REPORTS AND CONSOLIDATED FINANCIAL STATEMENTS

Management's responsibility for financial reporting

The accompanying consolidated financial statements of Royal Bank of Canada were prepared by management, which is responsible for the integrity and fairness of the information presented, including the many amounts that must of necessity be based on estimates and judgments. These consolidated financial statements were prepared in accordance with the *Bank Act* (Canada) and International Financial Reporting Standards. 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 & Touche 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, November 28, 2012

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, 2012, October 31, 2011 and November 1, 2010, and the consolidated statements of income, comprehensive income, statements of changes in equity, and statements of cash flows for the years ended October 31, 2012 and October 31, 2011, 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 sheet of Royal Bank of Canada and subsidiaries as October 31, 2012, October 31, 2011 and November 1, 2010 and their financial performance and cash flows for the years ended October 31, 2012 and October 31, 2011 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, 2012 based on the criteria established in *Internal Control – Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission and our report dated November 28, 2012 expressed an unqualified opinion on the Bank's internal control over financial reporting.

Deloitte & Touche LLP
Independent Registered Chartered Accountants
Licensed Public Accountants
Toronto, Canada
November 28, 2012

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, 2012, 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, 2012, 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, 2012.

Our internal control over financial reporting as of October 31, 2012 has been audited by Deloitte & Touche LLP, Independent Registered Chartered Accountants, who also audited our Consolidated Financial Statements for the year ended October 31, 2012, 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, November 28, 2012

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, 2012, based on the criteria established in *Internal Control — Integrated Framework* 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, 2012, based on the criteria established in *Internal Control — Integrated Framework* 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, 2012 of the Bank and our report dated November 28, 2012 expressed an unqualified opinion on those consolidated financial statements.

Deloitte & Touche LLP
Independent Registered Chartered Accountants
Licensed Public Accountants
Toronto, Canada
November 28, 2012

Consolidated Balance Sheets

(Millions of Canadian dollars)	October 31 2012	October 31 2011	November 1 2010
Assets			
Cash and due from banks	$ 12,617	$ 12,428	$ 8,536
Interest-bearing deposits with banks	10,255	6,460	7,241
Securities (Note 5)			
Trading	120,783	128,128	129,839
Available-for-sale	40,828	38,894	49,244
	161,611	167,022	179,083
Assets purchased under reverse repurchase agreements and securities borrowed	112,257	84,947	72,698
Loans (Note 6)			
Retail	301,185	284,745	271,927
Wholesale	79,056	64,752	67,597
	380,241	349,497	339,524
Allowance for loan losses (Note 6)	(1,997)	(1,967)	(2,867)
	378,244	347,530	336,657
Investments for account of segregated fund holders (Note 17)	383	320	257
Other			
Customers' liability under acceptances	9,385	7,689	7,371
Derivatives (Note 9)	91,293	99,650	106,109
Premises and equipment, net (Note 10)	2,691	2,490	2,501
Goodwill (Note 11)	7,485	7,610	6,553
Other intangibles (Note 11)	2,686	2,115	1,925
Assets of discontinued operations (Note 12)	—	27,152	5,723
Investments in associates (Note 13)	125	142	131
Prepaid pension benefit cost (Note 18)	1,049	311	266
Other assets (Note 14)	35,019	27,967	30,321
	149,733	175,126	160,900
Total assets	$ 825,100	$ 793,833	$ 765,372
Liabilities and equity			
Deposits (Note 15)			
Personal	$ 179,502	$ 166,030	$ 161,693
Business and government	312,882	297,511	287,535
Bank	15,835	15,561	19,285
	508,219	479,102	468,513
Insurance and investment contracts for account of segregated fund holders (Note 17)	383	320	257
Other			
Acceptances	9,385	7,689	7,371
Obligations related to securities sold short	40,756	44,284	46,597
Obligations related to assets sold under repurchase agreements and securities loaned	64,032	42,735	36,006
Derivatives (Note 9)	96,761	100,522	108,077
Insurance claims and policy benefit liabilities (Note 16)	7,921	7,119	6,867
Liabilities of discontinued operations (Note 12)	—	20,076	5,012
Accrued pension and other post-employment benefit expense (Note 18)	1,729	1,639	1,576
Other liabilities (Note 19)	41,371	39,241	38,318
	261,955	263,305	249,824
Subordinated debentures (Note 20)	7,615	8,749	7,676
Trust capital securities (Note 21)	900	894	1,627
Total liabilities	779,072	752,370	727,897
Equity attributable to shareholders (Note 22)			
Preferred shares	4,813	4,813	4,813
Common shares (shares issued - 1,445,302,600, 1,438,376,317 and 1,424,921,817)	14,323	14,010	13,378
Treasury shares – preferred (shares held – (41,632), 6,341 and 86,400)	1	—	(2)
– common (shares held – (543,276), (146,075) and 1,719,092)	30	8	(81)
Retained earnings	24,270	20,381	17,287
Other components of equity	830	490	(14)
	44,267	39,702	35,381
Non-controlling interests (Note 22)	1,761	1,761	2,094
Total equity	46,028	41,463	37,475
Total liabilities and equity	$ 825,100	$ 793,833	$ 765,372

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

Gordon M. Nixon
President and Chief Executive Officer

Victor L. Young
Director

Consolidated Statements of Income

(Millions of Canadian dollars, except per share amounts)	For the year ended October 31 2012	October 31 2011
Interest income		
Loans	$ 15,972	$ 15,236
Securities	3,874	4,750
Assets purchased under reverse repurchase agreements and securities borrowed	945	736
Deposits	61	91
	20,852	20,813
Interest expense		
Deposits	6,017	6,334
Other liabilities	1,977	2,723
Subordinated debentures	360	399
	8,354	9,456
Net interest income	12,498	11,357
Non-interest income		
Insurance premiums, investment and fee income (Note 16)	4,897	4,474
Trading revenue	1,298	655
Investment management and custodial fees	2,074	1,999
Mutual fund revenue	2,088	1,975
Securities brokerage commissions	1,213	1,331
Service charges	1,376	1,323
Underwriting and other advisory fees	1,434	1,485
Foreign exchange revenue, other than trading	655	684
Card service revenue	920	882
Credit fees	848	707
Net gain on available-for-sale securities (Note 5)	120	104
Share of profit (loss) in associates	24	(7)
Securitization revenue	(1)	—
Other	328	669
Non-interest income	17,274	16,281
Total revenue	29,772	27,638
Provision for credit losses (Note 6)	1,301	1,133
Insurance policyholder benefits, claims and acquisition expense (Note 16)	3,621	3,358
Non-interest expense		
Human resources (Note 18 and 23)	9,287	8,661
Equipment	1,083	1,010
Occupancy	1,107	1,026
Communications	764	746
Professional fees	695	692
Outsourced item processing	254	266
Amortization of other intangibles (Note 11)	528	481
Impairment of goodwill and other intangibles (Notes 11 and 12)	168	—
Other	1,274	1,285
	15,160	14,167
Income before income taxes from continuing operations	9,690	8,980
Income taxes (Note 25)	2,100	2,010
Net income from continuing operations	7,590	6,970
Net loss from discontinued operations (Note 12)	(51)	(526)
Net income	$ 7,539	$ 6,444
Net income attributable to:		
Shareholders	$ 7,442	$ 6,343
Non-controlling interests	97	101
	$ 7,539	$ 6,444
Basic earnings per share (in dollars) (Note 26)	$ 4.98	$ 4.25
Basic earnings per share from continuing operations (in dollars)	5.01	4.62
Basic loss per share from discontinued operations (in dollars)	(.03)	(.37)
Diluted earnings per share (in dollars) (Note 26)	4.93	4.19
Diluted earnings per share from continuing operations (in dollars)	4.96	4.55
Diluted loss per share from discontinued operations (in dollars)	(.03)	(.36)
Dividends per common share (in dollars)	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 2012	October 31 2011
Net income	$ 7,539	$ 6,444
Other comprehensive income (loss), net of taxes (Note 25)		
Net change in unrealized gains (losses) on available-for-sale securities		
Net unrealized gains (losses) on available-for-sale securities	193	(30)
Reclassification of net (gains) losses on available-for-sale securities to income	(33)	13
	160	(17)
Foreign currency translation adjustments		
Unrealized foreign currency translation gains (losses)	113	(625)
Net foreign currency translation gains from hedging activities	—	717
Reclassification of losses (gains) on foreign currency translation to income	11	(1)
	124	91
Net change in cash flow hedges		
Net gains on derivatives designated as cash flow hedges	32	298
Reclassification of losses on derivatives designated as cash flow hedges to income	25	132
	57	430
Total other comprehensive income, net of taxes	341	504
Total comprehensive income	$ 7,880	$ 6,948
Total comprehensive income attributable to:		
Shareholders	$ 7,782	$ 6,847
Non-controlling interests	98	101
	$ 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	–	–	–	–	(3,237)	–	–	–	–	(3,237)	(93)	(3,330)
Other	–	–	–	–	21	–	–	–	–	21	(14)	7
Net income	–	–	–	–	6,343	–	–	–	–	6,343	101	6,444
Other components of equity												
Net change in unrealized gains (losses) on available-for-sale securities	–	–	–	–	–	(18)	–	–	(18)	(18)	(2)	(20)
Foreign currency translation adjustments	–	–	–	–	–	–	91	–	91	91	(1)	90
Net change in cash flow hedges	–	–	–	–	–	–	–	431	431	431	–	431
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	–	–	–	–	(1)	–	–	–	–	(1)	–	(1)
Dividends	–	–	–	–	(3,549)	–	–	–	–	(3,549)	(92)	(3,641)
Other	–	–	–	–	(3)	–	–	–	–	(3)	(6)	(9)
Net income	–	–	–	–	7,442	–	–	–	–	7,442	97	7,539
Other components of equity												
Net change in unrealized gains (losses) on available-for-sale securities	–	–	–	–	–	160	–	–	160	160	1	161
Foreign currency translation adjustments	–	–	–	–	–	–	124	–	124	124	–	124
Net change in cash flow hedges	–	–	–	–	–	–	–	56	56	56	–	56
Balance at October 31, 2012	**$ 4,813**	**$14,323**	**$ 1**	**$ 30**	**$24,270**	**$ 419**	**$ 195**	**$ 216**	**$ 830**	**$ 44,267**	**$ 1,761**	**$ 46,028**

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 2012	October 31 2011
Cash flows from operating activities		
Net income	$ 7,539	$ 6,444
Adjustments for non-cash items and others		
Provision for credit losses	1,418	1,459
Depreciation	437	412
Deferred income taxes	123	(124)
Impairment and amortization of goodwill and other intangibles	716	546
Loss on sale of premises and equipment	25	106
Gain on securitizations	(9)	(15)
Gain on available-for-sale securities	(194)	(278)
Writedown of available-for-sale securities	55	247
Share of profit in associates	(23)	8
Adjustments for net changes in operating assets and liabilities		
Insurance claims and policy benefit liabilities	802	(139)
Net change in accrued interest receivable and payable	(161)	(115)
Current income taxes	(826)	807
Derivative assets	8,462	6,373
Derivative liabilities	(3,884)	(7,551)
Trading securities	6,818	(905)
Proceeds from securitizations	356	1,074
Change in loans, net of securitizations	(29,208)	(27,285)
Change in assets purchased under reverse repurchase agreements and securities borrowed	(25,060)	(12,249)
Change in deposits	15,850	29,059
Change in obligations related to assets sold under repurchase agreements and securities loaned	20,914	7,166
Change in obligations related to securities sold short	(3,528)	(2,313)
Net change in brokers and dealers receivable and payable	599	22
Other	(3,295)	1,730
Net cash (used in) from operating activities	(2,074)	4,479
Cash flows from investing activities		
Change in interest-bearing deposits with banks	457	781
Proceeds from sale of available-for-sale securities	10,915	14,549
Proceeds from maturity of available-for-sale securities	47,420	37,882
Proceeds from maturity of held-to-maturity securities	190	1,179
Purchases of available-for-sale securities	(55,448)	(45,942)
Purchases of held-to-maturity securities	(242)	(935)
Net acquisitions of premises and equipment and other intangibles	(1,351)	(1,452)
Proceeds from dispositions	2,677	440
Cash used in acquisitions	(853)	(1,300)
Net cash from investing activities	3,765	5,202
Cash flows from financing activities		
Redemption of RBC Trust Capital Securities	—	(750)
Issue of subordinated debentures	—	1,500
Repayment of subordinated debentures	(1,006)	(404)
Issue of common shares	126	152
Sales of treasury shares	5,284	6,171
Purchase of treasury shares	(5,261)	(6,080)
Dividends paid	(3,272)	(3,032)
Dividends/distributions paid to non-controlling interests	(92)	(93)
Change in short-term borrowings of subsidiaries	21	(615)
Net cash used in financing activities	(4,200)	(3,151)
Effect of exchange rate changes on cash resources	(18)	76
Net change in cash resources	(2,527)	6,606
Cash resources at beginning of year (1)	15,144	8,538
Cash resources at end of year (1)	$ 12,617	$ 15,144
Cash and due from banks	$ 12,617	$ 12,428
Cash and due from banks included in Assets of discontinued operations	—	2,716
Cash resources at end of year (1)	$ 12,617	$ 15,144
Cash flows from operating activities include:		
Amount of interest paid	$ 7,872	$ 9,234
Amount of interest received	19,674	20,471
Amount of dividend received	1,316	1,350
Amount of income taxes paid	2,926	1,512

(1) We are required to maintain balances with central banks and other regulatory authorities. The total balances were $2.1 billion as at October 31, 2012 (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 operate under the master brand name RBC. We provide diversified financial services including personal and commercial banking, wealth management, insurance, corporate and investment banking and transaction processing on a global basis. Refer to Note 30 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. We 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, 2012. 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.

These Consolidated Financial Statements are our first annual financial statements prepared in accordance with IFRS. Previously, our Consolidated Financial Statements were prepared under Canadian generally accepted accounting principles (GAAP). IFRS 1, *First-time Adoption of International Reporting Standards* (IFRS 1), has been applied. The accounting policies outlined in Note 2 have been consistently applied to all periods presented, including our consolidated balance sheet as at November 1, 2010 (the Transition date) for the purpose of transition to IFRS as required by IFRS 1. The main differences between our IFRS and Canadian GAAP accounting policies, relevant exceptions and exemptions, and reconciliations on how our transition to IFRS from Canadian GAAP has affected our assets, liabilities, equity, comprehensive income and cash flows are included in Note 3.

On November 28, 2012, 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 98 Note 8 – page 133	Securities impairment	Note 2 – page 98 Note 5 – page 125
Fair value of financial instruments	Note 2 – page 99 Note 4 – page 115	Application of the effective interest method	Note 2 – page 101
Allowance for credit losses	Note 2 – page 101 Note 6 – page 129	Derecognition of financial assets	Note 2 – page 102 Note 7 – page 132
Employee benefits	Note 2 – page 103 Note 18 – page 154	Income taxes	Note 2 – page 104 Note 25 – page 165
Goodwill and other intangibles	Note 2 – page 105 Note 11 – page 145 Note 12 – page 147	Provisions	Note 2 – page 106 Note 27 – 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 12, 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 is reflected as discontinued operations on our Consolidated Balance Sheets and Consolidated Statements of Income for all periods presented. The sale of our U.S. regional retail banking operations and other assets are reflected as discontinued operations on our Consolidated Balance Sheets as at October 31, 2012 and October 31, 2011 and in our Consolidated Statements of Income 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.

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 senior management 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.

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. Fair values of identical instruments traded in active markets are determined by reference to last quoted prices in the most advantageous active market for that instrument. In the absence of an active market, we determine fair values based on quoted prices for instruments with similar characteristics and risk profiles.

Fair values of financial instruments not traded in active markets are determined using valuation models that require the use of inputs, transaction values derived from models, and input assumptions sourced from pricing services. Valuation model inputs are either observable or unobservable. We look to external, readily observable market inputs, when available. Observable inputs to valuation models for financial instruments include certain prices and rates for shorter dated G7 (Canada, U.S., U.K., Italy, France, Germany and Japan) and non-G7 interest-rate-yield curves, currency rates and price and rate volatilities. Unobservable inputs include certain prices and rates for longer dated G7 and non-G7 interest-rate-yield curves, prepayment rates, credit spreads, probability of defaults, recovery rates, equity volatility and correlations of probability of defaults or baskets of common stock. For certain securities that are not quoted in an active market, we may record valuation adjustments for liquidity when we believe that the amount realized on sale may be less than the estimated fair value due to insufficient liquidity in the market over a reasonable amount of time.

All of our derivative transactions are accounted for on a fair value basis. Fair values of exchange-traded derivatives are based on last exchange prices. Over-the-counter derivatives are valued using either industry standard or internally developed valuation models. Where we determine that there is a difference between the transaction price and its fair value on the trade date, the unrealized gain or loss is deferred and recognized only when the unobservable market inputs become observable, or the financial instrument is derecognized.

We also make valuation adjustments for the credit risk of our derivative portfolios in order to arrive at their fair values. These (credit valuation) adjustments take into account the creditworthiness of our counterparties as well as our own, the current and potential future mark-to-market of the transactions, and the effects of credit mitigants such as master netting agreements and collateral agreements. Calculations 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 are generally implied from the market prices for credit protection and credit ratings of the counterparty. Correlation is the measure of how credit and market factors may move relative to one another. Factors can move in the same general direction, opposite general direction or independently. Correlation is estimated using historical data and market data where available. Credit valuation adjustments are frequently updated due to the changes in derivative values and counterparty credit risk. Changes to credit valuation adjustments are recorded in current-period income.

For financial liabilities, including deposits designated as at FVTPL, fair values are based on present value of the instruments' contractual cash flows discounted at the appropriate market interest rates. Appropriate market interest rates comprise observable benchmark interest rates and credit spreads which are either observable or unobservable.

For instruments not traded in an active market, fair value is determined, when possible, using a valuation technique that maximizes the use of observable market inputs. 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 instrument to arrive at the fair value, as the selection 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. When the valuation technique and inputs selected do not fully reflect our expectation as to the amount that could be received in a market transaction, valuation adjustments are made to incorporate model and parameter risk, liquidity risk and credit risk in the fair value calculation. These adjustments may be subjective as they require significant judgment in the input selection, such as probability of default and recovery rate, but are intended to arrive at fair value that is determined based on the assumptions that market participants would use in pricing the financial instrument. The realized price for a transaction previously valued using management judgment may be different than its recorded value, and will therefore impact unrealized gains and losses recognized in Non-interest income.

We have documented our internal policies that detail our processes for determining fair value, including the methodologies used in establishing our valuation adjustments. These methodologies are consistently applied and periodically reviewed by Finance and Group Risk Management.

A breakdown of fair values of financial instruments measured on the basis of quoted market prices in active markets (Level 1), valuation techniques reflecting market observable inputs (Level 2), and valuation techniques reflecting significant non-market-observable inputs (Level 3) is provided in Note 4. 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 4 and Note 5.

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.

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, 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 9 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. Credit card balances are written off when a payment is 180 days in arrears. Loans guaranteed by a Canadian government are classified as impaired when the loan is contractually 365 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 recorded fair value of the assets acquired is recognized by a charge to Impairment losses on loans and other off-balance sheet items.

Interest on loans is included in Interest income – Loans and is recognized on an accrual basis. 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. Significant judgment is applied in estimating the effective interest rate due to uncertainty in the timing and amount of future cash flows with respect to prepayment interest. This revenue is generated when a client prepays their existing mortgage by paying an interest amount equal to the greater of three-month interest or interest rate differential (contractual versus market rates) for the remainder of the term. This amount is unknown when the mortgage is originated and has to be estimated using variables such as prepayment behavior, outstanding mortgage balances and prevailing mortgage interest rates at the time of prepayment. Management determined that the prepayment interest expected to be collected over the term of the mortgages cannot be reliably estimated at the origination date. Therefore, instead of estimating prepayment interest upon origination of a mortgage, we defer and amortize the actual receipt of prepayment interest as Interest income upon renewal of a mortgage over the expected term of such loan using the effective interest method. If the mortgage is not renewed, the prepayment interest is recognized immediately 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 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 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 loan impairment allowances on both individually and collectively assessed loans. Any changes in the underlying assumptions and estimates used for both individually and collectively assessed loans can change from period to period and 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 inherent in the loan 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 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 assets in the group and historical loss experience for assets 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 accounts 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 allowances 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 those cash flows. We derecognize transferred financial assets if we transfer substantially all the risk and rewards of ownerships 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 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, 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 indications that impairment may have occurred, 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.

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 historical and 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 gross domestic product 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 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 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. Intangible assets with a finite life are amortized on a straight-line basis over their estimated useful lives, generally from 10 to 20 years, and 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. To make these estimates, management relies on sales projections, allocated costs and risk-adjusted discount rates that take into consideration the market environment and our business objectives. Changes in these assumptions may impact the amount of impairment loss recognized in Non-interest expense. We do not have any intangible assets with indefinite lives.

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 fair value less costs to sell and value in use, 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. Provisions 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. We record provisions related to litigation, asset retirement obligations, and the allowance for off-balance sheet and other items. In recording provisions, 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 amounts provided for. Provisions are reflected under Other liabilities on our Consolidated Balance Sheets.

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.

Interest, commissions and fees

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.

Commission and fee income

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 accounting changes

We are currently assessing the impact of adopting the following standards on our consolidated financial statements:

IAS 12 *Income Taxes* (IAS 12)

In December 2010, the IASB issued amendments to IAS 12 regarding deferred tax and the recovery of underlying assets. The amendments are effective for us starting November 1, 2012.

IAS 1 *Presentation of Financial Statements* (IAS 1)

In June 2011, the IASB issued amendments to IAS 1 regarding the presentation of OCI. The amendments are effective for us starting November 1, 2012.

IFRS 7 *Financial Instruments: Disclosures* (IFRS 7)

In December 2011, the IASB issued amendments to IFRS 7 regarding disclosure of offsetting financial assets and financial liabilities. The amendments are intended to help investors and other users to better assess the effect or potential effect of offsetting arrangements on a company's financial position. The amendments will be effective for us on November 1, 2013.

Consolidation and disclosure standards

In May 2011, the IASB issued IFRS 10, *Consolidated Financial Statements* (IFRS 10), IFRS 11, *Joint Arrangements* (IFRS 11), and IFRS 12, *Disclosure of Interests in Other Entities* (IFRS 12). IFRS 10 replaces the consolidation requirements in SIC-12 *Consolidation – Special Purpose Entities* (SIC-12) and amends IAS 27 *Consolidated and Separate Financial Statements* (IAS 27). IFRS 10 builds on existing principles by identifying the concept of control as the determining factor in whether an entity should be included within the consolidated financial statements of the parent company and establishes principles for the presentation and preparation of consolidated financial statements when an entity controls one or more other entities. IFRS 11 focuses on the classification of joint arrangements based on the rights and obligations of the arrangement, rather than its legal form, and addresses reporting inconsistencies by requiring a single method (equity method) to account for interests in joint ventures. IFRS 12 is a new and comprehensive standard on disclosure requirements for all forms of interests in other entities, including subsidiaries, joint arrangements, associates and unconsolidated structured entities. As a consequence of these new IFRSs, the IASB also issued amended and retitled IAS 27, *Separate Financial Statements* and IAS 28 *Investments in Associates and Joint Ventures*. The new requirements will be effective for us on November 1, 2013.

IFRS 13 *Fair Value Measurement* (IFRS 13)

In May 2011, the IASB issued IFRS 13, which defines fair value and sets out a framework for measuring fair value in a single IFRS. IFRS 13 also requires disclosures about fair value measurements for non-financial assets. The measurement and disclosure requirements of IFRS 13 apply when another IFRS requires or permits the item to be measured at fair value with limited exceptions. IFRS 13 will be effective for us on November 1, 2013.

IAS 19 *Employee Benefits* (IAS 19)

In June 2011, the IASB issued amendments to IAS 19 regarding the recognition and measurement of defined benefit pension expense and termination benefits, including the elimination of the deferral and amortization of net actuarial gains or losses, and the disclosures for all employee benefits. The amendments will be effective for us on November 1, 2013.

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 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, on the basis of the entity's business model for managing the financial asset and the contractual cash flow characteristics of the financial asset. A financial asset that is held by an entity for the purpose of collecting contractual cash flows on specified dates per contractual terms should be measured at amortized cost. All other financial assets should be measured at fair value. When the entity changes its business model, which is expected to be an infrequent occurrence, it is required to reclassify the affected financial assets prospectively. For equity instruments, management has an option on initial recognition to irrevocably designate on an instrument-by-instrument basis to present the changes in their fair value directly in equity. There is no subsequent recycling of fair value gains and losses from equity to our Consolidated Statements of Income; however, dividends from such equity investments will continue to be recognized in profit or loss.

In October 2010, the IASB added to IFRS 9 the requirements for classification and measurement of financial liabilities previously included in IAS 39. IFRS 9 also eliminated the exception from fair value measurement for derivative liabilities that are linked to and must be settled by delivery of an unquoted equity instrument, and require the changes in own credit risk for financial liabilities designated as at FVTPL to be reported in other comprehensive income. In December 2011, the IASB amended the effective date of IFRS 9 to annual periods beginning on or after January 1, 2015. Accordingly, IFRS 9 will be effective for us on November 1, 2015.

Note 3 First time adoption of IFRS

Transition to IFRS

The Canadian Accounting Standards Board has replaced Canadian GAAP with IFRS for all publically accountable enterprises for interim and annual financial statements relating to annual periods beginning on or after January 1, 2011. We have adopted IFRS effective November 1, 2011 and the date of transition is November 1, 2010.

Our accounting policies presented in Note 2 have been applied in preparing the Consolidated Financial Statements for the current year ended October 31, 2012, the comparative information for the previous year ended October 31, 2011 and the opening IFRS financial statements as at November 1, 2010. In our transition from Canadian GAAP to IFRS, we followed the provisions of IFRS 1. The effects of transition to IFRS were recognized directly through retained earnings, or another category of equity, where appropriate as presented in this note. References below in parentheses (Ref. x) refer to the corresponding columns in our reconciliations of our Consolidated Balance Sheets, and Consolidated Statements of Income between Canadian GAAP and IFRS, presented below.

Principal exemptions under IFRS 1

IFRS 1 provides guidance to first-time adopters of IFRS on how to account for items on transition to IFRS. Generally, IFRS 1 requires an entity to apply IFRS retrospectively upon transition. It also offers some exemptions and requires certain exceptions from retrospective application. Our first-time adoption decisions regarding the exemptions are discussed below. Other exemptions available under IFRS 1, which are not discussed here, are either not material or not relevant to our business.

Mandatory exceptions

Derecognition
The derecognition requirements of IAS 39 have been applied prospectively to transactions occurring on or after January 1, 2004.

Hedge accounting
Hedge accounting has been applied from the Transition date only to hedging relationships that satisfy the hedge accounting criteria in IAS 39, as described in Note 2, at that date.

Estimates
Estimates made in accordance with IFRS at the Transition date are consistent with estimates previously made under Canadian GAAP.

Optional exemptions

Designation of previously recognized financial instruments (Ref. 1)
On adoption of IFRS, an entity is required to retrospectively apply IAS 39 and classify its financial instruments as of the date that the financial instrument was originally acquired. Alternatively, an entity is permitted to designate a previously recognized financial asset or financial liability as a financial asset or financial liability as at FVTPL or a financial asset as AFS at the Transition date. Differences between the fair value and carrying value are recorded in opening Retained earnings. We have applied this election using criteria described in Note 2 defining financial assets as AFS and financial liabilities as at FVTPL and designated the following financial assets and financial liabilities at transition.

