
- would RBC's reputation be negatively impacted if this situation became public knowledge
- would clients, fellow employees or third parties perceive this situation as a conflict of interest

Payments, Gifts, Entertainment
Employees are encouraged to consider the motive behind business gifts and entertainment. Employees are to ensure that the practice is done only in the spirit of business courtesy and relationship management and in no way creates an environment where one party feels a sense of obligation to the other party or creates a real, potential or perceived conflict of interest. A modest value of approximately 100 local currency should be applied in assessing what is acceptable to give or to accept. Gifts in the form of cash, bonds or negotiable securities, in any amount, may not be accepted or given.

The value of business entertainment can sometimes exceed the guideline above, since some commonly accepted business invitations include, for example, event tickets (i.e. sports, arts, etc.). Therefore, in the case of business entertainment only, if the value is likely to exceed the value of 100 local currency, the entertainment must still be considered moderate, must in no way create a sense of obligation or real or perceived conflict of interest, and is to be of a style or value commonly accepted for business occasions. If in doubt, as to what is considered acceptable, seek guidance from your manager prior to accepting or extending an invitation.

The same considerations apply for payments, gifts or entertainment provided to employees as well as to those personally associated with employees, including friends or relatives, where the motive could be perceived as attempting to influence the employee.

As an employee:
- You are to familiarize yourself with RBC's enterprise-wide Policy on Gifts and Entertainment.

- You are not to be involved in any act that could be interpreted as seeking, receiving or dispensing a bribe, kickback or questionable payment. It is unethical and generally illegal.

- You may supply or accept modest gifts, favours, entertainment or services provided they:

- *do not consist of cash, bonds, or negotiable securities*
- *are unlikely to be interpreted as a bribe or other improper payment*
- *conform with generally accepted ethical and legal standards as well as public disclosure requirements*
- *are reasonably considered customary and usual business practice*
- *will not embarrass RBC or the recipient*
- *meet the requirements of RBC's Control Standards for Gifts and Entertainment*

Conflicts of Interest
Even the slightest impression of an impropriety or conflict of interest can have a devastating effect. Employees are encouraged to familiarize themselves with the types of situations that could give rise to a perception of a conflict of interest and to handle themselves accordingly. Employees must report any real, potential or perceived conflict of interest situation to their manager.

Employees should also refer to "Inside Information" in the section entitled Upholding the Law.

As an employee:
- Your primary business loyalty must be to RBC. You are to avoid any situation that could result in a real, potential or perceived conflict of interest.

- Any decision made by you in the course of your work is to be:

- *made in an objective manner*
- *based solely on the best interests of RBC*

- *unaffected by any consideration of personal gain for you or for anyone personally associated with you including friends and relatives*

- You are not to approve a product, service request or transaction for yourself or for any client with whom you are personally associated, including friends and relatives. These decisions are to be referred to your manager or through other approved channels. Personal transaction processing for investment advisers within the broker/dealer environment and insurance advisers in the insurance environment may be subject to different considerations. For guidance consult with your compliance group or applicable guidelines.

- Neither you nor members of your immediate family are to acquire any assets or property from a client's estate, either directly or indirectly, nor to accept executorships (paid or unpaid) for the settling of a client's estate, unless you can clearly demonstrate that the assets, property or executorship appointment is totally independent of your employment status. Your business unit or functional compliance officer or group is to be consulted in making this determination.

- You may accept other employment while employed by an RBC company providing it:

- *is legal*
- *is not with a competitor*
- *will not result in a conflict of interest*
- *will not interfere with your work performance at RBC*

- You may work in the same unit or department with someone with whom you are personally associated, including friends and relatives, providing it will not result in a potential security risk or a conflict of interest. As direct reporting relationships may more easily constitute a conflict of interest, employees who are in a direct reporting relationship with someone with whom they are personally associated are to disclose the relationship in keeping with RBC's Conflicts of Interest policy. Reporting relationships involving investment advisers in the broker/dealer environment may be subject to different considerations. For guidance, consult your compliance group or applicable guidelines.

External Directorships
Employees who are invited to sit on the boards of external organizations or to accept other appointments may do so, providing they observe the established RBC policies and procedures, including obtaining any necessary approvals.

