

REPORTS AND CONSOLIDATED FINANCIAL STATEMENTS

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Management's responsibility for financial reporting

The accompanying consolidated financial statements of Royal Bank of Canada were prepared by management, which is responsible for the integrity and fairness of the information presented, including the many amounts that must of necessity be based on estimates and judgments. These consolidated financial statements were prepared in accordance with the *Bank Act* (Canada) and International Financial Reporting Standards as issued by the International Accounting Standards Board. Financial information appearing throughout our Management's Discussion and Analysis is consistent with these consolidated financial statements.

Our internal controls are designed to provide reasonable assurance that transactions are authorized, assets are safeguarded and proper records are maintained. These controls include quality standards in hiring and training of employees, policies and procedures manuals, a corporate code of conduct and accountability for performance within appropriate and well-defined areas of responsibility.

The system of internal controls is further supported by a compliance function, which is designed to ensure that we and our employees comply with securities legislation and conflict of interest rules, and by an internal audit staff, which conducts periodic audits of all aspects of our operations.

The Board of Directors oversees management's responsibilities for financial reporting through an Audit Committee, which is composed entirely of independent directors. This Committee reviews our consolidated financial statements and recommends them to the Board for approval. Other key responsibilities of the Audit Committee include reviewing our existing internal control procedures and planned revisions to those procedures, and advising the directors on auditing matters and financial reporting issues. Our Chief Compliance Officer and Chief Internal Auditor have full and unrestricted access to the Audit Committee.

The Office of the Superintendent of Financial Institutions Canada (OSFI) examines and inquires into our business and affairs as deemed necessary to determine whether the provisions of the *Bank Act* are being complied with, and that we are in sound financial condition. In carrying out its mandate, OSFI strives to protect the rights and interests of our depositors and creditors.

Deloitte LLP, Independent Registered Public Accounting Firm 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.

David I. McKay
President and Chief Executive Officer

Janice R. Fukakusa
Chief Administrative Officer and Chief Financial Officer

Toronto, December 2, 2014

Report of Independent Registered Public Accounting Firm

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, 2014 and October 31, 2013, and the consolidated statements of income, statements of comprehensive income, statements of changes in equity, and statements of cash flows for each of the years in the three-year period ended October 31, 2014, and a summary of significant accounting policies and other explanatory information.

Management's Responsibility for the Consolidated Financial Statements

Management is responsible for the preparation and fair presentation of these consolidated financial statements in accordance with International Financial Reporting Standards as issued by the International Accounting Standards Board, and for such internal control as management determines is necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

Auditor's Responsibility

Our responsibility is to express an opinion on these consolidated financial statements based on our audits. We conducted our audits in accordance with Canadian generally accepted auditing standards and the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the consolidated financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the consolidated financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the consolidated financial statements in order to design audit procedures that are appropriate in the circumstances. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements.

We believe that the audit evidence we have obtained in our audits is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

In our opinion, the consolidated financial statements present fairly, in all material respects, the balance sheets of Royal Bank of Canada and subsidiaries as at October 31, 2014 and October 31, 2013, and their financial performance and cash flows for each of the years in the three-year period ended October 31, 2014 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, 2014 based on the criteria established in *Internal Control – Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission and our report dated December 2, 2014 expressed an unqualified opinion on the Bank's internal control over financial reporting.

Deloitte LLP
Chartered Professional Accountants, Chartered Accountants
Licensed Public Accountants
Toronto, Canada
December 2, 2014

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; and
- 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, 2014, based on the criteria set forth in *Internal Control – Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission. Based on that evaluation, management concluded that, as of October 31, 2014, internal control over financial reporting was effective based on the criteria established in the *Internal Control – Integrated Framework (2013)*. 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, 2014.

Our internal control over financial reporting as of October 31, 2014 has been audited by Deloitte LLP, Independent Registered Public Accounting Firm, who also audited our Consolidated Financial Statements for the year ended October 31, 2014, as stated in the Report of Independent Registered Public Accounting Firm, which report expressed an unqualified opinion on the effectiveness of our internal control over financial reporting.

David I. McKay
President and Chief Executive Officer

Janice R. Fukakusa
Chief Administrative Officer and Chief Financial Officer

Toronto, December 2, 2014

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, 2014, based on the criteria established in *Internal Control – Integrated Framework (2013)* 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 International Financial Reporting Standards as issued by the International Accounting Standards Board. 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 International Financial Reporting Standards as issued by the International Accounting Standards Board, 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, 2014, based on the criteria established in *Internal Control – Integrated Framework (2013)* 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, 2014 of the Bank and our report dated December 2, 2014 expressed an unqualified opinion on those consolidated financial statements.

Deloitte LLP
Chartered Professional Accountants, Chartered Accountants
Licensed Public Accountants Toronto, Canada
December 2, 2014

Consolidated Balance Sheets

	As at	
	October 31 2014	October 31 2013
(Millions of Canadian dollars)		
Assets		
Cash and due from banks	\$ 17,421	\$ 15,550
Interest-bearing deposits with banks	8,399	9,039
Securities (Note 4)		
Trading	151,380	144,023
Available-for-sale	47,768	38,687
	199,148	182,710
Assets purchased under reverse repurchase agreements and securities borrowed	135,580	117,517
Loans (Note 5)		
Retail	334,987	320,627
Wholesale	102,236	90,182
	437,223	410,809
Allowance for loan losses (Note 5)	(1,994)	(1,959)
	435,229	408,850
Segregated fund net assets (Note 16)	675	513
Other		
Customers' liability under acceptances	11,462	9,953
Derivatives (Note 8)	87,402	74,822
Premises and equipment, net (Note 9)	2,684	2,636
Goodwill (Note 10)	8,647	8,332
Other intangibles (Note 10)	2,775	2,777
Investments in joint ventures and associates (Note 12)	295	247
Employee benefit assets (Note 17)	138	161
Other assets (Note 13)	30,695	26,638
	144,098	125,566
Total assets	\$ 940,550	\$ 859,745
Liabilities and equity		
Deposits (Note 14)		
Personal	\$ 209,217	\$ 194,943
Business and government	386,660	354,593
Bank	18,223	13,543
	614,100	563,079
Segregated fund net liabilities (Note 16)	675	513
Other		
Acceptances	11,462	9,953
Obligations related to securities sold short	50,345	47,128
Obligations related to assets sold under repurchase agreements and securities loaned	64,331	60,416
Derivatives (Note 8)	88,982	76,745
Insurance claims and policy benefit liabilities (Note 15)	8,564	8,034
Employee benefit liabilities (Note 17)	2,420	2,027
Other liabilities (Note 18)	37,309	34,947
	263,413	239,250
Subordinated debentures (Note 19)	7,859	7,443
Total liabilities	886,047	810,285
Equity attributable to shareholders (Note 21)		
Preferred shares	4,075	4,600
Common shares (shares issued – 1,442,232,886 and 1,441,055,616)	14,511	14,377
Treasury shares – preferred (shares held – (1,207) and (46,641))	–	1
– common (shares held – (891,733) and (666,366))	71	41
Retained earnings	31,615	27,438
Other components of equity	2,418	1,208
	52,690	47,665
Non-controlling interests (Note 21)	1,813	1,795
Total equity	54,503	49,460
Total liabilities and equity	\$ 940,550	\$ 859,745

The accompanying notes are an integral part of these Consolidated Financial Statements. Comparative amounts have been restated. Refer to Note 2.

David I. McKay
President and Chief Executive Officer

Victor L. Young
Director

Consolidated Statements of Income

	For the year ended		
	October 31 2014	October 31 2013	October 31 2012
(Millions of Canadian dollars, except per share amounts)			
Interest income			
Loans	\$ 16,979	\$ 16,354	\$ 15,940
Securities	3,993	3,779	3,838
Assets purchased under reverse repurchase agreements and securities borrowed	971	941	937
Deposits and other	76	74	54
	22,019	21,148	20,769
Interest expense			
Deposits and other	5,873	5,694	6,048
Other liabilities	1,784	1,869	1,922
Subordinated debentures	246	336	360
	7,903	7,899	8,330
Net interest income	14,116	13,249	12,439
Non-interest income			
Insurance premiums, investment and fee income (Note 15)	4,957	3,911	4,897
Trading revenue	742	867	1,305
Investment management and custodial fees	3,355	2,870	2,006
Mutual fund revenue	2,621	2,201	1,896
Securities brokerage commissions	1,379	1,337	1,182
Service charges	1,494	1,437	1,376
Underwriting and other advisory fees	1,809	1,569	1,434
Foreign exchange revenue, other than trading	827	748	586
Card service revenue	689	632	588
Credit fees	1,080	1,092	849
Net gain on available-for-sale securities (Note 4)	192	188	148
Share of profit in joint ventures and associates (Note 12)	162	159	163
Other	685	422	278
	19,992	17,433	16,708
Total revenue	34,108	30,682	29,147
Provision for credit losses (Note 5)	1,164	1,237	1,299
Insurance policyholder benefits, claims and acquisition expense (Note 15)	3,573	2,784	3,621
Non-interest expense			
Human resources (Note 17 and 22)	11,031	10,248	9,082
Equipment	1,147	1,081	913
Occupancy	1,330	1,235	1,130
Communications	779	728	748
Professional fees	763	753	666
Outsourced item processing	246	250	254
Amortization of other intangibles (Note 10)	666	566	494
Impairment of other intangibles (Note 10 and 11)	8	10	–
Impairment of investments in joint ventures and associates (Note 12)	–	20	168
Other	1,691	1,323	1,186
	17,661	16,214	14,641
Income before income taxes from continuing operations	11,710	10,447	9,586
Income taxes (Note 24)	2,706	2,105	2,028
Net income from continuing operations	9,004	8,342	7,558
Net loss from discontinued operations (Note 11)	–	–	(51)
Net income	\$ 9,004	\$ 8,342	\$ 7,507
Net income attributable to:			
Shareholders	\$ 8,910	\$ 8,244	\$ 7,410
Non-controlling interests	94	98	97
	\$ 9,004	\$ 8,342	\$ 7,507
Basic earnings per share (in dollars) (Note 25)	\$ 6.03	\$ 5.53	\$ 4.96
Basic earnings per share from continuing operations (in dollars)	6.03	5.53	4.99
Basic loss per share from discontinued operations (in dollars)	–	–	(0.03)
Diluted earnings per share (in dollars) (Note 25)	6.00	5.49	4.91
Diluted earnings per share from continuing operations (in dollars)	6.00	5.49	4.94
Diluted loss per share from discontinued operations (in dollars)	–	–	(0.03)
Dividends per common share (in dollars)	2.84	2.53	2.28

The accompanying notes are an integral part of these Consolidated Financial Statements. Comparative amounts have been restated. Refer to Note 2.

Consolidated Statements of Comprehensive Income

	For the year ended		
	October 31 2014	October 31 2013	October 31 2012
(Millions of Canadian dollars)			
Net income	\$ 9,004	\$ 8,342	\$ 7,507
Other comprehensive income (loss), net of taxes (Note 24)			
Items that will be reclassified subsequently to income:			
Net change in unrealized gains (losses) on available-for-sale securities			
Net unrealized gains on available-for-sale securities	143	15	193
Reclassification of net gains on available-for-sale securities to income	(58)	(87)	(33)
	85	(72)	160
Foreign currency translation adjustments			
Unrealized foreign currency translation gains	2,743	1,402	114
Net foreign currency translation losses from hedging activities	(1,585)	(912)	–
Reclassification of losses on foreign currency translation to income	44	1	170
Reclassification of losses (gains) on net investment hedging activities to income	3	(1)	(159)
	1,205	490	125
Net change in cash flow hedges			
Net (losses) gains on derivatives designated as cash flow hedges	(108)	(11)	32
Reclassification of losses (gains) on derivatives designated as cash flow hedges to income	28	(30)	25
	(80)	(41)	57
Items that will not be reclassified subsequently to income:			
Remeasurements of employee benefit plans	(236)	319	(779)
Net fair value change due to credit risk on financial liabilities designated as at fair value through profit or loss	(59)	–	–
	(295)	319	(779)
Total other comprehensive income (loss), net of taxes	915	696	(437)
Total comprehensive income	\$ 9,919	\$ 9,038	\$ 7,070
Total comprehensive income attributable to:			
Shareholders	\$ 9,825	\$ 8,940	\$ 6,972
Non-controlling interests	94	98	98
	\$ 9,919	\$ 9,038	\$ 7,070

The accompanying notes are an integral part of these Consolidated Financial Statements. Comparative amounts have been restated. Refer to Note 2.

Consolidated Statements of Changes in Equity

	Other components of equity										Total equity		
	Preferred shares	Common shares	Treasury shares – preferred	Treasury shares – common	Retained earnings	Available-for-sale securities	Foreign currency translation	Cash flow hedges	Total other components of equity	Equity attributable to shareholders		Non-controlling interests	
Balance at November 1, 2011	\$ 4,813	\$14,010	\$ –	\$ –	\$ 8	\$20,084	\$ 259	\$ 71	\$ 160	\$ 490	\$ 39,405	\$ 1,758	\$41,163
Changes in equity													
Issues of share capital	–	313	–	–	–	–	–	–	–	–	313	–	313
Sales of treasury shares	–	–	98	5,186	–	–	–	–	–	–	5,284	–	5,284
Purchases of treasury shares	–	–	(97)	(5,164)	–	–	–	–	–	–	(5,261)	–	(5,261)
Share-based compensation awards	–	–	–	–	(9)	–	–	–	–	–	(9)	–	(9)
Dividends on common shares	–	–	–	–	(3,291)	–	–	–	–	–	(3,291)	–	(3,291)
Dividends on preferred shares and other	–	–	–	–	(258)	–	–	–	–	–	(258)	(92)	(350)
Other	–	–	–	–	5	–	–	–	–	–	5	(3)	2
Net income	–	–	–	–	7,410	–	–	–	–	–	7,410	97	7,507
Total other comprehensive income (loss), net of taxes	–	–	–	–	(779)	160	125	56	341	–	(438)	1	(437)
Balance at October 31, 2012	\$ 4,813	\$14,323	\$ 1	\$ 30	\$23,162	\$ 419	\$ 196	\$ 216	\$ 831	\$ 43,160	\$ 47,665	\$ 1,761	\$44,921
Changes in equity													
Issues of share capital	–	121	–	–	–	–	–	–	–	–	121	–	121
Common shares purchased for cancellation	–	(67)	–	–	(341)	–	–	–	–	–	(408)	–	(408)
Preferred shares redeemed	(213)	–	–	–	(9)	–	–	–	–	–	(222)	–	(222)
Sales of treasury shares	–	–	127	4,453	–	–	–	–	–	–	4,580	–	4,580
Purchases of treasury shares	–	–	(127)	(4,442)	–	–	–	–	–	–	(4,569)	–	(4,569)
Share-based compensation awards	–	–	–	–	(7)	–	–	–	–	–	(7)	–	(7)
Dividends on common shares	–	–	–	–	(3,651)	–	–	–	–	–	(3,651)	–	(3,651)
Dividends on preferred shares and other	–	–	–	–	(253)	–	–	–	–	–	(253)	(94)	(347)
Other	–	–	–	–	(26)	–	–	–	–	–	(26)	30	4
Net income	–	–	–	–	8,244	–	–	–	–	–	8,244	98	8,342
Total other comprehensive income (loss), net of taxes	–	–	–	–	319	(72)	490	(41)	377	–	696	–	696
Balance at October 31, 2013	\$ 4,600	\$14,377	\$ 1	\$ 41	\$27,438	\$ 347	\$ 686	\$ 175	\$ 1,208	\$ 47,665	\$ 52,690	\$ 1,795	\$49,460
Changes in equity													
Issues of share capital	1,000	150	–	–	(14)	–	–	–	–	–	1,136	–	1,136
Common shares purchased for cancellation	–	(16)	–	–	(97)	–	–	–	–	–	(113)	–	(113)
Preferred shares redeemed	(1,525)	–	–	–	–	–	–	–	–	–	(1,525)	–	(1,525)
Sales of treasury shares	–	–	124	5,333	–	–	–	–	–	–	5,457	–	5,457
Purchases of treasury shares	–	–	(125)	(5,303)	–	–	–	–	–	–	(5,428)	–	(5,428)
Share-based compensation awards	–	–	–	–	(9)	–	–	–	–	–	(9)	–	(9)
Dividends on common shares	–	–	–	–	(4,097)	–	–	–	–	–	(4,097)	–	(4,097)
Dividends on preferred shares and other	–	–	–	–	(213)	–	–	–	–	–	(213)	(94)	(307)
Other	–	–	–	–	(8)	–	–	–	–	–	(8)	18	10
Net income	–	–	–	–	8,910	–	–	–	–	–	8,910	94	9,004
Total other comprehensive income (loss), net of taxes	–	–	–	–	(295)	85	1,205	(80)	1,210	–	915	–	915
Balance at October 31, 2014	\$ 4,075	\$14,511	\$ –	\$ 71	\$31,615	\$ 432	\$ 1,891	\$ 95	\$ 2,418	\$ 52,690	\$ 58,105	\$ 1,813	\$54,503

The accompanying notes are an integral part of these Consolidated Financial Statements. Comparative amounts have been restated. Refer to Note 2.