(Millions of Canadian dollars)	Fair value at Transition date	Classifications as previously reported	Carrying value as previously reported
Financial assets designated as available-for-sale	$ 7,297	Held-for-trading	$ 7,297
Financial assets designated as available-for-sale	3,232	Held-for-trading using fair value option	3,232
Financial assets designated as available-for-sale	564	Loans and receivables	629
Financial liabilities designated as at fair value through profit or loss	128	Non-trading liabilities	138

Employee benefits (Ref. 2)
IFRS 1 provides the option to recognize cumulative actuarial gains and losses on employee benefit plans that are deferred under Canadian GAAP in opening Retained earnings at the Transition date. We have elected this option for all our employee defined pension benefit plans and other post-retirement benefits plans at the Transition date which results in a decrease to our opening Retained earnings of $1.36 billion. Our cumulative actuarial gains and losses is the sum of our unrecognized net actuarial loss, transitional (asset) obligation and prior service cost.

Cumulative foreign currency translation differences (Ref. 3)
IFRS 1 provides the option to reset the cumulative foreign currency translation gains and losses recorded in equity related to foreign subsidiaries to zero at the Transition date. We have elected this option and reset all the cumulative foreign currency translation gains and losses which arose from translation of our foreign operations to zero at the Transition date, with the impact recognized as a decrease to our opening Retained earnings of $1.66 billion.

Business combinations
IFRS 1 provides the option to apply IFRS 3, *Business Combinations* (IFRS 3), from any date up to and including the Transition date. Applying IFRS 3 from a date prior to the Transition date would require restatement of all business combinations that occurred between that date and the Transition date. We have elected to apply IFRS 3 prospectively from the Transition date; accordingly, business combinations completed prior to the Transition date have not been restated. This election has no impact on our opening Retained earnings.

Insurance contracts
IFRS 1 provides the option to apply the transitional provisions in IFRS 4, *Insurance Contracts* (IFRS 4), which restricts changes in accounting policies for insurance contracts, including changes made by a first-time adopter of IFRS. We have elected to apply the transitional provisions in IFRS 4 which allow us to follow our previous Canadian GAAP accounting policies with respect to our insurance-related activities. This election has no impact on our opening Retained earnings.

Impact on transition to IFRS

A summary of the material differences that are applicable to us is presented below.

Item	Canadian GAAP	IFRS	Impact on transition
Ref. 4	**Goodwill** IAS 36, *Impairment of Assets*		
	Goodwill is allocated to reporting units (RU) that are expected to benefit from the synergies of the business combination from which it arose. A RU is defined as an identified operating segment or one level below an identified operating segment. We had eight RU under Canadian GAAP. For impairment testing purposes, goodwill is assessed first by comparing a RU's carrying amount to its fair value. If the carrying value of a RU exceeds its fair value, the fair value of the RU's goodwill is imputed by determining the fair value of the assets and liabilities of the RU and allocating the residual fair value to goodwill. An impairment loss is recorded to the extent that the carrying value of a RU's goodwill exceeds its imputed fair value. There is no reversal of an impairment loss.	Goodwill is allocated to CGU that are expected to benefit from the synergies of the business combination from which it arose. We have 10 CGU under IFRS. Goodwill is impaired when the carrying value of a CGU exceeds its recoverable amount. Impairment cannot be reversed. An impairment test must be performed as at the date of transition to IFRS.	Our goodwill allocation under Canadian GAAP, which was presented in Note 10 to our 2011 Annual Consolidated Financial Statements, was realigned to the new CGU we have identified. Our International Banking RU resides in two CGU, U.S. Banking and Caribbean Banking. Our Global Asset Management RU also resides in two CGU: Canadian Wealth Management and Global Asset Management. We performed our impairment test as at the Transition date on the basis of the CGU identified. The results of this test indicated that the carrying amount of our U.S. Banking CGU exceeded its recoverable amount as determined using a 5-year discounted cash flow value-in-use model. Key inputs to the model included a discount rate of 10.5% and a terminal growth rate of 3.5%. Accordingly, the goodwill in our U.S. Banking CGU was written down to zero, which reduced our opening Retained earnings by $1.26 billion and reduced our loss on sale of our U.S. regional retail banking operations under IFRS, which occurred in the third quarter of 2011. See Note 12.
Ref. 5	**Securitization (derecognition)** IAS 39		
	Derecognition of financial assets is primarily based on the legal form of the transaction and an analysis of whether the seller retains control of the assets and whether the assets are legally isolated from the seller and its creditors, even in the event of a bankruptcy.	Derecognition is based on transfer of risks and rewards; control is only considered when substantially all risks and rewards have been neither transferred nor retained.	Most assets transferred in our securitization transactions do not qualify for derecognition. As a result, the assets and associated liabilities are recognized on our Consolidated Balance Sheets. The gains previously recognized under Canadian GAAP were recorded as a transition adjustment which decreased our opening Retained earnings by $415 million. Although this policy change significantly impacts our opening IFRS balance sheets and reduces our opening Retained earnings, we will recognize the net income generated by the assets over their remaining lives.
Ref. 6	**Consolidation of special purpose entities** IAS 27, SIC-12		
	Consolidation is based on a controlling financial interest model. For variable interest entities (VIEs), consolidation is assessed based on an analysis of economic risks and rewards. VIEs are consolidated by the party that absorbs a majority of the entity's expected losses or has the right to receive a majority of the expected residual returns.	SPEs created to accomplish a narrow and well-defined objective are consolidated based on a control model, which is broader than the concepts applied under Canadian GAAP. Control encompasses both decision making ability and the economic consequence of those abilities (i.e. benefits and risks). IFRS does not have a concept of VIEs.	Certain entities which we previously did not consolidate are consolidated and others which we consolidated have been deconsolidated. The associated assets and liabilities were adjusted on our Consolidated Balance Sheets and the profits (losses) previously recognized or unrecognized were included as a transition adjustment which decreased our opening Retained earnings by $226 million.

Item	Canadian GAAP	IFRS	Impact on transition
Ref. 7	**Insurance contracts** IFRS 4		
	Financial statements of an insurance company must exclude the assets, liabilities, revenues and expenses of segregated funds, but include the fee income earned and the cost of any guarantees or other contract holder benefits borne by the insurer from the administration of those accounts. Life and health insurance providers are required to net reinsurance premiums, reinsurance paid claims and reinsurance recoverable against the premium incomes, paid claims and actuarial liabilities.	Investments held in segregated funds are recognized as assets of the insurance company as they are legally owned and are kept in a separate account. The insurance company also has a liability to the policy holders to sell the underlying assets and repay the policyholders when they redeem the segregated accounts. Insurers should not offset reinsurance assets against the related insurance liabilities, and similarly, should not offset income/expense from reinsurance against the expense/income from related insurance contracts.	Investments held in segregated funds, which were not recognized under Canadian GAAP, are recorded on our Consolidated Balance Sheets with a corresponding liability to the policy holders. Reinsurance recoverable and the related policy benefit liabilities, which were offset under Canadian GAAP, are presented as assets and liabilities, respectively, on our Consolidated Balance Sheets. These policy changes affect the presentation of assets and liabilities on our Consolidated Balance Sheets but do not impact our opening Retained earnings.
Ref. 8	**Discontinued operations** IFRS 5, *Non-current Assets Held-for-Sale and Discontinued Operations*		
	The results of discontinued operations are reported as a separate component of income or loss for both current and prior periods. The assets and liabilities of a disposal group classified as held for sale or that has been sold, are presented separately in the asset and liability sections, respectively, of the balance sheet for the current and all comparative periods.	Restatement of prior period balance sheets as a result of discontinued operations is not permitted. Balance sheet adjustments related to discontinued operations are made prospectively from the date of classification as discontinued operations. The results of discontinued operations are reported as a separate component of income or loss for both current and all comparative periods.	To reconcile our IFRS Consolidated Balance Sheets to Canadian GAAP as at November 1, 2010, we reversed the impact of discontinued operations related to the sale of our U.S. regional retail operations announced during the third quarter of 2011 for which prior period results were adjusted in accordance with Canadian GAAP at the time of the announcement. Under IFRS, the classification of our U.S. regional retail banking operations and other assets as discontinued operations is reflected on our Consolidated Balance Sheets beginning in the quarter ended July 31, 2011. The sale of Liberty Life Insurance Company announced in October 2010 is reflected on our Consolidated Balance Sheets as discontinued operations under IFRS from the Transition date.
Ref. 9	**Hedging** IAS 39		
	In a qualifying hedge relationship, all or a portion of a recognized asset or liability can be designated as the hedged item. A portion of the hedged item is defined as either (a) a percentage of the entire recognized asset or liability, (b) all or a percentage of one or more selected cash flows, or (c) an embedded derivative that is not accounted for separately.	A portion of the cash flows of a financial asset or liability can be designated as the hedged item only if the selected cash flows are less than the total cash flows of the asset or liability. For liabilities whose effective interest rate is below the benchmark interest rate, we are not permitted to select benchmark-based cash flows as the hedged item because these cash flows would be greater than the total cash flows of the liability.	Hedge accounting has been applied only to hedging relationships that satisfy the hedge accounting criteria in IAS 39 at the Transition date. Certain cash flow hedges which qualify for hedge accounting under Canadian GAAP do not qualify under IFRS because the hedged items are portions of deposit liabilities whose cash flows are below the benchmark interest rate. The amounts accumulated in equity relating to these hedges have been reduced to zero with the impact recognized as a reduction to our opening Retained earnings of approximately $350 million. Although this policy change significantly impacts our opening IFRS balance sheet and reduces our opening Retained earnings, the amortization of losses previously deferred in OCI will no longer be recognized in net income in future periods.

Other presentation differences

Non-controlling Interest

Under Canadian GAAP, the portion of income attributable to non-controlling interests of subsidiaries (NCI) is deducted prior to the presentation of net income from continuing operations in our Consolidated Statements of Income. Under IFRS, net income from continuing operations reflects income attributable to both shareholders and NCI. Net income under IFRS is apportioned between our shareholders and NCI after the effects of all continuing and discontinued operations have been presented.

Changes in financial statement presentation during the year

Cash collateral

As presented in Note 14 and Note 19, during the second quarter of 2012, we retrospectively reclassified cash collateral paid from Interest bearing deposits with banks and Loans – Wholesale to Other assets and cash collateral received from Deposits to Other liabilities to better reflect the nature of the balances. The reclassification does not include cash collateral that is received or paid on securities borrowed and securities loaned, which is currently classified in Assets purchased under reverse repurchase agreements and securities borrowed and Obligations related to assets sold under repurchase agreements and securities loaned, respectively.

Reconciliations from Canadian GAAP to IFRS

The tables below show the reconciliations from Canadian GAAP to IFRS for our Consolidated Balance Sheets and Equity as at October 31, 2011 and November 1, 2010, and our Consolidated Statements of Income, Comprehensive Income, and Cash Flows for the year ended October 31, 2011.

Reconciliation of Canadian GAAP and IFRS – Consolidated Balance Sheet and Equity as at October 31, 2011

		IFRS 1 Elections			Other accounting policy differences						
(Millions of Canadian dollars)	Canadian GAAP	Classification of financial instruments (Ref. 1)	Employee benefits (Ref. 2)	Cumulative translation differences (Ref. 3)	Goodwill (Ref. 4)	Securitization (derecognition) (Ref. 5)	Special purpose entities (Ref. 6)	Insurance contracts (Ref. 7)	Hedging and other (Ref. 9)	Total impact	IFRS
Assets											
Cash and due from banks	$ 13,247	$ –	$ –	$ –	$ –	$ –	$ (66)	$ –	$ (753)	$ (819)	$ 12,428
Interest-bearing deposits with banks	12,181	–	–	–	–	–	–	–	(5,721)	(5,721)	6,460
Securities											
Trading	145,274	(4,713)	–	–	–	(12,644)	211	–	–	(17,146)	128,128
Available-for-sale	34,284	4,686	–	–	–	(830)	607	–	147	4,610	38,894
	179,558	(27)	–	–	–	(13,474)	818	–	147	(12,536)	167,022
Assets purchased under reverse repurchase agreements and securities borrowed	84,947	–	–	–	–	–	–	–	–	–	84,947
Loans											
Retail	228,484	–	–	–	–	53,751	2,658	–	(148)	56,261	284,745
Wholesale	69,758	(28)	–	–	–	–	(1,019)	–	(3,959)	(5,006)	64,752
	298,242	(28)	–	–	–	53,751	1,639	–	(4,107)	51,255	349,497
Allowance for loan losses	(1,958)	44	–	–	–	–	–	–	(53)	(9)	(1,967)
	296,284	16	–	–	–	53,751	1,639	–	(4,160)	51,246	347,530
Investments for account of segregated fund holders	–	–	–	–	–	–	–	320	–	320	320
Other											
Customers' liability under acceptances	7,689	–	–	–	–	–	–	–	–	–	7,689
Derivatives	100,013	–	–	–	–	32	(395)	–	–	(363)	99,650
Premises and equipment, net	2,490	–	–	–	–	–	–	–	–	–	2,490
Goodwill	7,703	–	–	–	22	–	–	–	(115)	(93)	7,610
Other intangibles	2,115	–	–	–	–	–	–	–	–	–	2,115
Assets of discontinued operations	27,143	(2)	11	–	–	–	–	–	–	9	27,152
Investment in associates	189	–	–	–	–	–	–	–	(47)	(47)	142
Prepaid pension benefit cost	1,697	–	(1,386)	–	–	–	–	–	–	(1,386)	311
Other assets	16,446	1	402	–	–	53	59	248	10,758	11,521	27,967
	165,485	(1)	(973)	–	22	85	(336)	248	10,596	9,641	175,126
Total assets	$751,702	$ (12)	$ (973)	$ –	$ 22	$ 40,362	$ 2,055	$ 568	$ 109	$ 42,131	$793,833
Liabilities											
Deposits											
Personal	$166,030	$ –	$ –	$ –	$ –	$ –	$ –	$ –	$ –	$ –	$166,030
Business and government	258,494	–	–	–	–	44,348	1,176	–	(6,507)	39,017	297,511
Bank	19,657	–	–	–	–	–	–	–	(4,096)	(4,096)	15,561
	444,181	–	–	–	–	44,348	1,176	–	(10,603)	34,921	479,102
Insurance and investment contracts for account of segregated fund holders	–	–	–	–	–	–	–	320	–	320	320
Other											
Acceptances	7,689	–	–	–	–	–	–	–	–	–	7,689
Obligations related to securities sold short	44,284	–	–	–	–	–	–	–	–	–	44,284
Obligations related to assets sold under repurchase agreements and securities loaned	46,188	–	–	–	–	(3,453)	–	–	–	(3,453)	42,735
Derivatives	101,437	–	–	–	–	(915)	–	–	–	(915)	100,522
Insurance claims and policy benefit liabilities	6,875	–	–	–	–	–	–	244	–	244	7,119
Liabilities of discontinued operations	20,071	5	–	–	–	–	–	–	–	5	20,076
Accrued pension and other post-employment benefit expense	1,531	–	108	–	–	–	–	–	–	108	1,639
Other liabilities	28,049	(6)	86	–	–	778	(491)	4	10,821	11,192	39,241
	256,124	(1)	194	–	–	(3,590)	(491)	248	10,821	7,181	263,305
Subordinated debentures	7,749	–	–	–	–	–	1,000	–	–	1,000	8,749
Trust capital securities	–	–	–	–	–	–	894	–	–	894	894
Total liabilities	708,054	(1)	194	–	–	40,758	2,579	568	218	44,316	752,370
Non-controlling interest in subsidiaries	1,941										n.a.
Equity attributable to shareholders											
Preferred shares	4,813	–	–	–	–	–	–	–	–	–	4,813
Common shares	14,017	–	–	–	–	–	–	–	(7)	(7)	14,010
Treasury shares – preferred	–	–	–	–	–	–	–	–	–	–	–
– common	8	–	–	–	–	–	–	–	–	–	8
Retained earnings	24,494	(6)	(1,167)	(1,632)	22	(396)	(310)	–	(624)	(4,113)	20,381
Other components of equity	(1,625)	(5)	–	1,632	–	–	(34)	–	522	2,115	490
	41,707	(11)	(1,167)	–	22	(396)	(344)	–	(109)	(2,005)	39,702
Non-controlling interests	n.a.	–	–	–	–	–	(180)	–	–	(180)	1,761
Total equity	n.a.	(11)	(1,167)	–	22	(396)	(524)	–	(109)	(2,185)	41,463
Total liabilities and equity	$751,702	$ (12)	$ (973)	$ –	22	$ 40,362	$ 2,055	$ 568	$ 109	$ 42,131	$793,833

n.a. Under IFRS, Non-controlling interests are presented as a component of Total equity.

Reconciliation of Canadian GAAP and IFRS – Consolidated Balance Sheet and Equity as at November 1, 2010

		IFRS 1 Elections			Other accounting policy differences							
(Millions of Canadian dollars)	Canadian GAAP	Classification of financial instruments (Ref. 1)	Employee benefits (Ref. 2)	Cumulative translation differences (Ref. 3)	Goodwill (Ref. 4)	Securitization (derecognition) (Ref. 5)	Special purpose entities (Ref. 6)	Insurance contracts (Ref. 7)	Discontinued operations (Ref. 8)	Hedging and other (Ref. 9)	Total impact	IFRS
Assets												
Cash and due from banks	$ 8,440	$ –	$ –	$ –	$ –	$ –	$ (30)	$ –	$ 888	$ (762)	$ 96	$ 8,536
Interest-bearing deposits with banks	13,254	–	–	–	–	–	–	–	(2)	(6,011)	(6,013)	7,241
Securities												
Trading	144,925	(3,274)	–	–	–	(12,550)	615	–	124	(1)	(15,086)	129,839
Available-for-sale	38,594	3,795	–	–	–	817	821	–	5,076	141	10,650	49,244
	183,519	521	–	–	–	(11,733)	1,436	–	5,200	140	(4,436)	179,083
Assets purchased under reverse repurchase agreements and securities borrowed	72,698	–	–	–	–	–	–	–	–	–	–	72,698
Loans												
Retail	214,937	–	–	–	–	48,311	1,920	–	6,892	(133)	56,990	271,927
Wholesale	60,107	(775)	–	–	–	–	(793)	–	12,789	(3,731)	7,490	67,597
	275,044	(775)	–	–	–	48,311	1,127	–	19,681	(3,864)	64,480	339,524
Allowance for loan losses	(2,038)	179	–	–	–	–	–	–	(958)	(50)	(829)	(2,867)
	273,006	(596)	–	–	–	48,311	1,127	–	18,723	(3,914)	63,651	336,657
Investments for account of segregated fund holders	–	–	–	–	–	–	–	279	(22)	–	257	257
Other												
Customers' liability under acceptances	7,371	–	–	–	–	–	–	–	–	–	–	7,371
Derivatives	106,155	–	–	–	–	(24)	(90)	–	68	–	(46)	106,109
Premises and equipment, net	2,139	–	–	–	–	–	–	–	362	–	362	2,501
Goodwill	6,660	–	–	–	(1,404)	–	–	–	1,404	(107)	(107)	6,553
Other intangibles	1,710	–	–	–	–	–	–	–	216	(1)	215	1,925
Assets of discontinued operations	34,364	–	–	–	–	–	–	–	(28,641)	–	(28,641)	5,723
Investment in associates	171	–	–	–	–	–	–	–	–	(40)	(40)	131
Prepaid pension benefit cost	1,992	–	(1,740)	–	–	–	–	–	–	14	(1,726)	266
Other assets	14,727	(19)	474	–	143	116	(22)	977	1,804	12,121	15,594	30,321
	$ 175,289	$ (19)	$ (1,266)	$ –	$ (1,261)	$ 92	$ (112)	$ 977	$ (24,787)	$ 11,987	$ (14,389)	$ 160,900
Total assets	$ 726,206	$ (94)	$ (1,266)	$ –	$ (1,261)	$ 36,670	$ 2,421	$ 1,256	$ –	$ 1,440	$ 39,166	$ 765,372
Liabilities												
Deposits												
Personal	$ 151,347	$ –	$ –	$ –	$ –	$ –	$ –	$ –	$ 10,346	$ –	$ 10,346	$ 161,693
Business and government	239,233	–	–	–	–	42,820	2,568	–	7,964	(5,050)	48,302	287,535
Bank	23,981	–	–	–	–	–	–	–	162	(4,858)	(4,696)	19,285
	414,561	–	–	–	–	42,820	2,568	–	18,472	(9,908)	53,952	468,513
Insurance and investment contracts for account of segregated fund holders	–	–	–	–	–	–	–	279	(22)	–	257	257
Other												
Acceptances	7,371	–	–	–	–	–	–	–	–	–	–	7,371
Obligations related to securities sold short	46,597	–	–	–	–	–	–	–	–	–	–	46,597
Obligations related to assets sold under repurchase agreements and securities loaned	41,207	–	–	–	–	(5,577)	–	–	376	–	(5,201)	36,006
Derivatives	108,908	–	–	–	–	(843)	10	–	2	–	(831)	108,077
Insurance claims and policy benefit liabilities	6,273	–	–	–	–	–	–	977	(381)	(2)	594	6,867
Liabilities of discontinued operations	24,454	–	–	–	–	–	–	–	(19,442)	–	(19,442)	5,012
Accrued pension and other post-employment benefit expense	1,477	–	98	–	–	–	–	–	–	1	99	1,576
Other liabilities	26,743	(40)	–	–	–	758	(1,642)	–	995	11,504	11,575	38,318
	263,030	(40)	98	–	–	(5,662)	(1,632)	977	(18,450)	11,503	(13,206)	249,824
Subordinated debentures	6,681	–	–	–	–	–	995	–	–	–	995	7,676
Trust capital securities	727	–	–	–	–	–	900	–	–	–	900	1,627
Total liabilities	684,999	(40)	98	–	–	37,158	2,831	1,256	–	1,595	42,898	727,897
Non-controlling interest in subsidiaries	2,256											n.a.
Equity attributable to shareholders												
Preferred shares	4,813	–	–	–	–	–	–	–	–	–	–	4,813
Common shares	13,378	–	–	–	–	–	–	–	–	–	–	13,378
Treasury shares – preferred	(2)	–	–	–	–	–	–	–	–	–	–	(2)
– common	(81)	–	–	–	–	–	–	–	–	–	–	(81)
Retained earnings	22,942	(57)	(1,364)	(1,664)	(1,261)	(415)	(226)	–	–	(668)	(5,655)	17,287
Other components of equity	(2,099)	3	–	1,664	–	(73)	(29)	–	–	520	2,085	(14)
	38,951	(54)	(1,364)	–	(1,261)	(488)	(255)	–	–	(148)	(3,570)	35,381
Non-controlling interests	n.a.	–	–	–	–	–	(155)	–	–	(7)	(162)	2,094
Total equity	n.a.	(54)	(1,364)	–	(1,261)	(488)	(410)	–	–	(155)	(3,732)	37,475
Total liabilities and equity	$ 726,206	$ (94)	$ (1,266)	$ –	$ (1,261)	$ 36,670	$ 2,421	$ 1,256	$ –	$ 1,440	$ 39,166	$ 765,372

n.a. Under IFRS, Non-controlling interests are presented as a component of Total equity.

Reconciliation of Canadian GAAP and IFRS – Consolidated Statement of Income for the year ended October 31, 2011

		IFRS 1 Elections			Other accounting policy differences					
(Millions of Canadian dollars)	Canadian GAAP	Classification of financial instruments (Ref. 1)	Employee benefits (Ref. 2)	Cumulative translation differences (Ref. 3)	Goodwill (Ref. 4)	Securitization (derecognition) (Ref. 5)	Special purpose entities (Ref. 6)	Hedging and other (Ref. 9)	Total impact	IFRS
Interest income										
Loans	$ 12,975	$ 10	$ —	$ —	$ —	$ 1,847	$ 335	$ 69	$ 2,261	$ 15,236
Securities	5,118	(5)	—	—	—	(359)	(10)	6	(368)	4,750
Assets purchased under reverse repurchase agreements and securities borrowed	736	—	—	—	—	—	—	—	—	736
Deposits with banks	91	—	—	—	—	—	—	—	—	91
	18,920	5	—	—	—	1,488	325	75	1,893	20,813
Interest expense										
Deposits	5,242	—	—	—	—	1,297	20	(225)	1,092	6,334
Other liabilities	2,725	—	—	—	—	(54)	52	—	(2)	2,723
Subordinated debentures	353	—	—	—	—	—	48	(2)	46	399
	8,320	—	—	—	—	1,243	120	(227)	1,136	9,456
Net interest income	10,600	5	—	—	—	245	205	302	757	11,357
Non-interest income										
Insurance premiums, investment and fee income	4,479	—	(1)	—	—	—	—	(4)	(5)	4,474
Mutual fund revenue	1,977	—	—	—	—	—	—	(2)	(2)	1,975
Trading revenue	800	9	—	—	—	(58)	(95)	(1)	(145)	655
Investment management and custodial fees	1,998	—	—	—	—	1	(1)	1	1	1,999
Securities brokerage commissions	1,329	—	—	—	—	2	—	—	2	1,331
Service charges	1,324	—	—	—	—	—	—	(1)	(1)	1,323
Underwriting and other advisory fees	1,489	—	—	—	—	—	(4)	—	(4)	1,485
Foreign exchange revenue, other than trading	683	—	—	—	—	(1)	—	2	1	684
Card service revenue	646	—	—	—	—	—	251	(15)	236	882
Credit fees	707	—	—	—	—	—	—	—	—	707
Securitization revenue	797	—	—	—	—	(416)	(382)	1	(797)	—
Net gain on available-for-sale securities	128	1	—	—	—	(2)	1	(24)	(24)	104
Share of loss in associates	—	—	—	—	—	—	(13)	6	(7)	(7)
Other	473	(3)	—	1	—	256	5	(63)	196	669
Non-interest income	16,830	7	(1)	1	—	(218)	(238)	(100)	(549)	16,281
Total revenue	27,430	12	(1)	1	—	27	(33)	202	208	27,638
Provision for credit losses	975	(4)	—	—	—	—	84	78	158	1,133
Insurance policyholder benefits, claims and acquisition expense	3,360	—	—	—	—	—	—	(2)	(2)	3,358
Non-interest expense										
Human resources	8,958	—	(337)	—	—	—	—	40	(297)	8,661
Equipment	1,011	—	—	—	—	—	—	(1)	(1)	1,010
Occupancy	1,027	—	—	—	—	—	—	(1)	(1)	1,026
Communications	745	—	—	—	—	—	—	1	1	746
Professional fees	683	—	—	—	—	11	(9)	7	9	692
Outsourced item processing	268	—	—	—	—	—	—	(2)	(2)	266
Amortization of other intangibles	480	—	—	—	—	—	—	1	1	481
Other	1,281	(3)	—	—	—	(4)	3	8	4	1,285
	14,453	(3)	(337)	—	—	7	(6)	53	(286)	14,167
Income before income taxes	8,642	19	336	1	—	20	(111)	73	338	8,980
Income taxes	1,888	(5)	91	—	—	3	(25)	58	122	2,010
Net income before non-controlling interest	6,754									n.a.
Non-controlling interest in net income of subsidiaries	104									n.a.
Net income from continuing operations	6,650	24	245	1	—	17	(86)	15	216	6,970
Net loss from discontinued operations	(1,798)	19	—	—	1,254	—	—	(1)	1,272	(526)
Net income	$ 4,852	$ 43	$ 245	$ 1	$ 1,254	$ 17	$ (86)	$ 14	$ 1,488	$ 6,444
Net income attributed to:										
Shareholders										$ 6,343
Non-controlling interests										101
										$ 6,444

n.a. Under IFRS, Non-controlling interests in net income of subsidiaries is included in the determination of Net income.