For publicly traded, private for-profit, or venture capital entities/organizations, even where the organization or entity is connected to an RBC company, refer to the policy for required process and approvals.

For not-for-profit organizations, review and approval by Management is required prior to accepting the Directorship.

As an employee:
- Before you accept a directorship or similar appointment, you are to obtain approval in accordance with RBC's Conflicts of Interest policy, control standards for Outside Activities and External Directorships and have the prior approval of your manager.

- If you are a member of a public or quasi-public decision-making body such as a school board or town council, you should recognize that these institutions are often consumers of financial services and may be actual or potential clients of RBC companies. You are cautioned to assess the potential for a conflict of interest before accepting and:

- *declare any such conflict to the institution and your manager*
- *carefully judge whether your employment warrants your voluntary withdrawal from any deliberations on the placement of the institution's financial business*

7. Integrity

Our word is our bond. As representatives of RBC companies, we tell the truth in all our communications and do not mislead by commission or omission.

Telling the Truth
Employees should evaluate all communications for which they are responsible, including sales representations and advertising, and ensure information is true and does not mislead the public, either directly or indirectly.

As an employee:
- You are to tell the truth in all communications, making every reasonable effort to provide full, fair, accurate, timely, and understandable disclosure in reports, documents and communications, and to avoid errors, omissions, or misunderstandings in statements issued on behalf of RBC.

Integrity of Records
The books and records of RBC companies are to be maintained with scrupulous integrity and are to accurately reflect all business dealings.

As an employee:
- You are to ensure that all transactions, documents, agreements and dealings are recorded and maintained in an accurate and timely manner, and that such records are managed in accordance with records management policies.

- No employee, officer or director should ask or encourage another person to report anything other than truthful and accurate financial or other information.

Employee Character
The cornerstone of financial services is trust. RBC companies require employees whose integrity is beyond reproach.

As an employee:

- *You are to avoid any conduct or association – either inside or outside of work – which could bring your honesty, integrity or trustworthiness into question, or which could be detrimental to RBC's security or to its reputation within the community.*
- *When representing yourself as an RBC employee – inside or outside of work, verbally or in writing – you must not conduct yourself in any way that would tarnish RBC's image and reputation, and must comply with the Code of Conduct and any relevant RBC policies, procedures, and standards.*

8. Individual Responsibility

As responsible women and men, we treat each other with respect. Our working relationships are based on candour, openness and our commitment to empower others rather than to exploit them.

Respectful Workplaces
RBC is committed to maintaining workplaces characterized by professionalism, and respect for the dignity of every individual with whom its employees interact. RBC expects each employee to respect the diversity of other employees, clients and others with whom they interact, respecting differences such as gender, race, colour, age, disability, sexual orientation, ethnic origin and religion. RBC does not tolerate harassment, other disrespectful and inappropriate behaviour and retaliation, as our employees have every right to work in an environment that is free from such conduct.

RBC has policies designed to prevent harassment, other disrespectful and inappropriate behaviour and retaliation and all RBC employers will take every reasonable measure to ensure a respectful workplace. Likewise, RBC expects that all employees take personal responsibility for their interactions, communications and behaviour to maintain a respectful workplace.

Any complaints of harassment, other disrespectful and inappropriate behaviour and retaliation are promptly, thoroughly and impartially investigated.

Harassment
Harassment is any kind of unwelcome behaviour that has the effect of creating an offensive, hostile or intimidating work environment or unreasonably interfering with an individual's work performance. It interferes with a climate of understanding and mutual respect for the dignity and worth of each person, thereby undermining the integrity of the employment relationship and eroding morale.

Other Disrespectful and Inappropriate Behaviour
Like harassment, other disrespectful and inappropriate behaviour creates an offensive, hostile and intimidating work environment affecting employee morale and performance.

Retaliation
RBC prohibits retaliation of any kind against an individual for making a complaint in good faith, providing information in connection with an investigation, or as a result of the resolution of the complaint. Likewise, retaliation against individuals who have exercised their legal rights is prohibited.

As an employee:

- Under no circumstances are you to engage in harassment, or disrespectful or inappropriate behaviour toward a fellow employee, client or others with whom you are interacting for the purposes of RBC's business.