Consolidated Statements of Cash Flows

	For the year ended		
	October 31 2014	October 31 2013	October 31 2012
(Millions of Canadian dollars)			
Cash flows from operating activities			
Net income	\$ 9,004	\$ 8,342	\$ 7,507
Adjustments for non-cash items and others			
Provision for credit losses	1,164	1,237	1,416
Depreciation	499	445	412
Deferred income taxes	(207)	(72)	(204)
Amortization and Impairment of other intangibles	674	576	514
Impairment of investments in joint ventures and associates	–	20	168
Loss (Gain) on sale of premises and equipment	14	(24)	25
Gain on available-for-sale securities	(228)	(217)	(222)
Loss (Gain) on disposition of business	95	(17)	–
Impairment of available-for-sale securities	25	26	55
Share of profit in joint ventures and associates	(162)	(159)	(162)
Net gain on sales of joint ventures and associates	(62)	–	–
Adjustments for net changes in operating assets and liabilities			
Insurance claims and policy benefit liabilities	530	113	802
Net change in accrued interest receivable and payable	187	(467)	(177)
Current income taxes	(206)	354	(815)
Derivative assets	(12,580)	16,475	8,180
Derivative liabilities	12,237	(20,017)	(3,679)
Trading securities	(7,253)	(23,038)	6,850
Loans, net of securitizations	(27,096)	(20,175)	(29,320)
Assets purchased under reverse repurchase agreements and securities borrowed	(18,063)	(5,260)	(25,179)
Deposits	52,339	41,857	18,103
Obligations related to assets sold under repurchase agreements and securities loaned	3,915	(3,616)	16,162
Obligations related to securities sold short	3,233	6,372	(3,484)
Brokers and dealers receivable and payable	(638)	536	537
Other	(2,247)	3,794	864
Net cash from (used in) operating activities	15,174	7,085	(1,647)
Cash flows from investing activities			
Change in interest-bearing deposits with banks	640	1,207	1,585
Proceeds from sale of available-for-sale securities	8,795	6,476	9,779
Proceeds from maturity of available-for-sale securities	38,950	37,099	45,991
Purchases of available-for-sale securities	(54,208)	(41,057)	(54,782)
Proceeds from maturity of held-to-maturity securities	285	401	190
Purchases of held-to-maturity securities	(1,625)	(284)	(242)
Net acquisitions of premises and equipment and other intangibles	(1,227)	(932)	(1,320)
Proceeds from dispositions	173	17	2,677
Cash used in acquisitions	–	(2,537)	(628)
Net cash (used in) from investing activities	(8,217)	390	3,250
Cash flows from financing activities			
Redemption of trust capital securities	(900)	–	–
Issue of subordinated debentures	2,000	2,046	–
Repayment of subordinated debentures	(1,600)	(2,000)	(1,006)
Issue of common shares	150	121	126
Common shares purchased for cancellation	(113)	(408)	–
Issue of preferred shares	1,000	–	–
Redemption of preferred shares	(1,525)	(222)	–
Sales of treasury shares	5,457	4,580	5,284
Purchase of treasury shares	(5,428)	(4,569)	(5,261)
Dividends paid	(4,211)	(3,810)	(3,272)
Issuance costs	(14)	–	–
Dividends/distributions paid to non-controlling interests	(94)	(94)	(92)
Change in short-term borrowings of subsidiaries	(6)	(93)	21
Net cash used in financing activities	(5,284)	(4,449)	(4,200)
Effect of exchange rate changes on cash and due from banks	198	96	1
Net change in cash and due from banks	1,871	3,122	(2,596)
Cash resources at beginning of period ^{(1), (2)}	15,550	12,428	15,024
Cash and due from banks at end of period ⁽¹⁾	\$ 17,421	\$ 15,550	\$ 12,428
Cash flows from operating activities include:			
Amount of interest paid	\$ 7,186	\$ 7,223	\$ 7,839
Amount of interest received	20,552	19,348	19,691
Amount of dividend received	1,702	1,478	1,316
Amount of income taxes paid	2,315	1,479	2,884

(1) We are required to maintain balances with central banks and other regulatory authorities. The total balances were \$2.0 billion as at October 31, 2014 (October 31, 2013 – \$2.6 billion; October 31, 2012 – \$2.1 billion; November 1, 2011 – \$2.0 billion).

(2) For the year ended October 31, 2012, cash resources at the beginning of the period include cash and due from banks of \$12,308 million and cash and due from banks included in assets of discontinued operations of \$2,716 million.

The accompanying notes are an integral part of these Consolidated Financial Statements. Comparative amounts have been restated. Refer to Note 2.

Note 1 General information

Royal Bank of Canada and its subsidiaries (the Bank) provide diversified financial services including personal and commercial banking, wealth management, insurance, investor services and capital markets products and services on a global basis. Refer to Note 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. Our common shares are listed on the Toronto Stock Exchange and New York Stock Exchange with the ticker symbol RY.

These Consolidated Financial Statements are prepared in compliance with International Financial Reporting Standards (IFRS) as issued by the International Accounting Standards Board (IASB). Unless otherwise stated, monetary amounts are stated in Canadian dollars. Tabular information is stated in millions of dollars, except per share amounts and percentages. These Consolidated Financial Statements also comply with Subsection 308 of the *Bank Act* (Canada), which states that, except as otherwise specified by the Office of the Superintendent of Financial Institutions (OSFI), our Consolidated Financial Statements are to be prepared in accordance with IFRS. The accounting policies outlined in Note 2 have been consistently applied to all periods presented.

On December 2, 2014, 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: 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:

Consolidation of structured entities	Note 2 – page 117 Note 7 – page 149	Securities impairment	Note 2 – page 121 Note 4 – page 143
Fair value of financial instruments	Note 2 – page 122 Note 3 – page 131	Application of the effective interest method	Note 2 – page 123
Allowance for credit losses	Note 2 – page 125 Note 5 – page 146	Derecognition of financial assets	Note 2 – page 125 Note 6 – page 149
Employee benefits	Note 2 – page 127 Note 17 – page 168	Income taxes	Note 2 – page 127 Note 24 – page 180
Goodwill and other intangibles	Note 2 – page 128 Note 10 – page 160 Note 11 – page 162	Provisions	Note 2 – page 129 Note 26 – page 182 Note 27 – page 185

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 structured entities, after elimination of intercompany transactions, balances, revenues and expenses.

Consolidation

Subsidiaries are those entities, including structured entities, over which we have control. We control an entity when we are exposed, or have rights, to variable returns from our involvement with the entity and have the ability to affect those returns through our power over the investee. We have power over an entity when we have existing rights that give us the current ability to direct the activities that most significantly affect the entity's returns (relevant activities). Power may be determined on the basis of voting rights or, in the case of structured entities, other contractual arrangements.

We are not deemed to control an entity when we exercise power over an entity in an agency capacity. In determining whether we are acting as an agent, we consider the overall relationship between us, the investee and other parties to the arrangement with respect to the following factors: (i) the scope of our decision making power; (ii) the rights held by other parties; (iii) the remuneration to which we are entitled; and (iv) our exposure to variability of returns.

The determination of control is based on the current facts and circumstances and is continuously assessed. In some circumstances, different factors and conditions may indicate that various parties control an entity depending on whether those factors and conditions are assessed in isolation or in totality. Significant judgment is applied in assessing the relevant factors and conditions in totality when determining whether we control an entity. Specifically, judgment is applied in assessing whether we have substantive decision making rights over the relevant activities and whether we are exercising our power as a principal or an agent.

We consolidate all subsidiaries from the date control is transferred to us, and cease consolidation when an entity is no longer controlled by us. Our consolidation conclusions affect the classification and amount of assets, liabilities, revenues and expenses reported in our Consolidated Financial Statements.

Non-controlling interests in subsidiaries 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 and joint ventures

Our investments in associated corporations and limited partnerships over which we have significant influence are accounted for using the equity method. The equity method is also applied to our interests in joint ventures over which we have joint control. 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 in other comprehensive income (OCI), subsequent to the date of acquisition.

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.

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. Our U.S. regional retail banking operations are reflected as discontinued operations on our Consolidated Financial Statements for all periods presented.

Changes in accounting policies

During the first quarter, we adopted the following new accounting standards (in order of significance).

IAS 19 Employee Benefits (IAS 19)

The amendments to IAS 19 change the accounting for pension and other post-employment benefits, specifically with respect to actuarial gains and losses, past service costs, interest expense and return on plan assets. The amended standard eliminates the deferral and amortization of actuarial gains and losses in net income, instead requiring the immediate recognition of actuarial gains and losses in OCI. Past service costs are immediately recognized in the period in which a plan amendment occurs. Net interest, calculated by applying the discount rate to the Net defined benefit liability or asset, replaces the Interest cost and Expected return on plan assets components of Defined benefit pension expense. The amendments also introduce a number of interim and annual disclosure requirements for defined benefit plans.

We retrospectively adopted the amendments on November 1, 2013. Under the amended standard, we recognize the present value of our defined benefit obligation under each of our defined benefit plans, less the fair value of the plan's assets, as a liability reported in Employee benefit liabilities on our Consolidated Balance Sheets. For plans where there is a net defined benefit asset, the amount is reported as an asset in Employee benefit assets. New annual disclosures have been provided in Note 17.

IFRS 10 Consolidated Financial Statements (IFRS 10)

IFRS 10 replaces the consolidation requirements in IAS 27 *Consolidated and Separate Financial Statements* (IAS 27) and SIC-12 *Consolidation – Special Purpose Entities* (SIC-12) and provides a single consolidation model applicable to all types of entities. IFRS 10 is based on the existing principle that an entity should consolidate all other entities that it controls.

Under IAS 27 and SIC-12, control was based on having a majority of the voting interests or, for special purpose entities, an overall assessment of the purpose and design of the entity, our decision making rights, and our exposure to the majority of the risks and rewards of ownership. Under IFRS 10, control is based on three conditions, which must all be satisfied: (i) decision making power over the relevant activities, (ii) exposure to variable returns, and (iii) a link between decision making power and returns. IFRS 10 introduces a substantial amount of application guidance that expands on new and existing principles related to the determination of control. It places a greater emphasis on decision making power by making it a required condition for control, removes the bright lines for assessing exposure to risks and rewards, and introduces new considerations related to our role as a principal or an agent in entities over which we have decision making power. The determination of control is based on the current facts and circumstances and is to be continuously assessed.

We retrospectively adopted IFRS 10 on November 1, 2013. On adoption, RBC Capital Trust II was deconsolidated as our involvement does not expose us to variable returns. See Note 20 for further details on our innovative capital instruments.

IFRS 11 Joint Arrangements (IFRS 11)

IFRS 11 requires a party to a joint arrangement to determine the type of joint arrangement in which it is involved by assessing its rights and obligations arising from the arrangement. IFRS 11 requires a joint operator to recognize and measure the assets and liabilities in relation to its interest in the arrangement, and a joint venturer to apply the equity method of accounting. We retrospectively adopted IFRS 11 on November 1, 2013. The adoption resulted in a change to our method of accounting for joint ventures from proportionate consolidation to the equity method.

IFRS 12 Disclosure of Interest in Other Entities (IFRS 12)

IFRS 12 provides enhanced guidance on the annual disclosure requirements of a reporting entity's interests in other entities. The standard requires an entity to disclose information that helps users to evaluate (i) the nature of, and risks associated with, a reporting entity's interests in subsidiaries, joint arrangements, associates and unconsolidated structured entities (off-balance sheet structures); and (ii) the effect of those interests on the entity's financial position, financial performance and cash flows. We adopted IFRS 12 on November 1, 2013. Our annual disclosures in Notes 7 and 12 have been updated to reflect the requirements of IFRS 12.

IAS 27 Separate Financial Statements (IAS 27) and IAS 28 Investments in Associates and Joint Ventures (IAS 28)

As a consequence of the new IFRS standards IFRS 10, IFRS 11 and IFRS 12, the IASB issued amended and retitled IAS 27 and IAS 28. We retrospectively adopted these new requirements on November 1, 2013. The adoption did not impact the Consolidated Financial Statements.

IFRS 13 Fair Value Measurement (IFRS 13)

IFRS 13 provides a revised definition of fair value and sets out a framework for measuring fair value in a single standard. IFRS 13 also requires more comprehensive disclosure requirements on fair value measurement. The measurement and disclosure requirements of IFRS 13 apply when another standard requires or permits the item to be measured at fair value with limited exceptions. We prospectively adopted IFRS 13 on November 1, 2013. The adoption did not have a material impact on the Consolidated Financial Statements. New annual disclosures have been provided in Notes 3, 10 and 17.

IFRS 7 Financial Instruments – Disclosure (IFRS 7)

The amendments to IFRS 7 require expanded disclosures to enable users to assess the effect of offsetting arrangements on an entity's financial position. The amendments require entities to disclose both gross and net amounts associated with master netting agreements and similar arrangements, including the effects of financial collateral, whether or not they are presented net on the balance sheet. We adopted the amendments to IFRS 7 on November 1, 2013. New annual disclosures have been provided in Note 33.

The tables below present the impact of the above standards adopted during the first quarter on our Consolidated Balance Sheets as at October 31, 2013, October 31, 2012 and November 1, 2011 and Consolidated Statements of Income for the years ended October 31, 2013 and 2012.

	As at and for the year ended October 31, 2013					
	Published	Adjustments			Total impact	Restated
		IAS 19	IFRS 10	IFRS 11		
<i>(Millions of Canadian dollars, except per share amounts)</i>						
Consolidated Balance Sheet						
Cash and due from banks	\$ 15,870	\$ –	\$ –	\$ (320)	\$ (320)	\$ 15,550
Interest-bearing deposits with banks	9,061	–	–	(22)	(22)	9,039
Securities – Trading and Available-for-sale	182,718	–	1	(9)	(8)	182,710
Loans – Wholesale ⁽¹⁾	89,998	–	3	181	184	90,182
Other – Investment in joint ventures and associates	112	–	–	135	135	247
Other – Employee benefit assets	1,084	(923)	–	–	(923)	161
Other – Other lines impacted by accounting changes ⁽²⁾	40,503	292	–	(412)	(120)	40,383
Lines not impacted by accounting changes	521,473	–	–	–	–	521,473
Total assets	860,819	(631)	4	(447)	(1,074)	859,745
Deposits – Business and government ⁽¹⁾	353,723	–	903	(33)	870	354,593
Other – Employee benefit liabilities	1,759	268	–	–	268	2,027
Other – Other liabilities ⁽¹⁾	35,384	(24)	1	(414)	(437)	34,947
Trust capital securities	900	–	(900)	–	(900)	–
Retained earnings	28,314	(876)	–	–	(876)	27,438
Other components of equity	1,207	1	–	–	1	1,208
Lines not impacted by accounting changes	439,532	–	–	–	–	439,532
Total liabilities and equity	\$ 860,819	\$ (631)	\$ 4	\$ (447)	\$ (1,074)	\$ 859,745
Consolidated Statement of Income						
Net income	\$ 8,429	\$ (87)	\$ –	\$ –	\$ (87)	\$ 8,342
Basic earnings per share (in dollars)	5.60	(0.07)	–	–	(0.07)	5.53
Diluted earnings per share (in dollars)	5.54	(0.05)	–	–	(0.05)	5.49

(Millions of Canadian dollars, except per share amounts)	As at and for the year ended October 31, 2012					
	Published	Adjustments			Total impact	Restated
		IAS 19	IFRS 10	IFRS 11		
Consolidated Balance Sheet						
Cash and due from banks	\$ 12,617	\$ –	\$ –	\$ (189)	\$ (189)	\$ 12,428
Interest-bearing deposits with banks	10,255	–	–	(9)	(9)	10,246
Securities – Trading and Available-for-sale	161,611	–	1	(10)	(9)	161,602
Loans – Wholesale ⁽¹⁾	79,953	–	3	(7)	(4)	79,949
Other – Investment in joint ventures and associates	125	–	–	452	452	577
Other – Employee benefit assets	1,049	(920)	–	–	(920)	129
Other – Other lines impacted by accounting changes ⁽²⁾	47,881	367	–	(834)	(467)	47,414
Lines not impacted by accounting changes	511,609	–	–	–	–	511,609
Total assets	825,100	(553)	4	(597)	(1,146)	823,954
Deposits – Business and government ⁽¹⁾	315,457	–	903	(21)	882	316,339
Other – Employee benefit liabilities	1,729	589	–	–	589	2,318
Other – Other liabilities ⁽¹⁾	38,228	(35)	1	(576)	(610)	37,618
Trust capital securities	900	–	(900)	–	(900)	–
Retained earnings	24,270	(1,108)	–	–	(1,108)	23,162
Other components of equity	830	1	–	–	1	831
Lines not impacted by accounting changes	443,686	–	–	–	–	443,686
Total liabilities and equity	\$ 825,100	\$ (553)	\$ 4	\$ (597)	\$ (1,146)	\$ 823,954
Consolidated Statement of Income						
Net income	\$ 7,539	\$ (32)	\$ –	\$ –	\$ (32)	\$ 7,507
Basic earnings per share (in dollars)	4.98	(0.02)	–	–	(0.02)	4.96
Diluted earnings per share (in dollars)	4.93	(0.02)	–	–	(0.02)	4.91

(Millions of Canadian dollars, except per share amounts)	As at November 1, 2011					
	Published	Adjustments			Total impact	Restated
		IAS 19	IFRS 10	IFRS 11		
Consolidated Balance Sheet						
Cash and due from banks	\$ 12,428	\$ –	\$ –	\$ (120)	\$ (120)	\$ 12,308
Interest-bearing deposits with banks	6,460	–	–	(3,133)	(3,133)	3,327
Securities – Trading and Available-for-sale	167,022	–	7	(4,577)	(4,570)	162,452
Loans – Wholesale ⁽¹⁾	64,752	–	3	(849)	(846)	63,906
Other – Investment in joint ventures and associates	142	–	–	1,652	1,652	1,794
Other – Employee benefit assets	311	(144)	–	(12)	(156)	155
Other – Other lines impacted by accounting changes ⁽²⁾	40,182	97	–	(3,872)	(3,775)	36,407
Lines not impacted by accounting changes	502,536	–	–	–	–	502,536
Total assets	793,833	(47)	10	(10,911)	(10,948)	782,885
Deposits – Business and government ⁽¹⁾	299,956	–	903	(15,424)	(14,521)	285,435
Other – Employee benefit liabilities	1,639	263	–	(8)	255	1,894
Other – Other liabilities ⁽¹⁾	36,796	(13)	1	4,521	4,509	41,305
Trust capital securities	894	–	(894)	–	(894)	–
Retained earnings	20,381	(297)	–	–	(297)	20,084
Other components of equity	490	–	–	–	–	490
Lines not impacted by accounting changes	433,677	–	–	–	–	433,677
Total liabilities and equity	\$ 793,833	\$ (47)	\$ 10	\$ (10,911)	\$ (10,948)	\$ 782,885

⁽¹⁾ Amounts have been restated from those originally published to reflect classification changes made in the current period.