Reconciliation of Canadian GAAP and IFRS – Consolidated Statement of Comprehensive Income for the year ended October 31, 2011

(Millions of Canadian dollars)	Canadian GAAP	Reclassifications	Accounting policy differences: Available-for-sale securities	Derivative designated as cash flow hedges	Currency translation adjustments	Other	IFRS
Comprehensive income							
Net income	$ 4,852	$ –	$ –	$ –	$ –	$ 1,592	$ 6,444
Other comprehensive income, net of taxes							
Net change in unrealized losses on available-for-sale securities							
Net unrealized losses on available-for-sale securities	(128)	–	98	–	–	–	(30)
Reclassification of (gains) losses on available-for-sale securities to income	(7)	20	–	–	–	–	13
	(135)	20	98	–	–	–	(17)
Foreign currency translation adjustments							
Unrealized foreign currency translation losses	(695)	–	–	–	70	–	(625)
Net foreign currency translation gains from hedging activities	725	–	–	–	(8)	–	717
Reclassification of gains on foreign currency translation to income	(8)	7	–	–	–	–	(1)
	22	7	–	–	62	–	91
Net change in cash flow hedges							
Net gains on derivatives designated as cash flow hedges	309	–	–	(11)	–	–	298
Reclassification of losses on derivatives designated as cash flow hedges to income	278	(146)	–	–	–	–	132
	587	(146)	–	(11)	–	–	430
Other comprehensive income, net of taxes	474	(119)	98	(11)	62	–	504
Total comprehensive income	$ 5,326	$ (119)	$ 98	$ (11)	$ 62	$ 1,592	$ 6,948
Total comprehensive income attributable to:							
Shareholders							$ 6,847
Non-controlling interests							101
							$ 6,948

Significant adjustments to the Statement of Cash Flows

On transition to IFRS, the following lines have been reclassified in the Consolidated Statements of Cash Flows from investing activities to operating activities: Change in loans, net of securitizations; Proceeds from securitizations; and Change in assets purchased under reverse repurchase agreements and securities borrowed. Additionally, the following lines have been reclassified from financing activities to operating activities: Change in deposits; Change in obligations related to assets sold under repurchase agreements and securities loaned; and Change in obligations related to securities sold short. The effects of these reclassifications and other transition impacts on our net cash from (used in) operating, investing, and financing activities are presented in the table below.

Reconciliation of Canadian GAAP and IFRS – Consolidated Statement of Cash Flows for the year ended October 31, 2011

(Millions of Canadian dollars)	Canadian GAAP	Reclassification adjustments	Other transition impacts	IFRS
Net cash from (used in) operating activities	$ 10,338	$ (9,475)	$ 3,616	$ 4,479
Net cash (used in) from investing activities	(32,936)	41,823	(3,685)	5,202
Net cash from (used in) financing activities	29,174	(32,348)	23	(3,151)
Effect of exchange rate changes on cash resources	57	–	19	76
Net change in cash resources	6,633	–	(27)	6,606
Cash resources at beginning of year (1)	9,330	–	(792)	8,538
Cash resources at end of year	$ 15,963	$ –	$ (819)	$15,144

(1) Cash resources represent our total Cash and due from banks relating to continuing operations, as presented on our Consolidated Balance Sheets, and Cash and due from banks relating to discontinued operations.

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, 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	–	36,600	36,600	–	37,305	37,305
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	–	47,635	47,635	–	47,765	47,765
Subordinated debentures	–	122	–	7,493	7,405	–	7,615	7,527
Trust capital securities	–	–	–	900	941	–	900	941

	As at October 31, 2011							
	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	$ 117,986	$ 10,142	$ –	$ –	$ –	$ –	$ 128,128	$ 128,128
Available-for-sale	–		38,433	–	–	461	38,894	38,894
Total securities	117,986	10,142	38,433	—	—	461	167,022	167,022
Assets purchased under reverse repurchase agreements and securities borrowed	–	74,860	–	10,087	10,087	–	84,947	84,947
Loans								
Retail	–	–	–	283,586	282,277	–	283,586	282,277
Wholesale	139	1,375	–	62,430	60,735	–	63,944	62,249
Total loans	139	1,375	–	346,016	343,012	–	347,530	344,526
Other								
Derivatives	99,650	–	–	–	–	–	99,650	99,650
Other assets	–	516	–	29,074	29,074	–	29,590	29,590
Financial liabilities								
Deposits								
Personal	$ –	$ 3,615	$ –	$ 162,415	$ 162,949	$ –	$ 166,030	$ 166,564
Business and government (1)	–	55,452	–	242,059	242,460	–	297,511	297,912
Bank (2)	–	3,777	–	11,784	11,784	–	15,561	15,561
Total deposits	–	62,844	–	416,258	417,193	–	479,102	480,037
Other								
Obligations related to securities sold short	44,284	–	–	–	–	–	44,284	44,284
Obligations related to assets sold under repurchase agreements and securities loaned	–	35,442	–	7,293	7,293	–	42,735	42,735
Derivatives	100,522	–	–	–	–	–	100,522	100,522
Other liabilities	68	12	–	43,309	43,309	–	43,389	43,389
Subordinated debentures	–	111	–	8,638	8,514	–	8,749	8,625
Trust capital securities	–	–	–	894	958	–	894	958

	As at November 1, 2010							
	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	$ 120,322	$ 9,517	$ –	$ –	$ –	$ –	$ 129,839	$ 129,839
Available-for-sale	–	–	48,588	–	–	656	49,244	49,244
Total securities	120,322	9,517	48,588	–	–	656	179,083	179,083
Assets purchased under reverse repurchase agreements and securities borrowed	–	60,864	–	11,834	11,834	–	72,698	72,698
Loans								
Retail	–	–	–	270,370	269,950	–	270,370	269,950
Wholesale	–	1,363	–	64,924	63,453	–	66,287	64,816
Total loans	–	1,363	–	335,294	333,403	–	336,657	334,766
Other								
Derivatives	106,109	–	–	–	–	–	106,109	106,109
Other assets	–	296	–	28,952	28,952	–	29,248	29,248
Financial liabilities								
Deposits								
Personal	$ –	$ 3,237	$ –	$ 158,456	$ 159,255	$ –	$ 161,693	$ 162,492
Business and government (1)	–	61,038	–	226,497	226,665	–	287,535	287,703
Bank (2)	–	4,713	–	14,572	14,572	–	19,285	19,285
Total deposits	–	68,988	–	399,525	400,492	–	468,513	469,480
Other								
Obligations related to securities sold short	46,597	–	–	–	–	–	46,597	46,597
Obligations related to assets sold under repurchase agreements and securities loaned	–	25,695	–	10,311	10,311	–	36,006	36,006
Derivatives	108,077	–	–	—	—	–	108,077	108,077
Other liabilities	(509)	127	–	42,654	42,333	–	42,272	41,951
Subordinated debentures	–	119	–	7,557	7,522	–	7,676	7,641
Trust capital securities	–	–	–	1,627	1,734	–	1,627	1,734

(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, 2012						
(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	$ 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

	As at October 31, 2011						
(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	$ 666	$ 666	$ –	$ –	$ –	$ –	$ –
Assets purchased under reverse repurchase agreements and securities borrowed	74,860	74,860	–	–	–	–	–
Loans – Wholesale	1,375	1,375	300	(15)	(15)	3	3
Other assets	177	177	–	–	–	–	–
Total	$ 77,078	$ 77,078	$ 300	$ (15)	$ (15)	$ 3	$ 3

	As at November 1, 2010		
(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
Interest-bearing deposits with banks	$ 182	$ 182	$ –
Assets purchased under reverse repurchase agreements and securities borrowed	60,864	60,864	–
Loans – Wholesale	1,363	1,363	346
Total	$ 62,409	$ 62,409	$ 346

(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, 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)

(Millions of Canadian dollars)	As at October 31, 2011 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	$ 3,598	$ 3,615	$ 17	$ (14)	$ (14)
Business and government (2)	55,623	55,452	(171)	(45)	(45)
Bank (3)	3,777	3,777	–	–	–
Total term deposits	62,998	62,844	(154)	(59)	(59)
Obligations related to assets sold under repurchase agreements and securities loaned	35,444	35,442	(2)	–	–
Other liabilities	12	12	–	–	–
Subordinated debentures	128	111	(17)	(7)	(7)
Total	$ 98,582	$ 98,409	$ (173)	$ (66)	$ (66)

(Millions of Canadian dollars)	As at November 1, 2010 Contractual maturity amount	Carrying value	Difference between carrying value and contractual maturity amount
Term deposits			
Personal	$ 3,300	$ 3,237	$ (63)
Business and government (2)	61,124	61,038	(86)
Bank (3)	4,713	4,713	–
Total term deposits	69,137	68,988	(149)
Obligations related to assets sold under repurchase agreements and securities loaned	25,697	25,695	(2)
Other liabilities	127	127	–
Subordinated debentures	127	119	(8)
Total	$ 95,088	$ 94,929	$ (159)

(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. 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, 2012						October 31, 2011					
	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	$ —	$ 120	$ –	$ 120	$	$ 120	$ –	$ 666	$ —	$ 666	$	$ 666
Securities												
Trading												
Canadian government debt (2)												
Federal	8,158	7,234	–	15,392		15,392	8,165	9,267	–	17,432		17,432
Provincial and municipal	–	8,465	–	8,465		8,465	–	6,929	4	6,933		6,933
U.S. state, municipal and agencies debt (2)	2,287	18,364	99	20,750		20,750	2,270	17,195	86	19,551		19,551
Other OECD government debt (3)	3,781	7,754	375	11,910		11,910	6,204	11,854	47	18,105		18,105
Mortgage-backed securities (2)	–	693	55	748		748	–	371	45	416		416
Asset-backed securities												
CDOs (4)	–	–	59	59		59	–	–	371	371		371
Non-CDO securities	–	700	23	723		723	–	780	138	918		918
Corporate debt and other debt	62	21,972	397	22,431		22,431	101	24,149	720	24,970		24,970
Equities	37,924	2,079	302	40,305		40,305	36,431	2,649	352	39,432		39,432
	52,212	67,261	1,310	120,783		120,783	53,171	73,194	1,763	128,128		128,128
Available-for-sale (5)												
Canadian government debt (2)												
Federal	367	10,914	–	11,281		11,281	1,058	8,473	–	9,531		9,531
Provincial and municipal	–	1,785	–	1,785		1,785	–	1,561	–	1,561		1,561
U.S. state, municipal and agencies debt (2)	23	3,856	1,906	5,785		5,785	119	2,083	2,691	4,893		4,893
Other OECD government debt	6,081	3,744	–	9,825		9,825	4,017	3,016	–	7,033		7,033
Mortgage-backed securities (2)	–	263	–	263		263	–	126	184	310		310
Asset-backed securities												
CDOs	–	–	1,996	1,996		1,996	–	–	1,932	1,932		1,932
Non-CDO securities	–	180	645	825		825	–	322	673	995		995
Corporate debt and other debt	–	5,062	1,446	6,508		6,508	–	9,048	1,478	10,526		10,526
Equities	266	603	948	1,817		1,817	158	404	863	1,425		1,425
Loan substitute securities	192	25	–	217		217	187	35	–	222		222
	6,929	26,432	6,941	40,302		40,302	5,539	25,068	7,821	38,428		38,428
Asset purchased under reverse repurchase agreements and securities borrowed	–	86,918	–	86,918		86,918	–	74,860	–	74,860		74,860
Loans	–	829	403	1,232		1,232	–	951	563	1,514		1,514
Other												
Derivatives												
Interest rate contracts	5	99,062	842	99,909		99,909	5	85,150	666	85,821		85,821
Foreign exchange contracts	–	19,126	118	19,244		19,244	–	27,068	81	27,149		27,149
Credit derivatives	–	167	125	292		292	–	349	291	640		640
Other contracts	1,699	2,296	448	4,443		4,443	1,671	4,129	428	6,228		6,228
Valuation adjustments determined on a pooled basis	(23)	(321)	(282)	(626)		(626)	(48)	(249)	(451)	(748)		(748)
Total gross derivatives	1,681	120,330	1,251	123,262		123,262	1,628	116,447	1,015	119,090		119,090
Netting adjustments					(31,969)	(31,969)					(19,440)	(19,440)
Total derivatives						91,293						99,650
Other assets	394	297	14	705		705	340	176	–	516		516
	$ 61,216	$ 302,187	$ 9,919	$ 373,322	$ (31,969)	$ 341,353	$ 60,678	$ 291,362	$ 11,162	$ 363,202	$ (19,440)	$ 343,762
Financial Liabilities												
Deposits												
Personal	$ –	$ 327	$ 6,840	$ 7,167	$	$ 7,167	$ –	$ –	$ 3,615	$ 3,615	$	$ 3,615
Business and government	–	46,817	2,519	49,336		49,336	–	52,017	3,435	55,452		55,452
Bank	–	2,524	–	2,524		2,524	–	3,777	–	3,777		3,777
Other												
Obligations related to securities sold short	27,365	13,383	8	40,756		40,756	31,416	12,868	–	44,284		44,284
Obligations related to assets sold under repurchase agreements and securities loaned	–	58,709	–	58,709		58,709	–	35,442	–	35,442		35,442
Derivatives												
Interest rate contracts	2	91,180	1,329	92,511		92,511	2	78,275	841	79,118		79,118
Foreign exchange contracts	–	28,016	316	28,332		28,332	–	30,975	41	31,016		31,016
Credit derivatives	–	188	147	335		335	–	261	573	834		834
Other contracts	1,370	4,501	1,500	7,371		7,371	1,824	5,147	1,496	8,467		8,467
Total gross derivatives	1,372	123,885	3,292	128,549		128,549	1,826	114,658	2,951	119,435		119,435
Netting adjustments					(31,788)	(31,788)					(18,913)	(18,913)
Total derivatives						96,761						100,522
Other liabilities	–	29	101	130		130	–	12	68	80		80
Subordinated debentures	–	–	122	122		122	–	–	111	111		111
	$ 28,737	$ 245,674	$ 12,882	$ 287,293	$ (31,788)	$ 255,505	$ 33,242	$ 218,774	$ 10,180	$ 262,196	$ (18,913)	$ 243,283

(Millions of Canadian dollars)	As at November 1, 2010					
	Fair value measurements using (1)					
	Level 1	Level 2	Level 3	Total gross fair value	Netting adjustments	Assets/ liabilities at fair value
Financial assets						
Interest bearing deposits with banks	$ –	$ 182	$ –	$ 182	$	$ 182
Securities						
Trading						
Canadian government debt (2)						
Federal	–	16,974	14	16,988		16,988
Provincial and municipal	–	7,243	5	7,248		7,248
U.S. state, municipal and agencies debt (2)	–	12,353	41	12,394		12,394
Other OECD government debt (3)	–	17,899	42	17,941		17,941
Mortgage-backed securities (2)	–	10	416	426		426
Asset-backed securities						
CDOs (4)	–	–	2,460	2,460		2,460
Non-CDO securities	–	236	541	777		777
Corporate debt and other debt	30	31,108	1,482	32,620		32,620
Equities	35,767	845	2,373	38,985		38,985
	35,797	86,668	7,374	129,839		129,839
Available-for-sale (5)						
Canadian government debt (2)						
Federal	–	16,274	–	16,274		16,274
Provincial and municipal	–	1,536	–	1,536		1,536
U.S. state, municipal and agencies debt (2)	–	4,722	3,277	7,999		7,999
Other OECD government debt	1,451	3,629	–	5,080		5,080
Mortgage-backed securities (2)	–	–	1,545	1,545		1,545
Asset-backed securities						
CDOs	–	–	224	224		224
Non-CDO securities	–	480	736	1,216		1,216
Corporate debt and other debt	358	9,950	2,350	12,658		12,658
Equities	167	139	1,265	1,571		1,571
Loan substitute securities	–	228	–	228		228
	1,976	36,958	9,397	48,331		48,331
Asset purchased under reverse repurchase agreements and securities borrowed	–	60,864	–	60,864		60,864
Loans	–	771	592	1,363		1,363
Other						
Derivatives						
Interest rate contracts	3	66,737	779	67,519		67,519
Foreign exchange contracts	–	29,616	101	29,717		29,717
Credit derivatives	–	972	960	1,932		1,932
Other contracts	1,960	2,193	3,735	7,888		7,888
Valuation adjustments determined on a pooled basis	(1)	(210)	(482)	(693)		(693)
Total gross derivatives	1,962	99,308	5,093	106,363		106,363
Netting adjustments					(254)	(254)
Total derivatives						106,109
Other assets	286	10	–	296		296
	$ 40,021	$ 284,761	$ 22,456	$ 347,238	$ (254)	$ 346,984
Financial Liabilities						
Deposits						
Personal	$ –	$ –	$ 3,237	$ 3,237	$	$ 3,237
Business and government	–	57,658	3,380	61,038		61,038
Bank	–	4,713	–	4,713		4,713
Other						
Obligations related to securities sold short	14,780	31,577	240	46,597		46,597
Obligations related to assets sold under repurchase agreements and securities loaned	–	25,695	–	25,695		25,695
Derivatives						
Interest rate contracts	1	60,840	415	61,256		61,256
Foreign exchange contracts	–	34,967	27	34,994		34,994
Credit derivatives	–	1,112	608	1,720		1,720
Other contracts	1,203	3,743	5,415	10,361		10,361
Total gross derivatives	1,204	100,662	6,465	108,331		108,331
Netting adjustments					(254)	(254)
Total derivatives						108,077
Other liabilities	–	–	(382)	(382)		(382)
Subordinated debentures	–	–	119	119		119
	$ 15,984	$ 220,305	$ 13,059	$ 249,348	$ (254)	$ 249,094

(1) Transfer between Level 1 and Level 2 is dependant on whether fair value is obtained on the basis of quoted market prices in active markets. 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. For the year ended October 31, 2011, our most significant transfer to Level 1 was the transfer of $20 billion of G7 issued debt in the first quarter of 2011, from Level 2 Trading and AFS Canadian government debt – Federal, U.S. state, municipal and agencies debt, and Other OECD government debt, to the corresponding Level 1 balances.
(2) As at October 31, 2012, residential and commercial MBS included in Trading securities were $7,761 million and $78 million (October 31, 2011 – $7,190 million and $43 million; November 1, 2010 – $5,110 million and $96 million), respectively, and in AFS securities, $3,682 million and $42 million (October 31, 2011 – $740 million and $54 million; November 1, 2010 – $3,531 million and $152 million), respectively.
(3) OECD stands for Organisation for Economic Co-operation and Development.
(4) CDOs stand for Collateralized Debt Obligations.
(5) Excludes $18 million and $508 million of AFS and held-to-maturity securities (October 31, 2011 – $5 million and $461 million; November 1, 2010 – $257 million and $656 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, 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 others (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									
Federal	$ –	$ –	$ –	$ –	$ –	$ –	$ –	$ –	$ –
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
Other OECD government debt	–	–	–	–	–	–	–	–	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)
Bank	–	–	–	–	–	–	–	–	–
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)

	For the year ended October 31, 2011									
(Millions of Canadian dollars)	Fair value November 1, 2010	Less Level 3 assets related to discontinued operations	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 others (2)	Transfers into Level 3	Transfers out of Level 3	Fair value October 31, 2011	Changes in unrealized gains (losses) included in earnings for assets and liabilities for the year ended October 31, 2011 for positions still held
Assets										
Securities										
Trading										
Canadian government debt										
Federal	$ 14	$ –	$ –	$ –	$ –	$ (10)	$ –	$ (4)	$ –	$ –
Provincial and municipal	5	–	–	–	1	(2)	7	(7)	4	–
U.S. state, municipal and agencies debt	41	–	1	–	304	(302)	158	(116)	86	–
Other OECD government debt	42	–	–	–	–	47	–	(42)	47	–
Mortgage-backed securities	416	–	(44)	(7)	1,975	(1,370)	62	(987)	45	(6)
Asset-backed securities										
CDOs	2,460	–	(76)	(55)	21	(1,979)	–	–	371	(3)
Non-CDO securities	541	–	(2)	(4)	3,027	(2,906)	87	(605)	138	–
Corporate debt and other debt	1,482	–	(83)	(18)	677	(1,134)	185	(389)	720	(79)
Equities	2,373	–	49	(40)	541	(68)	14	(2,517)	352	(22)
	7,374	–	(155)	(124)	6,546	(7,724)	513	(4,667)	1,763	(110)
Available-for-sale										
U.S. state, municipal and agencies debt	3,277	(97)	6	(227)	292	474	–	(1,034)	2,691	n.a.
Other OECD government debt	–	–	–	–	–	–	–	–	–	n.a.
Mortgage-backed securities	1,545	(1,039)	5	(2)	4	(135)	184	(378)	184	n.a.
Asset-backed securities										
CDOs	224	–	–	(70)	–	1,778	–	–	1,932	n.a.
Non-CDO securities	736	(46)	(25)	25	43	(56)	158	(162)	673	n.a.
Corporate debt and other debt	2,350	(76)	(1)	(63)	1,299	(2,052)	95	(74)	1,478	n.a.
Equities	1,265	(27)	(25)	14	80	(310)	28	(162)	863	n.a.
	9,397	(1,285)	(40)	(323)	1,718	(301)	465	(1,810)	7,821	n.a.
Loans – Wholesale	592	–	11	(13)	192	(302)	85	(2)	563	7
Other										
Derivatives, net of derivative related liabilities (3)	(1,372)	(67)	(436)	74	(54)	17	(378)	280	(1,936)	(224)
	$ 15,991	$ (1,352)	$ (620)	$ (386)	$ 8,402	$ (8,310)	$ 685	$ (6,199)	$ 8,211	$ (327)
Liabilities										
Deposits										
Personal	$ (3,237)	$ –	$ 131	$ 28	$ (3,091)	$ 2,554	$ –	$ –	$ (3,615)	$ 166
Business and government	(3,380)	–	138	43	(1,836)	1,543	–	57	(3,435)	214
Bank	–	–	–	–	–	–	–	–	–	–
Other										
Obligations related to securities sold short	(240)	–	(5)	1	(6)	64	–	186	–	–
Other liabilities	382	–	(71)	(18)	(2)	(358)	–	(1)	(68)	(52)
Subordinated debentures	(119)	–	9	–	–	(1)	–	–	(111)	9
	$ (6,594)	$ –	$ 202	$ 54	$ (4,935)	$ 3,802	$ –	$ 242	$ (7,229)	$ 337

(1) Includes 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 $162 million for the year ended October 31, 2012 (October 31, 2011 – losses of $72 million), excluding the translation gains or losses arising on consolidation.

(2) Others include amortization of premiums or discounts recognized in net income.

(3) Net derivatives as at October 31, 2012 included derivative assets of $1,251 million (October 31, 2011 – $1,015 million; November 1, 2010 – $5,093 million) and derivative liabilities of $3,292 million (October 31, 2011 – $2,951 million; November 1, 2010 – $6,465 million).

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.

For the year ended October 31, 2011, U.S. state municipal and agencies debt and Corporate debt and other debt within Trading securities were transferred into Level 3 due to lack of observable market inputs. During the prior year, there were significant transfers of Level 3 Trading securities to Level 2, consisting mainly of Equities that can be redeemable at net asset values (NAVs) and MBS for which pricing became observable. Significant transfers out of Level 3 in the prior year also included AFS securities, primarily due to the increased pricing transparency of certain U.S. state, municipal and agencies debt.

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 the 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, 2012			As at October 31, 2011		
(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						
Canadian government debt	$ –	$ –	$ –	$ 4	$ –	$ –
U.S. state, municipal and agencies debt	99	–	–	86	–	–
Other OECD government debt	375	–	–	47	–	–
Mortgage-backed securities	55	1	(1)	45	–	–
Asset-backed securities	82	3	(3)	509	3	(3)
Corporate debt and other debt	397	40	(32)	720	20	(17)
Equities	302	2	(2)	352	–	–
Available-for-sale						
U.S. state, municipal and agencies debt	1,906	25	(48)	2,691	36	(78)
Mortgage-backed securities	–	–	–	184	3	(3)
Asset-backed securities	2,641	29	(37)	2,605	36	(50)
Corporate debt and other debt	1,446	13	(12)	1,478	12	(11)
Equities	948	20	(24)	863	3	(2)
Loans	403	3	(3)	563	9	(11)
Derivatives	1,251	106	(117)	1,015	171	(151)
Other assets	14	1	(1)	–	–	–
Total	$ 9,919	$ 243	$ (280)	$ 11,162	$ 293	$ (326)
Deposits	(9,359)	84	(84)	(7,050)	61	(59)
Derivatives	(3,292)	41	(60)	(2,951)	119	(133)
Other, securities sold short, other liabilities and subordinated debentures	(231)	8	(8)	(179)	1	(1)
Total	$ (12,882)	$ 133	$ (152)	$ (10,180)	$ 181	$ (193)

	As at November 1, 2010		
(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
Securities			
Trading			
Canadian government debt	$ 19	$ –	$ –
U.S. state, municipal and agencies debt	41	–	–
Other OECD government debt	42	–	–
Mortgage-backed securities	416	37	(33)
Asset-backed securities	3,001	20	(31)
Corporate debt and other debt	1,482	26	(21)
Equities	2,373	–	–
Available-for-sale			
U.S. state, municipal and agencies debt	3,277	35	(75)
Mortgage-backed securities	1,545	67	(92)
Asset-backed securities	960	22	(48)
Corporate debt and other debt	2,350	39	(31)
Equities	1,265	–	–
Loans	592	3	(2)
Derivatives	5,093	194	(170)
Other assets	–	–	–
Total	$ 22,456	$ 443	$ (503)
Deposits	(6,617)	10	(10)
Derivatives	(6,465)	81	(87)
Other, securities sold short, other liabilities and subordinated debentures	23	–	–
Total	$ (13,059)	$ 91	$ (97)

Sensitivity results

As at October 31, 2012, the effects of applying other reasonably possible alternative assumptions to the Level 3 asset positions would be an increase of $243 million and a reduction of $280 million in fair value, of which $87 million and $121 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 $133 million and an increase of $152 million in fair value. The reduction in both positive and negative fair value movement in Derivative related assets was caused by the termination of a certain credit derivative transaction. The reduction in both positive and negative fair value movement of Derivative related liabilities was due to the reduction of a certain MBS reference portfolio.

Level 3 valuation inputs and approaches of developing reasonably possible alternative assumptions

Level 3 financial instruments primarily include asset-backed securities (ABS) including Collateralized Loan Obligations and CDOs, auction-rate securities (ARS), municipal bonds, U.S. Non-agency MBS, 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, derivatives referenced to the performance of certain CDOs, commodity derivatives, equity-linked and interest-rate-linked structured notes, and deposit notes with long-dated maturities and significant unobservable spreads.

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 subprime, Alt-A and prime MBS, Collateralized Loan Obligations, CDOs, corporate bonds and loans, floating-rate notes, non-OECD countries' government debt and municipal bonds are determined using prices from pricing services. These securities were 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 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 the 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 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 these hedge funds at NAV. 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 consist of CDO-referenced derivatives, commodity derivatives, structured-interest-rate derivatives, hedge fund swaps and bank-owned life insurance (BOLI). Inputs for CDOs are based on credit default correlation. 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 applied one standard deviation to the commodity prices. Interest rate swaps and options were classified as Level 3 if their terms exceed certain observable periods or contain unique features, respectively. The sensitivity for interest rate swaps, cross currency swaps and options is derived using a combination of model and parameter uncertainty valuation adjustments. For BOLI, the unobservable inputs include default rates, prepayment rates, severity and housing price index. For sensitivity, the range of values was determined as reasonably possible alternative assumptions by adjusting these parameters by 10% and the housing price index by one standard deviation. The sensitivity for the derivative credit valuation adjustment was calculated using a combination of increasing the relative credit spread by 9.0%, and an amount for model uncertainty.

Equity-linked and interest-rate-linked structured notes, as well as promissory notes with significant unobservable spreads and limited market activities are included in Deposits. For equity-linked and interest-rate-linked structured notes, model parameters include volatility rate, dividend rate, correlation and foreign currency rate. The model parameters are adjusted by plus or minus one standard deviation and the interest rate curves by certain basis points to derive the sensitivities.