- You must not display obscene or offensive material in any RBC workplace.

- You may lodge a complaint of harassment or other disrespectful or inappropriate behaviour against an employee, a client or a supplier of an RBC company through one of the key contacts. Should you so desire, you may also lodge a complaint through regulatory channels, e.g. Human Rights Commission.

Publication Date: December 9, 2011

Exhibit 5

Industry Guide 3 — Return on Equity and Assets Ratios

	For the Year Ended October 2013	For the Year Ended October 2012	For the Year Ended October 2011
Return on Assets	0.99%	0.93%	0.83%
Return on Equity	19.4%	19.3%	18.7%
Dividend Payout Ratio	45%	46%	49%
Equity to Asset Ratio	5.63%	5.39%	5.05%

Results are from Consolidated Financial Statements.

Exhibit 7

CONSOLIDATED RATIOS OF EARNINGS TO FIXED CHARGES

The tables below set forth our consolidated ratios of earnings to fixed charges, calculated in accordance with International Financial Reporting Standards (IFRS) and Canadian GAAP, as applicable, for the five-year period ended October 31, 2013:

	IFRS			Canadian GAAP	
	Year ended October 31, 2013	Year ended October 31, 2012	Year ended October 31, 2011	Year ended October 31, 2010	2009
Excluding Interest on Deposits	5.37	4.81	3.47	3.55	3.28
Including Interest on Deposits	2.31	2.12	1.84	1.90	1.60

For purposes of computing these ratios, earnings represent net income plus income taxes and fixed charges (excluding capitalized interest). Fixed charges represent (i) estimated interest within rental expense, (ii) amortization of debt issuance costs, and (iii) interest (including capitalized interest), including or excluding deposit interest as indicated.

Royal Bank of Canada and Subsidiaries—IFRS
Ratio of Earnings to Fixed Charges and Preferred Dividends

(Canadian dollars in millions)	IFRS Year Ended October 31 2013	IFRS Year Ended October 31 2012	IFRS Year Ended October 31 2011	CDN GAAP Year Ended October 31 2010	CDN GAAP Year Ended October 31 2009	
Excluding Interest on Deposits						
Net Income before income taxes	$ 10,617	$ 9,617	$ 8,191	$ 6,968	$ 5,526	
Less: Income/(loss) from equity investees (Note 1)	(6)	(24)	9	55	4	*Note 1*
Fixed Charges:						
Interest expense (excl. Deposits)	$ 2,257	$ 2,353	$ 3,164	$ 2,605	$ 2,275	
Estimated interest within rental expense	173	162	156	149	146	
Total fixed charges	2,430	2,515	3,320	2,754	2,421	
Preferred dividend requirements (note 2)	319	329	326	338	325	*Note 2*
Fixed charges and preferred dividends	2,749	2,844	3,645	3,092	2,746	
Earnings	13,041	12,108	11,520	9,777	7,951	
Ratio of earnings to fixed charges	**5.37**	**4.81**	**3.47**	**3.55**	**3.28**	
Ratio of earnings to fixed charges and preferred dividends	**4.74**	**4.26**	**3.16**	**3.16**	**2.90**	
Including Interest on Deposits						
Net Income before income taxes	$ 10,617	$ 9,617	$ 8,191	$ 6,968	$ 5,526	
Less: Income/(loss) from equity investees (Note 1)	(6)	(23)	9	55	4	*Note 1*
Fixed Charges:						
Interest expense (incl. Deposits)	$ 7,899	$ 8,403	$ 9,626	$ 7,696	$ 9,037	
Estimated interest within rental expense	173	162	156	149	146	
Total fixed charges	8,072	8,565	9,782	7,845	9,183	
Preferred dividend requirements (note 2)	319	329	328	338	325	*Note 2*
Fixed charges and preferred dividends	8,391	8,894	10,110	8,183	9,508	
Earnings	18,683	18,159	17,982	14,868	14,713	
Ratio of earnings to fixed charges	**2.31**	**2.12**	**1.84**	**1.90**	**1.60**	
Ratio of earnings to fixed charges and preferred dividends	**2.23**	**2.04**	**1.78**	**1.82**	**1.55**	

Note (1) **Equity in Undistributed Earnings of Unconsolidated Subsidiaries Calculation (C $'000s):**	2013	2012	2011	2010	2009
Associated Corporations (equity accounted investments—IFRS)	6	23,904	(8,890)	(54,684)	(3,922)
JV (proportionate consolidation Cdn. GAAP)				-	(1)
	6	23,904	(8,890)	(54,684)	(3,923)

Note: Losses are presented with a negative sign in this calculation.