⁽²⁾ Includes Premises and equipment, Goodwill, Other intangibles and Other assets.

During the second quarter, we adopted the following new accounting standard.

Own credit provisions of IFRS 9 *Financial Instruments* (IFRS 9)

The own credit provisions of IFRS 9 change the accounting for financial liabilities designated as at fair value through profit or loss (FVTPL). Previously under International Accounting Standard (IAS) 39 *Financial Instruments: Recognition and Measurement* (IAS 39), all fair value changes in financial liabilities designated as at FVTPL were recognized in net income. Under IFRS 9, the changes in the fair value of these liabilities attributable to our own credit are recognized in OCI rather than income. Amounts recognized in OCI will not be reclassified subsequently to net income.

We prospectively adopted the own credit provisions of IFRS 9 with an initial application date of November 1, 2013. Fair value changes in our financial liabilities designated as at FVTPL attributable to changes in our own credit risk are now recorded in OCI. The remaining fair value changes continue to be recorded in Trading revenue or Non-interest income - Other. We did not restate our quarterly or annual results for periods prior to February 1, 2014 as the amounts were not significant. Amounts recognized in the Statement of Income in the first quarter were recorded in OCI in the second quarter.

The table below presents the impact of adopting the above standard on our Consolidated Statement of Income and Consolidated Statement of Comprehensive Income for the year ended October 31, 2014. Results as reported under the own credit provisions of IFRS 9 are compared to the pro-forma results had we continued to apply IAS 39. The adoption did not impact our Consolidated Balance Sheet.

	For the year ended October 31, 2014		
	Pro-forma (IAS 39)	Impact	As reported (IFRS 9)
<i>(Millions of Canadian dollars, except per share amounts)</i>			
Consolidated Statement of Income			
Non-interest income – Trading revenue	\$ 672	\$ 70	\$ 742
Non-interest income – Other	674	11	685
Non-interest expense – Human resources (1)	11,008	23	11,031
Net income	8,962	42	9,004
Basic earnings per share (in dollars)	6.00	0.03	6.03
Diluted earnings per share (in dollars)	5.97	0.03	6.00
Consolidated Statement of Comprehensive Income			
Total other comprehensive income, net of taxes	\$ 974	\$ (59)	\$ 915

(1) Adjustments related to variable compensation arrangements.

Financial instruments – Recognition and measurement Securities

Securities are classified at inception, based on management's intention, as at 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. For held-to-maturity 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 the recognition of the impairment loss. Reversals of impairment losses on held-to-maturity securities are recorded to a maximum of what the amortized cost of the investment would have been before the original impairment charge. We hold an insignificant 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 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 (an accounting mismatch); (ii) it belongs to a group of financial assets or financial liabilities or both that are managed, evaluated, and reported to key management personnel on a fair value basis in accordance with our risk management strategy, and we can demonstrate that significant financial risks are eliminated or significantly reduced; or (iii) there is an embedded derivative in the financial or non-financial host contract and the derivative is not closely related to the host contract. These instruments cannot be reclassified out of the FVTPL category while they are held or issued.

Financial assets 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 Non-interest income – Other. Financial liabilities designated as at FVTPL are recorded at fair value and fair value changes attributable to changes in our own credit risk are recorded in OCI. The remaining fair value changes are recorded in Trading revenue or Non-interest income – Other. Upon initial recognition, if we determine that presenting the effects of own credit risk changes in OCI would create or enlarge an accounting mismatch in net income, the full fair value change in our debt designated as at FVTPL is recognized in net income.

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 OCI, Trading revenue or Non-interest income – Other as appropriate.

Determination of fair value

The fair value of a financial instrument is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. We determine fair value by incorporating all factors that market participants would consider in setting a price, including commonly accepted valuation approaches.

The Board of Directors provides oversight on valuation of financial instruments, primarily through the Audit Committee and Risk Committee. The Audit Committee reviews the presentation and disclosure of financial instruments that are measured at fair value, while the Risk Committee assesses adequacy of governance structures and control processes for valuation of these instruments.

We have established policies, procedures and controls for valuation methodologies and techniques to ensure fair value is reasonably estimated. Major valuation processes and controls include, but are not limited to, profit and loss decomposition, independent price verification (IPV) and model validation standards. These control processes are managed by either Finance or Group Risk Management and are independent of the relevant businesses and their trading functions. Profit and loss decomposition is a process to explain the fair value changes of certain positions and is performed daily for trading portfolios. All fair value instruments are subject to IPV, a process whereby trading function valuations are verified against external market prices and other relevant market data. Market data sources include traded prices, brokers and price vendors. We give priority to those third-party pricing services and prices having the highest and most consistent accuracy. The level of accuracy is determined over time by comparing third-party price values to traders' or system values, to other pricing service values and, when available, to actual trade data. Other valuation techniques are used when a price or quote is not available. Some valuation processes use models to determine fair value. We have a systematic and consistent approach to control model use. Valuation models are approved for use within our model risk management framework. The framework addresses, among other things, model development standards, validation processes and procedures, and approval authorities. Model validation ensures that a model is suitable for its intended use and sets parameters for its use. All models are revalidated regularly.

We record valuation adjustments to appropriately reflect counterparty credit quality of our derivative portfolio, differences between the overnight index swap (OIS) curve and London Interbank Offered Rates (LIBOR) for collateralized derivatives, funding valuation adjustments (FVA) for uncollateralized and under-collateralized over-the-counter (OTC) derivatives, unrealized gains or losses at inception of the transaction, bid-offer spreads and unobservable parameters. These adjustments may be subjective as they require significant judgment in the input selection, such as probability of default and recovery rate, and are intended to arrive at fair value that is determined based on assumptions that market participants would use in pricing the financial instrument. The realized price for a transaction may be different from its recorded value that is previously estimated using management judgment, and may therefore impact unrealized gains and losses recognized in Non-interest income – Trading revenue or Other.

Valuation adjustments are recorded for the credit risk of our derivative portfolios in order to arrive at their fair values. Credit valuation adjustments (CVA) take into account our counterparties' creditworthiness, the current and potential future mark-to-market of the transactions, and the effects of credit mitigants such as master netting and collateral agreements. CVA amounts are derived from estimates of exposure at default, probability of default, recovery rates on a counterparty basis, and market and credit factor correlations. Exposure at default is the amounts of expected derivative related assets and liabilities at the time of default, estimated through modeling using underlying risk factors. Probability of default and recovery rate are generally implied from the market prices for credit protection and credit ratings of the counterparty. Correlation is the statistical measure of how credit and market factors may move in relation to one another. Correlation is estimated using historical data and market data where available. CVA is calculated daily and changes are recorded in Non-interest income – Trading revenue.

In the determination of fair value of collateralized OTC derivatives using the OIS curve, our valuation approach accounts for the difference between certain OIS rates and LIBOR for derivatives valuation as valuation adjustments.

FVA are also calculated to incorporate cost and benefit of funding in the valuation of uncollateralized and under-collateralized OTC derivatives. Future expected cash flows of these derivatives are discounted to reflect the cost and benefit of funding the derivatives by using a funding curve, implied volatilities and correlations as inputs.

Where required, a valuation adjustment is made to reflect the unrealized gain or loss at inception of a financial instrument contract where the fair value of that financial instrument is not obtained from a quoted market price or cannot be evidenced by other observable market transactions based on a valuation technique incorporating observable market data.

A bid-offer valuation adjustment is required when a financial instrument is valued at the mid-market price, instead of the bid or offer price for asset or liability positions, respectively. The valuation adjustment takes into account the spread from the mid to either the bid or offer price.

Some valuation models require parameter calibration from such factors as market observed option prices. The calibration of parameters may be sensitive to factors such as the choice of instruments or optimization methodology. A valuation adjustment is also estimated to mitigate the uncertainties of parameter calibration.

In determining fair value, a hierarchy is used which prioritizes the inputs to valuation techniques. The fair value hierarchy gives the highest priority to unadjusted quoted prices in active markets for identical assets or liabilities (Level 1) and the lowest priority to unobservable inputs (Level 3). Determination of fair value based on this hierarchy requires the use of observable market data whenever available. Level 1 inputs are unadjusted quoted prices in active markets for identical assets or liabilities that we have the ability to access at the measurement date. Level 2 inputs include quoted prices for similar assets or liabilities in active markets, quoted prices for identical or similar assets or liabilities in markets that are not active, and model inputs that are either observable, or can be corroborated by observable market data for substantially the full term of the assets or liabilities. Level 3 inputs are one or more inputs that are unobservable and significant to the fair value of the asset or liability. Unobservable inputs are used to measure fair value to the extent that observable inputs are not available at the measurement date. The availability of inputs for valuation may affect the selection of valuation techniques. The classification of a financial instrument in the hierarchy for disclosure purposes is based upon the lowest level of input that is significant to the measurement of fair value.

Where observable prices or inputs are not available, management judgment is required to determine fair values by assessing other relevant sources of information such as historical data, proxy information from similar transactions, and through extrapolation and interpolation techniques. For more complex or illiquid instruments, significant judgment is required in the determination of the model used, the selection of model inputs, and in some cases the application of valuation adjustments to the model value or quoted price for inactively traded financial instruments, as the selection of model inputs may be subjective and the inputs may be unobservable. Unobservable inputs are inherently uncertain as there is little or no market data available from which to determine the level at which the transaction would occur under normal business circumstances. Appropriate parameter uncertainty and market risk valuation adjustments for such inputs and other model risk valuation adjustments are assessed in all such instances.

Interest

Interest is recognized in Interest income and Interest expense in the Consolidated Statements of Income for all interest bearing financial instruments using the effective interest method. The effective interest rate is the rate that discounts estimated future cash flows over the expected life of the financial asset or liability to the net carrying amount upon initial recognition. Significant judgment is applied in determining the effective interest rate due to uncertainty in the timing and amounts of future cash flows.

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.

Offsetting financial assets and financial liabilities

Financial assets and financial liabilities are offset on the balance sheet when there exists both a legally enforceable right to offset the recognized amounts and an intention to settle on a net basis, or realize the asset and settle the liability simultaneously.

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.

Derivatives

Derivatives are primarily used in sales and trading activities. Derivatives are also used to manage our exposure to interest, currency, credit and other market risks. The most frequently used derivative products are interest rate swaps, interest rate futures, forward rate agreements, interest rate options, foreign exchange forward contracts, cross currency swaps, foreign currency futures, foreign currency options, equity swaps and credit derivatives. All derivative instruments are recorded on our Consolidated Balance Sheets at fair value, including those derivatives that are embedded in financial or non-financial contracts and are not closely related to the host contracts.

When derivatives are embedded in other financial instruments or host contracts, such combinations are known as hybrid instruments with the effect that some of the cash flows of a hybrid instrument vary in a way similar to a stand-alone derivative. If the host contract is not carried at fair value with changes in fair value reported in our Consolidated Statements of Income, the embedded derivative is generally required to be separated from the host contract and accounted for separately as at FVTPL if the economic characteristics and risks of the embedded derivative are not closely related to those of the host contract. All embedded derivatives are presented on a combined basis with the host contracts although they are separated for measurement purposes when conditions requiring separation are met.

When derivatives are used in sales and trading activities, the realized and unrealized gains and losses on these derivatives are recognized in Trading revenue in Non-interest income. Derivatives with positive fair values are reported as Derivative assets and derivatives with negative fair values are reported as Derivative liabilities. In accordance with our policy for offsetting financial assets and financial liabilities, the net fair value of certain derivative assets and liabilities are reported as an asset or liability, as appropriate. Valuation adjustments are included in the fair value of Derivative assets and Derivative liabilities. Premiums paid and premiums received are shown in Derivative assets and Derivative liabilities, respectively.

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 strategy for undertaking the hedge transaction. The documentation identifies the specific asset, liability or anticipated cash flows being hedged, the risk that is being hedged, the type of hedging instrument used and how effectiveness will be assessed. We assess, both at the inception of the hedge and on an ongoing basis, whether the hedging instruments have been 'highly effective' in offsetting changes in the fair value or cash flows of the hedged items. A hedge is regarded as highly effective only if the following criteria are met: (i) at inception of the hedge and throughout its life, the hedge is expected to be highly effective in achieving offsetting changes in fair value or cash flows attributable to the hedged risk, and (ii) actual results of the hedge are within a pre-determined range. In the case of hedging a forecast transaction, the transaction must have a high probability of occurring and must present an exposure to variations in cash flows that could ultimately affect the reported net profit or loss. Hedge accounting is discontinued when it is determined that the hedging instrument is no longer effective as a hedge, the hedging instrument is terminated or sold, upon the sale or early termination of the hedged item, or when the forecast transaction is no longer deemed highly probable. Refer to Note 8 for the fair value of derivatives and non-derivative instruments categorized by their hedging relationships, as well as derivatives that are not designated in hedging relationships.

Fair value hedges

In a fair value hedging relationship, the carrying value of the hedged item is adjusted for changes in fair value attributable to the hedged risk and recognized in Non-interest income. Changes in fair value of the hedged item, to the extent that the hedging relationship is effective, are offset by changes in the fair value of the hedging derivative, which are also recognized in Non-interest income. When hedge accounting is discontinued, the carrying value of the hedged item is no longer adjusted and the cumulative fair value adjustments to the carrying value of the hedged items are amortized to Net income over the remaining life of the hedged items.

We predominantly use interest rate swaps to hedge our exposure to 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. Loans are subsequently measured at amortized cost using the effective interest method less impairment, unless we intend to sell them in the near future upon origination or they have been designated as at FVTPL, in which case they are carried at fair value.

We assess at each balance sheet date whether there is objective evidence that the loans are impaired. Evidence of impairment may include indications that the borrower is experiencing significant financial difficulty, probability of bankruptcy or other financial reorganization, as well as a measurable decrease in the estimated future cash flows evidenced by the adverse changes in the payments status of the borrower or economic conditions that correlate with defaults. Whenever a payment is 90 days past due, loans other than credit card balances and loans guaranteed or insured by a Canadian government (Federal or Provincial) or a Canadian government agency (collectively, Canadian government) are classified as impaired unless they are fully secured and collection efforts are reasonably expected to result in repayment of debt within 180 days of the loans becoming past due. Loans guaranteed by a Canadian government are classified as impaired when the loan is contractually 365 days in arrears. Credit card balances are written off when a payment is 180 days in arrears.

Assets acquired to satisfy loan commitments are recorded at their fair value less costs to sell. Fair value is determined based on either current market value where available or discounted cash flows. Any excess of the carrying value of the loan over the fair value of the assets acquired is recognized by a charge to Provision for credit losses.

Interest on loans is recognized in Interest income – Loans using the effective interest method. The estimated future cash flows used in this calculation include those determined by the contractual term of the asset, all fees that are considered to be integral to the effective interest rate, transaction costs and all other premium or discounts. Fees that relate to activities such as originating, restructuring or renegotiating loans are deferred and recognized as Interest income over the expected term of such loans using the effective interest method. Where there is a reasonable expectation that a loan will result, commitment and standby fees are also recognized as interest income over the expected term of the resulting loans using the effective interest method. Otherwise, such fees are recorded as other liabilities and amortized into Non-interest income over the commitment or standby period. Prepayment fees on mortgage loans are not included as part of the effective interest rate at origination as the amounts are not reliably measurable. If prepayment fees are received on a renewal of a mortgage loan, the fee is included as part of the effective interest rate, and if not renewed, the prepayment fee is recognized in interest income at the prepayment date.

Allowance for credit losses

An allowance for credit losses is established if there is objective evidence that we will be unable to collect all amounts due on our loans portfolio according to the original contractual terms or the equivalent value. This portfolio includes on-balance sheet exposures, such as loans and acceptances, and off-balance sheet items such as letters of credit, guarantees and unfunded commitments.