Note 5 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, 2012						
	Term to maturity (1)						
(Millions of Canadian dollars)	Within 3 months	3 months to 1 year	1 to 5 years	5 years to 10 years	Over 10 years	With no specific maturity	Total
Trading account (2)							
Canadian government debt	$ 3,696	$ 6,085	$ 6,351	$ 1,674	$ 6,051	$ –	$ 23,857
U.S. government debt	1,580	4,461	5,537	1,649	7,523	–	20,750
Other OECD government debt	1,400	2,116	4,696	2,150	1,548	–	11,910
Mortgage-backed securities (3)	–	7	37	114	590	–	748
Asset-backed securities (3)	29	68	312	166	207	–	782
Corporate debt and other debt (3)							
Bankers' acceptances	925	14	–	–	–	–	939
Certificates of deposit	377	559	611	9	9	–	1,565
Other (4)	2,524	2,697	9,207	2,254	3,245	–	19,927
Equities	–	–	–	–	–	40,305	40,305
	10,531	16,007	26,751	8,016	19,173	40,305	120,783
Available-for-sale securities (2)							
Canadian government debt							
Federal							
Amortized cost	310	851	8,230	864	513	–	10,768
Fair value	312	858	8,626	956	529	–	11,281
Yield (5)	.8%	3.1%	2.6%	3.3%	2.7%	–	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)	.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)	.4%	.1%	.3%	.9%	.8%	–	.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)	.2%	.6%	1.1%	2.4%	–	–	.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)	.7%	.7%	1.0%	.7%	1.1%	–	.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	12,544	3,615	7,134	1,793	39,705
Fair value	10,316	4,344	12,957	3,760	6,891	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	$39,820	$ 11,854	$ 26,065	$ 42,357	$161,611

(Millions of Canadian dollars)	As at October 31, 2011 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	$ 1,902	$ 8,000	$ 8,768	$ 1,569	$ 4,126	$ –	$ 24,365
U.S. government debt	313	5,594	4,659	1,485	7,500	–	19,551
Other OECD government debt	2,109	5,144	5,333	3,957	1,562	–	18,105
Mortgage-backed securities (3)	–	3	97	39	277	–	416
Asset-backed securities (3)	160	44	422	237	426	–	1,289
Corporate debt and other debt (3)							
Bankers' acceptances	582	287	–	–	–	–	869
Certificates of deposit	3	974	352	7	12	–	1,348
Other (4)	2,142	4,876	10,369	1,873	3,493	–	22,753
Equities	–	–	–	–	–	39,432	39,432
	7,211	24,922	30,000	9,167	17,396	39,432	128,128
Available-for-sale securities (2)							
Canadian government debt							
Federal							
Amortized cost	284	353	7,697	680	26	–	9,040
Fair value	284	360	8,156	703	28	–	9,531
Yield (5)	.5%	4.3%	3.1%	2.6%	4.1%	–	3.0%
Provincial and municipal							
Amortized cost	301	89	1,112	14	21	–	1,537
Fair value	302	91	1,131	15	22	–	1,561
Yield (5)	4.9%	3.6%	2.6%	5.4%	4.9%	–	3.1%
U.S. state, municipal and agencies debt							
Amortized cost	60	51	53	10	4,864	–	5,038
Fair value	60	51	55	10	4,717	–	4,893
Yield (5)	1.1%	1.7%	1.3%	4.9%	1.8%	–	1.8%
Other OECD government debt							
Amortized cost	4,006	1,108	1,736	190	–	–	7,040
Fair value	4,005	1,105	1,730	193	–	–	7,033
Yield (5)	.2%	1.8%	1.8%	3.7%	–	–	1.0%
Mortgage-backed securities							
Amortized cost	–	–	20	26	268	–	314
Fair value	–	–	21	28	261	–	310
Yield (5)	–	–	4.6%	4.2%	2.6%	–	2.9%
Asset-backed securities							
Amortized cost	128	30	270	1,584	1,048	–	3,060
Fair value	128	31	269	1,573	926	–	2,927
Yield (5)	2.0%	5.1%	.8%	.7%	2.3%	–	1.3%
Corporate debt and other debt							
Amortized cost	5,793	1,917	2,073	388	380	22	10,573
Fair value	5,803	1,920	2,049	361	361	32	10,526
Yield (5)	2.2%	2.1%	2.0%	5.9%	4.8%	–	2.3%
Equities							
Cost	–	–	–	–	–	1,250	1,250
Fair value	–	–	–	–	–	1,430	1,430
Loan substitute							
Cost	–	–	–	–	–	222	222
Fair value	–	–	–	–	–	222	222
Yield (5)	–	–	–	–	–	3.7%	3.7%
Amortized cost	10,572	3,548	12,961	2,892	6,607	1,494	38,074
Fair value	10,582	3,558	13,411	2,883	6,315	1,684	38,433
Held-to-maturity securities (2)							
Amortized cost	129	57	193	81	1	–	461
Fair value	129	57	193	81	1	–	461
Total carrying value of securities (2)	$ 17,922	$ 28,537	$43,604	$ 12,131	$ 23,712	$ 41,116	$167,022

	As at November 1, 2010						
	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	$ 2,065	$ 5,346	$10,392	$ 1,991	$ 4,442	$ –	$ 24,236
U.S. government debt	946	1,184	3,241	2,138	4,885	–	12,394
Other OECD government debt	1,097	3,446	9,003	2,394	2,001	–	17,941
Mortgage-backed securities (3)	–	1	45	11	369	–	426
Asset-backed securities (3)	56	215	1,821	546	599	–	3,237
Corporate debt and other debt (3)							
Bankers' acceptances	508	249	–	–	–	–	757
Certificates of deposit	128	696	500	15	44	–	1,383
Other (4)	2,520	4,189	14,454	4,463	4,854	–	30,480
Equities	–	–	–	–	–	38,985	38,985
	7,320	15,326	39,456	11,558	17,194	38,985	129,839
Available-for-sale securities (2)							
Canadian government debt							
Federal							
Amortized cost	145	4,331	7,491	3,558	314	–	15,839
Fair value	145	4,374	7,699	3,738	318	–	16,274
Yield (5)	.8%	4.1%	1.8%	.4%	.8%	–	2.1%
Provincial and municipal							
Amortized cost	22	144	1,148	32	147	–	1,493
Fair value	22	144	1,179	34	157	–	1,536
Yield (5)	1.6%	2.3%	3.7%	5.0%	4.3%	–	3.6%
U.S. state, municipal and agencies debt							
Amortized cost	596	1,012	383	972	5,046	–	8,009
Fair value	596	1,013	386	972	5,032	–	7,999
Yield (5)	.7%	1.1%	1.2%	.7%	.7%	–	.8%
Other OECD government debt							
Amortized cost	1,414	1,153	2,314	183	–	–	5,064
Fair value	1,413	1,153	2,330	184	–	–	5,080
Yield (5)	.1%	.6%	4.3%	3.9%	–	–	2.3%
Mortgage-backed securities							
Amortized cost	3	2	79	75	1,431	–	1,590
Fair value	3	3	82	78	1,379	–	1,545
Yield (5)	6.6%	5.1%	4.5%	4.7%	2.0%	–	2.3%
Asset-backed securities							
Amortized cost	5	–	306	205	1,085	–	1,601
Fair value	5	–	311	199	925	–	1,440
Yield (5)	3.7%	–	1.6%	.7%	5.6%	–	4.1%
Corporate debt and other debt							
Amortized cost	3,836	3,504	2,940	573	1,681	148	12,682
Fair value	3,846	3,518	2,976	601	1,604	115	12,660
Yield (5)	2.4%	1.4%	2.3%	5.7%	2.3%	2.9%	2.3%
Equities							
Cost	–	–	–	–	–	1,649	1,649
Fair value	–	–	–	–	–	1,826	1,826
Loan substitute							
Cost	–	–	–	–	–	228	228
Fair value	–	–	–	–	–	228	228
Yield (5)	–	–	–	–	–	4.1%	4.1%
Amortized cost	6,021	10,146	14,661	5,598	9,704	2,025	48,155
Fair value	6,030	10,205	14,963	5,806	9,415	2,169	48,588
Held-to-maturity securities (2)							
Amortized cost	522	40	65	28	1	–	656
Fair value	522	40	65	28	1	–	656
Total carrying value of securities (2)	$ 13,872	$ 25,571	$54,484	$ 17,392	$ 26,610	$ 41,154	$179,083

(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 4.
(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)

	As at											
	October 31, 2012				October 31, 2011				November 1, 2010			
(Millions of Canadian dollars)	Cost/ Amortized cost	Gross unrealized gains	Gross unrealized losses	Fair value	Cost/ Amortized cost	Gross unrealized gains	Gross unrealized losses	Fair value	Cost/ Amortized cost	Gross unrealized gains	Gross unrealized losses	Fair value
Canadian government debt												
Federal	$ 10,927	$ 513	$ –	$11,440	$ 9,172	$ 492	$ (1)	$ 9,663	$ 15,871	$ 436	$ (1)	$16,306
Provincial and municipal	1,774	11	–	1,785	1,537	25	(1)	1,561	1,493	44	(1)	1,536
U.S. state, municipal and agencies debt (3)	5,929	13	(157)	5,785	5,038	11	(156)	4,893	8,009	75	(85)	7,999
Other OECD government debt	9,856	25	(6)	9,875	7,091	26	(33)	7,084	5,068	24	(8)	5,084
Mortgage-backed securities	253	13	(3)	263	314	19	(23)	310	1,590	24	(69)	1,545
Asset-backed securities												
CDOs	1,943	61	(8)	1,996	1,941	4	(13)	1,932	221	20	(17)	224
Non-CDO securities	932	12	(119)	825	1,119	4	(128)	995	1,380	46	(210)	1,216
Corporate debt and other debt	6,806	49	(48)	6,807	10,851	58	(105)	10,804	13,302	158	(180)	13,280
Equities	1,584	269	(18)	1,835	1,250	207	(27)	1,430	1,649	200	(23)	1,826
Loan substitute securities	209	8	–	217	222	–	–	222	228	–	–	228
	$ 40,213	$ 974	$ (359)	$40,828	$ 38,535	$ 846	$ (487)	$38,894	$ 48,811	$ 1,027	$ (594)	$49,244

(1) Includes $508 million held-to-maturity securities as at October 31, 2012 (October 31, 2011 – $461 million; November 1, 2010 – $656 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 $41 million, $1 million, $nil and $42 million, respectively as at October 31, 2012 (October 31, 2011 – $52 million, $2 million, $nil, and $54 million; November 1, 2010 – $148 million, $4 million, $nil, and $152 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)

	For the year ended	
(Millions of Canadian dollars)	October 31 2012	October 31 2011
Realized gains	$ 242	$ 283
Realized losses	(74)	(63)
Impairment losses	(48)	(116)
Net gain (loss) on available-for-sale securities	$ 120	$ 104

(1) The following related to our insurance operations are excluded from Net gain (loss) on available-for-sale securities and included in Insurance premiums, investment and fee income on the Consolidated Statement of Income: Realized gains for the year ended October 31, 2012 were $9 million (October 31, 2011 – $25 million); Realized losses for the year ended October 31, 2012 were $nil (October 31, 2011 – $1 million); Impairment losses for the year ended October 31, 2012 were $nil (October 31, 2011 – $14 million).

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, 2012, our gross unrealized losses on AFS securities were $359 million (October 31, 2011 – $487 million; November 1, 2010 – $594 million).

The total cost/amortized cost of the AFS portfolio, as at October 31, 2012, increased by $1.7 billion or 4.4% compared to October 31, 2011. The increase is largely due to purchases of Other OECD government debt as well as certain Canadian and U.S. government guaranteed MBS. This was partially offset by sales and maturities of short-term Corporate debt and other debt.

Gross unrealized gains of $974 million, as of October 31, 2012, increased by $128 million or 15.1% compared to October 31, 2011. This increase mainly reflects fair value improvements due to tightening of credit spreads on certain ABS, as well as fair value improvements on certain equities.

Gross unrealized losses of $359 million, as of October 31, 2012, decreased by $128 million or 26.3% compared to October 31, 2011. This decrease mainly reflects losses realized on sale of securities by RBC Dexia in connection with the acquisition. Also contributing to the overall decrease are fair value improvements due to tightening of credit spreads on certain European exposures classified as Corporate debt and other debt as well as on certain MBS.

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, 2012.

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 is of the view that there is no impairment on held-to-maturity investments as at October 31, 2012.

Net gain (loss) on available-for-sale securities

During the year ended October 31, 2012, $120 million of net gains were recognized in Non-interest income as compared to $104 million in the prior year. The current year reflects net realized gain on sales of $168 million mainly comprised of gain on distributions and redemptions from certain equities along with gain on sales of Canadian government debt partially offset by loss on sales of securities by RBC Dexia as a result of the acquisition. The net realized gain on sales was also partially offset by $48 million of writedowns on securities that were deemed impaired, mainly on equities. This compares to net gain on sales for the year ended October 31, 2011 of $220 million which was partially offset by $116 million of writedowns on securities that were deemed impaired, mainly on certain ABS and equities.

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 2012 (1)	October 31 2011 (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	$ 1,801	$ 1,738
Mortgage-backed securities	75	31
	$ 1,876	$ 1,769

	For the year ended			
	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
FVTPL reclassified to available-for-sale				
CDOs	$ 60	$ 76	$ (4)	$ 5
Mortgage-backed securities	2	8	–	–
	$ 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 6 Loans

	As at											
	October 31, 2012				October 31, 2011				November 1, 2010			
(Millions of Canadian dollars)	Canada	United States	Other International	Total	Canada	United States	Other International	Total	Canada	United States	Other International	Total
Retail (1)												
Residential mortgages	$195,552	$ 275	$ 2,497	$198,324	$185,620	$ 321	$ 2,465	$188,406	$172,244	$ 2,350	$ 2,418	$177,012
Personal	80,897	2,825	2,975	86,697	75,668	2,749	2,504	80,921	69,291	7,205	2,332	78,828
Credit cards	13,422	38	201	13,661	12,723	31	183	12,937	12,969	220	186	13,375
Small business (2)	2,503	–	–	2,503	2,481	–	–	2,481	2,712	–	–	2,712
	$292,374	$ 3,138	$ 5,673	$301,185	$276,492	$ 3,101	$ 5,152	$284,745	$257,216	$ 9,775	$ 4,936	$271,927
Wholesale (1)												
Business (3), (4)	42,894	16,755	16,121	75,770	38,981	11,035	10,780	60,796	35,676	19,230	9,029	63,935
Bank (5)	390	304	296	990	747	24	553	1,324	472	98	536	1,106
Sovereign (6)	1,854	–	442	2,296	1,886	–	746	2,632	1,613	–	943	2,556
	$ 45,138	$17,059	$ 16,859	$ 79,056	$ 41,614	$11,059	$ 12,079	$ 64,752	$ 37,761	$19,328	$ 10,508	$ 67,597
Total loans	$337,512	$20,197	$ 22,532	$380,241	$318,106	$14,160	$ 17,231	$349,497	$294,977	$29,103	$ 15,444	$339,524
Allowance for loan losses	(1,542)	(330)	(125)	(1,997)	(1,518)	(115)	(334)	(1,967)	(1,539)	(964)	(364)	(2,867)
Total loans net of allowance for loan losses	$335,970	$19,867	$ 22,407	$378,244	$316,588	$14,045	$ 16,897	$347,530	$293,438	$28,139	$ 15,080	$336,657

(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) Included under U.S. as at October 31, 2012 are loans totalling $1.4 billion (October 31, 2011 – $1.4 billion; November 1, 2010 – $1.5 billion), respectively, to SPEs administered by us.
(5) Bank refers primarily to regulated deposit-taking institutions and securities firms.
(6) 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, 2012							
	Maturity term (1)				Rate sensitivity			
(Millions of Canadian dollars)	Under 1 year (2), (3)	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

	As at October 31, 2011							
	Maturity term (1)				Rate sensitivity			
(Millions of Canadian dollars)	Under 1 year (2), (3)	1 to 5 years	Over 5 years	Total	Floating	Fixed Rate	Non-rate-sensitive	Total
Retail	$ 168,480	$105,560	$10,705	$284,745	$131,813	$148,786	$ 4,146	$284,745
Wholesale	45,646	12,257	6,849	64,752	36,335	27,138	1,279	64,752
Total loans	$ 214,126	$117,817	$17,554	$349,497	$168,148	$175,924	$ 5,425	$349,497
Allowance for loan losses				(1,967)				(1,967)
Total loans net of allowance for loan losses				$347,530				$347,530

	As at November 1, 2010							
	Maturity term (1)				Rate sensitivity			
(Millions of Canadian dollars)	Under 1 year (2), (3)	1 to 5 years	Over 5 years	Total	Floating	Fixed Rate	Non-rate-sensitive	Total
Retail	$ 157,568	$ 98,211	$16,148	$271,927	$141,363	$126,275	$ 4,289	$271,927
Wholesale	46,417	12,816	8,364	67,597	33,603	31,045	2,949	67,597
Total loans	$ 203,985	$111,027	$24,512	$339,524	$174,966	$157,320	$ 7,238	$339,524
Allowance for loan losses				(2,867)				(2,867)
Total loans net of allowance for loan losses				$336,657				$336,657

(1) Generally, based on the earlier of contractual repricing or maturity date.
(2) Included in Wholesale are loans totalling $1.4 billion (October 31, 2011 – $1.4 billion; November 1, 2010 – $1.5 billion) to SPEs administered by us. All of the loans reprice monthly or quarterly.
(3) Includes variable rate loans that can be repriced at the clients' discretion without penalty.

Allowance for credit losses

	For the year ended October 31, 2012						
(Millions of Canadian dollars)	Balance at beginning of period	Provision for credit losses	Write-offs	Recoveries	Unwind of discount	Exchange rate changes/ other	Balance at end of period
Retail							
Residential mortgages	$ 112	$ 64	$ (32)	$ 1	$ (34)	$ 13	$ 124
Personal	557	437	(499)	83	(23)	(12)	543
Credit cards	415	403	(496)	102	–	(21)	403
Small business	75	43	(50)	8	(2)	(2)	72
	1,159	947	(1,077)	194	(59)	(22)	1,142
Wholesale							
Business (1)	775	354	(291)	39	(51)	27	853
Bank (2)	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 (3)	91	–	–	–	–	–	91
Total allowance for credit losses	$ 2,058	$ 1,301	$ (1,400)	$ 233	$ (110)	$ 6	$ 2,088
Individually assessed	$ 252	244	(202)	19	(26)	11	$ 298
Collectively assessed	1,806	1,057	(1,198)	214	(84)	(5)	1,790
Total allowance for credit losses	$ 2,058	$ 1,301	$ (1,400)	$ 233	$ (110)	$ 6	$ 2,088

(Millions of Canadian dollars)	For the year ended October 31, 2011 Balance at beginning of period	Less allowances related to discontinued operations	Provision for credit losses	Write-offs	Recoveries	Unwind of discount	Exchange rate changes/ other	Balance at end of period
Retail								
Residential mortgages	$ 154	$ (63)	$ 43	$ (16)	$ 1	$ (30)	$ 23	$ 112
Personal	891	(258)	440	(515)	79	(11)	(69)	557
Credit cards	434	(19)	447	(545)	97	–	1	415
Small business	78	–	35	(45)	7	(1)	1	75
	1,557	(340)	965	(1,121)	184	(42)	(44)	1,159
Wholesale								
Business (1)	1,267	(503)	168	(226)	60	(36)	45	775
Sovereign (4)	9	–	–	(9)	–	–	–	–
Bank (2)	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 (3)	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) Includes $5 million of allowance for credit losses related to loans extended under liquidity facilities drawn on by RBC-administered multi-seller asset-backed commercial paper conduit programs as at October 31, 2012 (October 31, 2011 – $2 million; November 1, 2010 – $2 million)
(2) Bank refers primarily to regulated deposit-taking institutions and securities firms.
(3) The allowance for off-balance sheet and other items is reported separately in Provisions under Other liabilities.
(4) 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 2012	October 31 2011
Net interest income	$ 12,498	$ 11,357
Provision for credit losses	1,301	1,133
Net interest income after provision for credit losses	$ 11,197	$ 10,224

Loans past due but not impaired

(Millions of Canadian dollars)	As at October 31, 2012 1 to 29 days	30 to 89 days	90 days and greater	Total	October 31, 2011 1 to 29 days	30 to 89 days	90 days and greater	Total
Retail	$ 2,954	$ 1,350	$ 393	$4,697	$ 3,180	$ 1,416	$ 525	$5,121
Wholesale	416	221	–	637	417	241	–	658
Total	$ 3,370	$ 1,571	$ 393	$5,334	$ 3,597	$ 1,657	$ 525	$5,779

(Millions of Canadian dollars)	As at November 1, 2010 1 to 29 days	30 to 89 days	90 days and greater	Total
Retail	$ 3,582	$ 1,706	$ 635	$5,923
Wholesale	1,197	485	12	1,694
Total	$ 4,779	$ 2,191	$ 647	$7,617

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

(Millions of Canadian dollars)	As at October 31 2012	October 31 2011	November 1 2010
Wholesale			
Business (2)	$ 981	$ 907	$ 2,233
Sovereign (3)	–	–	9
Bank (4)	2	33	34
Total	$ 983	$ 940	$ 2,276

(1) Average balance of gross individually assessed impaired loans for the year ended October 31, 2012 was $929 million (October 31, 2011 – $917 million).
(2) Includes gross and net balances of individually assessed impaired loans of $50 million (October 31, 2011 – $53 million; November 1, 2010 – $58 million) and $45 million (October 31, 2011 – $49 million; November 1, 2010 – $55 million), respectively, related to loans extended under liquidity facilities drawn on by RBC-administered multi-seller asset-backed commercial paper conduit programs.
(3) Sovereign refers to all central governments and agencies, central banks, as well as other qualifying public sector entities and multilateral development banks.
(4) Bank refers primarily to regulated deposit-taking institutions and securities firms.

Note 7 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 assets are derecognized from our Consolidated Balance Sheets when we transfer substantially all of the risks and rewards of ownership of the 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 assets, we continue to recognize the 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 government 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 mortgage loans with an LTV ratio less than 80% and securitized under this program we are required to insure 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 mortgage 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 material to our Consolidated Financial Statements and no significant losses were incurred due to legal action arising from a mortgage default during 2012 and 2011.

We sell 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 MBS pools from eligible MBS issuers who participate in the issuance of a particular CMB series. Our continuing involvement includes servicing, either ourselves or through an independent servicer, the underlying mortgages 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 trust permitted investments as outlined in the swap agreement.

We have determined that all of the NHA MBS 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 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 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, price, 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.

(Millions of Canadian dollars)	As at											
	October 31, 2012				October 31, 2011				November 1, 2010			
	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	Canadian residential mortgage loans (1) (2)	Securities sold under repurchase agreements (3)	Securities loaned (3)	Total
Carrying amount of transferred assets that fail derecognition	$ 45,973	$ 59,332	$ 4,700	$110,005	$ 45,684	$ 37,560	$ 5,175	$88,419	$ 43,921	$ 32,005	$ 4,001	$79,927
Carrying amount of associated liabilities	$ 45,878	59,332	4,700	109,910	45,478	37,560	5,175	88,213	43,726	32,005	4,001	79,732
Fair value of transferred assets	$ 45,994	$ 59,332	$ 4,700	$110,026	$ 45,903	$ 37,560	$ 5,175	$88,638	$ 44,857	$ 32,005	$ 4,001	$80,863
Fair value of associated liabilities	47,014	59,332	4,700	111,046	46,984	37,560	5,175	89,719	44,936	32,005	4,001	80,942
Fair value of net position	$ (1,020)	$ –	$ –	$ (1,020)	$ (1,081)	$ –	$ –	$ (1,081)	$ (79)	$ –	$ –	$ (79)

(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 8 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.

(Millions of Canadian dollars)	As at October 31, 2012				
	Credit card securitization vehicle (1)	Structured finance	Investment funds	Other (1)	Total
Consolidated assets (2), (3)					
Cash	$ –	$ 24	$ 8	$ 4	$ 36
Securities – Trading and Available-for-sale	–	3,878	371	79	4,328
Loans – Retail and Wholesale	–	–	–	–	–
Derivatives	–	–	–	–	–
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)	40	3,146	–	84	3,270
Non-controlling interests	–	–	–	810	810
	$ 7,086	$ 3,962	$ –	$ 914	$ 11,962

(Millions of Canadian dollars)	As at October 31, 2011 Credit card securitization vehicle (1)	Structured finance	Investment funds	Other (1)	Total
Consolidated assets (2), (3)					
Cash	$ –	$ 28	$ 2	$ 6	$ 36
Securities – Trading and Available-for-sale	–	3,740	252	27	4,019
Loans – Retail and Wholesale	–	214	–	94	308
Derivatives	–	–	–	–	–
Other assets	11	47	–	26	84
	$ 11	$ 4,029	$ 254	$ 153	$ 4,447
Consolidated liabilities					
Deposit	$ 3,747	$ 216	$ –	$ 99	$ 4,062
Other liabilities (4)	41	3,254	–	88	3,383
Non-controlling interests	–	–	–	1,863	1,863
	$ 3,788	$ 3,470	$ –	$ 2,050	$ 9,308

(Millions of Canadian dollars)	As at November 1, 2010 Credit card securitization vehicle (1)	Structured finance	Investment funds	Other (1)	Total
Consolidated assets (2), (3)					
Cash	$ –	$ 40	$ –	$ 1	$ 41
Securities – Trading and Available-for-sale	400	3,108	287	57	3,852
Loans – Retail and Wholesale	–	219	–	381	600
Derivatives	–	5	–	–	5
Other assets	9	14	8	35	66
	$ 409	$ 3,386	$ 295	$ 474	$ 4,564
Consolidated liabilities					
Deposit	$ 3,542	$ 1,128	$ –	$ 417	$ 5,087
Other liabilities (4)	28	2,283	3	246	2,560
Non-controlling interests	–	–	–	1,894	1,894
	$ 3,570	$ 3,411	$ 3	$ 2,557	$ 9,541

(1) We transferred credit card receivables to a securitization vehicle 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, 2012, our consolidated compensation vehicles held $15 million of our common shares (October 31, 2011 – $29 million; November 1, 2010 – $53 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 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 relating 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. This information is set forth in the table below. 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 special purpose entity, our continuing involvement in the SPE and whether we hold subordinated interests in the SPE. This table also includes SPEs that we sponsor.

(Millions of Canadian dollars)	As at October 31, 2012 Multi-seller conduits (1)	Structured finance	Investment funds	Third-party securitization vehicles	Other (2)	Total
Total assets of unconsolidated special purpose entities	$ 29,582	$ 4,840	$ 1,584	$ 5,429	$ 152,301	$ 193,736
On-balance sheet assets						
Securities – Trading and Available-for-sale	26	–	1,077	118	76	1,297
Loans – Retail and Wholesale	1,391	–	–	1,074	–	2,465
Derivatives	2	–	–	–	–	2
Other assets	–	1,111	1	–	169	1,281
Total	$ 1,419	$ 1,111	$ 1,078	$ 1,192	$ 245	$ 5,045
On-balance sheet liabilities						
Deposits	$ 2	$ –	$ –	$ –	$ –	$ 2
Derivatives	11	–	–	–	–	11
Other liabilities	247	–	43	–	–	290
Total	$ 260	$ –	$ 43	$ –	$ –	$ 303
Maximum exposure to loss (3)	$ 30,029	$ 1,663	$ 1,082	$ 1,266	$ 162	$ 34,202

(Millions of Canadian dollars)	As at October 31, 2011 Multi-seller conduits (1)	Structured finance	Investment funds	Third-party securitization vehicles	Other (2)	Total
Total assets of unconsolidated special purpose entities	$ 24,271	$ 4,988	$ 1,374	$ 1,090	$137,866	$169,589
On-balance sheet assets						
Securities – Trading and Available-for-sale	111	–	1,090	–	130	1,331
Loans – Retail and Wholesale	1,413	–	–	206	–	1,619
Derivatives	–	–	–	–	–	–
Other assets	–	870	–	–	208	1,078
Total	$ 1,524	$ 870	$ 1,090	$ 206	$ 338	$ 4,028
On-balance sheet liabilities						
Deposits	$ –	$ –	$ –	$ –	$ –	$ –
Derivatives	–	–	–	–	–	–
Other liabilities	190	–	–	–	36	226
Total	$ 190	$ –	$ –	$ –	$ 36	$ 226
Maximum exposure to loss (3)	$ 24,614	$ 1,340	$ 1,125	$ 214	$ 77	$ 27,370

(Millions of Canadian dollars)	As at November 1, 2010 Multi-seller conduits (1)	Structured finance	Investment funds	Third-party securitization vehicles	Other (2)	Total
Total assets of unconsolidated special purpose entities	$ 21,848	$ 4,590	$ 1,063	$ –	$132,827	$160,328
On-balance sheet assets						
Securities – Trading and Available-for-sale	4	1,041	704	–	169	1,918
Loans – Retail and Wholesale	1,517	–	–	–	–	1,517
Derivatives						–
Other assets	–	–	–	–	211	211
Total	$ 1,521	$ 1,041	$ 704	$ –	$ 380	$ 3,646
On-balance sheet liabilities						
Deposits	$ –	$ –	$ –	$ –	$ –	$ –
Derivatives	–	–	–	–	–	–
Other liabilities	61	–	–	–	89	150
Total	$ 61	$ –	$ –	$ –	$ 89	$ 150
Maximum exposure to loss (3)	$ 22,139	$ 1,041	$ 728	$ –	$ 196	$ 24,104

(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, 2012, were $17.1 billion (October 31, 2011 – 16.3 billion; November 1, 2010 — $14.0 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 27.

