REPORTS AND CONSOLIDATED FINANCIAL STATEMENTS

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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)	October 31 2013	October 31 2012	October 31 2011
	For the year ended		
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

(Millions of Canadian dollars)	Preferred shares	Common shares	Treasury shares – preferred	Treasury shares – common	Retained earnings	Other components of equity: Available-for-sale securities	Other components of equity: Foreign currency translation	Other components of equity: Cash flow hedges	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.

Note 3 Fair value of financial instruments

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)						Fair value measurements using (1)					
(Millions of Canadian dollars)	Level 1	Level 2	Level 3	Total gross fair value	Netting adjustments	Assets/ liabilities at fair value	Level 1	Level 2	Level 3	Total gross fair value	Netting adjustments	Assets/ liabilities at fair value
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

(Millions of Canadian dollars)	As at October 31, 2012 — Term to maturity (1) 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

(Millions of Canadian dollars)	As at October 31, 2012							
	Maturity term (1)				Rate sensitivity			
	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

(Millions of Canadian dollars)	For the year ended October 31, 2013						
	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

(Millions of Canadian dollars)	For the year ended October 31, 2012						
	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

	For the year ended October 31, 2011							
(Millions of Canadian dollars)	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

	As at							
	October 31, 2013				October 31, 2012			
(Millions of Canadian dollars)	**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)

	As at	
(Millions of Canadian dollars)	**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

	As at October 31, 2012					
	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	$ 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:

	As at October 31, 2013					
(Millions of Canadian dollars)	**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)**

	As at October 31, 2012					
(Millions of Canadian dollars)	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

(Millions of Canadian dollars)	As at October 31, 2012								
	Risk rating (1)					Counterparty type (2)			
	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).

Note 10 Goodwill and other intangible assets

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.

	As at	
(Millions of Canadian dollars)	October 31 2013	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.

	As at or for the year ended		
(Millions of Canadian dollars)	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

	As at	
(Millions of Canadian dollars)	October 31 2013	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			October 31, 2012		
	Gross	Ceded	Net	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			October 31, 2012		
	Gross	Ceded	Net	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

(Millions of Canadian dollars, except for percentage amounts)	Change in variable	Net income after-tax impact for year ended 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	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	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

(Canadian dollars per share except share amounts)	October 31, 2013 Number of options (thousands)	October 31, 2013 Weighted average exercise price	October 31, 2012 Number of options (thousands)	October 31, 2012 Weighted average exercise price	October 31, 2011 Number of options (thousands)	October 31, 2011 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

(Canadian dollars per share except share amounts)	Options outstanding Number outstanding (thousands)	Options outstanding Weighted average exercise price (1)	Options outstanding Weighted average remaining contractual life	Options exercisable Number exercisable (thousands)	Options exercisable 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

	For the year ended		
(Millions of Canadian dollars)	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)

	For the year ended		
(Millions of Canadian dollars)	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)

	For the year ended		
(Millions of Canadian dollars)	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)

	For the year ended		
(Millions of Canadian dollars)	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:

	As at	
(Millions of Canadian dollars)	**October 31 2013**	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.

(Millions of Canadian dollars, except percentage amounts)	As at October 31, 2013 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**

(Millions of Canadian dollars, except percentage amounts)	As at October 31, 2012 (6) 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

	As at	
(Millions of Canadian dollars)	**October 31 2013**	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

.	For the year ended		
(Millions of Canadian dollars)	**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.