The allowance for credit losses is increased by the impairment losses recognized and decreased by the amount of write-offs, net of recoveries. The allowance for credit losses for on-balance sheet items is included as a reduction to assets, and the allowance for credit losses relating to off-balance sheet items is included in Provisions under Other Liabilities.

We assess whether objective evidence of impairment exists individually for loans that are individually significant and collectively for loans that are not individually significant. If we determine that no objective evidence of impairment exists for an individually assessed loan, whether significant or not, the loan is included in a group of loans with similar credit risk characteristics and collectively assessed for impairment. Loans that are individually assessed for impairment and for which an impairment loss is recognized are not included in a collective assessment of impairment.

Allowance for credit losses represent management's best estimates of losses incurred in our loan portfolio at the balance sheet date. Management's judgment is required in making assumptions and estimations when calculating allowances on both individually and collectively assessed loans. The underlying assumptions and estimates used for both individually and collectively assessed loans can change from period to period and may significantly affect our results of operations.

Individually assessed loans

Loans which are individually significant are assessed individually for objective indicators of impairment. A loan is considered impaired when management determines that it will not be able to collect all amounts due according to the original contractual terms or the equivalent value.

Credit exposures of individually significant loans are evaluated based on factors including the borrower's overall financial condition, resources and payment record, and where applicable, the realizable value of any collateral. If there is evidence of impairment leading to an impairment loss, then the amount of the loss is determined as the difference between the carrying amount of the loan, including accrued interest, and the estimated recoverable amount. The estimated recoverable amount is measured as the present value of expected future cash flows discounted at the loan's original effective interest rate, including cash flows that may result from the realization of collateral less costs to sell. Individually-assessed impairment losses reduce the carrying amount of the loan through the use of an allowance account and the amount of the loss is recognized in Provision for credit losses in our Consolidated Statements of Income. Following impairment, interest income is recognized on the unwinding of the discount from the initial recognition of impairment.

Significant judgment is required in assessing evidence of impairment and estimation of the amount and timing of future cash flows when determining the impairment loss. When assessing objective evidence of impairment we primarily consider specific factors such as the financial condition of the borrower, borrower's default or delinquency in interest or principal payments, local economic conditions and other observable data. In determining the estimated recoverable amount we consider discounted expected future cash flows at the effective interest rate using a number of assumptions and inputs. Management judgment is involved when choosing these inputs and assumptions used such as the expected amount of the loan that will not be recovered and the cost of time delays in collecting principal and/or interest, and when estimating the value of any collateral held for which there may not be a readily accessible market. Changes in the amount expected to be recovered would have a direct impact on the Provision for credit losses and may result in a change in the Allowance for credit losses

Collectively assessed loans

Loans which are not individually significant, or which are individually assessed and not determined to be impaired, are collectively assessed for impairment. For the purposes of a collective evaluation of impairment, loans are grouped on the basis of similar risk characteristics, taking into account loan type, industry, geographic location, collateral type, past due status and other relevant factors.

The collective impairment allowance is determined by reviewing factors including: (i) historical loss experience, which takes into consideration historical probabilities of default, loss given default and exposure at default, in portfolios of similar credit risk characteristics, and (ii) management's judgment on the level of impairment losses based on historical experience relative to the actual level as reported at the balance sheet date, taking into consideration the current portfolio credit quality trends, business and economic and credit conditions, the impact of policy and process changes, and other supporting factors. Future cash flows for a group of loans are collectively evaluated for impairment on the basis of the contractual cash flows of the loans in the group and historical loss experience for loans with credit risk characteristics similar to those in the group. Historical loss experience is adjusted based on current observable data to reflect the effects of current conditions that did not affect the period on which the historical loss experience is based and to remove the effects of conditions in the historical period that do not currently exist. The methodology and assumptions used for estimating future cash flows are reviewed regularly to reduce any differences between loss estimates and actual loss experience. Collectively-assessed impairment losses reduce the carrying amount of the aggregated loan position through an allowance account and the amount of the loss is recognized in Provision for credit losses. Following impairment, interest income is recognized on the unwinding of the discount from the initial recognition of impairment.

The methodology and assumptions used to calculate collective impairment allowances are subject to uncertainty, in part because it is not practicable to identify losses on an individual loan basis due to the large number of individually insignificant loans in the portfolio. Significant judgment is required in assessing historical loss experience, the loss identification period and its relationship to current portfolios including delinquency, and loan balances; and current business, economic and credit conditions including industry specific performance, unemployment and country risks. Changes in these assumptions would have a direct impact on the Provision for credit losses and may result in changes in the related Allowance for credit losses.

Write-off of loans

Loans and the related impairment allowance for credit losses are written off, either partially or in full, when there is no realistic prospect of recovery. Where loans are secured, they are generally written off after receipt of any proceeds from the realization of the collateral. In circumstances where the net realizable value of any collateral has been determined and there is no reasonable expectation of further recovery, write off may be earlier. For credit cards, the balances and related allowance for credit losses are written off when payment is 180 days in arrears. Personal loans are generally written off at 150 days past due.

Derecognition of financial assets

Our various securitization activities generally consist of the transfer of financial assets such as loans or packaged mortgage-backed securities (MBS) to independent structured entities or trusts that issue securities to investors.

Financial assets are derecognized from our Consolidated Balance Sheets when our contractual rights to the cash flows from the assets have expired, when we retain the rights to receive the cash flows of the assets but assume an obligation to pay those cash flows to a third party subject to certain pass-through requirements or when we transfer our contractual rights to receive the cash flows and substantially all of the risk and rewards of the assets have been transferred. When we retain substantially all of the risks and rewards of the transferred assets, the transferred assets are not derecognized from our Consolidated Balance Sheets and are accounted for as secured financing transactions. When we neither retain nor transfer substantially all risks and rewards of ownership of the assets, we derecognize the assets if control over the assets is relinquished. If we retain control over the transferred assets, we continue to recognize the transferred assets to the extent of our continuing involvement.

Management's judgment is applied in determining whether the contractual rights to the cash flows from the transferred assets have expired or whether we retain the rights to receive cash flows on the assets but assume an obligation to pay for those cash flows. We derecognize transferred financial assets if we transfer substantially all the risk and rewards of the ownership in the assets. When assessing whether we have transferred substantially all of the risk and rewards of the transferred assets, management considers the entity exposure before and after the transfer with the variability in the amount and timing of the net cash flows of the transferred assets. In transfers that we retain the servicing rights, management has applied judgment in assessing the benefits of servicing against market expectations. When the benefits of servicing are greater than fair market value, a servicing asset is recognized in Other assets in our Consolidated Balance Sheets. When the benefits of servicing are less than fair market value, a servicing liability is recognized in Other liabilities in our Consolidated Balance Sheets.

Derecognition of financial liabilities

We derecognize a financial liability from our Consolidated Balance Sheets when our obligation specified in the contract expires, or is discharged or cancelled. We recognize the difference between the carrying amount of a financial liability transferred and the consideration paid in our Consolidated Statements of Income.

Guarantees

Financial guarantee contracts are contracts that contingently require us to make specified payments (in cash, other assets, our own shares or provision of services) to reimburse the holder for a loss it incurs because a specified debtor fails to make payment when due in accordance with the original or modified terms of a debt instrument. Liabilities are recognized on our Consolidated Balance Sheets at the inception of a guarantee for the fair value of the obligation undertaken in issuing the guarantee. Financial guarantees are subsequently remeasured at the higher of (i) the amount initially recognized and (ii) our best estimate of the present value of the expenditure required to settle the present obligation at the end of the reporting period.

If the financial guarantee contract meets the definition of a derivative, it is measured at fair value at each balance sheet date and reported under Derivatives on our Consolidated Balance Sheets.

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. As the segregated fund policyholders bear the risks and rewards of the funds' performance, investment income earned by the segregated funds and expenses incurred by the segregated funds are offset and are not separately presented in our Consolidated Statements of Income. Fee income we earn from segregated funds includes management fees, mortality, policy administration and surrender charges, and these fees are recorded in Non-interest income – Insurance premiums, investment and fee income. 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

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, net interest on the net defined benefit liability (asset), past service cost and gains or losses on settlement. Remeasurements of the net defined benefit liability, which comprise actuarial gains and losses and return on plan assets (excluding amounts included in net interest on the net defined benefit liability), are recognized immediately in OCI in the period in which they occur. Actuarial gains and losses comprise experience adjustments (the effects of differences between the previous actuarial assumptions and what has actually occurred), as well as the effects of changes in actuarial assumptions. Past service cost is the change in the present value of the defined benefit obligation resulting from a plan amendment or curtailment and is charged immediately to income.

For each defined benefit plan, we recognize the present value of our defined benefit obligations less the fair value of the plan assets, as a defined benefit liability reported in Employee benefit liabilities on our Consolidated Balance Sheets. For plans where there is a net defined benefit asset, the amount is reported as an asset in Employee benefit assets on our Consolidated Balance sheets.

The calculation of defined benefit expenses and obligations requires significant judgment as the recognition is dependent on discount rates 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. 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, expenses and remeasurements that we recognize.

Our contributions to defined contribution plans are expensed when employees have rendered services in exchange for such contributions. 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 carryforwards 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 in our Consolidated Statements of Income.

Business combinations, goodwill and other intangibles

All business combinations are accounted for using the acquisition method. Non-controlling interests, if any, are recognized at their proportionate share of the fair value of identifiable assets and liabilities, unless otherwise indicated. Identifiable intangible assets are recognized separately from goodwill and included in Other intangibles. Goodwill represents the excess of the price paid for the business acquired over the fair value of the net identifiable assets acquired on the date of acquisition.

Goodwill

Goodwill is allocated to cash-generating units or groups of cash-generating units (CGU) for the purpose of impairment testing, which is undertaken at the lowest level at which goodwill is monitored for internal management purposes. Impairment testing is performed annually as at August 1, or more frequently if there are objective indicators of impairment, by comparing the recoverable amount of a CGU with its carrying amount. The recoverable amount of a CGU is the higher of its value in use and its fair value less costs of disposal. Value in use is the present value of the expected future cash flows from a CGU. Fair value less costs of disposal is the amount obtainable from the sale of a CGU in an orderly transaction between market participants, less disposal costs. The fair value of a CGU is estimated using valuation techniques such as a discounted cash flow method, adjusted to reflect the considerations of a prospective third-party buyer. External evidence such as binding sale agreements or recent transactions for similar businesses within the same industry is considered to the extent that it is available.

Significant judgment is involved in estimating the model inputs used to determine the recoverable amount of our CGU, in particular future cash flows, discount rates and terminal growth rates, due to the uncertainty in the timing and amount of cash flows and the forward-looking nature of these inputs. Future cash flows are based on financial plans agreed by management which are estimated based on forecast results, business initiatives, planned capital investments and returns to shareholders. Discount rates are based on the bank-wide cost of capital, adjusted for CGU-specific risks and currency exposure as reflected by differences in expected inflation. Bank-wide cost of capital is based on the Capital Asset Pricing Model. CGU-specific risks include country risk, business/operational risk, geographic risk (including political risk, devaluation risk, and government regulation), currency risk, and price risk (including product pricing risk and inflation). Terminal growth rates reflect the expected long-term gross domestic product growth and inflation for the countries within which the CGU operates. Changes in these assumptions may impact the amount of impairment loss recognized in Non-interest expense.

The carrying amount of a CGU includes the carrying amount of assets, liabilities and goodwill allocated to the CGU. If the recoverable amount is less than the carrying value, the impairment loss is allocated first to reduce the carrying amount of any goodwill allocated to the CGU and then to the other non-financial assets of the CGU proportionately based on the carrying amount of each asset. Any impairment loss is charged to income in the period in which the impairment is identified. Goodwill is stated at cost less accumulated impairment losses. Subsequent reversals of goodwill impairment are prohibited.

Upon disposal of a portion of a CGU, the carrying amount of goodwill relating to the portion of the CGU sold is included in the determination of gains or losses on disposal. The carrying amount is determined based on the relative fair value of the disposed portion to the total CGU.

Other intangibles

Intangible assets represent identifiable non-monetary assets and are acquired either separately or through a business combination, or generated internally. Intangible assets acquired through a business combination are recognized separately from goodwill when they are separable or arise from contractual or other legal rights, and their fair value can be measured reliably. The cost of a separately acquired intangible asset includes its purchase price and directly attributable costs of preparing the asset for its intended use. In respect of internally generated intangible assets, cost includes all directly attributable costs necessary to create, produce, and prepare the asset to be capable of operating in the manner intended by management. Research and development costs that are not eligible for capitalization are expensed. After initial recognition, an intangible asset is carried at its cost less any accumulated amortization and accumulated impairment losses, if any. Intangible assets with a finite-life are amortized on a straight-line basis over their estimated useful lives as follows: computer software – 3 to 10 years; and customer relationships – 10 to 20 years. We do not have any intangible assets with indefinite lives.

Intangible assets are assessed for indicators of impairment at each reporting period. If there is an indication that an intangible asset may be impaired, an impairment test is performed by comparing the carrying amount of the intangible asset to its recoverable amount. Where it is not possible to estimate the recoverable amount of an individual asset, we estimate the recoverable amount of the CGU to which the asset belongs. If the recoverable amount of the asset (or CGU) is less than its carrying amount, the carrying amount of the intangible asset is written down to its recoverable amount as an impairment loss.

An impairment loss recognized previously is reversed if there is a change in the estimates used to determine the recoverable amount of the asset (or CGU) since the last impairment loss was recognized. If an impairment loss is subsequently reversed, the carrying amount of the asset (or CGU) is revised to the lower of its recoverable amount and the carrying amount that would have been determined (net of amortization) had there been no prior impairment.

Due to the subjective nature of these estimates, significant judgment is required in determining the useful lives and recoverable amounts of our intangible assets, and assessing whether certain events or circumstances constitute objective evidence of impairment. Estimates of the recoverable amounts of our intangible assets rely on certain key inputs, including future cash flows and discount rates. Future cash flows are based on sales projections and allocated costs which are estimated based on forecast results and business initiatives. Discount rates are based on the bank-wide cost of capital, adjusted for asset-specific risks. Changes in these assumptions may impact the amount of impairment loss recognized in Non-interest expense.

Other

Translation of foreign currencies

Monetary assets and liabilities denominated in foreign currencies, are translated into Canadian dollars at rates prevailing at the balance sheet date. Foreign exchange gains and losses resulting from the translation and settlement of these items are recognized in Non-interest income in the Consolidated Statements of Income.

Non-monetary assets and liabilities that are measured at historical cost are translated into Canadian dollars at historical rates. Non-monetary financial assets classified as AFS securities, such as equity instruments, that are measured at fair value are translated into Canadian dollars at rates prevailing at the balance sheet date, and the resulting foreign exchange gains and losses are recorded in Other components of equity until the asset is sold or becomes impaired.

Assets and liabilities of our foreign operations with functional currencies other than Canadian dollars are translated into Canadian dollars at rates prevailing at the balance sheet date, and income and expenses of these foreign operations are translated at average rates of exchange for the reporting period.

Unrealized gains or losses arising as a result of the translation of our foreign operations along with the effective portion of related hedges are reported in Other components of equity on an after-tax basis. Upon disposal or partial disposal of a foreign operation, an appropriate portion of the accumulated net translation gains or losses is included in Non-interest income.

Premises and equipment

Premises and equipment includes land, buildings, leasehold improvements, computer equipment, furniture, fixtures and other equipment, and are stated at cost less accumulated depreciation and accumulated impairment losses. Cost comprises the purchase price, any costs directly attributable to bringing the asset to the location and condition necessary for its intended use, and the initial estimate of any disposal costs. Depreciation is recorded principally on a straight-line basis over the estimated useful lives of the assets, which are 25 to 50 years for buildings, 3 to 10 years for computer equipment, and 7 to 10 years for furniture, fixtures and other equipment. The amortization period for leasehold improvements is the lesser of the useful life of the leasehold improvements or the lease term plus the first renewal period, if reasonably assured of renewal, up to a maximum of 10 years. Land is not depreciated. Gains and losses on disposal are recorded in Non-interest income.

Premises and equipment are assessed for indicators of impairment at each reporting period. If there is an indication that an asset may be impaired, an impairment test is performed by comparing the asset's carrying amount to its recoverable amount. Where it is not possible to estimate the recoverable amount of an individual asset, we estimate the recoverable amount of the CGU to which the asset belongs and test for impairment at the CGU level. An impairment charge is recorded to the extent the recoverable amount of an asset (or CGU), which is the higher of value in use and fair value less costs of disposal, 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). Fair value less costs of disposal is the amount obtainable from the sale of the asset (or CGU) in an orderly transaction between market participants, less costs of disposal.

After the recognition of impairment, the depreciation charge is adjusted in future periods to reflect the asset's revised carrying amount. If an impairment is later reversed, the carrying amount of the asset is revised to the lower of the asset's recoverable amount and the carrying amount that would have been determined (net of depreciation) had there been no prior impairment loss. The depreciation charge in future periods is adjusted to reflect the revised carrying amount.

Provisions

Provisions are liabilities of uncertain timing or amount and are recognized when we have a present legal or constructive obligation as a result of a past event, it is probable that an outflow of resources will be required to settle the obligation, and a reliable estimate can be made of the amount of the obligation. Provisions are measured as the best estimate of the consideration required to settle the present obligation at the reporting date. Significant judgment is required in determining whether a present obligation exists and in estimating the probability, timing and amount of any outflows. We record provisions related to litigation, asset retirement obligations, and the allowance for off-balance sheet and other items. Provisions are recorded under Other liabilities on our Consolidated Balance Sheets.