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 ABS 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 we have the decision making powers to obtain the majority of the benefits of the SPE and are exposed to the majority of the residual ownership risks.

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 remarketing 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 those U.S. ARS Trusts where we do not have decision making power to obtain the majority of the benefits of the Trust. We have significant interests in these entities through our note holdings.

ARS TOB programs
We also sold ARS into 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 the 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 the decision making power to obtain the majority of the benefits of the SPEs 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 the reference funds, and we economically hedge our exposure from these derivatives by investing in those third-party managed reference funds. We also act as custodian or administrator for several funds. Our investments in reference funds may expose us to the market risk of the underlying investments. We may also be exposed to counterparty risk due to the equity derivative transactions. We do not consolidate these third-party managed reference funds 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), an SPE subsidiary. We consolidate the intermediate entity because we have the decision making power to obtain the majority of the benefits of the SPE and are exposed to a majority of the residual ownership risk.

Multi-seller conduits
We administer five multi-seller 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, and mitigation of credit losses.

We do not consolidate these multi-seller conduits as we do not have the decision-making power 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 the decision making power to obtain the majority of the benefits of these 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 may transfer assets to these SPEs as collateral for notes issued; however, these assets 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 those credit investment product SPEs in which we have the decision making power to obtain the majority of the benefits of the SPE.

Funding vehicles

RBC Capital Trust (Trust), RBC Capital Trust II (Trust II), RBC Subordinated Notes Trust (Trust III) and Guarantor LP were created to issue innovative capital instruments, subordinated notes or covered bonds. With the proceeds, we issued senior deposit notes to Trust II and Trust III and transferred our mortgages to the Trust and Guarantor LP. These mortgages were 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. 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 notes and innovative capital instruments issued to the third-party investors.

During the year, all of the outstanding subordinated notes issued by Trust III were redeemed. See Note 21 for further details.

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 consolidated certain mutual and pooled funds in which we have direct investment or seed capital representing greater than 50% of the fund units such that we have the decision making power to obtain the majority of the benefits of the fund and are exposed to a majority of the residual ownership risk.

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 to obtain the majority of the benefits of the trusts and are exposed to the majority of the residual ownership risks.

Note 9 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 the various swap agreements that we enter into are as follows:

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 principal 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 include credit default swaps, credit default baskets and total return swaps.

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 instrument functions effectively, 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 derivative that is designated as a hedging instrument based on the change in its fair value. 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 $64 million (before-tax unrealized gains of $87 million) included in Other components of equity as at October 31, 2012, 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, 2012				October 31, 2011				November 1, 2010			
	Designated as hedging instruments in hedging relationships				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	Cash flow hedges	Fair value hedges	Net investment hedges	Not designated in a hedging relationship
Assets												
Derivative instruments	$ 837	$1,894	$ 5	$ 88,557	$1,089	$2,271	$ 85	$ 96,205	$ 505	$2,047	$ 360	$ 103,197
Liabilities												
Derivative instruments	$ 680	$ 284	$ 144	$ 95,653	$1,072	$ 370	$ 125	$ 98,955	$ 812	$ 60	$ 182	$ 107,023
Non-derivative instruments	–	–	16,777	–	–	–	17,211	–	–	–	8,732	–

Results of hedge activities recorded in Net income and Other Comprehensive Income

	For the year ended					
	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
Fair value hedges						
(Losses) gains on hedging instruments	$ (66)	$ n.a.	$ n.a.	$ 148	$ n.a.	$ n.a.
Gains (losses) on hedged items attributable to the hedged risk	(15)	n.a.	n.a.	(134)	n.a.	n.a.
Ineffective portion	(81)	n.a.	n.a.	14	n.a.	n.a.
Cash flow hedges						
Ineffective portion	(4)	n.a.	n.a.	14	n.a.	n.a.
Effective portion	n.a.	n.a.	32	n.a.	n.a.	298
Reclassified to income during the period (1)	n.a.	(35)	n.a.	n.a.	(161)	n.a.
Net investment hedges						
Ineffective portion	1	n.a.	n.a.	4	n.a.	n.a.
Foreign currency (losses) gains	n.a.	n.a.	113	n.a.	n.a.	(625)
Gains (losses) from hedges	n.a.	n.a.	–	n.a.	n.a.	717
	$ (84)	$ (35)	$ 145	$ 32	$ (161)	$ 390

(1) After-tax losses of $25 million were reclassified from Other components of equity to income for the year ended October 31, 2012 (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, 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

	As at October 31, 2011					
	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	$ 647,975	$ 260,133	$ –	$ 908,108	$ 908,108	$ –
Swaps	1,430,516	1,794,498	1,071,978	4,296,992	4,136,341	160,651
Options purchased	34,831	38,965	23,789	97,585	97,544	41
Options written	36,356	42,774	31,289	110,419	110,378	41
Foreign exchange contracts						
Forward contracts	872,548	26,405	825	899,778	849,317	50,461
Cross currency swaps	3,602	12,229	11,155	26,986	26,679	307
Cross currency interest rate swaps	97,270	267,070	120,552	484,892	469,204	15,688
Options purchased	23,715	8,584	3,558	35,857	35,850	7
Options written	23,366	8,292	3,151	34,809	34,809	–
Credit derivatives (2)	7,510	28,237	11,790	47,537	45,636	1,901
Other contracts (3)	48,532	31,499	28,677	108,708	106,904	1,804
Exchange-traded contracts						
Interest rate contracts						
Futures – long positions	28,744	19,518	46,920	95,182	95,172	10
Futures – short positions	58,250	29,331	70,378	157,959	157,959	–
Options purchased	29,555	10,714	418	40,687	40,687	–
Options written	24,704	2,443	–	27,147	27,147	–
Foreign exchange contracts						
Futures – long positions	27	–	–	27	27	–
Futures – short positions	21	–	–	21	21	–
Other contracts (3)	152,934	39,284	10,337	202,555	202,555	–
	$ 3,520,456	$ 2,619,976	$ 1,434,817	$ 7,575,249	$ 7,344,338	$ 230,911

(Millions of Canadian dollars)	As at November 1, 2010 Term to maturity Within 1 year	1 to 5 years	Over 5 years (1)	Total	Trading	Other than Trading
Over-the-counter contracts						
Interest rate contracts						
Forward rate agreements	$ 560,552	$ 188,012	$ –	$ 748,564	$ 748,564	$ –
Swaps	1,310,679	1,613,018	825,153	3,748,850	3,560,592	188,258
Options purchased	21,888	32,555	31,801	86,244	86,244	–
Options written	23,560	48,037	84,429	156,026	156,026	–
Foreign exchange contracts						
Forward contracts	859,657	31,738	579	891,974	809,191	82,783
Cross currency swaps	5,853	6,881	12,056	24,790	24,789	1
Cross currency interest rate swaps	93,626	241,216	114,243	449,085	414,750	34,335
Options purchased	29,947	7,996	2,456	40,399	40,392	7
Options written	29,935	7,969	2,004	39,908	39,908	–
Credit derivatives (2)	7,959	57,043	24,196	89,198	87,720	1,478
Other contracts (3)	41,275	39,962	11,456	92,693	90,937	1,756
Exchange-traded contracts						
Interest rate contracts						
Futures – long positions	34,281	18,314	42,655	95,250	95,241	9
Futures – short positions	39,135	18,212	56,372	113,719	113,719	–
Options purchased	32,205	4,557	97	36,859	36,859	–
Options written	19,149	3,572	–	22,721	22,721	–
Foreign exchange contracts						
Futures – long positions	140	–	–	140	140	–
Futures – short positions	28	–	–	28	28	–
Other contracts (3)	92,507	36,990	9,503	139,000	139,000	–
	$ 3,202,376	$2,356,072	$ 1,217,000	$6,775,448	$6,466,821	$ 308,627

(1) Includes contracts maturing in over 10 years with a notional value of $401.9 billion (October 31, 2011 – $406.7 billion; November 1, 2010, – $337.9 billion). The related gross positive replacement cost is $32.3 billion (October 31, 2011 – $26.8 billion; November 1, 2010 – $21.7 billion).
(2) Comprises 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 $1.6 billion (October 31, 2011 – $1.9 billion; November 1, 2010 – $1.5 billion) are economic hedges. Trading credit derivatives comprise protection purchased of $8.7 billion (October 31, 2011 – $24.2 billion; November 1, 2010 – $47.6 billion) and protection sold of $6.8 billion (October 31, 2011 – $21.4 billion; November 1, 2010 – $40.1 billion).
(3) Comprises precious metal, commodity, stable value and equity derivative contracts.

The following tables indicate the periods when the cash flows are expected to occur and when they are expected to affect profit or loss for cash flow hedges:

(Millions of Canadian dollars)	As at October 31, 2012 Within 1 year	1 to 2 years	2 to 3 years	3 to 5 years	Over 5 years	Total
Cash inflows from assets	**$ 329**	**$ 314**	**$ 314**	**$ 274**	**$ 85**	**$ 1,316**
Cash outflows from liabilities	**(370)**	**(250)**	**(211)**	**(261)**	**(272)**	**(1,364)**
Net cash flows	**$ (41)**	**$ 64**	**$ 103**	**$ 13**	**$ (187)**	**$ (48)**

(Millions of Canadian dollars)	As at October 31, 2011 Within 1 year	1 to 2 years	2 to 3 years	3 to 5 years	Over 5 years	Total
Cash inflows from assets	$ 1,248	$ 752	$ 538	$ 721	$ 446	$ 3,705
Cash outflows from liabilities	(526)	(364)	(310)	(217)	(105)	(1,522)
Net cash flows	$ 722	$ 388	$ 228	$ 504	$ 341	$ 2,183

(Millions of Canadian dollars)	As at November 1, 2010 Within 1 year	1 to 2 years	2 to 3 years	3 to 5 years	Over 5 years	Total
Cash inflows from assets	$ 1,238	$ 746	$ 405	$ 473	$ 293	$ 3,155
Cash outflows from liabilities	(777)	(793)	(607)	(558)	(136)	(2,871)
Net cash flows	$ 461	$ (47)	$ (202)	$ (85)	$ 157	$ 284

Fair value of derivative instruments

	As at									
	October 31, 2012				October 31, 2011				November 1, 2010	
	Average fair value for year ended (1)		Year end fair value		Average fair value for year ended (1)		Year end fair value		Year end fair value	
(Millions of Canadian dollars)	Positive	Negative	Positive	Negative	Positive	Negative	Positive	Negative	Positive	Negative
Held or issued for trading purposes										
Interest rate contracts										
Forward rate agreements	$ 729	$ 544	$ 690	$ 429	$ 467	$ 403	$ 763	$ 602	$ 316	$ 286
Swaps	89,881	84,214	93,908	87,908	56,069	51,765	79,538	73,832	62,029	56,659
Options purchased	2,527	–	2,516	–	1,732	–	2,324	–	2,099	–
Options written	–	3,519	–	3,408	–	2,180	–	3,202	–	2,486
	93,137	88,277	97,114	91,745	58,268	54,348	82,625	77,636	64,444	59,431
Foreign exchange contracts										
Forward contracts	8,622	8,314	6,288	6,251	11,137	10,822	10,639	9,985	12,201	12,133
Cross currency swaps	1,665	1,371	1,665	1,267	1,995	1,725	1,851	1,489	1,902	1,540
Cross currency interest rate swaps	10,361	19,219	8,637	18,841	12,224	17,300	11,635	17,437	12,211	17,797
Options purchased	1,632	–	1,557	–	1,408	–	1,518	–	1,421	–
Options written	–	1,420	–	1,373	–	1,124	–	1,196	–	1,190
	22,280	30,324	18,147	27,732	26,764	30,971	25,643	30,107	27,735	32,660
Credit derivatives (2)	459	484	287	306	720	924	599	815	1,925	1,692
Other contracts (3)	5,331	7,991	4,351	7,369	6,805	9,083	6,022	8,467	7,770	10,361
	121,207	127,076	119,899	127,152	92,557	95,326	114,889	117,025	101,874	104,144
Held or issued for other than trading purposes										
Interest rate contracts										
Swaps			2,795	766			3,195	1,481	3,075	1,825
Options purchased			–	–			1	–	–	–
Options written			–	–			–	1	–	–
			2,795	766			3,196	1,482	3,075	1,825
Foreign exchange contracts										
Forward contracts			232	142			435	325	533	480
Cross currency swaps			4	19			7	2	2	3
Cross currency interest rate swaps			861	439			1,064	582	1,447	1,851
Options purchased			–	–			–	–	–	–
Options written			–	–			–	–	–	–
			1,097	600			1,506	909	1,982	2,334
Credit derivatives (2)			5	29			41	19	7	28
Other contracts (3)			92	2			206	–	118	–
			3,989	1,397			4,949	2,410	5,182	4,187
Total gross fair values before netting (4)			123,888	128,549			119,838	119,435	107,056	108,331
Valuation adjustments determined on a pooled basis			(626)	–			(748)	–	(693)	–
Impact of netting agreements that qualify for balance sheet offset			(31,969)	(31,788)			(19,440)	(18,913)	(254)	(254)
			91,293	96,761			99,650	100,522	106,109	108,077
Impact of netting agreements that do not qualify for balance sheet offset (5)			(67,849)	(67,849)			(70,630)	(70,630)	(76,381)	(76,381)
Total			$ 23,444	$ 28,912			$ 29,020	$ 29,892	$ 29,728	$ 31,696

(1) Average fair value amounts are calculated based on monthly balances.
(2) Comprises credit default swaps, total return swaps and credit default baskets, including credit derivatives given guarantee treatment for OSFI regulatory reporting purposes.
(3) Comprises 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, 2012				October 31, 2011				November 1, 2010			
(Millions of Canadian dollar)	Less than 1 year	1 to 5 years	Over 5 years	Total	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	$ 12,958	$ 29,957	$ 48,378	$ 91,293	$ 20,711	$ 34,035	$ 44,904	$ 99,650	$ 22,191	$ 38,411	$ 45,507	$ 106,109
Derivative liabilities	14,429	35,362	46,970	96,761	20,943	35,899	43,680	100,522	23,558	40,019	44,500	108,077

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 amounts in the table below exclude fair value of $2.1 billion (October 31, 2011 – $3.4 billion; November 1, 2010 – $2.3 billion) relating to exchange-traded instruments as they are subject to daily margining and are deemed to have no credit risk.

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, 2012 (1)			October 31, 2011 (1)			November 1, 2010 (1)		
(Millions of Canadian dollars)	Replacement cost	Credit equivalent amount (2)	Risk-adjusted balance (3)	Replacement cost	Credit equivalent amount (2)	Risk-adjusted balance (3)	Replacement cost	Credit equivalent amount (2)	Risk-adjusted balance (3)
Interest rate contracts									
Forward rate agreements	$ 81	$ 273	$ 116	$ 173	$ 782	$ 184	$ 40	$ 478	$ 90
Swaps	15,722	13,114	5,798	15,275	18,058	6,666	14,015	17,621	6,505
Options purchased	211	396	153	198	344	121	355	561	268
	16,014	13,783	6,067	15,646	19,184	6,971	14,410	18,660	6,863
Foreign exchange contracts									
Forward contracts	2,859	7,778	2,143	4,623	9,325	2,187	4,290	8,954	2,024
Swaps	1,748	6,664	1,529	3,125	13,567	3,232	3,709	12,956	3,101
Options purchased	224	634	283	1,310	2,116	738	1,035	1,716	583
	4,831	15,076	3,955	9,058	25,008	6,157	9,034	23,626	5,708
Credit derivatives (4)	121	588	244	548	1,226	399	937	2,379	2,553
Other contracts (5)	981	3,958	1,642	1,322	4,553	2,401	3,826	6,688	4,950
Total	$ 21,947	$ 33,405	$ 11,908	$ 26,574	$ 49,971	$ 15,928	$ 28,207	$ 51,353	$ 20,074

(1) The amounts presented are net of master netting agreements in accordance with Basel II.
(2) The total credit equivalent amount includes collateral applied of $10.7 billion (October 31, 2011– $7.9 billion; November 1, 2010 – $7.4 billion).
(3) The risk-weighted balance was calculated in accordance with Basel II.
(4) Comprises 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 $5 million (October 31, 2011 – $41 million; November 1, 2010 – $7 million).
(5) Comprises precious metal, commodity and equity derivative contracts.

Replacement cost of derivative instruments by risk rating and by counterparty type

	As at October 31, 2012								
	Risk rating (1)					Counterparty type (2)			
(Millions of Canadian dollars)	AAA, AA	A	BBB	BB or lower	Total	Banks	OECD governments	Other	Total
Gross positive replacement cost	$ 24,404	$ 77,490	$ 15,006	$ 4,873	$ 121,773	$ 59,859	$ 13,074	$ 48,840	$ 121,773
Impact of master netting agreements	19,332	70,193	9,113	1,183	99,821	49,353	10,485	39,983	99,821
Replacement cost (after netting agreements) (3)	$ 5,072	$ 7,297	$ 5,893	$ 3,690	$ 21,952	$ 10,506	$ 2,589	$ 8,857	$ 21,952

Note 9 Derivative financial instruments and hedging activities (continued)

	As at October 31, 2011								
	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	$ 29,938	$ 66,503	$ 13,877	$ 6,378	$ 116,696	$ 65,484	$ 12,287	$ 38,925	$ 116,696
Impact of master netting agreements	22,497	56,846	8,142	2,596	90,081	52,217	8,445	29,419	90,081
Replacement cost (after netting agreements) (3)	$ 7,441	$ 9,657	$ 5,735	$ 3,782	$ 26,615	$ 13,267	$ 3,842	$ 9,506	$ 26,615

	November 1, 2010								
	Risk rating (1)					Counterparty type (2)			
(Millions of Candian dollars)	AAA, AA	A	BBB	BB or lower	Total	Banks	OECD governments	Other	Total
Gross positive replacement cost	$ 31,724	$ 49,339	$ 16,544	$ 7,243	$ 104,850	$ 68,475	$ 11,118	$ 25,257	$ 104,850
Impact of master netting agreements	24,228	38,862	10,889	2,658	76,637	55,638	8,141	12,858	76,637
Replacement cost (after netting agreements) (3)	$ 7,496	$ 10,477	$ 5,655	$ 4,585	$ 28,213	$ 12,837	$ 2,977	$ 12,399	$ 28,213

(1) Our internal risk ratings for major counterparty types approximate those of public rating agencies. Ratings of AAA, AA, A and BBB represent investment grade ratings and ratings of BB or lower represent non-investment grade ratings.
(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 $5 million (October 31, 2011 – $41 million; November 1, 2010 – $7 million).

Note 10 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, 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

(Millions of Canadian dollars)	Land	Buildings	Computer equipment	Furniture, fixtures and other equipment	Leasehold improvements	Work in process	Total
Cost							
Balance at November 1, 2010	$ 216	$ 934	$ 1,954	$ 1,467	$ 1,641	$ 293	$ 6,505
Assets from discontinued operations	(105)	(269)	(38)	(154)	(81)	(12)	(659)
Additions (1)	6	40	77	56	34	612	825
Acquisitions through business combinations	–	–	–	–	–	–	–
Transfers from work in process	1	66	95	53	156	(371)	–
Disposals	–	(5)	(34)	(54)	(23)	–	(116)
Foreign exchange translation	(2)	7	(20)	(17)	(24)	(1)	(57)
Other	–	28	(219)	2	(19)	11	(197)
Balance at October 31, 2011	$ 116	$ 801	$ 1,815	$ 1,353	$ 1,684	$ 532	$ 6,301
Accumulated depreciation							
Balance at November 1, 2010	$ –	$ 498	$ 1,511	$ 993	$ 1,002	$ –	$ 4,004
Assets from discontinued operations	–	(108)	(31)	(111)	(46)	–	(296)
Depreciation	–	18	165	76	128	–	387
Impairment loss (reversal)	–	–	–	–	–	–	–
Disposals	–	(3)	(34)	(49)	(20)	–	(106)
Foreign exchange translation	–	3	(11)	(5)	(12)	–	(25)
Other	–	19	(168)	3	(7)	–	(153)
Balance at October 31, 2011	$ –	$ 427	$ 1,432	$ 907	$ 1,045	$ –	$ 3,811
Net carrying amount at October 31, 2011	$ 116	$ 374	$ 383	$ 446	$ 639	$ 532	$ 2,490

(1) At October 31, 2012, we had total contractual commitments of $96 million to acquire premises and equipment (October 31, 2011 – $154 million; November 1, 2010 – $72 million).

Note 11 Goodwill and other intangibles

Goodwill

The following table presents changes in the carrying amount of goodwill by CGU for the years ended October 31, 2012 and 2011.

(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 November 1, 2010	$ 1,931	$ 1,492	$ 545	$ 765	$ 528	$ 119	$ 126	$ 146	$ –	$ 901	$ 6,553
Acquisitions	11	–	–	1,099	–	–	–	–	–	2	1,112
Currency translations	–	(41)	(3)	17	(12)	(1)	(8)	(2)	–	(16)	(66)
Other changes	11	–	–	–	–	–	–	–	–	–	11
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 (2)	–	–	–	–	–	–	–	(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

(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 30 for further details on our business segments.

(2) During the second quarter of 2012, we recorded an impairment loss of $142 million in our Investor Services CGU related to our acquisition of the remaining 50% interest in RBC Dexia. See Note 12 for further details.

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, 2012 and August 1, 2011 and our goodwill impairment test performed on transition to IFRS as at November 1, 2010, the recoverable amounts of our CGUs were based on value in use, except for Caribbean Banking as at August 1, 2012 and 2011, which was based on fair value less costs to sell.

We calculate value in use using the discounted cash flow (DCF) method that projects future cash flows, which are discounted to their present value. 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. Cash flow projections beyond the initial five-year period are assumed to increase at a constant rate using a nominal long-term growth rate (terminal growth rate).

The estimation of value in use involves significant judgment in the determination of inputs to the model and is 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 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, 2012, no change in an individual key input or assumption as described, would result in a CGU's carrying value exceeding its recoverable amount.

We calculate fair value less costs to sell using a DCF method that projects future cash flows over a 10-year period. Future cash flows are based on the same factors noted above. Cash flow projections beyond the initial 10-year period are assumed to increase at a constant rate using a nominal long-term growth rate. Cash flow projections are adjusted to reflect the considerations of a prospective third-party buyer and discounted to their present value.

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 125% of its carrying value. If projected cash flows decreased by 19%, the discount rate increased to 12.3% or the terminal growth rate decreased to 1.4%, holding other individual factors constant, the recoverable amount based on fair value less costs to sell would be equal to the carrying value.

The discount rate used is 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). 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 terminal growth rates and discount rates used in our annual impairment tests are summarized below.

	As at					
	August 1, 2012		August 1, 2011		November 1, 2010	
	Discount rate	Terminal growth rate	Discount rate	Terminal growth rate	Discount rate	Terminal growth rate
Group of Cash Generating Units						
Canadian Banking	8.0%	3.0%	9.0%	3.0%	9.5%	3.0%
Canadian Wealth Management	9.0	3.0	10.0	3.0	10.5	3.0
Global Asset Management	9.0	3.0	10.0	3.0	10.5	3.0
U.S. Wealth Management	9.5	3.0	10.5	3.0	10.5	3.0
International Wealth Management	9.6	3.0	10.7	3.0	10.7	3.0
Insurance	9.0	3.0	10.0	3.0	10.5	3.0
U.S. Banking	n.a.	n.a.	n.a.	n.a.	10.5	3.5
Caribbean Banking	10.8	4.1	11.5	4.0	11.3	4.0
Investor Services	n.a.	n.a.	10.5	3.0	10.0	3.0
Capital Markets	10.4	3.0	11.3	3.0	11.0	3.0

n.a. As at August 1, 2012 and 2011, the balance of goodwill in our U.S. Banking CGU was $nil. See Note 3. As at August 1, 2012, the balance of goodwill in our Investor Services CGU was $nil. Therefore, no annual impairment tests were performed for these CGUs on these dates.

Other intangible assets

The following table presents the carrying amount of our other intangible assets:

	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

(Millions of Canadian dollars)	As at October 31, 2011 Internally generated software	Other software	Core deposit intangibles	Customer list and relationships	Mortgage servicing rights	In process software	Total
Gross carrying amount							
Balance at November 1, 2010	$ 1,522	$ 840	$ 648	$ 1,073	$ 16	$ 98	$ 4,197
Assets of discontinued operations	–	(121)	(493)	–	(16)	–	(630)
Additions	339	37	–	283	–	319	978
Transfers	71	61	–	–	–	(132)	–
Dispositions	(12)	(44)	–	(1)	–	(2)	(59)
Currency translations	(6)	25	(5)	(1)	–	(1)	12
Other changes	12	57	–	2	–	24	95
Balance at October 31, 2011	$ 1,926	$ 855	$ 150	$ 1,356	$ –	$ 306	$ 4,593
Accumulated amortization							
Balance at November 1, 2010	$ (866)	$ (599)	$ (387)	$ (420)	$ –	$ –	$(2,272)
Assets of discontinued operations	–	76	338	–	–	–	414
Amortization charge for the year	(250)	(82)	(24)	(125)	–	–	(481)
Dispositions	4	1	–	–	–	–	5
Currency translations	1	(3)	2	3	–	–	3
Other changes	(71)	(83)	3	4	–	–	(147)
Balance at October 31, 2011	$ (1,182)	$ (690)	$ (68)	$ (538)	$ –	$ –	$(2,478)
Net balance, at October 31, 2011	$ 744	$ 165	$ 82	$ 818	$ –	$ 306	$ 2,115

(1) The impairment loss in our customer list and relationships intangibles related to our acquisition of the remaining 50% interest in RBC Dexia. See Note 12 for further details.

Note 12 Significant acquisitions and dispositions

Acquisitions

Personal & Commercial Banking

On October 23, 2012, RBC announced a definitive agreement to acquire the Canadian auto finance and deposit business of Ally Financial Inc. Subject to certain closing adjustments, total consideration is expected to be $3.1 to $3.8 billion, depending on the size of a dividend paid to the seller prior to closing. The transaction is subject to customary closing conditions, including regulatory and other approvals, and is expected to close in the first quarter of calendar 2013.

Investor & Treasury Services

On July 27, 2012, we completed the acquisition of the 50% interest that we did not already own in RBC Dexia for cash consideration of €837.5 million ($1 billion) and renamed the entity RBC Investor Services. The acquisition of the remaining interest in RBC Dexia allows us to increase stable earnings from global custody services that are well positioned for growth.