Note (2) **Preferred Dividend Requirements Calculation (C $ millions):**	2013	2012	2011	2010	2009
Preferred Dividends (per Income Statement)	253	258	258	258	233
Taxable Equivalent Gross-up (1-Effective Tax Rate for period)	79.4%	78.4%	78.7%	76.4%	71.6%
Preferred Dividend Requirement	319	329	328	338	325
Effective Tax Rate	20.6%	21.6%	21.3%	23.6%	28.4%

Exhibit 31.1

SOX 302 CERTIFICATION

I, Gordon M. Nixon, certify that:

1. I have reviewed this annual report on Form 40-F of Royal Bank of Canada;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the issuer as of, and for, the periods presented in this report;
4. The issuer's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the issuer and have:
   (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the issuer, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
   (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
   (c) Evaluated the effectiveness of the issuer's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
   (d) Disclosed in this report any change in the issuer's internal control over financial reporting that occurred during the period covered by the annual report that has materially affected, or is reasonably likely to materially affect, the issuer's internal control over financial reporting; and
5. The issuer's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the issuer's auditors and the audit committee of the issuer's board of directors (or persons performing the equivalent functions):
   (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the issuer's ability to record, process, summarize and report financial information; and
   (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the issuer's internal control over financial reporting.

December 5, 2013

/s/ Gordon M. Nixon
Name: Gordon M. Nixon
Title: President and Chief Executive Officer

Exhibit 31.2

SOX 302 CERTIFICATION

I, Janice R. Fukakusa, certify that:

1. I have reviewed this annual report on Form 40-F of Royal Bank of Canada;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the issuer as of, and for, the periods presented in this report;

4. The issuer's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the issuer and have:

   (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the issuer, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   (c) Evaluated the effectiveness of the issuer's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   (d) Disclosed in this report any change in the issuer's internal control over financial reporting that occurred during the period covered by the annual report that has materially affected, or is reasonably likely to materially affect, the issuer's internal control over financial reporting; and

5. The issuer's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the issuer's auditors and the audit committee of the issuer's board of directors (or persons performing the equivalent functions):

   (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the issuer's ability to record, process, summarize and report financial information; and

   (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the issuer's internal control over financial reporting.

December 5, 2013

/s/ Janice R. Fukakusa
Name: Janice R. Fukakusa
Title: Chief Administrative Officer and Chief Financial Officer

Exhibit 32.1

CERTIFICATIONS

Pursuant to section 906 of the Sarbanes-Oxley Act of 2002 (subsections (a) and (b) of section 1350, chapter 63 of title 18, United States Code), the undersigned officer of Royal Bank of Canada, a Canadian chartered Bank (the "Bank"), hereby certifies, to such officer's knowledge, that:

The annual report on Form 40-F for the year ended October 31, 2013 (the "Report") of the Bank fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934 and information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Bank.

Dated: December 5, 2013

/s/ Gordon M. Nixon
Name: Gordon M. Nixon
Title: President and Chief Executive Officer

Exhibit 32.2

CERTIFICATIONS

Pursuant to section 906 of the Sarbanes-Oxley Act of 2002 (subsections (a) and (b) of section 1350, chapter 63 of title 18, United States Code), the undersigned officer of Royal Bank of Canada, a Canadian chartered Bank (the "Bank"), hereby certifies, to such officer's knowledge, that:

The annual report on Form 40-F for the year ended October 31, 2013 (the "Report") of the Bank fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934 and information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Bank.

Dated: December 5, 2013

/s/ Janice R. Fukakusa

Name: Janice R. Fukakusa
Title: Chief Administrative Officer and
Chief Financial Officer