We are required to estimate the results of ongoing legal proceedings, expenses to be incurred to dispose of capital assets, and credit losses on undrawn commitments and guarantees. The forward-looking nature of these estimates requires us to use a significant amount of judgment in projecting the timing and amount of future cash flows. We record our provisions on the basis of all available information at the end of the reporting period and make adjustments on a quarterly basis to reflect current expectations. Should actual results differ from our expectations, we may incur expenses in excess of the provisions recognized.

When some or all of the economic benefits required to settle a provision are expected to be recovered from a third party, such as an insurer, a separate asset is recognized if it is virtually certain that reimbursement will be received.

Commissions and fees

Portfolio management and other management advisory and service fees are recognized based on the applicable service contracts. Fees related to provision of services including asset management, wealth management, financial planning and custody services that cover a specified service period, are recognized over the period in which the service is provided. Fees such as underwriting fees and brokerage fees that are related to the provision of specific transaction type services are recognized when the service has been completed.

Dividend income

Dividend income is recognized when the right to receive payment is established. This is the ex-dividend date for listed equity securities, and usually the date when shareholders have approved the dividend for unlisted equity securities.

Leasing

A lease is an agreement whereby the lessor conveys to the lessee the right to use an asset for an agreed upon period of time in return for a payment or series of payments. A finance lease is a lease that transfers substantially all the risks and rewards incidental to ownership of the leased asset to the lessee, where title may or may not eventually be transferred. An operating lease is a lease other than a finance lease.

Operating leases

When we are the lessee in an operating lease, we record rental payments on a straight-line basis over the lease term in Non-interest expense.

Finance leases

When we are the lessee in a finance lease, we initially record both the leased asset and the related lease obligation in Premises and equipment, Other intangibles and Other liabilities on our Consolidated Balance Sheets at an amount equal to the fair value of the leased asset or, if lower, the present value of the minimum lease payments, each determined at the date of inception of the lease. Initial direct costs directly attributed to the lease are recognized as an asset under the finance lease.

Earnings per share

Earnings per share is computed by dividing Net income available to common shareholders by the weighted average number of common shares outstanding for the period. Net income available to common shareholders is determined after deducting dividend entitlements of preferred shareholders, any gain (loss) on redemption of preferred shares net of related income taxes and the net income attributable to non-controlling interests.

Diluted earnings per share reflects the potential dilution that could occur if additional common shares are assumed to be issued under securities or contracts that entitle their holders to obtain common shares in the future, to the extent such entitlement is not subject to unresolved contingencies. For contracts that may be settled in cash or in common shares at our option, diluted earnings per share is calculated based on the assumption that such contracts will be settled in shares. Income and expenses associated with these types of contracts are

excluded from the Net income available to common shareholders, and the additional number of shares that would be issued is included in the diluted earnings per share calculation. These contracts include our convertible Preferred Shares and Trust Capital Securities. For stock options whose exercise price is less than the average market price of our common shares, they are assumed to be exercised and the proceeds are used to repurchase common shares at the average market price for the period. The incremental number of common shares issued under stock options and repurchased from proceeds is included in the calculation of diluted earnings per share.

Share capital

We classify a financial instrument that we issue as a financial asset, financial liability or an equity instrument in accordance with the substance of the contractual arrangement.

Our common shares held by us are classified as treasury shares in equity and accounted for at weighted average cost. Upon the sale of treasury shares, the difference between the sale proceeds and the cost of the shares is recognized in Retained earnings. Financial instruments issued by us are classified as equity instruments when there is no contractual obligation to transfer cash or other financial assets. Incremental costs directly attributable to the issue of equity instruments are included in equity as a deduction from the proceeds, net of tax. Financial instruments that will be settled by a variable number of our common shares upon their conversion by the holders as well as the related accrued distributions are classified as liabilities on our Consolidated Balance Sheets. Dividends and yield distributions on these instruments are classified as Interest expense in our Consolidated Statements of Income.

Future changes in accounting policy and disclosure

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

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. The adoption of these amendments is not expected to have a material impact on our consolidated financial statements.

IFRS Interpretations Committee Interpretation 21 *Levies* (IFRIC 21)

In May 2013, the IASB issued IFRIC 21 which provides guidance on when to recognize a liability to pay a levy that is accounted for in accordance with IAS 37 *Provisions, Contingent Liabilities and Contingent Assets*. It also addresses the accounting for a liability to pay a levy whose timing and amount is certain. The Interpretation clarifies that the obligating event that gives rise to a liability to pay a levy is the activity described in the relevant legislation that triggers the payment of the levy. IFRIC 21 will be effective for us on November 1, 2014. The adoption of this interpretation is not expected to have a material impact on our consolidated financial statements.

IFRS 15 *Revenue from Contracts with Customers* (IFRS 15)

In May 2014, the IASB issued IFRS 15 which establishes principles for reporting about the nature, amount, timing and uncertainty of revenue and cash flows arising from an entity's contracts with customers. The standard provides a single, principles based five-step model for revenue recognition to be applied to all contracts with customers. IFRS 15 will be effective for us on November 1, 2017.

IFRS 9 *Financial Instruments*

In July 2014, the IASB issued the complete version of IFRS 9, first issued in November 2009, which brings together the classification and measurement, impairment and hedge accounting phases of the IASB's project to replace IAS 39.

IFRS 9 introduces a principles-based approach to the classification of financial assets based on an entity's business model and the nature of the cash flows of the asset. All financial assets, including hybrid contracts, are measured as at FVTPL, fair value through OCI or amortized cost. For financial liabilities, IFRS 9 includes the requirements for classification and measurement previously included in IAS 39.

IFRS 9 also introduces an expected loss impairment model for all financial assets not as at FVTPL. The model has three stages: (1) on initial recognition, 12-month expected credit losses are recognized in profit or loss and a loss allowance is established; (2) if credit risk increases significantly and the resulting credit risk is not considered to be low, full lifetime expected credit losses are recognized; and (3) when a financial asset is considered credit-impaired, interest revenue is calculated based on the carrying amount of the asset, net of the loss allowance, rather than its gross carrying amount.

Finally, IFRS 9 introduces a new hedge accounting model that aligns the accounting for hedge relationships more closely with an entity's risk management activities.

We adopted the own credit provisions of IFRS 9 in the second quarter of this year. The remaining sections of IFRS 9 will be effective for us no later than November 1, 2018.

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.

(Millions of Canadian dollars)	As at October 31, 2014							
	Carrying value and fair value			Carrying value	Fair value		Total carrying amount	Total fair value
	Financial instruments classified as at FVTPL	Financial instruments designated as at FVTPL	Available-for-sale instruments measured at fair value	Financial instruments measured at amortized cost	Financial instruments measured at amortized cost			
Financial assets								
Securities								
Trading	\$ 141,217	\$ 10,163	\$ –	\$ –	\$ –	\$ 151,380	\$ 151,380	
Available-for-sale (1)	–	–	46,009	1,759	1,762	47,768	47,771	
Total Securities	141,217	10,163	46,009	1,759	1,762	199,148	199,151	
Assets purchased under reverse repurchase agreements and securities borrowed	–	85,292	–	50,288	50,288	135,580	135,580	
Loans								
Retail	–	–	–	333,763	335,178	333,763	335,178	
Wholesale	1,337	2,278	–	97,851	97,758	101,466	101,373	
	1,337	2,278	–	431,614	432,936	435,229	436,551	
Other								
Derivatives	87,402	–	–	–	–	87,402	87,402	
Other assets	–	930	–	32,975	32,975	33,905	33,905	
Financial liabilities								
Deposits								
Personal	\$ 112	\$ 13,289	–	\$ 195,816	\$ 195,964	\$ 209,217	\$ 209,365	
Business and government (2)	–	59,446	–	327,214	328,328	386,660	387,774	
Bank (3)	–	6,592	–	11,631	11,636	18,223	18,228	
	112	79,327	–	534,661	535,928	614,100	615,367	
Other								
Obligations related to securities sold short	50,345	–	–	–	–	50,345	50,345	
Obligations related to assets sold under repurchase agreements and securities loaned	–	58,411	–	5,920	5,921	64,331	64,332	
Derivatives	88,982	–	–	–	–	88,982	88,982	
Other liabilities	20	30	–	36,816	36,762	36,866	36,812	
Subordinated debentures	–	106	–	7,753	7,712	7,859	7,818	

(Millions of Canadian dollars)	As at October 31, 2013							
	Carrying value and fair value			Carrying value	Fair value		Total carrying amount	Total fair value
	Financial instruments classified as at FVTPL	Financial instruments designated as at FVTPL	Available-for-sale instruments measured at fair value	Financial instruments measured at amortized cost	Financial instruments measured at amortized cost			
Financial assets								
Securities								
Trading	\$ 135,346	\$ 8,677	\$ –	\$ –	\$ –	\$ 144,023	\$ 144,023	
Available-for-sale (1)	–	–	38,286	401	401	38,687	38,687	
Total Securities	135,346	8,677	38,286	401	401	182,710	182,710	
Assets purchased under reverse repurchase agreements and securities borrowed	–	82,023	–	35,494	35,494	117,517	117,517	
Loans								
Retail	–	–	–	319,447	317,635	319,447	317,635	
Wholesale	614	964	–	87,825	87,848	89,403	89,426	
	614	964	–	407,272	405,483	408,850	407,061	
Other								
Derivatives	74,822	–	–	–	–	74,822	74,822	
Other assets	–	983	–	28,820	28,820	29,803	29,803	
Financial liabilities								
Deposits								
Personal	\$ 69	\$ 9,069	–	\$ 185,805	\$ 185,989	\$ 194,943	\$ 195,127	
Business and government (2)	–	56,037	–	298,556	299,442	354,593	355,479	
Bank (3)	–	1,932	–	11,611	11,611	13,543	13,543	
	69	67,038	–	495,972	497,042	563,079	564,149	
Other								
Obligations related to securities sold short	47,128	–	–	–	–	47,128	47,128	
Obligations related to assets sold under repurchase agreements and securities loaned	–	53,948	–	6,468	6,468	60,416	60,416	
Derivatives	76,745	–	–	–	–	76,745	76,745	
Other liabilities	(2)	42	–	34,352	34,352	34,392	34,392	
Subordinated debentures	–	109	–	7,334	7,285	7,443	7,394	

(1) Available-for-sale securities include held-to-maturity securities that are recorded at amortized cost.

(2) Business and government includes deposits from regulated deposit-taking institutions other than regulated banks.

(3) Bank refers to regulated banks.

Note 3 Fair value of financial instruments (continued)

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. For our loans and receivables designated as at FVTPL, we measure the change in fair value attributable 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, 2014						
	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	Changes in fair value for the year attributable to changes in credit risk for positions still held	Cumulative change in fair value attributable to changes in credit risk for positions still held (1)	Changes in fair value of credit derivatives or similar instruments for the year	Cumulative change in fair value of credit derivatives or similar instruments (1)
(Millions of Canadian dollars)							
Interest-bearing deposits with banks	\$ 5,603	\$ 5,603	\$ –	\$ –	\$ –	\$ –	\$ –
Assets purchased under reverse repurchase agreements and securities borrowed	85,292	85,292	–	–	–	–	–
Loans – Wholesale	2,278	2,278	242	4	5	–	–
Other Assets	326	326	–	–	–	–	–
	\$ 93,499	\$ 93,499	\$ 242	\$ 4	\$ 5	\$ –	\$ –

	As at October 31, 2013						
	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	Changes in fair value for the year attributable to changes in credit risk for positions still held	Cumulative change in fair value attributable to changes in credit risk for positions still held (1)	Changes in fair value of credit derivatives or similar instruments for the year	Cumulative change in fair value of credit derivatives or similar instruments (1)
(Millions of Canadian dollars)							
Interest-bearing deposits with banks	\$ 2,424	\$ 2,424	\$ –	\$ –	\$ –	\$ –	\$ –
Assets purchased under reverse repurchase agreements and securities borrowed	82,023	82,023	–	–	–	–	–
Loans – Wholesale	964	964	224	3	1	–	–
Other assets	463	463	–	–	–	–	–
	\$ 85,874	\$ 85,874	\$ 224	\$ 3	\$ 1	\$ –	\$ –

(1) The cumulative change is measured from 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. For our financial liabilities designated as at FVTPL, we measure the change in fair value attributable 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 the fair value attributable to changes in market conditions such as changes in benchmark interest rate or foreign exchange rate.

Liabilities designated as at fair value through profit or loss

	As at October 31, 2014						
	Contractual maturity amount	Carrying Value	Difference between carrying value and contractual maturity amount	Changes in fair value for the year ended attributable to changes in credit risk included in net income for positions still held	Changes in fair value for the year ended attributable to changes in credit risk included in other comprehensive income for positions still held	Cumulative change in fair value attributable to changes in credit risk for positions still held (1)	
(Millions of Canadian dollars)							
Term deposits							
Personal	\$ 12,964	\$ 13,289	\$ 325	\$ –	\$ 13	\$ 19	
Business and government (2)	59,139	59,446	307	–	61	58	
Bank (3)	6,592	6,592	–	–	–	–	
	78,695	79,327	632	–	74	77	
Obligations related to assets sold under repurchase agreements and securities loaned	58,413	58,411	(2)	–	–	–	
Other liabilities	30	30	–	–	–	–	
Subordinated debentures	101	106	5	–	3	(3)	
	\$ 137,239	\$ 137,874	\$ 635	\$ –	\$ 77	\$ 74	

As at October 31, 2013

(Millions of Canadian dollars)	Contractual maturity amount	Carrying value	Difference between carrying value and contractual maturity amount	Changes in fair value for the year ended attributable to changes in credit risk included in net income for positions still held	Changes in fair value for the year ended attributable to changes in credit risk included in other comprehensive income for positions still held	Cumulative change in fair value attributable to changes in credit risk for positions still held ⁽¹⁾
Term deposits						
Personal	\$ 8,963	\$ 9,069	\$ 106	\$ (20)	n.a.	\$ 6
Business and government ⁽²⁾	56,216	56,037	(179)	36	n.a.	(3)
Bank ⁽³⁾	1,932	1,932	–	–	n.a.	–
	67,111	67,038	(73)	16	n.a.	3
Obligations related to assets sold under repurchase agreements and securities loaned						
Other liabilities	53,952	53,948	(4)	–	n.a.	–
Subordinated debentures	42	42	–	–	n.a.	–
	106	109	3	6	n.a.	(6)
	\$ 121,211	\$ 121,137	\$ (74)	\$ 22	n.a.	\$ (3)

(1) The cumulative change is measured from the initial recognition of the liabilities designated as at FVTPL. For the year ended October 31, 2014, \$4 million of fair value losses previously included in OCI were realized for financial liabilities derecognized during the year.

(2) Business and government includes deposits from regulated deposit-taking institutions other than regulated banks.

(3) Bank refers to regulated banks.

n.a. not applicable.

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

The following tables present the financial instruments that are measured at fair value on a recurring basis and classified by the fair value hierarchy.