When we announced the definitive agreement to purchase the additional 50% interest of RBC Dexia, the agreed purchase price for the additional 50% was below the carrying value of our existing 50% interest. We believed this to be an indicator that our existing investment in RBC Dexia may be impaired. We completed an impairment test in accordance with IAS 36 in April 2012 on our Investor Services CGU which was primarily comprised of our direct investment in RBC Dexia. In determining the CGU's recoverable amount, we determined value in use using a discounted cash flow approach that specifically considered the impact of the pending transaction; we considered the purchase price to be evidence of fair value in our estimate of fair value less costs to sell. Based on this analysis, fair value less costs to sell was determined to be higher than value in use, and was therefore determined to represent the CGU's recoverable amount. As a result, in the second and third quarters, we recognized impairment losses on the CGU of $161 million and $7 million respectively ($161 million and $7 million after tax) in Impairment of goodwill and other intangibles. The second quarter loss was comprised of writedowns of $142 million of goodwill and $19 million of other intangibles and the third quarter loss was comprised of a writedown of other intangibles. We incurred further impairment losses in the third quarter as we continued to writedown the carrying value of our Investor Services CGU to its recoverable amount between the announcement date and the closing date, representing recognition of our proportionate share of RBC Dexia's results.

In conjunction with the purchase agreement, RBC Dexia sold AFS fixed income securities issued by Dexia Group (our joint venture partner) with a fair value of €1.4 billion ($1.9 billion) to the Dexia Group and acquired an approximately equivalent amount of U.S. dollar-denominated securities primarily issued by large global financial institutions. The sale of the Dexia Group securities and subsequent trading losses on the securities purchased resulted in $52 million in losses (after tax) to RBC Dexia. Our proportionate share of the total loss of $36 million ($26 million after tax) was recognized in the second quarter of 2012.

In accordance with IFRS 3, for a business combination achieved in stages (step acquisition), upon closing, there is a deemed disposition of our existing investment at fair value and then recognition of the entire investment at its acquisition-date fair value. The difference between the carrying value and fair value of our existing interest at the closing date is recognized in earnings. No gain or loss was recognized on the deemed disposition as we had previously written down our investment to its fair value. We then recognized the entire investment in RBC Investor Services at its acquisition date fair value of $2.1 billion, represented by the cash consideration paid to the Dexia Group of $1 billion and the fair value of our previously held 50% interest of $1 billion. Our preliminary purchase price allocation includes assigning $28.9 billion to assets, including $304 million of other intangible assets, and $26.8 billion to liabilities on the acquisition date.

As part of the acquisition, we also incurred costs of $5 million ($4 million after tax) recorded in Non-interest expense. The following table presents the estimated fair values of the assets acquired and liabilities assumed as at the date of the acquisition.

(Millions of Canadian dollars, except as otherwise noted)	
Percentage of shares acquired	50%
Cash consideration transferred to acquire the 50% interest	€837.5 million
Fair value of previously held 50% interest	€837.5 million
Fair value of 100% interest	€1,675 million
Fair value of 100% interest in Canadian dollars	$ 2,084
Fair value of identifiable assets acquired (100% interest)	
Cash and deposits with banks	$ 9,086
Securities	5,177
Assets purchased under reverse repurchase agreements and securities borrowed	11,913
Loans	1,455
Other assets (1)	1,288
Fair value of liabilities assumed (100% interest)	
Deposits	(25,629)
Other liabilities	(1,206)
Fair value of identifiable net assets acquired (100% interest)	$ 2,084

(1) Other assets include $304 million of customer lists and relationships which are amortized on a straight-line basis over an estimated average useful life of 15 years.

Had the acquisition of full control been effective on November 1, 2011, our consolidated revenue and net income for the year ended October 31, 2012 would have increased by $428 million and $7 million, respectively, including losses on the sale of Dexia Group securities described above.

All results of operations and the impairment losses discussed above are included in our Investor & Treasury Services segment.

Wealth Management

On May 31, 2012, we completed the acquisition of the Latin American, Caribbean and African private banking business of Coutts, the wealth division of The Royal Bank of Scotland Group with client assets of approximately US$2 billion, for an estimated purchase price of $35 million. The purchase price will be adjusted based on the actual net client assets transferred over the 12 month period subsequent to close.

On December 17, 2010, we completed the acquisition of BlueBay Asset Management plc (BlueBay), a London based publicly-traded asset management company specializing in fixed income investing with approximately $39.1 billion of assets under management on the date of acquisition. Details of the final purchase price allocation are in the following table. We report the results of BlueBay in our Wealth Management segment on a one-month lag basis.

(Millions of Canadian dollars, except as otherwise noted)	
Percentage of shares acquired	100%
Purchase consideration in the currency of the transaction	Total cash payment of £ 955 million
Purchase consideration in Canadian dollar equivalent	$ 1,503
Fair value of identifiable assets acquired (1)	$ 689
Fair value of liabilities assumed (2)	(286)
Fair value of identifiable net assets acquired	$ 403
Goodwill	1,100
Total purchase consideration	$ 1,503

(1) Identifiable assets acquired include $280 million of customer lists and relationships which are amortized on a straight-line basis over an estimated average useful life of 12 years.
(2) Includes deferred tax liabilities of $79 million related to the intangible assets acquired.

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 are 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 were reflected as discontinued operations on our Consolidated Balance Sheets beginning in the third quarter of 2011 and our Consolidated Statements of Income for all relevant periods. Selected financial information for these operations 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 Condensed Consolidated Financial Statements as discontinued operations for all periods presented. Select financial information is set out in the tables below.

Total discontinued operations – Balance Sheets

	As at		
(Millions of Canadian dollars)	**October 31 2012**	October 31 2011	November 1 2010
Total Assets (1)			
Securities	$ –	$ 5,253	$ 4,612
Loans	–	16,593	477
Other (2)	–	5,306	634
	$ –	$ 27,152	$ 5,723
Total Liabilities			
Deposits	$ –	$ 18,470	$ –
Insurance claims and policy benefit liabilities	–	–	4,858
Other	–	1,606	154
	$ –	$ 20,076	$ 5,012

(1) Total other U.S. regional banking assets classified as discontinued operations are $nil (October 31, 2011 – $331 million).
(2) Includes deferred tax assets classified as discontinued operations of $nil (October 31, 2011 – $1,029 million; November 1, 2010 – $nil).

Total discontinued operations – Statements of Income

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

	For the year ended	
(Millions of Canadian dollars)	**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, 2012 were $nil (October 31, 2011 – $(2) million).

Note 13 Joint ventures and associated companies

Joint ventures

As at October 31, 2012, 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 Investor Services Limited (RBC Dexia), a provider of global custody services. In the third quarter of 2012, we completed the acquisition of the remaining 50% that we did not already own in RBC Dexia. As a result of the acquisition, RBC Dexia is no longer a joint venture. See Note 12.

Note 13 Joint ventures and associated companies (continued)

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 2012**	October 31 2011	November 1 2010	**October 31 2012**	October 31 2011	November 1 2010	**October 31 2012**	October 31 2011	November 1 2010
Consolidated Balance Sheets									
Assets	**$ –**	$ 11,949	$ 11,727	**$ 1,044**	$ 770	$ 679	**$ 1,044**	$12,719	$12,406
Liabilities	**–**	11,998	11,749	**1,050**	788	679	**1,050**	12,786	12,428
Consolidated Income Statements									
Total revenue	**428**	680	n.a.	**336**	333	n.a.	**764**	1,013	n.a.
Net income	**7**	96	n.a.	**131**	125	n.a.	**138**	221	n.a.

(1) As at October 31, 2012 our interest in RBC Dexia is no longer a joint venture. 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. Refer to Note 12 for further details.

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 2012**	October 31 2011
Carrying amount at the beginning of the year	**$ 142**	$ 131
Additions (disposals)	**4**	43
Our share of investees' net income (loss)	**24**	(9)
Our share of investees' other comprehensive income (loss) (1)	**–**	–
Dividends/distributions	**(36)**	–
Impairments	**–**	–
Foreign currency translation	**–**	(2)
Other	**(9)**	(21)
Carrying amount at the end of the year	**$ 125**	$ 142

	As at or for the year ended		
(Millions of Canadian dollars)	**October 31 2012**	October 31 2011	November 1 2010
Total assets	**$ 584**	$ 667	$ 652
Total liabilities	**300**	356	322
Total revenue	**623**	611	n.a.
Total profit for the year	**46**	(28)	n.a.

(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.

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, 2012, restricted net assets of these subsidiaries and joint ventures were $13.6 billion (October 31, 2011 – $16.6 billion).

Note 14 Other assets

	As at		
(Millions of Canadian dollars)	**October 31 2012**	October 31 2011	November 1 2010
Cash collateral and margin deposits	**$ 18,220**	$ 10,093	$ 10,216
Accounts receivable and prepaids	**3,482**	3,172	2,763
Receivable from brokers, dealers and clients	**2,849**	3,935	4,165
Insurance-related assets	**2,003**	1,821	2,042
Deferred income tax asset	**1,707**	1,894	2,792
Accrued interest receivable	**1,467**	1,434	1,669
Taxes receivable	**1,450**	675	1,475
Precious metals	**996**	753	535
Other	**2,845**	4,190	4,664
	$ 35,019	$ 27,967	$ 30,321

Note 15 Deposits

The following table details our deposit liabilities:

	As at							
	October 31, 2012				October 31, 2011			
(Millions of Canadian dollars)	**Demand (1)**	**Notice (2)**	**Term (3)**	**Total**	Demand (1)	Notice (2)	Term (3)	Total
Personal	**$ 104,079**	**$ 13,893**	**$ 61,530**	**$ 179,502**	$ 96,233	$ 11,938	$ 57,859	$ 166,030
Business and government	**128,409**	**1,393**	**183,080**	**312,882**	109,454	1,709	186,348	297,511
Bank	**4,621**	**18**	**11,196**	**15,835**	4,139	17	11,405	15,561
	$ 237,109	**$ 15,304**	**$ 255,806**	**$ 508,219**	$ 209,826	$ 13,664	$ 255,612	$ 479,102
Non-interest-bearing (4)								
Canada	**$ 56,706**	**$ 82**	**$ –**	**$ 56,788**	$ 50,876	$ 86	$ –	$ 50,962
United States	**1,188**	**6**	**–**	**1,194**	1,160	6	–	1,166
Europe (5)	**3,935**	**1**	**–**	**3,936**	2,365	2	–	2,367
Other International	**3,332**	**439**	**–**	**3,771**	2,767	266	–	3,033
Interest-bearing (4)								
Canada	**136,169**	**11,024**	**205,041**	**352,234**	125,887	9,325	199,402	334,614
United States	**3,410**	**584**	**33,303**	**37,297**	3,196	960	34,778	38,934
Europe (5)	**29,143**	**50**	**10,072**	**39,265**	19,159	35	12,913	32,107
Other International	**3,226**	**3,118**	**7,390**	**13,734**	4,416	2,984	8,519	15,919
	$ 237,109	**$ 15,304**	**$ 255,806**	**$ 508,219**	$ 209,826	$ 13,664	$ 255,612	$ 479,102

	As at November 1, 2010			
(Millions of Canadian dollars)	Demand (1)	Notice (2)	Term (3)	Total
Personal	$ 85,774	$ 12,206	$ 63,713	$ 161,693
Business and government	107,385	2,394	177,756	287,535
Bank	3,515	11	15,759	19,285
	$ 196,674	$ 14,611	$ 257,228	$ 468,513
Non-interest-bearing (4)				
Canada	$ 44,341	$ 87	$ —	$ 44,428
United States	4,223	765	—	4,988
Europe (5)	974	1	—	975
Other International	3,225	247	—	3,472
Interest-bearing (4)				
Canada	110,354	7,562	180,632	298,548
United States	8,527	2,996	45,501	57,024
Europe (5)	20,763	25	22,026	42,814
Other International	4,267	2,928	9,069	16,264
	$ 196,674	$ 14,611	$ 257,228	$ 468,513

(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, 2012, the balance of term deposits also include senior deposit notes we have issued to provide long-term funding of $113.9 billion (October 31, 2011 – $103.9 billion; November 1, 2010 – $94.5 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 tables present the contractual maturities of our term deposit liabilities:

	As at		
(Millions of Canadian dollars)	**October 31 2012**	October 31 2011	November 1 2010
Within 1 year:			
less than 3 months	**$ 55,808**	$ 61,108	$ 57,679
3 to 6 months	**22,493**	27,982	28,047
6 to 12 months	**43,286**	26,552	41,248
1 to 2 years	**49,920**	50,403	37,165
2 to 3 years	**24,011**	28,605	34,986
3 to 4 years	**21,134**	21,300	23,849
4 to 5 years	**18,568**	21,198	16,942
Over 5 years	**20,586**	18,464	17,312
	$ 255,806	$ 255,612	$ 257,228
Aggregate amount of term deposits in denominations of $100,000 or more	**$ 223,000**	$ 221,000	$ 221,000

The following table presents the average deposit balances and average rates of interest during 2012 and 2011.

	For the year ended			
	October 31, 2012		October 31, 2011	
(Millions of Canadian dollars, except for percentage amounts)	Average balances	Average rates	Average balances	Average rates
Canada	$ 404,656	1.31%	$ 358,094	1.49%
United States	38,792	0.54	42,766	0.54
Europe (1)	33,394	0.63	45,740	1.00
Other International	19,338	1.44	18,717	1.75
	$ 496,180	1.21%	$ 465,317	1.36%

(1) Europe includes the United Kingdom, Switzerland and the Channel Islands.

Note 16 Insurance

Insurance assets

	As at		
(Millions of Canadian dollars)	October 31 2012	October 31 2011	November 1 2010
Collateral loans	$ 1,176	$ 990	$ 808
Policy loans	120	120	113
Reinsurance assets	336	361	803
Other	371	350	318
Total	$ 2,003	$ 1,821	$ 2,042

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 2012	October 31 2011
Gross premiums	$ 4,739	$ 4,552
Premiums ceded to reinsurers	(1,034)	(1,019)
Net premiums	$ 3,705	$ 3,533
Gross claims and benefits	$ 3,472	$ 3,155
Reinsurers' share of claims and benefits	(417)	(398)
Net claims	$ 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, and the processes used to determine them 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, claim processes and legislative trends, result in a collective loss ratio when compared with earned premium.

The net increase in Insurance claims and policy benefit liabilities over the prior year was comprised of i) the increase due to market movements on assets backing life and health liabilities and ii) the net increase in life and health, reinsurance and property and casualty liabilities attributable to business growth. During the year, we reviewed all key actuarial methods and assumptions which are used in determining the policy benefit liabilities resulting in a $3 million net increase to the insurance liabilities. The policy benefit liabilities were adversely impacted by $71 million due to interest rate and market conditions, most notably for updates to the re-investment rate assumption. These impacts were partially offset by insurance risk related assumption updates, largely due to mortality, morbidity, maintenance and expense assumptions of $68 million. Changes in Insurance claims and policy benefit liabilities are included in Insurance policyholder benefits, claims and acquisition expenses in our Consolidated Statements of Income in the period in which the estimates changed.

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, 2012			October 31, 2011			November 1, 2010		
(Millions of Canadian dollars)	Gross	Ceded	Net	Gross	Ceded	Net	Gross	Ceded	Net
Life insurance policyholder liabilities									
Life, health and annuity	$ 6,988	$ 206	$ 6,782	$ 6,288	$ 252	$ 6,036	$ 6,127	$ 600	$ 5,527
Investment contracts (1)	1	–	1	3	–	3	2	–	2
	$ 6,989	$ 206	$ 6,783	$ 6,291	$ 252	$ 6,039	$ 6,129	$ 600	$ 5,529
Non-life insurance policyholder liabilities									
Unearned premium provision (1)	$ 421	$ –	$ 421	$ 417	$ –	$ 417	$ 384	$ –	$ 384
Unpaid claims provision	933	27	906	831	10	821	739	12	727
	$ 1,354	$ 27	$ 1,327	$ 1,248	$ 10	$ 1,238	$ 1,123	$ 12	$ 1,111
Total	$ 8,343	$ 233	$ 8,110	$ 7,539	$ 262	$ 7,277	$ 7,252	$ 612	$ 6,640

(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

	October 31, 2012			October 31, 2011		
(Millions of Canadian dollars)	Gross	Ceded	Net	Gross	Ceded	Net
Balances, beginning of the year	$ 6,291	$ 252	$ 6,039	$ 6,129	$ 600	$ 5,529
New and in-force policies	697	(46)	743	180	(348)	528
Changes in assumption and methodology	3	–	3	(20)	–	(20)
Net change in investment contracts	(2)	–	(2)	2	–	2
Balances, end of the year	$ 6,989	$ 206	$ 6,783	$ 6,291	$ 252	$ 6,039

Reconciliation of non-life insurance policyholder liabilities

	October 31, 2012			October 31, 2011		
(Millions of Canadian dollars)	Gross	Ceded	Net	Gross	Ceded	Net
Balances, beginning of the year	$ 1,248	$ 10	$ 1,238	$ 1,123	$ 12	$ 1,111
Changes in unearned premiums provision						
Written Premiums	1,006	13	993	978	9	969
Less: Net premiums earned	(1,001)	(13)	(988)	(945)	(9)	(936)
Changes in unpaid claims provision and adjustment expenses						
Incurred claims	619	14	605	635	2	633
Less: Claims paid	(518)	3	(521)	(543)	(4)	(539)
Balances, end of the year	$ 1,354	$ 27	$ 1,327	$ 1,248	$ 10	$ 1,238

Sensitivity Analysis

The following table presents the sensitivity of the level of insurance policyholder liabilities disclosed in this note to movements 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 the year ended October 31 2012	October 31 2011
Increase in market interest rates	1%	$ 8	$ 25
Decrease in market interest rates	1	(17)	(38)
Increase in equity market values	10	17	10
Decrease in equity market values	10	(17)	(13)
Increase in maintenance expenses	5	(31)	(29)
Life Insurance			
Adverse change in annuitant mortality rates	2	(49)	(38)
Adverse change in assurance mortality rates	2	(45)	(38)
Adverse change in morbidity rates	5	(198)	(183)
Adverse change in lapse	10	(180)	(141)
Non-life Insurance			
Increase in expected loss ratio	5	(37)	(34)

Note 17 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. 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:

Segregated funds net assets

	As at		
(Millions of Canadian dollars)	October 31 2012	October 31 2011	November 1 2010
Cash	$ 5	$ 2	–
Investment in mutual funds	379	318	257
Other liabilities, net	(1)	–	–
	$ 383	$ 320	$ 257

Change in net assets

	For the year ended	
(Millions of Canadian dollars)	October 31 2012	October 31 2011
Net assets, beginning of year	$ 320	$ 257
Additions (deductions):		
Deposits from policyholders	128	140
Net realized and unrealized gains (losses)	16	(5)
Interest and dividend	9	8
Payment to policyholders	(81)	(73)
Management administrative fees	(9)	(7)
Net assets, end of year	$ 383	$ 320

Note 18 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, 2012 was $666 million (October 31, 2011 – $241 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, 2012, and the next valuation will be completed on January 1, 2013.

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 2012, total company contributions to our pension plans (defined benefit and defined contribution plans) and other post-employment plans were $952 million and $55 million (2011 – $282 million and $46 million), respectively. For 2013, total contributions to pension plans and other post-employment benefit plans are expected to be approximately $471 million and $67 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, 2012		October 31, 2011		November 1, 2010	
(Millions of Canadian dollars)	**Defined benefit pension plans** (1) (2)	**Other post-employment plans** (2)	Defined benefit pension plans (1) (2)	Other post-employment plans (2)	Defined benefit pension plans (1) (2)	Other post-employment plans (2)
Change in fair value of plan assets						
Opening fair value of plan assets	$ 8,092	$ 1	$ 7,980	$ 12		
Expected return on plan assets	517	–	498	–		
Actuarial gain (loss)	148	–	(258)	–		
Company contributions	861	55	195	46		
Plan participant contributions	46	10	37	10		
Benefits paid	(406)	(65)	(379)	(67)		
Acquisition (3)	88	–	–	–		
Change in foreign currency exchange rate	2	–	(12)	–		
Other	–	–	31	–		
Closing fair value of plan assets	$ 9,348	$ 1	$ 8,092	$ 1		
Change in benefit obligation						
Opening benefit obligation	$ 8,337	$ 1,461	$ 7,902	$ 1,411		
Current service cost	222	25	203	23		
Interest cost	444	78	425	75		
Plan participant contributions	46	10	37	9		
Actuarial (gain) loss	1,165	126	112	12		
Benefits paid	(406)	(65)	(379)	(67)		
Acquisition (3)	99	23	–	–		
Disposal (4)	(52)	–	–	–		
Prior service cost	–	(1)	–	–		
Curtailment	–	(4)	–	–		
Change in foreign currency exchange rate	2	–	(15)	(2)		
Other	–	(2)	52	–		
Closing benefit obligation	$ 9,857	$ 1,651	$ 8,337	$ 1,461		
Unfunded obligation	$ 29	$ 1,503	$ 77	$ 1,309	$ 75	$ 1,253
Wholly or partly funded obligation	9,828	148	8,260	151	7,827	158
Total benefit obligation	$ 9,857	$ 1,651	$ 8,337	$ 1,460	$ 7,902	$ 1,411
Reconciliation of funded status						
Net (deficit) surplus	$ (509)	$ (1,650)	$ (245)	$ (1,460)	$ 78	$ (1,399)
Unrecognized net actuarial loss (gain)	1,345	134	365	12	13	(2)
Net amount recognized	$ 836	$ (1,516)	$ 120	$ (1,448)	$ 91	$ (1,401)
Amounts recognized in our Consolidated Balance Sheets						
Prepaid pension benefit cost	$ 1,049	$ –	$ 311	$ –	$ 266	$ –
Accrued pension and other post-employment benefit expense	(213)	(1,516)	(191)	(1,448)	(175)	(1,401)
Net amount recognized	$ 836	$ (1,516)	$ 120	$ (1,448)	$ 91	$ (1,401)

(1) For pension plans with funding deficits, the benefit obligations and fair value of plan assets as at October 31,2012 were $8,573 million and $7,935 million, respectively (October 31, 2011 – $7,163 million and $6,776 million, respectively; November 1, 2010 – $1,092 million and $914 million, respectively).
(2) Cumulative actuarial gains and loses for these plans as at November 1, 2010 were recognized in Retained Earnings on transition to IFRS. See Note 3 for details.
(3) Acquisition for 2012 reflect the additional amounts relating to the acquisition of the remaining 50% interest in our previous joint venture RBC Dexia Investor Services Limited. See Note 12.
(4) 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 12.

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 2012**	October 31 2011	November 1 2010	**October 31 2012**	October 31 2011	November 1 2010
Defined benefit obligation	$ 9,857	$ 8,337	$ 7,902	$ 1,651	$ 1,461	$ 1,411
Fair value of plan assets	9,348	8,092	7,980	1	1	12
(Deficit) Surplus	$ (509)	$ (245)	$ 78	$ (1,650)	$ (1,460)	$ (1,399)
Experience (gain) loss adjustments on defined benefit obligation	$ 7	$ 43	n.a.	$ –	$ 50	n.a.
Experience gain (loss) adjustment on assets	148	(258)	n.a.	–	40	n.a.

(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 2012**	October 31 2011	**October 31 2012**	October 31 2011
Service cost	**$ 222**	$ 203	**$ 25**	$ 23
Interest cost	**444**	425	**78**	75
Expected return on plan assets	**(517)**	(498)	**–**	(1)
Recognition of past service cost	**1**	(1)	**–**	–
Amortization of net (gain) loss	**10**	–	**2**	(1)
Curtailment (gain) loss	**–**	–	**(5)**	(1)
Defined benefit pension expense	**$ 160**	$ 129	**$ 100**	$ 95
Defined contribution pension expense	**91**	87	**–**	–
Total benefit expense recognized	**$ 251**	$ 216	**$ 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 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, 2012, the assets include 1 million (October 31, 2011 – 1 million; November 1, 2010 – 1 million) of our common shares having a fair value of $57 million (October 31, 2011 – $47 million; November 1, 2010 – $66 million) and $6 million (October 31, 2011 – $4 million; November 1, 2010 – $4 million) of our debt securities. For the year ended October 31, 2012, dividends received on our common shares held in the plan assets were $2 million (October 31, 2011 – $1 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 2012	October 31 2011	November 1 2010
Equity securities	**39%**	38%	44%
Debt securities	**46**	47	43
Other	**15**	15	13
	100%	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 valuation methodology does not rely on assumptions regarding reinvestment returns.

Summary of significant assumptions

	Defined benefit pension plans			Other post-employment plans		
	As at					
	October 31 2012	October 31 2011	November 1 2010	**October 31 2012**	October 31 2011	November 1 2010
Weighted average assumptions to determine benefit obligation						
Discount rate	**4.40%**	5.30%	5.40%	**4.50%**	5.50%	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.	**3.90%**	4.50%	4.50%
– Dental	**n.a.**	n.a.	n.a.	**4.00%**	4.00%	4.00%
Weighted average assumptions to determine benefit expense						
Discount rate	**5.30%**	5.40%	n.a.	**5.50%**	5.50%	n.a.
Assumed long-term rate of return on plan assets	**6.25%**	6.50%	n.a.	**0.00%**	6.50%	n.a.
Rate of increase in future compensation	**3.30%**	3.30%	n.a.	**n.a.**	n.a.	n.a.
Healthcare cost trend rates						
– Medical	**n.a.**	n.a.	n.a.	**4.50%**	4.50%	n.a.
– Dental	**n.a.**	n.a.	n.a.	**4.00%**	4.00%	n.a.

(1) For our other post-employment plans, the assumed medical healthcare cost trend rates used to measure the expected cost of benefits were 3.9% for the next year decreasing to an ultimate rate of 2.7% in 2028.

Mortality assumptions

Mortality assumptions are significant in measuring our obligations under the defined benefit plans. These assumptions have been set in accordance with current practices in the respective countries. Future longevity improvements have been considered and included where appropriate. The following table summarizes the mortality assumptions used for major plans.