(Millions of Canadian dollars)	As at											
	October 31, 2014						October 31, 2013					
	Fair value measurements using			Total gross fair value	Netting adjustments	Assets/liabilities at fair value	Fair value measurements using			Total gross fair value	Netting adjustments	Assets/liabilities at fair value
Level 1	Level 2	Level 3	Level 1				Level 2	Level 3				
Financial assets												
Interest bearing deposits with banks	\$ -	\$ 5,603	\$ -	\$ 5,603	\$ -	\$ 5,603	\$ -	\$ 2,424	\$ -	\$ 2,424	\$ -	\$ 2,424
Securities												
Trading												
Canadian government debt (1)												
Federal	8,288	5,855	-	14,143		14,143	11,978	6,976	-	18,954		18,954
Provincial and municipal	-	11,371	-	11,371		11,371	-	12,146	-	12,146		12,146
U.S. state, municipal and agencies debt (1)	1,838	27,628	6	29,472		29,472	5,480	23,980	22	29,482		29,482
Other OECD government debt (2)	7,334	7,991	-	15,325		15,325	2,815	8,101	370	11,286		11,286
Mortgage-backed securities (1)	-	964	4	968		968	-	802	28	830		830
Asset-backed securities												
CDOs (3)	-	37	74	111		111	-	-	31	31		31
Non-CDO securities	-	889	364	1,253		1,253	-	1,084	260	1,344		1,344
Corporate debt and other debt	15	27,422	149	27,586		27,586	-	24,346	415	24,761		24,761
Equities	47,396	3,589	166	51,151		51,151	41,874	3,132	183	45,189		45,189
	64,871	85,746	763	151,380		151,380	62,147	80,567	1,309	144,023		144,023
Available-for-sale (4)												
Canadian government debt (1)												
Federal	429	11,540	-	11,969		11,969	153	9,690	-	9,843		9,843
Provincial and municipal	-	799	-	799		799	-	667	-	667		667
U.S. state, municipal and agencies debt (1)	29	4,839	1,389	6,257		6,257	26	4,238	2,014	6,278		6,278
Other OECD government debt	6,979	7,303	11	14,293		14,293	5,463	5,434	-	10,897		10,897
Mortgage-backed securities (1)	-	138	-	138		138	-	139	-	139		139
Asset-backed securities												
CDOs	-	857	24	881		881	-	1,294	103	1,397		1,397
Non-CDO securities	-	381	182	563		563	-	283	180	463		463
Corporate debt and other debt	-	7,714	1,573	9,287		9,287	-	5,096	1,673	6,769		6,769
Equities	140	514	1,028	1,682		1,682	137	585	969	1,691		1,691
Loan substitute securities	102	24	-	126		126	103	24	-	127		127
	7,679	34,109	4,207	45,995		45,995	5,882	27,450	4,939	38,271		38,271
Assets purchased under reverse repurchase agreements and securities borrowed	-	85,292	-	85,292		85,292	-	82,023	-	82,023		82,023
Loans	-	3,154	461	3,615		3,615	-	1,164	414	1,578		1,578
Other												
Derivatives												
Interest rate contracts	13	102,176	339	102,528		102,528	22	78,517	333	78,872		78,872
Foreign exchange contracts	-	33,761	48	33,809		33,809	-	20,709	76	20,785		20,785
Credit derivatives	-	244	10	254		254	-	193	32	225		225
Other contracts	3,238	4,839	560	8,637		8,637	2,558	3,219	858	6,635		6,635
Valuation adjustments (5)	-	(702)	(56)	(758)		(758)	(2)	(398)	(105)	(505)		(505)
Total gross derivatives	3,251	140,318	901	144,470		144,470	2,578	102,240	1,194	106,012		106,012
Netting adjustments					(57,068)	(57,068)					(31,190)	(31,190)
Total derivatives						87,402						74,822
Other assets	604	326	-	930		930	520	452	11	983		983
	\$ 76,405	\$ 354,548	\$ 6,332	\$ 437,285	\$ (57,068)	\$ 380,217	\$ 71,127	\$ 296,320	\$ 7,867	\$ 375,314	\$ (31,190)	\$ 344,124
Financial Liabilities												
Deposits												
Personal	\$ -	\$ 12,904	\$ 497	\$ 13,401	\$ -	\$ 13,401	\$ -	\$ 8,095	\$ 1,043	\$ 9,138	\$ -	\$ 9,138
Business and government	-	59,376	70	59,446		59,446	-	52,104	3,933	56,037		56,037
Bank	-	6,592	-	6,592		6,592	-	1,932	-	1,932		1,932
Other												
Obligations related to securities sold short	32,857	17,484	4	50,345		50,345	31,832	15,280	16	47,128		47,128
Obligations related to assets sold under repurchase agreements and securities loaned	-	58,411	-	58,411		58,411	-	53,948	-	53,948		53,948
Derivatives												
Interest rate contracts	9	96,752	709	97,470		97,470	9	74,113	791	74,913		74,913
Foreign exchange contracts	-	35,664	39	35,703		35,703	-	22,715	193	22,908		22,908
Credit derivatives	-	327	15	342		342	-	295	37	332		332
Other contracts	2,886	8,537	1,062	12,485		12,485	2,379	5,979	1,727	10,085		10,085
Valuation adjustments (5)	-	(65)	29	(36)		(36)	n.a.	n.a.	n.a.	n.a.		n.a.
Total gross derivatives	2,895	141,215	1,854	145,964		145,964	2,388	103,102	2,748	108,238		108,238
Netting adjustments					(56,982)	(56,982)					(31,493)	(31,493)
Total derivatives						88,982						76,745
Other liabilities	-	30	20	50		50	-	37	3	40		40
Subordinated debentures	-	106	-	106		106	-	-	109	109		109
	\$ 35,752	\$ 296,118	\$ 2,445	\$ 334,315	\$ (56,982)	\$ 277,333	\$ 34,220	\$ 234,498	\$ 7,852	\$ 276,570	\$ (31,493)	\$ 245,077

(1) As at October 31, 2014, residential and commercial mortgage-backed securities (MBS) included in all fair value levels of Trading securities were \$6,564 million and \$81 million (October 31, 2013 - \$4,934 million and \$93 million), respectively, and in all fair value levels of AFS securities, \$6,956 million and \$34 million (October 31, 2013 - \$3,105 and \$35 million), respectively.

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

(3) CDOs stand for Collateralized Debt Obligations.

(4) Excludes \$14 million and \$1,759 million of AFS and held-to-maturity securities (October 31, 2013 - \$15 million and \$401 million), respectively, that are carried at cost.

(5) IFRS 13 requirements are applied on a prospective basis and the standard permits an exception, through an accounting policy choice, to measure the fair value of a portfolio of financial instruments on a net open risk position basis when certain criteria are met. We have elected to use this policy choice to determine fair value of certain portfolios of financial instruments, primarily derivatives, on a net exposure to market or credit risk. The valuation adjustment amounts in this table include those determined on a portfolio basis.

n.a. not applicable.

The following describes how fair values are determined, what inputs are used and where they are classified in the fair value hierarchy table above, for our significant assets and liabilities that are measured at fair value on a recurring basis:

Government bonds (Canadian, U.S. and other OECD governments)

Government bonds are included in Canadian government debt, U.S. state, municipal and agencies debt, Other OECD government debt and Obligations related to securities sold short in the fair value hierarchy table. The fair values of government issued or guaranteed debt securities in active markets are determined by reference to recent transaction prices, broker quotes, or third-party vendor prices and are classified as Level 1 in the fair value hierarchy. The fair values of securities that are not traded in active markets are based on either security prices, or valuation techniques using implied yields and risk spreads derived from prices of actively traded and similar government securities. Securities with observable prices or rate inputs as compared to transaction prices, dealer quotes or vendor prices are classified as Level 2 in the hierarchy. Securities where inputs are unobservable are classified as Level 3 in the hierarchy.

Corporate and U.S. municipal bonds

The fair values of corporate and U.S. municipal bonds, which are included in Corporate debt and other debt, U.S. state, municipal and agencies debt and Obligations related to securities sold short in the fair value hierarchy table, are determined using either recently executed transaction prices, broker quotes, pricing services, or in certain instances discounted cash flow method using rate inputs such as benchmark yields (Canadian Dealer Offered Rate, LIBOR and other similar reference rates) and risk spreads of comparable securities. Securities with observable prices or rate inputs as compared to transaction prices, dealer quotes or vendor prices are classified as Level 2 in the hierarchy. Securities where inputs are unobservable are classified as Level 3 in the hierarchy.

Asset-backed securities and Mortgage-backed securities

Asset-backed securities (ABS) and MBS are included in Asset-backed securities, Mortgage-backed securities, Canadian government debt, U.S. state, municipal and agencies debt, and Obligations related to securities sold short in the fair value hierarchy table. ABS are primarily collateralized debt obligations (CDO). Inputs for valuation of MBS and CDO are, when available, traded prices, dealer or lead manager quotes, broker quotes and vendor prices of the identical securities. When prices of the identical securities are not readily available, we use industry standard models with inputs such as discount margins, yields, default, prepayment and loss severity rates that are implied from transaction prices, dealer quotes or vendor prices of comparable instruments. Where security prices and inputs are observable, ABS and MBS are classified as Level 2 in the hierarchy. Otherwise, they are classified as Level 3 in the hierarchy.

Auction rate securities

Auction rate securities (ARS) are included in U.S. state, municipal and agencies debt, and Asset-backed securities in the fair value hierarchy table. The valuation of ARS involves discounting forecasted cash flows from the underlying student loan collateral and incorporating multiple inputs such as default, prepayment, deferment and redemption rates, and credit spreads. These inputs are unobservable, and therefore, ARS are classified as Level 3 in the hierarchy. All relevant data must be assessed and significant judgment is required to determine the appropriate valuation inputs.

Equities

Equities and Obligations related to securities sold short in the fair value hierarchy table consist of listed and unlisted common shares, private equities and hedge funds with certain redemption restrictions. The fair values of common shares are based on quoted prices in active markets, where available, and are classified as Level 1 in the hierarchy. Where quoted prices in active markets are not readily available, fair value is determined based on quoted market prices for similar securities or through valuation techniques, including multiples of earnings and discounted cash flow method with forecasted cash flows and discount rate as inputs. Private equities are classified as Level 3 in the hierarchy as their inputs are not observable. Hedge funds are valued using Net Asset Values (NAV). If we can redeem a hedge fund at NAV prior to the next quarter end, the fund is classified as Level 2 in the hierarchy. Otherwise, it is classified as Level 3 in the hierarchy.

Derivatives

The fair values of exchange-traded derivatives, such as interest rate and equity options and futures, are based on quoted market prices and are classified as Level 1 in the fair value hierarchy. OTC derivatives primarily consist of interest rate and cross currency swaps, interest rate options, foreign exchange forward contracts and options, and commodity options and swaps. The exchange-traded or OTC interest rate, foreign exchange and equity derivatives are included in Interest rate contracts, Foreign exchange contracts and Other contracts, respectively, in the fair value hierarchy table. The fair values of OTC derivatives are determined using valuation models when quoted market prices or third-party consensus pricing information are not available. The valuation models, such as discounted cash flow method or Black-Scholes option model, incorporate observable or unobservable inputs for interest and foreign exchange rates, equity and commodity prices (including indices), credit spreads, corresponding market volatility levels, and other market-based pricing factors. As previously discussed, other adjustments to fair value include bid-offer, CVA, FVA, OIS, parameter and model uncertainties, and unrealized gain or loss at inception of a transaction. A derivative instrument is classified as Level 2 in the hierarchy if observable market inputs are available or the unobservable inputs are not significant to the fair value. Otherwise, it is classified as Level 3 in the hierarchy.

Securities borrowed or purchased under resale agreements and securities lent or sold under repurchase agreements

In the fair value hierarchy table, these instruments are included in Assets purchased under reverse repurchase agreements and securities borrowed, and Obligations related to assets sold under repurchase agreements and securities loaned. Fair value for these contracts is calculated using valuation techniques such as discounted cash flow method using interest rate curves as inputs. They are classified as Level 2 instruments in the hierarchy as the inputs are observable.

Deposits

A majority of our deposits are measured at amortized cost but we designated certain deposits as at FVTPL. These FVTPL deposits are composed of deposits taken, the issuance of certificate of deposits and promissory notes, interest rate and equity linked notes, and are included in Deposits in the fair value hierarchy table. The fair values for these instruments are determined using discounted cash flow method and derivative option valuation models. The inputs to the valuation models include benchmark yield curves, credit spreads, interest rates, interest rate and equity volatility, dividends and correlation, where applicable. They are classified as Level 2 or 3 instruments in the hierarchy, depending on the significance of the unobservable credit spreads, volatility, dividend and correlation rates.

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

The following table presents fair values of our significant Level 3 financial instruments, valuation techniques used to determine their fair values, ranges and weighted averages of unobservable inputs.

As at October 31, 2014 (Millions of Canadian dollars, except for prices, percentages and ratios)

Products	Reporting line in the fair value hierarchy table	Fair value		Valuation techniques	Significant unobservable inputs (1)	Range of input values (2), (3), (4)		
		Assets	Liabilities			Low	High	Weighted average / Inputs distribution (5)
Non-derivative financial instruments								
Asset-backed securities								
	Asset-backed securities	\$ 478		Price-based Discounted cash flows	Prices Discount margins Yields Default rates Prepayment rates Loss severity rates	\$ 53.70 0.70% 2.84% 1.00% 15.00% 30.00%	\$ 90.50 9.48% 5.36% 5.00% 30.00% 70.00%	\$ 75.92 5.09% 3.52% 2.00% 20.00% 50.00%
Auction rate securities								
	U.S. state, municipal and agencies debt	979		Discounted cash flows	Discount margins Default rates Prepayment rates Recovery rates	1.32% 9.00% 4.00% 40.00%	4.63% 10.00% 8.00% 97.50%	2.26% 9.80% 4.76% 93.51%
	Asset-backed securities	166						
Corporate debt								
	Corporate debt and other debt	100		Price-based Discounted cash flows	Prices Yields Capitalization rates Liquidity discounts (6)	\$ 2.50 2.75% 6.43% 10.00%	\$ 119.52 7.50% 9.47% 10.00%	\$ 97.86 3.84% 7.95% 10.00%
	Loans	461						
	Obligations related to securities sold short		4					
Government debt and municipal bonds								
	U.S. state, municipal and agencies debt	416		Price-based Discounted cash flows	Prices Yields	\$ 67.38 0.17%	\$ 100.00 30.15%	\$ 96.24 3.06%
	Other OECD government debt	11						
	Corporate debt and other debt	1,616						
Bank funding and deposits								
	Deposits		70	Discounted cash flows	Interest rate (IR)–IR correlations Foreign exchange (FX)–FX correlations FX–IR correlations	19.00% 68.00% 29.00%	67.00% 68.00% 56.00%	Even Even Even
Private equities, hedge fund investments and related equity derivatives								
	Equities	1,194		Market comparable	EV/EBITDA multiples P/E multiples	4.00 X 8.79 X	10.80 X 15.70 X	8.73 X 11.79 X
	Derivative-related assets	11		Price-based Discounted cash flows	EV/Rev multiples Liquidity discounts (6) Discount rate Net Asset Values /Prices (7)	0.45 X –% 12.00% n.a.	7.50 X 50.00% 17.00% n.a.	4.97 X 26.92% 14.78% n.a.
	Derivative-related liabilities		434					
Derivative financial instruments								
Interest rate derivatives and interest-rate-linked structured notes (8)								
	Derivative-related assets	348		Discounted cash flows Option pricing model	Interest rates CPI swap rates IR–IR correlations FX–IR correlations FX–FX correlations IR volatilities	2.96% 1.73% 19.00% 29.00% 68.00% 26.28%	2.98% 2.30% 67.00% 56.00% 68.00% 28.28%	Even Even Even Even Even Even
	Derivative-related liabilities		732					
Equity derivatives and equity-linked structured notes (8)								
	Derivative-related assets	442		Discounted cash flows Option pricing model	Dividend yields Equity (EQ)–EQ correlations EQ–FX correlations EQ volatilities	0.04% 0.50% (72.80)% 1.00%	18.11% 97.20% 53.20% 172.00%	Lower Middle Middle Lower
	Deposits		497					
	Derivative-related liabilities		529					
Other (9)								
	Mortgage-backed securities	4						
	Corporate debt and other debt	6						
	Derivative-related assets	100						
	Derivative-related liabilities		159					
	Other Liabilities		20					
Total		\$ 6,332	\$ 2,445					

- The acronyms stand for the following: (i) Enterprise Value (EV); (ii) Earnings Before Interest, Taxes, Depreciation and Amortization (EBITDA); (iii) Price / Earnings (P/E); (iv) Revenue (Rev); and (v) Consumer Price Index (CPI).
- Comparative information relating to periods before November 1, 2013 is not required by IFRS 13.
- The low and high input values represent the actual highest and lowest level inputs used to value a group of financial instruments in a particular product category. These input ranges do not reflect the level of input uncertainty, but are affected by the different underlying instruments within the product category. The input ranges will therefore vary from period to period based on the characteristics of the underlying instruments held at each balance sheet date. Where provided, the weighted average of the input values is calculated based on the relative fair values of the instruments within the product category. The weighted averages for derivatives are not presented in the table as they would not provide a comparable metric; instead, distribution of significant unobservable inputs within the range for each product category is indicated in the table.
- Price-based inputs are significant for certain debt securities, and are based on external benchmarks, comparable proxy instruments or pre-quarter-end trade data. For these instruments, the price input is expressed in dollars for each \$100 par value. For example, with an input price of \$105, an instrument is valued at a premium over its par value.
- The level of aggregation and diversity within each derivative instrument category may result in certain ranges of inputs being wide and unevenly distributed across the range. In the table, we indicated whether the majority of the inputs are concentrated toward the upper, middle, or lower end of the range, or evenly distributed throughout the range.
- Fair value of securities with liquidity discount inputs totalled \$211 million.
- NAV of a hedge fund is total fair value of assets less liabilities divided by the number of fund units. The NAVs of the funds and the corresponding equity derivatives referenced to NAVs are not considered observable as we cannot redeem certain of these hedge funds at NAV prior to the next quarter end. Private equities are valued based on NAV or valuation techniques. The range for NAV per unit or price per share has not been disclosed for the hedge funds or private equities due to the dispersion of prices given the diverse nature of the investments.
- The structured notes contain embedded equity or interest rate derivatives with unobservable inputs that are similar to those of the equity or interest rate derivatives.
- Other primarily includes certain insignificant instruments such as commodity derivatives, foreign exchange derivatives, credit derivatives and bank-owned life insurance.
- n.a. not applicable

Sensitivity to unobservable inputs and interrelationships between unobservable inputs

Yield, credit spreads/discount margins

A financial instrument's yield is the interest rate used to discount future cash flows in a valuation model. An increase in the yield, in isolation, would result in a decrease in a fair value measurement and vice versa. A credit spread/discount margin is the difference between a debt instrument's yield and a benchmark instrument's yield. Benchmark instruments have high credit quality ratings, similar maturities and are often government bonds. The credit spread/discount margin therefore represents the discount rate used to present value future cash flows of an asset to reflect the market return required for uncertainty in the estimated cash flows. The credit spread/discount margin for an instrument forms part of the yield used in a discounted cash flow method. Generally, an increase in the credit spread or discount margin will result in a decrease in fair value, and vice versa.

Funding spread

Funding spreads are credit spreads specific to our funding or deposit rates. A decrease in funding spreads, on its own, will increase fair value of our liabilities, and vice versa.

Default rates

A default rate is the rate at which borrowers fail to make scheduled loan payments. A decreasing default rate will typically increase the fair value of the loan, and vice versa. This effect will be significantly more pronounced for a non-government guaranteed loan than a government guaranteed loan.

Prepayment rates

A prepayment rate is the rate at which a loan will be repaid in advance of its expected amortization schedule. Prepayments change the future cash flows of a loan. An increase in the prepayment rate in isolation will result in an increase in fair value when the loan interest rate is lower than the then current reinvestment rate, and a decrease in the prepayment rate in isolation will result in a decrease in fair value when the loan interest rate is lower than the then current reinvestment rate. Prepayment rates are generally negatively correlated with interest rates.

Recovery and loss severity rates

A recovery rate is an estimation of the amount that can be collected in a loan default scenario. The recovery rate is the percentage of the recovered amount divided by the loan balance due. The inverse concept of recovery is loss severity. Loss severity is an estimation of the loan amount not collected when a loan defaults. The loss severity rate is the percentage of the loss amount divided by the loan balance due. Generally, an increase in the recovery rate or a decrease in the loss severity rate will increase the loan fair value, and vice versa.

Capitalization rates

A capitalization rate is a rate of return on a real estate property investment calculated by dividing a property's income by the property's value. A lower capitalization rate increases the property value, and vice versa.

Volatility rates

Volatility measures the potential variability of future prices and is often measured as the standard deviation of price movements. Volatility is an input to option pricing models used to value derivatives and issued structured notes. Volatility is used in valuing equity, interest rate, commodity and foreign exchange options. A higher volatility rate means that the underlying price or rate movements are more likely to occur. Higher volatility rates may increase or decrease an option's fair value depending on the option's terms. The determination of volatility rates is dependent on various factors, including but not limited to, the underlying's market price, the strike price and maturity.

Dividend yields

A dividend yield is the underlying equity's expected dividends expressed as an annual percentage of its price. Dividend yield is used as an input for forward equity price and option models. Higher dividend yields will decrease the forward price, and vice versa. A higher dividend yield will increase or decrease an option's value, depending on the option's terms.

Correlation rates

Correlation is the linear relationship between the movements in two different variables. Correlation is an input to the valuation of derivative contracts and issued structured notes when an instrument's payout is determined by correlated variables. When variables are positively correlated, an increase in one variable will result in an increase in the other variable. When variables are negatively correlated, an increase in one variable will result in a decrease in the other variable. The referenced variables can be within a single asset class or market (equity, interest rate, commodities, credit and foreign exchange) or between variables in different asset classes (equity to foreign exchange, or interest rate to foreign exchange). Changes in correlation will either increase or decrease a financial instrument's fair value depending on the terms of its contractual payout.

Interest rates

An interest rate is the percentage amount charged on a principal or notional amount. Increasing interest rates will decrease the discounted cash flow value of a financial instrument, and vice versa.

Consumer Price Index swap rates

A Consumer Price Index (CPI) swap rate is expressed as a percentage of an increase in the average price of a basket of consumer goods and services, such as transportation, food and medical care. An increase in the CPI swap rate will cause inflation swap payments to be larger, and vice versa.

Note 3 Fair value of financial instruments (continued)

EV/EBITDA multiples, P/E multiples, EV/Rev multiples, and liquidity discounts

Private equity valuation inputs include Enterprise Value / Earnings Before Interest, Taxes, Depreciation and Amortization (EV/EBITDA) multiples, Price / Earnings (P/E) multiples and Enterprise Value / Revenue (Ev/Rev) multiples. These are used to calculate either enterprise value or share value of a company based on a multiple of earnings or revenue estimates. Higher multiples equate to higher fair values for all multiple types, and vice versa. A liquidity discount may be applied when few or no transactions exist to support the valuations.

Interrelationships between unobservable inputs

Unobservable inputs of ARS, including the above discount margin, default rate, prepayment rate, recovery and loss severity rates, may not be independent of each other. The discount margin of ARS can be affected by a change in default rate, prepayment rate, or recovery and loss severity rates. Discount margins will generally decrease when default rates decline or when recovery rates increase. Prepayments may cause fair value to either increase or decrease.

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

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

	For the year ended October 31, 2014								Changes in unrealized gains (losses) included in earnings for assets and liabilities for the year ended October 31, 2014 for positions still held
	Fair value November 1, 2013	Total realized/unrealized gains (losses) included in earnings	Total unrealized gains (losses) included in other comprehensive income (1)	Purchases of assets/ issuances of liabilities	Sales of assets/ settlements of liabilities and other (2)	Transfers into Level 3	Transfers out of Level 3	Fair value October 31, 2014	
(Millions of Canadian dollars)									
Assets									
Securities									
Trading									
U.S. state, municipal and agencies debt	\$ 22	\$ –	\$ 2	\$ 47	\$ (61)	\$ 5	\$ (9)	\$ 6	\$ 1
Other OECD government debt	370	–	(4)	–	–	–	(366)	–	–
Mortgage-backed securities	28	(3)	2	90	(83)	1	(31)	4	–
Asset-backed securities									
CDOs	31	15	(9)	130	(85)	7	(15)	74	2
Non-CDO securities	260	(2)	20	2,083	(1,984)	16	(29)	364	(5)
Corporate debt and other debt	415	(2)	27	263	(487)	20	(87)	149	–
Equities	183	1	14	84	(77)	22	(61)	166	–
	1,309	9	52	2,697	(2,777)	71	(598)	763	(2)
Available-for-sale									
U.S. state, municipal and agencies debt	2,014	–	240	–	(856)	–	(9)	1,389	n.a.
Other OECD government debt	–	–	–	1	10	–	–	11	n.a.
Asset-backed securities									
CDOs	103	–	9	–	(36)	24	(76)	24	n.a.
Non-CDO securities	180	(4)	23	–	(17)	–	–	182	n.a.
Corporate debt and other debt	1,673	–	130	1,760	(1,921)	–	(69)	1,573	n.a.
Equities	969	120	120	47	(228)	–	–	1,028	n.a.
	4,939	116	522	1,808	(3,048)	24	(154)	4,207	n.a.
Loans – Wholesale	414	3	32	31	(19)	–	–	461	(22)
Other									
Net derivative balances (3)									
Interest rate contracts	(458)	(100)	(2)	31	(13)	94	78	(370)	(108)
Foreign exchange contracts	(117)	(28)	3	3	–	2	146	9	(18)
Credit derivatives	(5)	(31)	(2)	–	33	–	–	(5)	(5)
Other contracts	(869)	43	(54)	(103)	93	(169)	557	(502)	20
Valuation adjustments	(105)	15	(1)	–	(73)	–	79	(85)	4
Other assets	11	–	–	–	–	–	(11)	–	–
	\$ 5,119	\$ 27	\$ 550	\$ 4,467	\$ (5,804)	\$ 22	\$ 97	\$ 4,478	\$ (131)
Liabilities									
Deposits									
Personal	\$ (1,043)	\$ 11	\$ (54)	\$ (560)	\$ 184	\$ (299)	\$ 1,264	\$ (497)	\$ 20
Business and government	(3,933)	(184)	(180)	(1,551)	265	–	5,513	(70)	(7)
Other									
Obligations related to securities sold short	(16)	1	(1)	(198)	202	–	8	(4)	–
Other liabilities	(3)	29	–	–	(50)	–	4	(20)	(22)
Subordinated debentures	(109)	–	(3)	–	–	–	112	–	–
	\$ (5,104)	\$ (143)	\$ (238)	\$ (2,309)	\$ 601	\$ (299)	\$ 6,901	\$ (591)	\$ (9)

(Millions of Canadian dollars)	Fair value November 1, 2012	Total realized/ unrealized gains (losses) included in earnings	Total unrealized gains (losses) included in other comprehensive income (1)	Purchases of assets/ issuances of liabilities	Sales of assets/ settlements of liabilities and other (2)	Transfers into Level 3	Transfers out of Level 3	Fair value October 31, 2013	Changes in unrealized gains (losses) included in earnings for assets and liabilities for the year ended October 31, 2013 for positions still held
									October 31, 2013
Assets									
Securities									
Trading									
U.S. state, municipal and agencies debt	\$ 99	\$ 2	\$ 2	\$ 414	\$ (525)	\$ 34	\$ (4)	\$ 22	\$ -
Other OECD government debt	375	(1)	6	633	(237)	-	(406)	370	-
Mortgage-backed securities	55	7	2	50	(64)	21	(43)	28	1
Asset-backed securities									
CDOs	59	10	1	16	(48)	-	(7)	31	8
Non-CDO securities	23	(2)	7	4,608	(4,376)	70	(70)	260	(2)
Corporate debt and other debt	397	19	10	634	(655)	96	(86)	415	1
Equities	302	(16)	8	107	(224)	7	(1)	183	(29)
	1,310	19	36	6,462	(6,129)	228	(617)	1,309	(21)
Available-for-sale									
U.S. state, municipal and agencies debt	1,906	-	88	417	(406)	9	-	2,014	n.a.
Other OECD government debt	-	-	-	-	-	-	-	-	n.a.
Asset-backed securities									
CDOs	1,996	-	67	-	(542)	12	(1,430)	103	n.a.
Non-CDO securities	645	4	36	-	(505)	-	-	180	n.a.
Corporate debt and other debt	1,446	(12)	80	1,281	(1,172)	50	-	1,673	n.a.
Equities	948	65	51	27	(122)	-	-	969	n.a.
	6,941	57	322	1,725	(2,747)	71	(1,430)	4,939	n.a.
Loans – Wholesale	403	8	22	288	(307)	-	-	414	-
Other									
Net derivative balances (3)									
Interest rate contracts	(487)	70	(3)	32	(70)	(4)	4	(458)	95
Foreign exchange contracts	(198)	46	21	19	(9)	13	(9)	(117)	56
Credit derivatives	(22)	(21)	-	-	38	-	-	(5)	(8)
Other contracts	(1,052)	(193)	(33)	153	101	(79)	234	(869)	13
Valuation adjustments	(282)	160	-	(6)	26	(2)	(1)	(105)	124
Other assets	14	(3)	-	-	-	-	-	11	1
	\$ 6,627	\$ 143	\$ 365	\$ 8,673	\$ (9,097)	\$ 227	\$ (1,819)	\$ 5,119	\$ 260
Liabilities									
Deposits									
Personal	\$ (6,840)	\$ (737)	\$ (102)	\$ (6,133)	\$ 7,213	\$ (69)	\$ 5,625	\$ (1,043)	\$ (34)
Business and government	(2,519)	(11)	(95)	(1,738)	165	-	265	(3,933)	(120)
Other									
Obligations related to securities sold short	(8)	10	-	(96)	79	(8)	7	(16)	-
Other liabilities	(101)	98	(3)	-	3	-	-	(3)	98
Subordinated debentures	(122)	(6)	19	-	-	-	-	(109)	(6)
	\$ (9,590)	\$ (646)	\$ (181)	\$ (7,967)	\$ 7,460	\$ (77)	\$ 5,897	\$ (5,104)	\$ (62)

(1) These amounts include the foreign currency translation gains or losses arising on consolidation of foreign subsidiaries relating to the Level 3 instruments, where applicable. The unrealized gains included in OCI on AFS securities were \$152 million for the year ended October 31, 2014 (October 31, 2013 – gains of \$79 million), excluding the translation gains or losses arising on consolidation.

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

(3) Net derivatives as at October 31, 2014 included derivative assets of \$901 million (October 31, 2013 – \$1,194 million) and derivative liabilities of \$1,854 million (October 31, 2013 – \$2,748 million).

n.a. not applicable

Total gains or losses of Level 3 instruments recognized in earnings (1)

(Millions of Canadian dollars)	For the year ended October 31, 2014					
	Total realized/unrealized gains (losses) included in earnings			Changes in unrealized gains (losses) included in earnings for assets and liabilities for the year ended October 31, 2014 for positions still held		
	Assets	Liabilities	Total	Assets	Liabilities	Total
Non-interest income						
Insurance premiums, investment and fee income	\$ 1	\$ -	\$ 1	\$ -	\$ -	\$ -
Trading revenue	686	(882)	(196)	136	(208)	(72)
Net gain on available-for-sale securities	115	-	115	-	-	-
Credit fees and Other	(3)	(33)	(36)	11	(79)	(68)
	\$ 799	\$ (915)	\$ (116)	\$ 147	\$ (287)	\$ (140)

(1) Comparative information relating to periods before November 1, 2013 is not required by IFRS 13.

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

Transfers between Level 1 and Level 2, and 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 above 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 above reconciliation.

Transfers between Level 1 and Level 2 are dependent on whether fair value is obtained on the basis of quoted market prices in active markets (Level 1) as opposed to fair value estimated using observable inputs in a discounted cash flow method (Level 2). For the year ended October 31, 2014, \$1,905 million of certain government bonds reported in Trading and Available-for-sale U.S. state, municipal and agencies debt, and \$1,027 million included in Obligations related to securities sold short were transferred from Level 1 to the corresponding Level 2 balances. During the year ended October 31, 2013, \$1,105 million of certain government bonds reported in Trading U.S. state, municipal and agencies debt, and \$1,308 million included in Obligations related to securities sold short were transferred from Level 1 to the corresponding Level 2 balances, and certain government bonds of \$122 million reported in Trading Canadian government debt – Federal were transferred from Level 2 to the corresponding Level 1 balances.

During the year ended October 31, 2014, significant transfers out of Level 3 included: (i) Other OECD government debt of \$366 million, due to improved price transparency; (ii) net Interest rate contracts of \$112 million, due to the increase in observability of swap rates; (iii) net Foreign exchange contracts of \$149 million, due to shorter maturities; (iv) net Other contracts of \$515 million, mainly due to the increase in observability of pricing in the underlying investments; (v) Personal deposits of \$1,071 million and \$185 million, as the unobservable inputs did not significantly affect their fair values, and the equity volatility became observable, respectively; (vi) Business and government deposits of \$5,032 million, as the funding spread became observable; and (vii) Business and government deposits of \$462 million, as yields became observable. Significant transfer in to Level 3 includes Personal deposits of \$139 million, as the equity volatility became unobservable.

During the year ended October 31, 2013, significant transfers out of Level 3 included: (i) Other OECD government debt of \$406 million, due to increased market activity; (ii) CDOs of \$1,437 million, as a result of increased price transparency evidenced by trade data, dealer data or multiple vendor quotes; (iii) certain net derivative balances, with a majority of the transfers related to derivatives for which pricing became observable as maturity dates became shorter due to the passage of time; (iv) Personal deposits of \$5,535 million, transferred out of Level 3, as unobservable inputs did not significantly affect fair value measurement of these instruments.

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

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

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

As at

(Millions of Canadian dollars)	October 31, 2014			October 31, 2013		
	Level 3 fair value	Positive fair value movement from using reasonably possible alternatives	Negative fair value movement from using reasonably possible alternatives	Level 3 fair value	Positive fair value movement from using reasonably possible alternatives	Negative fair value movement from using reasonably possible alternatives
Securities						
Trading						
U.S. state, municipal and agencies debt	\$ 6	\$ –	\$ –	\$ 22	\$ –	\$ (1)
Other OECD government debt	–	–	–	370	–	–
Mortgage-backed securities	4	1	(1)	28	1	(2)
Asset-backed securities	438	10	(14)	291	3	(3)
Corporate debt and other debt	149	2	(2)	415	42	(32)
Equities	166	–	–	183	–	–
Available-for-sale						
U.S. state, municipal and agencies debt	1,389	23	(57)	2,014	20	(64)
Other OECD government debt	11	–	–	–	–	–
Asset-backed securities	206	12	(18)	283	9	(16)
Corporate debt and other debt	1,573	12	(10)	1,673	9	(10)
Equities	1,028	92	(23)	969	24	(20)
Loans	461	12	(11)	414	3	(3)
Derivatives	901	23	(21)	1,194	84	(85)
Other assets	–	–	–	11	–	–
	\$ 6,332	\$ 187	\$ (157)	\$ 7,867	\$ 195	\$ (236)
Deposits	(567)	14	(14)	(4,976)	60	(39)
Derivatives	(1,854)	38	(59)	(2,748)	77	(100)
Other, securities sold short, other liabilities and subordinated debentures	(24)	–	–	(128)	1	–
	\$ (2,445)	\$ 52	\$ (73)	\$ (7,852)	\$ 138	\$ (139)

Sensitivity results

As at October 31, 2014, the effects of applying other reasonably possible alternative assumptions to the Level 3 asset positions would be an increase of \$187 million and a reduction of \$157 million in fair value, of which \$139 million and \$98 million would be recorded in Other components of equity, respectively. The effects of applying these assumptions to the Level 3 liability positions would result in a decrease of \$52 million and an increase of \$73 million in fair value.

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

The following is a summary of the unobservable inputs of the Level 3 instruments and our approaches to develop reasonably possible alternative assumptions used to determine sensitivity.