	October 31, 2012				October 31, 2011			
	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	**20.3**	**22.1**	**21.8**	**22.9**	20.2	22.1	21.7	22.9
United States	**20.3**	**22.1**	**21.8**	**22.9**	20.2	22.1	21.7	22.9
United Kingdom	**23.6**	**25.0**	**25.9**	**27.3**	22.5	24.9	24.4	26.8

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 2012:

(Millions of Canadian dollars)	**Increase (decrease) in obligation**	**Increase (decrease) in expense**
Defined benefit pension plans		
Impact of .25% decrease in discount rate	**$ 354**	**$ 42**
Impact of .25% increase in rate of increase in future compensation	**27**	**6**
Impact of .25% decrease in the long-term rate of return on plan assets	**–**	**23**
Other post-employment plans		
Impact of .25% decrease in discount rate	**$ 59**	**$ 3**
Impact of .25% increase in rate of increase in future compensation	**–**	**–**
Impact of 1% increase in health care cost trend rate	**127**	**8**
Impact of 1% decrease in health care cost trend rate	**(106)**	**(7)**

Note 19 Other liabilities

	As at		
(Millions of Canadian dollars)	**October 31 2012**	October 31 2011	November 1 2010
Cash collateral	**$ 10,843**	$ 10,589	$ 9,898
Accounts payable and accrued expenses	**5,242**	3,954	2,376
Payroll and related compensation	**5,002**	4,266	4,247
Payable to brokers, dealers and clients	**2,722**	3,209	3,393
Negotiable instruments	**2,282**	2,355	1,897
Accrued interest payable	**1,878**	2,019	2,305
Deferred income	**1,580**	1,512	1,416
Taxes payable	**1,312**	1,331	1,365
Precious metals certificates	**967**	1,125	827
Dividends payable	**932**	841	779
Insurance related liabilities	**559**	556	517
Deferred income taxes	**176**	266	218
Provisions	**235**	229	252
Other	**7,641**	6,989	8,828
	$ 41,371	$ 39,241	$ 38,318

Note 20 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)				As at		
Maturity	Earliest par value redemption date	Interest rate	Denominated in foreign currency (millions)	**October 31 2012**	October 31 2011	November 1 2010
November 14, 2014		10.00%		**$ 233**	$ 249	$ 259
April 12, 2016	April 12, 2011 (1)	6.30% (2)		**–**	–	405
April 30, 2017		4.58% (3)		**–**	1,000	996
March 11, 2018	March 11, 2013 (4)	4.84% (5)		**1,005**	1,034	1,050
June 6, 2018	June 6, 2013 (6)	5.00% (7)		**1,004**	1,012	1,002
November 4, 2018	November 4, 2013 (8)	5.45% (2)		**1,033**	1,075	1,096
June 15, 2020	June 15, 2015	4.35% (9)		**1,556**	1,577	1,562
November 2, 2020	November 2, 2015	3.18% (10)		**1,524**	1,528	–
June 8, 2023		9.30%		**110**	110	110
June 26, 2037	June 26, 2017	2.86%	JPY 10,000	**122**	111	120
October 1, 2083	Any interest payment date	(11)		**224**	224	224
June 6, 2085	Any interest payment date	(12)	US$180	**173**	179	187
June 18, 2103	June 18, 2009 (13)	5.95% (14)		**636**	659	676
				$ 7,620	$ 8,758	$ 7,687
Deferred financing costs				**(5)**	(9)	(11)
				$ 7,615	$ 8,749	$ 7,676

The terms and conditions of the debentures are as follows:

(1) All outstanding subordinated debentures were redeemed on April 12, 2011 for $400 million.
(2) 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.
(3) All $1 billion outstanding Trust Subordinated Notes – Series A were redeemed on April 30, 2012 for 100% of their principal amount plus accrued interest to the redemption date.
(4) Redeemable at any time prior to the earliest par value redemption date at the greater of (i) the fair value of the subordinated debentures based on the yield on Government of Canada bonds plus 42.5 basis points and (ii) par value, and thereafter at any time at par value.
(5) 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.
(6) Redeemable at any time prior to the earliest par value redemption date at the greater of (i) the fair value of the subordinated debentures based on the yield on Government of Canada bonds plus 44 basis points and (ii) par value, and thereafter at any time at par value.
(7) 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.
(8) Redeemable at any time prior to the earliest par value redemption date at the greater of (i) the fair value of the subordinated debentures based on the yield on Government of Canada bonds plus 14 basis points and (ii) par value, and thereafter at any time at par value.
(9) 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.
(10) 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.
(11) Interest at a rate of 40 basis points above the 30-day Bankers' Acceptance rate.
(12) 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.
(13) 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.
(14) 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 2012**
Within 1 year	**$ –**
1 to 5 years	**233**
5 to 10 years	**6,122**
Thereafter	**1,265**
	$ 7,620

Note 21 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), Trust II and Trust III.

We also issued non-voting RBC Trust Capital Securities Series 2010, 2011, 2015 and 2008-1 (RBC TruCS 2010, 2011, 2015 and 2008-1) through the Trust. RBC TruCS 2010 were redeemed for cash, at a redemption price of $1,000 per unit for a total of $650 million on June 30, 2010. RBC TruCS 2011 were redeemed for cash, at a redemption price of $1,000 per unit for a total of $750 million on June 30, 2011.

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.

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.

In 2007, we issued $1 billion of innovative subordinated debentures, RBC TSNs – Series A, through Trust III. Trust III is a closed-end trust. The proceeds were used to purchase a senior deposit note from us. Upon consolidation of Trust III, RBC TSNs – Series A was classified as Subordinated debentures.

The table below presents the significant terms and conditions of RBC TruCS and RBC TSNs.

Significant terms and conditions of RBC Trust Capital Securities and RBC Trust Subordinated Notes

Issuer	Issuance date	Distribution dates	Annual yield	Redemption date: At the option of the issuer	Conversion date: At the option of the holder	As at October 31 2012 Principal amount	As at October 31 2011 Principal amount	As at November 1 2010 Principal amount
RBC Capital Trust (1),(2),(3),(4),(5),(6),(7)								
Included in Trust capital securities								
750,000 Trust Capital Securities – Series 2011(8)	December 6, 2000	June 30, December 31	7.183%	December 31, 2005	December 31, 2011	$ –	$ –	$ 750
Included in Non-controlling interests								
1,200,000 Trust Capital Securities – Series 2015	October 28, 2005	June 30, December 31	4.87%(9)	December 31, 2010	n.a.	1,200	1,200	1,200
500,000 Trust Capital Securities – Series 2008-1	April 28, 2008	June 30, December 31	6.82%(9)	June 30, 2013	n.a.	500	500	500
RBC Capital Trust II (2),(3),(4),(5),(6),(7),(10)								
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	$ 900
RBC Capital Trust III								
RBC Trust Subordinated Notes(3),(4),(5),(6),(7)								
Included in Subordinated debentures $1 billion 4.58% Trust Subordinated Notes – Series A(11)	April 30, 2007	April 30, October 30	4.584%	Any time	n.a.	$ –	$ 1,000	$ 1,000

The significant terms and conditions of the RBC TruCS and RBC TSNs are as follows:

(1) Subject to the approval of OSFI, the trust may, on the 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 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. The RBC TSNs – Series A may be redeemed, in whole or in part, subject to the approval of OSFI, for cash equivalent to (i) the Early Redemption Price if the notes are redeemed prior to April 30, 2012, or (ii) the Redemption Price if the notes are redeemed on or after April 30, 2012. 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; and a maturity date of April 30, 2012, plus 11 basis points for RBC TSNs – Series A.

(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, and each RBC TSNs-Series A will be exchanged automatically for an equal principal amount of Bank Series 10 Subordinated Notes 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 $nil of RBC TruCS – Series 2011 (October 31, 2011 – nil; November 1, 2010 – $22 million), $20 million of RBC TruCS – Series 2015 (October 31, 2011 – $nil; November 1, 2010 – $nil), $nil of the RBC TruCS Series 2008-1 (October 31, 2011 – $12 million; November 1, 2010 – $nil), $nil of the RBC Capital Trust II Series 2013 (October 31, 2011 – $6 million; November 1, 2010 – $nil) and $nil of RBC TSNs – Series A (October 31, 2011 – $nil; November 1, 2010 – $4 million) as treasury holdings which were deducted from regulatory capital.

(6) Regulatory capital: According to OSFI guidelines, innovative capital instruments may comprise up to 15% of net Tier 1 capital with an additional 5% eligible for Tier 2B capital. RBC TSNs – Series A qualifies as Tier 2B capital. As at October 31, 2012, $2,580 million represents Tier 1 capital (October 31, 2011 – $2,582 million; November 1, 2010 – $3,327 million), none for Tier 2B capital (October 31, 2011 – $1,027 million; November 1, 2010 – $1,023 million) and $20 million of our treasury holdings of innovative capital is deducted for regulatory capital purposes (October 31, 2011 – $18 million; November 1, 2010 – $26 million).

(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, RBC TruCS 2015 and RBC TSNs – Series A do not have similar exchange rights.

(8) On June 30, 2011, the Trust redeemed all issued and outstanding RBC TruCS 2011 for cash at a redemption price of $1,000 per unit for a total of $750 million.

(9) 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 in an amount of $34.105 on June 30 and December 31 of each year until June 30, 2018, and floating distributions thereafter at the six-month Bankers' Acceptance rate plus 350 basis points.

(10) Subject to the approval of OSFI, Trust II may, in whole or in part, on the redemption date specified above, and on any distribution date thereafter, redeem any outstanding RBC TruCS 2013 without the consent of the holders.

(11) All $1 billion outstanding Trust Subordinated Notes – Series A were redeemed on April 30, 2012 for 100% of their principal amount plus accrued interest to the redemption date.

n.a. not applicable

Note 22 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

	As at							
	October 31, 2012			October 31, 2011			November 1, 2010	
(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	Number of shares (Thousands)	Amount
Preferred shares								
First preferred (1)								
Non-cumulative Series W	12,000	$ 300	$ 1.23	12,000	$ 300	$ 1.23	12,000	$ 300
Non-cumulative Series AA	12,000	300	1.11	12,000	300	1.11	12,000	300
Non-cumulative Series AB	12,000	300	1.18	12,000	300	1.18	12,000	300
Non-cumulative Series AC	8,000	200	1.15	8,000	200	1.15	8,000	200
Non-cumulative Series AD	10,000	250	1.13	10,000	250	1.13	10,000	250
Non-cumulative Series AE	10,000	250	1.13	10,000	250	1.13	10,000	250
Non-cumulative Series AF	8,000	200	1.11	8,000	200	1.11	8,000	200
Non-cumulative Series AG	10,000	250	1.13	10,000	250	1.13	10,000	250
Non-cumulative Series AH	8,500	213	1.41	8,500	213	1.41	8,500	213
Non-cumulative, 5-Year Rate Reset Series AJ	16,000	400	1.25	16,000	400	1.25	16,000	400
Non-cumulative, 5-Year Rate Reset Series AL	12,000	300	1.40	12,000	300	1.40	12,000	300
Non-cumulative, 5-Year Rate Reset Series AN	9,000	225	1.56	9,000	225	1.56	9,000	225
Non-cumulative, 5-Year Rate Reset Series AP	11,000	275	1.56	11,000	275	1.56	11,000	275
Non-cumulative, 5-Year Rate Reset Series AR	14,000	350	1.56	14,000	350	1.56	14,000	350
Non-cumulative, 5-Year Rate Reset Series AT	11,000	275	1.56	11,000	275	1.56	11,000	275
Non-cumulative, 5-Year Rate Reset Series AV	16,000	400	1.56	16,000	400	1.56	16,000	400
Non-cumulative, 5-Year Rate Reset Series AX	13,000	325	1.53	13,000	325	1.53	13,000	325
		$ 4,813			$ 4,813			$ 4,813
Common shares								
Balance at beginning of year	1,438,376	$ 14,010		1,424,922	$ 13,378			
Issued for general business purpose	–	–		6,412	317			
Issued under dividend reinvestment plan (2)	3,752	187		2,951	162			
Issued under the stock option plan (3)	3,175	126		2,953	90			
Employee savings and share ownership plans (4)	–	–		1,138	63			
Balance at end of year	1,445,303	$ 14,323	$ 2.28	1,438,376	$ 14,010	$ 2.08		
Treasury shares – Preferred shares								
Balance at beginning of year	(6)	$ –		(86)	$ (2)			
Sales	3,706	98		3,726	97			
Purchases	(3,658)	(97)		(3,646)	(95)			
Balance at end of year	42	$ 1		(6)	$ –			
Treasury shares – Common shares								
Balance at beginning of year	146	$ 8		(1,719)	$ (81)			
Sales	99,008	5,186		112,865	6,074			
Purchases	(98,611)	(5,164)		(111,000)	(5,985)			
Balance at end of year	543	$ 30		146	$ 8			

(1) First Preferred Shares Series were issued at $25 per share.
(2) During 2012 and 2011, the requirements of our dividend reinvestment plan (DRIP) were satisfied through open market share purchases and treasury share issuances.
(3) Includes fair value adjustments to stock options of $17 million (2011 – $6 million).
(4) During 2012, we funded our employee savings and share ownership plans through open market share purchases. During 2011, we funded our employee savings and share ownership plans through open market share purchases and treasury share issuances.

	Dividend per share (1)	Initial Period Annual Yield	Dividend Reset Premium (2)	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	$ 26.00	February 24, 2010	Not convertible
Non-cumulative Series AA	.278125	4.45%		May 24, 2011	April 4, 2006	26.00	Not convertible	Not convertible
Non-cumulative Series AB	.293750	4.70%		August 24, 2011	July 20, 2006	26.00	Not convertible	Not convertible
Non-cumulative Series AC	.287500	4.60%		November 24, 2011	November 1, 2006	26.00	Not convertible	Not convertible
Non-cumulative Series AD	.281250	4.50%		February 24, 2012	December 13, 2006	26.00	Not convertible	Not convertible
Non-cumulative Series AE	.281250	4.50%		February 24, 2012	January 19, 2007	26.00	Not convertible	Not convertible
Non-cumulative Series AF	.278125	4.45%		May 24, 2012	March 14, 2007	26.00	Not convertible	Not convertible
Non-cumulative Series AG	.281250	4.50%		May 24, 2012	April 26, 2007	26.00	Not convertible	Not convertible
Non-cumulative Series AH	.353125	5.65%		May 24, 2013	April 29, 2008	26.00	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 on Series W, AA, AB, AC, AD, AE, AF, AG, AH, AJ, AL, AN, AP, AR, AT, AV and AX 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, 2012 or the contractual redemption price, whichever is applicable. Subject to the consent of OSFI and the requirements of the Act, we may, on or after the dates specified above, redeem First Preferred Shares. These may be redeemed for cash, in the case of Series W, at a price per share of $26, if redeemed during the 12 months commencing February 24, 2010, and decreasing by $.25 each 12-month period thereafter to a price per share of $25 if redeemed on or after February 24, 2014; and in the case of Series AA, at a price per share of $26, if redeemed during the 12 months commencing May 24, 2011, and decreasing by $.25 each 12-month period thereafter to a price per share of $25 if redeemed on or after May 24, 2015; and in the case of Series AB, at a price per share of $26, if redeemed during the 12 months commencing August 24, 2011, and decreasing by $.25 each 12-month period thereafter to a price per share of $25 if redeemed on or after August 24, 2015; and in the case of Series AC, at a price per share of $26, if redeemed during the 12 months commencing November 24, 2011, and decreasing by $.25 each 12-month period thereafter to a price per share of $25 if redeemed on or after November 24, 2015; and in the case of Series AD, at a price per share of $26, if redeemed during the 12 months commencing February 24, 2012, and decreasing by $.25 each 12-month period thereafter to a price per share of $25 if redeemed on or after February 24, 2016; and in the case of Series AE, at a price per share of $26, if redeemed during the 12 months commencing February 24, 2012, and decreasing by $.25 each 12-month period thereafter to a price per share of $25 if redeemed on or after February 24, 2016; and in the case of Series AF, at a price per share of $26, if redeemed during the 12 months commencing May 24, 2012, and decreasing by $.25 each 12-month period thereafter to a price per share of $25 if redeemed on or after May 24, 2016; and in the case of Series AG, at a price per share of $26, if redeemed during the 12 months commencing May 24, 2012, and decreasing by $.25 each 12-month period thereafter to a price per share of $25 if redeemed on or after May 24, 2016; and in the case of Series AH, at a price per share of $26, if redeemed during the 12 months commencing May 24, 2013, and decreasing by $.25 each 12-month period thereafter to a price per share of $25 if redeemed on or after May 24, 2017; and in the case of Series AJ, at a price per share of $25, if redeemed on February 24, 2014 and on each February 24 every fifth year thereafter; and in the case of Series AL, at a price per share of $25, if redeemed on February 24, 2014 and on each February 24 every fifth year thereafter; and in the case of Series AN, at a price per share of $25, if redeemed on February 24, 2014 and on each February 24 every fifth year thereafter; and in the case of Series AP, at a price per share of $25, if redeemed on February 24, 2014 and on each February 24 every fifth year thereafter; and in the case of Series AR, at a price per share of $25, if redeemed on February 24, 2014 and on each February 24 every fifth year thereafter; and in the case of Series AT, at a price per share of $25, if redeemed on August 24, 2014 and on each August 24 every fifth year thereafter; and in the case of Series AV, at a price per share of $25, if redeemed on August 24, 2014 and on each August 24 every fifth year thereafter; and in the case of Series AX, at a price per share of $25, if redeemed on November 24, 2014 and on each November 24 every fifth year thereafter.

(4) Subject to the consent of OSFI and the requirements of the Act, we may purchase the First Preferred Shares W, AA, AB, AC, AD, AE, AF, AG, AH, AJ, AL, AN, AP, AR, AT, AV and AX 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 Act 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 21. 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, 2012, 47.5 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 38.9 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

	As at		
(Millions of Canadian dollars)	**October 31 2012**	October 31 2011	November 1 2010
RBC Trust Capital Securities (1)			
Series 2015	**$ 1,200**	$ 1,219	$ 1,219
Series 2008-1	**511**	499	511
Consolidated special purpose entities	**–**	–	5
Others	**50**	43	359
	$ 1,761	$ 1,761	$ 2,094

(1) As at October 31, 2012, RBC TruCS Series 2015 includes $20 million (October 31, 2011 – $19 million; November 1, 2010 – $19 million) of accrued interest, net of $20 million of treasury holdings (October 31, 2011 – $nil; November 1, 2010 – $nil). Series 2008-1 includes $11 million of accrued interest (October 31, 2011 – $11 million; November 1, 2010 – $11 million) net of $nil of treasury holdings (October 31, 2011 – $12 million; November 1, 2010 – $nil).

Note 23 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. Stock options are normally granted at the end of the year, with the exercise price determined at least five business days after the release of the year-end financial results. 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, 2012, in respect of the stock option plans was $7 million (October 31, 2011 – $13 million). The compensation expenses related to non-vested awards were $7 million at October 31, 2012 (October 31, 2011 – $9 million), to be recognized over the weighted average period of 1.5 years (October 31, 2011 – 1.8 years).

Analysis of the movement in the number and weighted average exercise price of options is set out below:

A summary of our stock option activity and related information

	October 31, 2012		October 31, 2011	
(Canadian dollars per share except share amounts)	**Number of options (thousands)**	**Weighted average exercise price**	Number of options (thousands)	Weighted average exercise price
Outstanding at beginning of year (1), (2)	**14,413**	**$ 45.06**	15,659	$ 40.90
Granted	**1,161**	**48.93**	1,815	52.60
Exercised (3), (4)	**(3,174)**	**34.36**	(2,954)	27.76
Forfeited in the year	**(96)**	**52.37**	(100)	44.04
Expired in the year	**–**	**–**	(7)	24.64
Outstanding at end of year	**12,304**	**$ 48.12**	14,413	$ 45.06
Exercisable at end of year	**6,544**	**$ 45.43**	8,688	$ 41.64
Available for grant	**12,968**		14,033	

(1) As at November 1, 2010, there was 10,170,311 of options exercisable with weighted average exercise price of $36.86.
(2) As at November 1, 2010, there was 15,740,995 of options available for grant.
(3) Cash received for options exercised during the year was $109 million (October 31, 2011 – $82 million) and the weighted average share price at the date of exercise was $54.48 (October 31, 2011 – $55.61).
(4) New shares were issued for all stock options exercised in 2012 and 2011. See Note 22.

Options outstanding as at October 31, 2012 by range of exercise price:

(Canadian dollars per share except share amounts)	Options outstanding			Options exercisable	
	Number outstanding (thousands)	Weighted average exercise price (1)	Weighted average remaining contractual life	Number exercisable (thousands)	Weighted average exercise price (1)
$29.00 – $35.37	2,790	$ 34.05	4.72	2,241	$ 33.76
$44.13 – $48.93	2,230	46.60	6.17	1,080	44.13
$50.55 – $52.94	3,344	52.72	6.67	1,573	52.85
$54.99 – $57.90	3,940	55.05	5.84	1,650	55.06
Total	12,304	$ 48.12	5.87	6,544	$ 45.43

(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 2012 was estimated at $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 in 2012 and 2011:

Weighted average assumptions

(Canadian dollars per share except percentages)	For the year ended October 31 2012	October 31 2011
Weighted average assumptions		
Share price at grant date	$ 48.19	$ 52.60
Risk-free interest rate	1.38%	2.72%
Expected dividend yield	3.93%	3.62%
Expected share price volatility	18%	20%
Expected life of option	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 2012, we contributed $75 million (2011 – $72 million), under the terms of these plans, towards the purchase of our common shares. As at October 31, 2012, an aggregate of 37 million common shares were held under these plans (October 31, 2011 – 36 million common shares; November 1, 2010 – 35 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. Awards under the plans are deferred in the form of common shares which are held in trust until they fully vest or in the form of DSUs. A portion of the award under some 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. The value of the award paid will be equivalent to the original award adjusted for dividends and changes in the market value of common shares at the time the award vests. The number of our common shares held in trust as at October 31, 2012 was 0.3 million (October 31, 2011 – 0.7 million; November 1, 2010 – 1.1 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 Accumulated Plan. This plan allows eligible employees to make deferrals of 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 0.1 million as at October 31, 2012 (October 31, 2011 – 0.1 million; November 1, 2010 – 0.5 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

(Millions of Canadian dollars except units and per unit amounts)	October 31, 2012 Units granted during the year Number granted (thousands)	Weighted average fair value	Units outstanding at the end of the year Carrying amount	October 31, 2011 Units granted during the year Number granted (thousands)	Weighted average fair value	Units outstanding at the end of the year Carrying amount	November 1, 2010 Units outstanding Carrying amount
Deferred share unit plans	302	$ 59.60	$ 229	228	$ 64.74	$ 187	$ 204
Deferred bonus plan	8,917	56.72	1,494	7,314	49.50	1,116	953
Performance deferred share award plans	2,570	49.03	307	2,360	52.60	299	337
RBC U.S. Wealth Accumulation Plan	458	51.61	305	390	59.45	263	303
Other share-based plan	437	51.34	63	401	53.70	57	66
Total	12,684	$ 54.86	$ 2,398	10,693	$ 51.03	$ 1,922	$ 1,863

Compensation expenses (recoveries) recognized under deferred share and other plans

(Millions of Canadian dollars)	For the year ended October 31 2012	October 31 2011
Deferred share unit plans	$ 29	$ (8)
Deferred bonus plan	185	(60)
Performance deferred share award plans	151	147
RBC U.S. Wealth Accumulation Plan	136	33
Other share-based plan	29	11
Total	$ 530	$ 123

Note 24 Income and expenses from selected financial instruments

Gains and losses arising from financial instruments held at FVTPL, except for those supporting our insurance operations, are reported in Non-interest income. Related interest and dividend income are reported in Net interest income.

Net gains (losses) from financial instruments held at fair value through profit or loss (1)

(Millions of Canadian dollars)	For the year ended October 31 2012	October 31 2011
Net gains (losses)	$	$
Classified as at fair value through profit or loss	1,210	10
Designated as at fair value through profit or loss	(94)	590
	$ 1,116	$ 600
By product line		
Interest rate and credit	$ 796	$ 321
Equities	(48)	(47)
Foreign exchange and commodities	368	326
Total	$ 1,116	$ 600

(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 classified as at FVTPL were $nil (2011 – $nil), Net gains (losses) from financial instruments designated as at FVTPL were $439 million (2011 – $213 million).

Net interest income from financial instruments (1)

(Millions of Canadian dollars)	For the year ended October 31 2012	October 31 2011
Interest income		
Financial instruments held as at fair value through profit or loss	$ 4,957	$ 5,250
Other categories of financial instruments (2)	15,895	15,563
	20,852	20,813
Interest expense		
Financial instruments held as at fair value through profit or loss	$ 3,029	$ 3,827
Other categories of financial instruments	5,325	5,629
	8,354	9,456
Net interest income	$ 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 Statement of Income: Interest income of $466 million (2011 – $456 million), Interest expense of $nil (2011 – $nil).
(2) See Note 6 for interest income accrued on impaired financial assets.

Income from other categories of financial instruments (1), (2)

(Millions of Canadian dollars)	For the year ended October 31 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	3,784	3,528
Net fee income arising from trust and other fiduciary activities	6,855	6,812

(1) See Note 5 for net gains (losses) on AFS securities.
(2) See Note 5 for impairment losses on AFS and held-to-maturity securities, and Note 6 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 25 Income taxes

The components of tax expense are as follows:

(Millions of Canadian dollars)	For the year ended October 31 2012	October 31 2011
Income taxes (recoveries) in Consolidated Statements of Income		
Current tax		
Tax expense (recoveries) for current year	$ 2,217	$ 2,074
Adjustments for prior years	(184)	(8)
	2,033	2,066
Deferred tax		
Origination and reversal of temporary difference	(86)	(66)
Effects of changes in tax rates	2	36
Adjustments for prior years	167	(26)
(Recoveries) arising from previously unrecognized tax loss, tax credit or temporary difference of a prior period	(16)	–
	67	(56)
	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	72	(56)
Reclassification of (gains) losses on available-for-sale securities to income	(2)	45
Net foreign currency translation gains, net of hedging activities	40	279
Reclassification of gains on net investment hedging activities	(59)	–
Net unrealized gains on derivatives designated as cash flow hedges	11	137
Reclassification of losses on derivatives designated as cash flow hedges to income	10	29
	72	434
Total income taxes	$ 2,172	$ 2,444

Our effective tax rate changed from 22.4% for 2011 to 21.7% for 2012, principally due to a decrease of 1.7% 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

	For the year ended			
(Millions of Canadian dollars, except for percentage amounts)	October 31, 2012		October 31, 2011	
Income taxes at Canadian statutory tax rate	$ 2,558	26.4%	$ 2,523	28.1%
(Decrease) increase in income taxes resulting from				
Lower average tax rate applicable to subsidiaries	(305)	(3.1)%	(271)	(3.0)%
Goodwill Impairment	37	0.4%	–	0.0%
Tax-exempt income from securities	(330)	(3.4)%	(355)	(4.0)%
Tax rate change	2	0.0%	36	0.4%
Other	138	1.4%	77	0.9%
Income taxes reported in Consolidated Statements of Income / effective tax rate	$ 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, 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

	As at October 31, 2011						
(Millions of Canadian dollars)	Net Asset November 1, 2010	Change through equity	Change through profit or loss	Exchange rate differences	Acquisitions/ disposals	Other	Net Asset October 31, 2011
Net deferred tax asset/(liability)							
Allowance for credit losses	$ 749	$ –	$ (27)	$ –	$ (348)	$ –	$ 374
Deferred compensation	858	–	90	(13)	(57)	–	878
Business realignment charges	7	–	18	1	–	–	26
Tax loss carryforwards	397	–	12	(1)	(374)	–	34
Deferred income	254	–	(3)	–	–	–	251
Available-for-sale securities	187	44	(5)	(1)	(52)	–	173
Derivatives designated as cash flow hedges	–	20	(23)	–	–	–	(3)
Premises and equipment	(197)	–	(7)	(1)	12	–	(193)
Deferred expense	(26)	–	(39)	–	–	–	(65)
Pension and post-employement related	324	–	(3)	1	(6)	–	316
Intangibles	19	–	40	3	(242)	–	(180)
Other	2	(54)	3	4	28	34	17
	$ 2,574	$ 10	$ 56	$ (7)	$ (1,039)	$ 34	$ 1,628
Comprising							
Deferred tax assets	$ 2,792						$ 1,894
Deferred tax liabilities	(218)						(266)
	$ 2,574						$ 1,628

The tax loss carry-forwards amount of deferred tax assets was related to losses in our Canadian, U.K., Japanese, Luxembourg and U.S. operations. Deferred tax assets of $72 million (October 31, 2011 – $34 million; November 1, 2010 – $397 million) was recognized at October 31, 2012 in respect of tax losses incurred in current or preceding year 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, 2012, unused tax losses and tax credits of $169 million and $nil (October 31, 2011 – $207 million and $6 million; November 1, 2010 – $350 million and $6 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 $11 million (October 31, 2011 – $58 million; November 1, 2010 – $32 million) which expire in two to four years, and $158 million (October 31, 2011 – $149 million; November 1, 2010 – $318 million) which expire after four years. There are $nil of tax credits (October 31, 2011 – $6 million; November 1, 2010 – $6 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 $10.6 billion as at October 31, 2012 (October 31, 2011 – $10.0 billion; November 1, 2010, – $10.0 billion).

Note 26 Earnings per share

(Millions of Canadian dollars, except share and per share amounts)	For the year ended October 31 2012	For the year ended October 31 2011
Basic earnings per share		
Net Income	$ 7,539	$ 6,444
Net loss from discontinued operations	(51)	(526)
Net income from continuing operations	7,590	6,970
Preferred share dividends	(258)	(258)
Net income attributable to non-controlling interest	(97)	(101)
Net income available to common shareholders from continuing operations	7,235	6,611
Weighted average number of common shares (in thousands)	1,442,167	1,430,722
Basic earnings (loss) per share		
Continuing operations (in dollars)	$ 5.01	$ 4.62
Discontinued operations (in dollars)	(.03)	(.37)
Total	$ 4.98	$ 4.25
Diluted earnings (loss) per share		
Net income available to common shareholders from continuing operations	$ 7,235	$ 6,611
Dilutive impact of exchangeable shares	53	78
Net income from continuing operations available to common shareholders including dilutive impact of exchangeable shares	7,288	6,689
Net loss from discontinued operations available to common shareholders	(51)	(526)
Weighted average number of common shares (in thousands)	1,442,167	1,430,722
Stock options (1)	1,626	2,941
Issuable under other share-based compensation plans	433	1,043
Exchangeable shares (2)	24,061	36,787
Average number of diluted common shares (in thousands)	1,468,287	1,471,493
Diluted earnings per share		
Continuing operations (in dollars)	$ 4.96	$ 4.55
Discontinued operations (in dollars)	(.03)	(.36)
Total	$ 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 calculations of diluted earnings per share: for 2012 – 3,992,229 average outstanding options with an exercise price of $55.05; for 2011 – 4,052,267 average outstanding options with an exercise price of $55.05.

(2) Included in exchangeable shares are preferred shares, trust capital securities and exchangeable shares issued on the acquisition of Phillips, Hager & North Investment Management Ltd. (PH&N) in 2008. The PH&N exchangeable shares were replaced with 6.4 million RBC common shares on May 2, 2011, the third anniversary of the closing date of the acquisition.

Note 27 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.

	Maximum exposure to credit losses		
	As at		
	October 31 2012	October 31 2011	November 1 2010
Financial guarantees			
Financial standby letters of credit	**$ 14,683**	$ 12,139	$ 11,617
Commitments to extend credit			
Backstop liquidity facilities	**30,317**	23,496	20,827
Credit enhancements	**3,708**	3,330	3,211
Documentary and commercial letters of credit	**186**	191	255
Other commitments to extend credit	**94,198**	73,468	56,540
Other commitments			
Securities lending indemnifications (1)	**56,141**	52,607	52,076
Performance guarantees	**5,396**	4,655	5,030

(1) For securities lending indemnifications prior to July 31, 2012, we were exposed to 50% of this amount through our former joint venture, RBC Dexia.

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 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.

Mortgage loans sold with recourse
Through our various agreements with investors, we may be required to repurchase U.S. originated mortgage loans sold to an investor if the loans are uninsured for greater than one year, or refund any premium received where mortgage loans are prepaid or in default within 120 days. The mortgage loans are fully collateralized by residential properties. As at October 31, 2012 and 2011, we have no outstanding mortgage loans sold with recourse (November 1, 2010 – $323 million).

Uncommitted amounts
Uncommitted amounts represent undrawn credit facilities for which we have the ability to withdraw the credit extended to the borrower. These include both retail and commercial commitments. As at October 31, 2012, the total balance of uncommitted amounts was $172 billion (October 31, 2011 — $166 billion; November 1, 2010 — $167 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, 2012, we had on average $3.2 billion of assets pledged intraday to the Bank of Canada on a daily basis (October 31, 2011 – $3.5 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, 2012, October 31, 2011, and November 1, 2010.

Details of assets pledged against liabilities and collateral assets held or re-pledged are shown in the following tables:

(Millions of Canadian dollars)	As at October 31 2012	October 31 2011	November 1 2010
Sources of pledged assets and collateral			
Bank assets			
Cash and due from banks	$ 94	$ 184	$ 123
Interest-bearing deposits with banks	424	618	334
Loans	65,077	58,998	54,992
Securities	40,424	44,119	46,607
Other assets	19,411	9,805	10,046
	$ 125,430	$ 113,724	$ 112,102
Client assets			
Collateral received and available for sale or re-pledging	178,454	137,548	123,596
Less: not sold or re-pledged	(56,172)	(28,870)	(26,013)
	122,282	108,678	97,583
	247,712	222,402	209,685
Uses of pledged assets and collateral			
Securities lent	$ 12,202	$ 10,805	$ 14,977
Securities borrowed	25,555	31,509	25,637
Obligations related to securities sold short	40,756	44,284	46,597
Obligations related to securities lent or sold under repurchase agreements	64,154	44,885	36,196
Securitization	51,959	48,535	46,241
Covered bonds	13,276	10,513	8,557
Derivative transactions	32,967	27,625	26,240
Foreign governments and central banks	2,608	2,376	2,332
Clearing systems, payment systems and depositories	4,235	1,839	2,154
Other	–	31	754
	$ 247,712	$ 222,402	$ 209,685

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, 2012			October 31, 2011			November 1, 2010		
(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	Total future minimum lease payments	Future interest charges	Present value of finance lease commitments
Future minimum lease payments									
no later than one year	$ 62	$ (6)	$ 56	$ 52	$ (5)	$ 47	$ 52	$ (4)	$ 48
later than one year and no later than five years	108	(12)	96	66	(7)	59	61	(6)	55
later than five years	–	–	–	–	–	–	3	–	3
	$ 170	$ (18)	$ 152	$ 118	$ (12)	$ 106	$ 116	$ (10)	$ 106

The net carrying amount of computer equipment held under finance lease as at October 31, 2012 was $156 million (October 31, 2011 – $106 million; November 1, 2010 – $103 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, 2012		October 31, 2011		November 1, 2010	
(Millions of Canadian dollars)	Land and buildings	Equipment	Land and buildings	Equipment	Land and buildings	Equipment
Future minimum lease payments						
no later than one year	$ 566	$ 131	$ 483	$ 116	$ 510	$ 125
later than one year and no later than five years	1,663	449	1,485	83	1,588	98
later than five years	1,256	4	1,029	–	1,133	1
	3,485	584	2,997	199	3,231	224
less: Future minimum sublease payments to be received	(20)	(1)	(27)	(3)	(52)	(3)
Net future minimum lease payments	$ 3,465	$ 583	$ 2,970	$ 196	$ 3,179	$ 221

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., including various U.S. states, 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 various 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 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, and state law. 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 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, 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 28 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, 2012, would result in a change in the under-one-year gap from $19.2 billion to $60.7 billion.

	As at October 31, 2012							
(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	$ 14,370	$ 5,063	$ 41	$ 25	$ 191	$ –	$ 3,182	$ 22,872
Securities								
Trading	10,132	9,582	3,617	8,714	22,633	25,128	40,977	120,783
Available-for-sale	–	25,501	514	1,569	9,365	1,827	2,052	40,828
Assets purchased under reverse repurchase agreements and securities borrowed	8,283	93,154	7,926	2,687	207	–	–	112,257
Loans (net of allowance for loan losses)	191,103	30,383	8,519	16,696	119,877	8,916	2,750	378,244
Derivatives	91,293	–	–	–	–	–	–	91,293
Investments for account of segregated fund holders	–	–	–	–	–	–	383	383
Other assets	–	4	4	10	34	40	58,348	58,440
	$ 315,181	$163,687	$20,621	$ 29,701	$152,307	$35,911	$107,692	$825,100
Liabilities								
Deposits	$ 202,812	$ 83,476	$19,739	$ 35,506	$ 79,148	$18,263	$ 69,275	$508,219
Obligations related to assets sold under repurchase agreements and securities loaned	3,653	58,479	711	1,189	–	–	–	64,032
Obligations related to securities sold short	771	518	767	1,515	8,259	10,949	17,977	40,756
Derivatives	96,761	–	–	–	–	–	–	96,761
Insurance and investment contracts for account of segregated fund holders	–	–	–	–	–	–	383	383
Other liabilities	–	45	51	136	1,236	516	58,422	60,406
Subordinated debentures	–	397	1,004	1,639	4,575	–	–	7,615
Trust capital securities	–	–	–	–	900	–	–	900
Non-controlling interests	–	–	–	–	1,200	511	50	1,761
Shareholders' equity	–	–	213	600	4,000	–	39,454	44,267
	$ 303,997	$142,915	$22,485	$ 40,585	$ 99,318	$30,239	$185,561	$825,100
Total gap	$ 11,184	$ 20,772	$ (1,864)	$(10,884)	$ 52,989	$ 5,672	$ (77,869)	$ –
Canadian dollar	$ 18,367	$ (11,750)	$ 1,333	$ (6,116)	$ 59,052	$ 340	$ (54,900)	$ 6,326
Foreign currency	(7,183)	32,522	(3,197)	(4,768)	(6,063)	5,332	(22,969)	(6,326)
Total gap	$ 11,184	$ 20,772	$ (1,864)	$(10,884)	$ 52,989	$ 5,672	$ (77,869)	$ –

Note 29 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 2012**	October 31 2011
Salaries and other short-term employee benefits	**$ 21**	$ 23
Post-employment benefits	**2**	2
Share-based payments	**25**	24
	$ 48	$ 49

Shareholdings and options held by key management personnel, Directors and their close family members

	As at					
	October 31, 2012		October 31, 2011		November 1, 2010	
(Millions of Canadian dollars, except number of shares)	**No. of units held**	**Value**	No. of units held	Value	No. of units held	Value
Stock options	**5,402,931**	**$ 40**	5,663,871	$ 23	5,011,708	$ 45
Other non-option stock based awards	**2,657,787**	**143**	2,189,588	106	1,994,916	107
RBC common shares	**1,593,328**	**91**	1,638,939	80	1,511,316	82
	9,654,046	**$ 274**	9,492,398	$ 209	8,517,940	$ 234

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, 2012, total loans to key management personnel, Directors and their close family members are $6 million (October 31, 2011 – $4 million; November 1, 2010 – $5 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, 2012, there were no deposits from joint ventures and associates (October 31, 2011 – $2.9 billion; November 1, 2010 – $3.1 billion).

Other transactions, arrangements or agreements involving joint ventures or associates

	As at or for the year ended		
(Millions of Canadian dollars)	**October 31 2012**	October 31 2011	November 1 2010
Guarantees provided	**$ –**	$ 483	$ 497
Commitments and other contingencies	**138**	135	–
Other fees received for services rendered	**84**	93	n.a.
Other fees paid for services received	**51**	65	n.a.

Note 30 Results by business segment

(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
	For the year ended October 31, 2012									
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							$ 7,539	$ 6,041	$ 792	$ 706
Non-interest expense includes:										
Depreciation and amortization	$ 248	$ 126	$ 14	$ 54	$ 27	$ 487	$ 956	$ 782	$ 38	$ 136
Impairment of goodwill and other intangibles	–	–	–	168	–	–	168	100	–	68
Total assets from continuing operations	$ 343,100	$ 22,000	$ 12,300	$ 77,200	$ 355,200	$ 15,300	$ 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	$ 355,100	$ (29,700)	$ 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	$ 231	$ 127	$ 20	$ 48	$ 24	$ 418	$ 868	$ 705	$ 37	$ 126
Impairment of goodwill and other intangibles	–	–	–	–	–	–	–	–	–	–
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).

Composition of business segments

For management purposes, we are organized into five business segments. Effective October 31, 2012, our previous business segments (Canadian Banking, Wealth Management, Insurance, International Banking and Capital Markets) were reorganized into the following five business segments as outlined below, based on the products and services offered. The comparative results have been revised to conform to our new basis of segment presentation.

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 our cross border banking business serves the needs of Canadian clients within the United States.

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 & Other. In Canada, we offer our products and services through our proprietary distribution channels, composed of the field sales force which includes retail insurance branches and our field sales representatives, call centers and online network, as well as through independent insurance advisors and travel agencies. 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, 2012 was $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.

Note 31 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 51 to 68 of the Management Discussion and Analysis. These shaded text and tables are an integral part of these Consolidated Financial Statements.

Concentrations of credit risk exist if a number of our clients are engaged in similar activities, are located in the same geographic region or have comparable economic characteristics such that their ability to meet contractual obligations would be similarly affected by changes in economic, political or other conditions.

Concentrations of credit risk indicate the relative sensitivity of our performance to developments affecting a particular industry or geographic location. The amounts of credit exposure associated with our on- and off-balance sheet financial instruments are summarized in the following table.

	As at October 31, 2012								
(Millions of Canadian dollars, except percentage amounts)	Canada	%	United States	%	Europe	%	Other International	%	Total
On-balance sheet assets other than derivatives (1)	$ 372,920	74%	$64,254	13%	$ 37,806	8%	$ 26,903	5%	$501,883
Derivatives before master netting agreement (2), (3)	14,549	12	20,617	17	79,810	66	6,761	5	121,737
	$ 387,469	62%	$84,871	14%	$117,616	19%	$ 33,664	5%	$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

	As at October 31, 2011								
(Millions of Canadian dollars, except percentage amounts)	Canada	%	United States	%	Europe	%	Other International	%	Total
On-balance sheet assets other than derivatives (1)	$ 348,970	79%	$35,814	8%	$ 34,840	8%	$ 22,509	5%	$442,133
Derivatives before master netting agreement (2), (3)	15,211	13	21,541	19	72,334	62	7,270	6	116,356
	$ 364,181	65%	$57,355	10%	$107,174	19%	$ 29,779	5%	$558,489
Off-balance sheet credit instruments (4)									
Committed and uncommitted (5)	$ 187,641	71%	$52,831	20%	$ 16,669	6%	$ 8,306	3%	$265,447
Other	38,503	55	11,321	16	15,691	23	3,886	6	69,401
	$ 226,144	67%	$64,152	19%	$ 32,360	10%	$ 12,192	4%	$334,848

(Millions of Canadian dollars, except percentage amounts)	As at November 1, 2010 Canada	%	United States	%	Europe	%	Other International	%	Total
On-balance sheet assets other than derivatives (1)	$319,261	77%	$46,119	11%	$35,427	8%	$ 18,786	4%	$419,593
Derivatives before master netting agreement (2), (3)	13,527	13	25,066	24	58,648	56	7,530	7	104,771
	$332,788	63%	$71,185	14%	$94,075	18%	$ 26,316	5%	$524,364
Off-balance sheet credit instruments (4)									
Committed and uncommitted (5)	$180,909	73%	$43,223	18%	$13,417	5%	$ 8,661	4%	$246,210
Other	38,731	56	13,130	19	13,137	19	3,725	6	68,723
	$219,640	70%	$56,353	18%	$26,554	8%	$ 12,386	4%	$314,933

(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 53% (October 31, 2011 – 52%; November 1, 2010 – 46%), the Prairies at 18% (October 31, 2011 – 18%; November 1, 2010 – 15%), British Columbia and the territories at 15% (October 31, 2011 – 15%; November 1, 2010 – 14%) and Quebec at 10% (October 31, 2011 – 10%; November 1, 2010 – 21%). No industry accounts for more than 30% (October 31, 2011 – 30%; November 1, 2010 – 28%) of total on-balance sheet credit instruments.
(2) The largest concentration of credit exposure by counterparty type is banks at 49% (October 31, 2011 – 56%; November 1, 2010 – 65%).
(3) Excludes credit derivatives classified as other than trading with a replacement cost of $5 million (October 31, 2011 – $41 million; November 1, 2010 – $7 million).
(4) Represents financial instruments with contractual amounts representing credit risk.
(5) Retail and wholesale commitments comprise 40% (October 31, 2011 – 44%; November 1, 2010 – 46%) and 60% (October 31, 2011 – 56%; November 1, 2010 – 54%), respectively, of our total commitments. The largest sector concentrations in the wholesale portfolio relate to Energy at 17% (October 31, 2011 – 17%; November 1, 2010 – 14%), Financing products at 17% (October 31, 2011 – 17%; November 1, 2010 – 17%), Non-bank financial services at 9% (October 31, 2011 – 10%; November 1, 2010 – 15%), Sovereign at 9% (October 31, 2011 – 8%; November 1, 2010 – 9%), and Real estate and related at 8% (October 31, 2011 – 8%; November 1, 2010 – 7%).

Note 32 Capital management

Regulatory capital and capital ratios

Capital levels for Canadian banks are regulated pursuant to guidelines issued by OSFI, based on standards issued by the Bank for International Settlements and Basel Committee on Banking Supervision. Regulatory capital is allocated to two tiers: Tier 1 and Tier 2. Tier 1 capital comprises the highest quality capital and is a core measure of a bank's financial strength. Tier 1 capital consists of more permanent components of capital, is free of mandatory fixed charges against earnings and has a subordinate legal position to the rights of depositors and other creditors of the financial institution. Tier 2 capital is composed of supplementary capital instruments that contribute to the overall strength of a financial institution as a going concern. Total capital is defined as the sum of Tier 1 and Tier 2 capital.

Regulatory capital ratios are calculated by dividing Tier 1 and Total capital by risk-weighted assets (RWA). OSFI requires banks to meet minimum risk-based capital requirements for exposures to credit risk, operational risk, and where they have significant trading activity, market risk. RWA is calculated for each of these risk types and added together to determine total RWA.

In addition, OSFI formally establishes risk-based capital targets for deposit-taking institutions in Canada. These targets are currently a Tier 1 capital ratio of greater than or equal to 7% and a Total capital ratio of greater than or equal to 10%. In addition to the Tier 1 and Total capital ratios, 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 2012 and 2011, we have complied with all capital requirements imposed by OSFI.

Impact of adoption of IFRS

Regulatory capital reporting under IFRS commenced with our conversion to IFRS on November 1, 2011. Per OSFI's Capital Adequacy Guidelines, financial institutions may elect a phase-in of the impact of the conversion to IFRS on their regulatory capital reporting. We made use of this election and are phasing-in the IFRS conversion impact over a five-quarter period ending in the first quarter of fiscal 2013. The phase-in amount is recognized on a straight-line basis, and has reduced the IFRS conversion impact on our Tier 1 capital by $444 million this year, from $2.2 billion to $1.8 billion.

	Determined based on IFRS	Canadian GAAP
	As at	
(Millions of Canadian dollars, except for percentage and multiple amounts)	**October 31 2012**	October 31 2011
Capital		
Tier 1 capital	**$ 36,807**	$ 35,713
Total capital	**42,347**	41,021
Risk-weighted assets		
Credit risk	**$ 209,559**	$ 205,182
Market risk	**30,109**	21,346
Operational risk	**40,941**	40,283
Transitional adjustment prescribed by OSFI (1)	**–**	969
Total risk-weighted assets	**$ 280,609**	$ 267,780
Capital ratios and multiples		
Tier 1 capital	**13.1%**	13.3%
Total capital	**15.1%**	15.3%
Assets-to-capital multiple (2)	**16.7X**	16.1X

(1) Under Basel II transitional guidance, OSFI requires the minimum risk-based capital to be no less than 90% of the capital requirements as calculated under Basel I standards. If the capital requirement is less than 90%, a transitional adjustment to RWA must be applied as prescribed by the OSFI Capital Adequacy Requirement guidance Section 1.7.
(2) As part of the IFRS transition, for the assets-to-capital multiple calculation, the gross adjusted assets exclude mortgages securitized through the CMHC program up to and including March 31, 2010 as approved by OSFI.

Note 33 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, 2012			October 31, 2011		
(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)	$ 11,020	$ 1,597	$ 12,617	$ 11,002	$ 1,426	$ 12,428
Interest-bearing deposits with banks (1)	10,255	–	10,255	6,387	73	6,460
Securities						
Trading (2)	112,406	8,377	120,783	119,371	8,757	128,128
Available-for-sale	15,305	25,523	40,828	14,326	24,568	38,894
Assets purchased under reverse repurchase agreements and securities borrowed	110,052	2,205	112,257	84,698	249	84,947
Loans						
Retail	47,193	253,992	301,185	42,581	242,164	284,745
Wholesale	29,446	49,610	79,056	26,192	38,560	64,752
Allowance for loan losses			(1,997)			(1,967)
Investments for account of segregated fund holders	–	383	383	–	320	320
Other						
Customers' liability under acceptances	5,198	4,187	9,385	4,756	2,933	7,689
Derivatives (2)	12,958	78,335	91,293	20,711	78,939	99,650
Premises and equipment, net	–	2,691	2,691	–	2,490	2,490
Goodwill	–	7,485	7,485	–	7,610	7,610
Other intangibles	–	2,686	2,686	–	2,115	2,115
Assets of discontinued operations	–	–	–	27,152	–	27,152
Investments in associates	–	125	125	–	142	142
Prepaid pension benefit cost	–	1,049	1,049	–	311	311
Other assets	32,010	3,009	35,019	24,963	3,004	27,967
	$ 385,843	$441,254	$825,100	$ 382,139	$413,661	$793,833
Liabilities						
Deposits (3)	$ 374,000	$134,219	$508,219	$ 339,132	$139,970	$479,102
Insurance and investment contracts for account of segregated fund holders	–	383	383	–	320	320
Other						
Acceptances	5,198	4,187	9,385	4,756	2,933	7,689
Obligations related to securities sold short	38,751	2,005	40,756	41,339	2,945	44,284
Obligations related to assets sold under repurchase agreements and securities loaned	64,032	–	64,032	42,735	–	42,735
Derivatives (2)	14,429	82,332	96,761	20,943	79,579	100,522
Insurance claims and policy benefit liabilities	232	7,689	7,921	132	6,987	7,119
Liabilities of discontinued operations	–	–	–	20,076	–	20,076
Accrued pension and other post-employment benefit expense	66	1,663	1,729	67	1,572	1,639
Other liabilities	34,618	6,753	41,371	32,757	6,484	39,241
Subordinated debentures	2,007	5,608	7,615	–	8,749	8,749
Trust capital securities	–	900	900	–	894	894
	$ 533,333	$245,739	$779,072	$ 501,937	$250,433	$752,370

(Millions of Canadian dollars)	As at November 1, 2010 Within one year	After one year	Total
Assets			
Cash and due from banks (1)	$ 7,367	$ 1,169	$ 8,536
Interest-bearing deposits with banks (1)	7,194	47	7,241
Securities			
Trading (2)	120,629	9,210	129,839
Available-for-sale	16,797	32,447	49,244
Assets purchased under reverse repurchase agreements and securities borrowed	69,841	2,857	72,698
Loans			
Retail	31,038	240,889	271,927
Wholesale	36,413	31,184	67,597
Allowance for loan losses			(2,867)
Investments for account of segregated fund holders	–	257	257
Other			
Customers' liability under acceptances	4,547	2,824	7,371
Derivatives (2)	22,191	83,918	106,109
Premises and equipment, net	–	2,501	2,501
Goodwill	–	6,553	6,553
Other intangibles	–	1,925	1,925
Assets of discontinued operations	5,723	–	5,723
Investments in associates	–	131	131
Prepaid pension benefit cost	–	266	266
Other assets	26,602	3,719	30,321
	$ 348,342	$ 419,897	$ 765,372
Liabilities			
Deposits (3)	$ 338,259	$ 130,254	$ 468,513
Insurance and investment contracts for account of segregated fund holders	–	257	257
Other			
Acceptances	4,547	2,824	7,371
Obligations related to securities sold short	46,597	–	46,597
Obligations related to assets sold under repurchase agreements and securities loaned	36,006	–	36,006
Derivatives (2)	23,558	84,519	108,077
Insurance claims and policy benefit liabilities	131	6,736	6,867
Liabilities of discontinued operations	5,012	–	5,012
Accrued pension and other post-employment benefit expense	44	1,532	1,576
Other liabilities	33,184	5,134	38,318
Subordinated debentures	405	7,271	7,676
Trust capital securities	727	900	1,627
	$ 488,470	$ 239,427	$ 727,897

(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 $237 billion (October 31, 2011 – $210 billion; November 1, 2010 – $197 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 34 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 2012**	October 31 2011	November 1 2010
Assets			
Cash and due from banks	$ 3,126	$ 7,406	$ 3,790
Interest-bearing deposits with banks	1,160	1,560	1,273
Securities	83,704	92,408	89,930
Investments in bank subsidiaries and associated corporations	24,668	26,837	28,478
Investments in other subsidiaries and associated corporations	37,973	33,837	22,619
Assets purchased under reverse repurchase agreements	10,909	8,745	6,367
Loans, net of allowances for loan losses	356,079	326,776	300,019
Net balances due from bank subsidiaries	–	2,342	8,637
Net balances due from other subsidiaries	–	–	–
Other assets	129,879	125,202	128,898
	$ 647,498	$ 625,113	$ 590,011
Liabilities and shareholders' equity			
Deposits	$ 422,893	$ 413,121	$ 384,359
Net balances due to bank subsidiaries	2,719	–	–
Net balances due from other subsidiaries	18,062	13,261	8,431
Other liabilities	151,942	151,280	155,163
	595,616	577,662	547,953
Subordinated debentures	7,615	7,749	6,677
Shareholders' equity	44,267	39,702	35,381
	$ 647,498	$ 625,113	$ 590,011

Condensed Statements of Income

	For the year ended	
(Millions of Canadian dollars)	**October 31 2012**	October 31 2011
Interest income (1)	$ 18,788	$ 17,681
Interest expense	6,860	7,357
Net interest income	11,928	10,324
Non-interest income (2)	1,733	3,685
Total revenue	13,661	14,009
Provision for credit losses	1,139	1,009
Insurance policyholder benefits and acquisition expense	–	2
Non-interest expense	6,903	6,760
Income before income taxes	5,619	6,238
Income taxes	1,440	1,394
Net income before equity in undistributed income of subsidiaries	4,179	4,844
Equity in undistributed income of subsidiaries	3,361	1,600
Net income	$ 7,540	$ 6,444

(1) Includes dividend income from investments in subsidiaries and associated corporations of $1,292 million (2011 – $1,314 million).
(2) Includes income from associated corporations of a nominal amount (2011 – loss of a nominal amount).

Condensed Statements of Cash Flows

(Millions of Canadian dollars)	As at October 31 2012	October 31 2011
Cash flows from operating activities		
Net income	$ 7,540	$ 6,444
Adjustments to determine net cash from operating activities:		
Change in undistributed earnings of subsidiaries	(3,361)	(1,600)
Change in deposits	9,772	28,762
Change in loans, net of loan securitizations	(29,324)	(26,884)
Proceeds from loan securitizations	20	207
Change in obligations related to assets sold under repurchase agreements and securities loaned	(229)	(1,690)
Change in assets purchased under reverse repurchase agreements and securities borrowed	(2,164)	(2,378)
Change in obligations related to securities sold short	(2,713)	3,864
Other operating activities, net	6,799	(16,657)
Net cash used in operating activities	(13,660)	(9,932)
Cash flows from investing activities		
Change in interest-bearing deposits with banks	400	(287)
Proceeds from sale of available-for-sale securities	3,991	8,401
Proceeds from maturity of available-for-sale securities	28,994	22,898
Purchases of available-for-sale securities	(29,307)	(18,054)
Net acquisitions of premises and equipment and other intangibles	(867)	(691)
Change in cash invested in subsidiaries	163	(8,393)
Change in net funding provided to subsidiaries	10,158	11,458
Net cash from investing activities	13,532	15,332
Cash flows from financing activities		
Issue of subordinated debentures	–	1,500
Repayment of subordinated debentures	(1,006)	(404)
Issue of common shares	126	152
Dividends paid	(3,272)	(3,032)
Net cash used in from financing activities	(4,152)	(1,784)
Net change in cash and due from banks	(4,280)	3,616
Cash and due from banks at beginning of year	7,406	3,790
Cash and due from banks at end of year	$ 3,126	$ 7,406
Supplemental disclosure of cash flow information		
Amount of interest paid in year	$ 7,372	$ 6,752
Amount of interest received in year	17,502	16,758
Amount of dividends received in year	1,302	1,277
Amount of income taxes (recovered) paid in year	1,951	1,012