Financial assets or liabilities	Sensitivity methodology
Asset-backed securities, corporate debt, government debt and municipal bonds	Sensitivities are determined based on adjusting, plus or minus one standard deviation, the bid-offer spreads or input prices if a sufficient number of prices is received, or using high and low vendor prices as reasonably possible alternative assumptions.
Auction Rate Securities	Sensitivity of ARS is determined by decreasing the discount margin between 12% and 15% and increasing the discount margin between 19% and 38%, depending on the specific reasonable range of fair value uncertainty for each particular financial instrument's market. Changes to the discount margin reflect historic monthly movements in the student loan asset-backed securities market.
Private equities, hedge fund investments and related equity derivatives	Sensitivity of direct private equity investments is determined by (i) adjusting the discount rate by 2% when discounted cash flow method is used to determine fair value, (ii) adjusting the price multiples based on the range of multiples of comparable companies when price-based models are used, or (iii) using an alternative valuation approach. NAVs of the private equity funds, hedge funds and related equity derivatives are provided by the fund managers, and as a result, there are no other reasonably possible alternative assumptions for these investments.
Interest rate derivatives	Sensitivities of interest rate and cross currency swaps are derived using plus or minus one standard deviation of these inputs, and an amount based on model and parameter uncertainty, where applicable.
Equity derivatives	Sensitivity of the Level 3 position will be determined by shifting the unobservable model inputs by plus or minus one standard deviation of the pricing service market data including volatility, dividends or correlations, as applicable.
Bank funding and deposits	Sensitivities of deposits are calculated by shifting the funding curve by plus or minus certain basis points.
Structured notes	Sensitivities for interest-rate-linked and equity-linked structured notes are derived by adjusting inputs by plus or minus one standard deviation, and for other deposits, by estimating a reasonable move in the funding curve by plus or minus certain basis points.
Municipal guaranteed investment certificates	Sensitivity is calculated using plus or minus one standard deviation of the funding curve bid-offer spread.

Fair value for financial instruments that are carried at amortized cost and classified using the fair value hierarchy

The following table presents fair values of financial instruments that are carried at amortized cost and classified by the fair value hierarchy.

	As at October 31, 2014 ⁽¹⁾						
	Fair value always approximates carrying value ⁽²⁾	Fair value may not approximate carrying value				Total	Total Fair value
		Fair value measurements using					
(Millions of Canadian dollars)		Level 1	Level 2	Level 3			
Held-to-maturity securities ⁽³⁾	\$ –	\$ 5	\$ 1,522	\$ 235	\$ 1,762	\$ 1,762	
Assets purchased under reverse repurchase agreements and securities borrowed	29,198	–	21,090	–	21,090	50,288	
Loans							
Retail	65,766	–	265,038	4,374	269,412	335,178	
Wholesale	5,603	–	88,940	3,215	92,155	97,758	
	71,369	–	353,978	7,589	361,567	432,936	
Other assets	28,224	–	4,546	205	4,751	32,975	
	128,791	5	381,136	8,029	389,170	517,961	
Deposits							
Personal	139,209	–	55,924	831	56,755	195,964	
Business and government	176,555	–	150,827	946	151,773	328,328	
Bank	9,659	–	1,915	62	1,977	11,636	
	325,423	–	208,666	1,839	210,505	535,928	
Obligations related to assets sold under repurchase agreements and securities loaned	5,419	–	502	–	502	5,921	
Other liabilities	27,280	–	5,699	3,783	9,482	36,762	
Subordinated debentures	–	–	7,657	55	7,712	7,712	
	\$ 358,122	\$ –	\$ 222,524	\$ 5,677	\$ 228,201	\$ 586,323	

(1) Comparative information relating to periods before November 1, 2013 is not required by IFRS 13.

(2) Certain financial instruments have not been assigned to a level as the carrying amount always approximates their fair values due to the short-term nature (instruments that are receivable or payable on demand, or with original maturity of three months or less) and insignificant credit risk.

(3) Included in Securities – Available-for-sale on our Consolidated Balance Sheets

Fair values of financial assets and liabilities carried at amortized cost and disclosed in the table above are determined using the following valuation techniques and inputs.

Held-to-maturity securities

Fair values of Canadian Federal and OECD government bonds, and corporate bonds are based on quoted prices. Fair values of certain Non-OECD government bonds are based on vendor prices or the discounted cash flow method with yield curves of other countries' government bonds as inputs.

Assets purchased under reverse repurchase agreements and securities borrowed, and Obligations related to assets sold under repurchase agreements and securities loaned

Valuation methods used for the long-term instruments are described in the Fair value of assets and liabilities measured on a recurring basis and classified using the fair value hierarchy section of this note. The carrying values of short-term instruments generally approximate their fair values.

Loans – Retail

Retail loans include residential mortgages, personal and small business loans and credit cards. For residential mortgages, and personal and small business loans, we segregate the portfolio based on certain attributes such as product type, contractual interest rate, term to maturity and credit scores, if applicable. Fair values of these loans are determined by the discounted cash flow method using applicable inputs such as prevailing interest rates, contractual and posted client rates, client discounts, credit spreads, prepayment rates and loan-to-value ratio. Fair values of credit card receivables are also calculated based on a discounted cash flow method with portfolio yields, charge off and monthly payment rates as inputs. The carrying values of short-term and variable rate loans generally approximate their fair values.

Loans – Wholesale

Wholesale loans include Business, Bank and Sovereign loans. Where market prices are available, loans are valued based on market prices. Otherwise, fair value is determined by the discounted cash flow method using the following inputs: market interest rates and market based spreads of assets with similar credit ratings and terms to maturity, expected default frequency implied from credit default swap prices, if available, and relevant pricing information such as contractual rate, origination and maturity dates, redemption price, coupon payment frequency and date convention.

Deposits

Deposits are composed of demand, notice, and term deposits which include senior deposit notes we have issued to provide us with long-term funding. Fair values of term deposits are determined by one of several valuation techniques: (i) for term deposits and similar instruments, we segregate the portfolio based on term to maturity. Fair values of these instruments are determined by the discounted cash flow method using inputs such as client rates for new sales of the corresponding terms; and (ii) for senior deposit notes, we use actual traded prices, vendor prices or the discounted cash flow method using a market interest rate curve and our funding spreads as inputs. The carrying values of short-term term deposits, and demand and notice deposits generally approximate their fair values.

Other assets and Other liabilities

Other assets and Other liabilities include receivables and payables relating to certain commodities and option premiums. Fair values of the commodity receivables and payables are calculated by the discounted cash flow method using applicable inputs such as market interest rates, counterparties' credit spreads, our funding spreads, commodity forward prices and spot prices. The option premium receivables and payables are valued by the discounted cash flow models using market interest rates as inputs.

Subordinated debentures

Fair values of Subordinated debentures are based on recent transaction prices.

Note 4 Securities

Carrying value of securities

The following table presents the financial instruments that we held at the end of the period, measured at carrying value:

	As at October 31, 2014						
	Term to maturity (1)					With no specific maturity	Total
	Within 3 months	3 months to 1 year	1 year to 5 years	5 years to 10 years	Over 10 years		
(Millions of Canadian dollars)							
Trading (2)							
Canadian government debt	\$ 3,050	\$ 6,651	\$ 7,594	\$ 2,232	\$ 5,987	\$ –	\$ 25,514
U.S. state, municipal and agencies debt	3,272	6,811	7,109	5,678	6,602	–	29,472
Other OECD government debt	1,637	3,205	6,223	1,594	2,666	–	15,325
Mortgage-backed securities (3)	–	1	86	246	635	–	968
Asset-backed securities (3)	56	66	307	321	614	–	1,364
Corporate debt and other debt (3)							
Bankers' acceptances	754	8	–	–	–	–	762
Certificates of deposit	17	342	574	30	17	–	980
Other (4)	470	5,501	13,086	2,998	3,789	–	25,844
Equities	–	–	–	–	–	51,151	51,151
	9,256	22,585	34,979	13,099	20,310	51,151	151,380
Available-for-sale (2)							
Canadian government debt							
Federal							
Amortized cost	626	615	8,195	2,197	–	–	11,633
Fair value	627	619	8,356	2,367	–	–	11,969
Yield (5)	1.8%	2.8%	2.2%	3.3%	–	–	2.4%
Provincial and municipal							
Amortized cost	–	–	644	130	18	–	792
Fair value	–	–	648	131	20	–	799
Yield (5)	–	–	2.4%	2.9%	4.9%	–	2.5%
U.S. state, municipal and agencies debt							
Amortized cost	108	385	80	213	5,544	–	6,330
Fair value	108	383	81	213	5,472	–	6,257
Yield (5)	0.0%	8.5%	0.7%	0.4%	0.7%	–	1.1%
Other OECD government debt							
Amortized cost	5,663	2,138	6,357	117	–	–	14,275
Fair value	5,663	2,139	6,374	117	–	–	14,293
Yield (5)	0.1%	0.2%	0.9%	0.4%	–	–	0.5%
Mortgage-backed securities							
Amortized cost	–	–	–	17	116	–	133
Fair value	–	–	–	17	121	–	138
Yield (5)	–	–	–	3.0%	1.8%	–	2.0%
Asset-backed securities							
Amortized cost	–	–	381	833	277	–	1,491
Fair value	–	–	387	849	208	–	1,444
Yield (5)	–	–	0.6%	0.5%	1.0%	–	0.6%
Corporate debt and other debt							
Amortized cost	1,625	822	5,820	727	255	–	9,249
Fair value	1,628	823	5,840	739	257	–	9,287
Yield (5)	1.1%	2.0%	1.6%	2.0%	4.2%	–	1.7%
Equities							
Cost	–	–	–	–	–	1,333	1,333
Fair value	–	–	–	–	–	1,696	1,696
Loan substitute securities							
Cost	–	–	–	–	–	124	124
Fair value	–	–	–	–	–	126	126
Yield (5)	–	–	–	–	–	3.9%	3.9%
Amortized cost	8,022	3,960	21,477	4,234	6,210	1,457	45,360
Fair value	8,026	3,964	21,686	4,433	6,078	1,822	46,009
Held-to-maturity (2)							
Amortized cost	163	110	38	1,448	–	–	1,759
Fair value	163	110	40	1,449	–	–	1,762
Total carrying value of securities (2)	\$ 17,445	\$ 26,659	\$ 56,703	\$ 18,980	\$ 26,388	\$ 52,973	\$ 199,148

As at October 31, 2013							
(Millions of Canadian dollars)	Term to maturity (1)					With no specific maturity	Total
	Within 3 months	3 months to 1 year	1 year to 5 years	5 years to 10 years	Over 10 years		
Trading (2)							
Canadian government debt	\$ 3,341	\$ 8,872	\$ 8,245	\$ 4,204	\$ 6,438	\$ –	\$ 31,100
U.S. state, municipal and agencies debt	2,415	9,852	8,655	3,376	5,184	–	29,482
Other OECD government debt	1,181	2,041	6,281	709	1,074	–	11,286
Mortgage-backed securities (3)	2	6	46	136	640	–	830
Asset-backed securities (3)	90	38	351	206	690	–	1,375
Corporate debt and other debt (3)							
Bankers' acceptances	678	–	–	–	–	–	678
Certificates of deposit	22	493	1,042	19	12	–	1,588
Other (4)	1,319	2,114	12,289	3,115	3,658	–	22,495
Equities	–	–	–	–	–	45,189	45,189
	9,048	23,416	36,909	11,765	17,696	45,189	144,023
Available-for-sale (2)							
Canadian government debt							
Federal							
Amortized cost	852	533	4,927	3,189	4	–	9,505
Fair value	853	540	5,007	3,439	4	–	9,843
Yield (5)	2.6%	2.7%	2.1%	3.6%	4.8%	–	2.7%
Provincial and municipal							
Amortized cost	250	175	181	40	19	–	665
Fair value	250	175	182	40	20	–	667
Yield (5)	1.4%	1.4%	2.5%	4.3%	4.9%	–	2.0%
U.S. state, municipal and agencies debt							
Amortized cost	158	68	521	534	5,141	–	6,422
Fair value	157	68	522	533	4,998	–	6,278
Yield (5)	0.4%	0.1%	2.5%	0.4%	0.7%	–	0.8%
Other OECD government debt							
Amortized cost	5,263	1,306	2,913	1,405	–	–	10,887
Fair value	5,262	1,311	2,917	1,407	–	–	10,897
Yield (5)	0.1%	0.7%	0.7%	0.4%	–	–	0.4%
Mortgage-backed securities							
Amortized cost	–	–	–	25	105	–	130
Fair value	–	–	–	26	113	–	139
Yield (5)	–	–	–	3.5%	2.5%	–	2.7%
Asset-backed securities							
Amortized cost	8	–	279	1,193	408	–	1,888
Fair value	5	–	291	1,237	327	–	1,860
Yield (5)	2.6%	–	1.0%	0.5%	1.1%	–	0.7%
Corporate debt and other debt							
Amortized cost	1,387	939	3,475	615	333	–	6,749
Fair value	1,394	945	3,478	619	333	–	6,769
Yield (5)	1.3%	1.8%	1.7%	2.8%	4.5%	–	1.9%
Equities							
Cost	–	–	–	–	–	1,407	1,407
Fair value	–	–	–	–	–	1,706	1,706
Loan substitute securities							
Cost	–	–	–	–	–	125	125
Fair value	–	–	–	–	–	127	127
Yield (5)	–	–	–	–	–	4.0%	4.0%
Amortized cost	7,918	3,021	12,296	7,001	6,010	1,532	37,778
Fair value	7,921	3,039	12,397	7,301	5,795	1,833	38,286
Held-to-maturity (2)							
Amortized cost	140	141	76	44	–	–	401
Fair value	140	141	76	44	–	–	401
Total carrying value of securities (2)	\$ 17,109	\$ 26,596	\$ 49,382	\$ 19,110	\$ 23,491	\$ 47,022	\$ 182,710

(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 measured on a recurring basis and classified using the fair value hierarchy in Note 3.

(4) Primarily composed of corporate debt, supra-national debt, and commercial paper.

(5) The weighted average yield is derived using the contractual interest rate and the carrying value at the end of the year for the respective securities.

Unrealized gains and losses on available-for-sale securities ^{(1), (2)}

(Millions of Canadian dollars)	As at							
	October 31, 2014				October 31, 2013			
	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	\$ 11,633	\$ 338	\$ (2)	\$ 11,969	\$ 9,505	\$ 340	\$ (2)	\$ 9,843
Provincial and municipal	792	8	(1)	799	665	3	(1)	667
U.S. state, municipal and agencies debt ⁽³⁾	6,330	9	(82)	6,257	6,422	9	(153)	6,278
Other OECD government debt	14,275	19	(1)	14,293	10,887	14	(4)	10,897
Mortgage-backed securities	133	5	–	138	130	10	(1)	139
Asset-backed securities								
CDOs	857	26	(2)	881	1,343	58	(4)	1,397
Non-CDO securities	634	5	(76)	563	545	3	(85)	463
Corporate debt and other debt	9,249	49	(11)	9,287	6,749	49	(29)	6,769
Equities	1,333	369	(6)	1,696	1,407	312	(13)	1,706
Loan substitute securities	124	2	–	126	125	3	(1)	127
	\$ 45,360	\$ 830	\$ (181)	\$ 46,009	\$ 37,778	\$ 801	\$ (293)	\$ 38,286

(1) Excludes \$1,759 million held-to-maturity securities as at October 31, 2014 (October 31, 2013 – \$401 million) that are carried at cost.

(2) The majority of the MBS are residential. Cost/Amortized cost, gross unrealized gains, gross unrealized losses and fair value related to commercial MBS are \$33 million, \$1 million, \$nil, and \$34 million, respectively as at October 31, 2014 (October 31, 2013 – \$34 million, \$1 million, \$nil, and \$35 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.

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, 2014, our gross unrealized losses on AFS securities were \$181 million (October 31, 2013 – \$293 million). Management believes that there is no objective evidence of impairment on our AFS securities that are in an unrealized loss position as at October 31, 2014.

Held-to-maturity securities

Held-to-maturity securities stated at amortized cost are subject to periodic impairment review and are classified as impaired when, in management's opinion, there is no longer reasonable assurance of the timely collection of the full amount of principal and interest. The impairment review of held-to-maturity securities is primarily based on the impairment model for loans. Management believes that there is no objective evidence of impairment on our held-to-maturity securities as at October 31, 2014.

Net gain and loss on available-for-sale securities ⁽¹⁾

(Millions of Canadian dollars)	For the year ended		
	October 31 2014	October 31 2013	October 31 2012
Realized gains	\$ 232	\$ 231	\$ 242
Realized losses	(15)	(17)	(46)
Impairment losses	(25)	(26)	(48)
	\$ 192	\$ 188	\$ 148

(1) The following related to our insurance operations are excluded from Net gain (loss) on AFS securities and included in Insurance premiums, investment and fee income on the Consolidated Statements of Income: Realized gains for the year ended October 31, 2014 were \$12 million (October 31, 2013 – \$3 million; October 31, 2012 – \$9 million). Realized losses for the year ended October 31, 2014 were \$1 million (October 31, 2013 – \$nil, October 31, 2012 – \$nil). There were no impairment losses related to our insurance operations for the years ended October 31, 2014, October 31, 2013 and October 31, 2012.

During the year ended October 31, 2014, \$192 million of net gains were recognized in Non-interest income as compared to \$188 million in the prior year. The current year reflects net realized gains of \$217 million mainly comprised of distributions from and gains on sale of certain Equities, redemption and restructurings of certain Asset-backed securities and the sale of Canadian government debt. Partially offsetting the net realized gains are \$25 million of impairment losses primarily on certain Equities. This compares to net realized gains for the year ended October 31, 2013 of \$214 million which was partially offset by \$26 million of impairment losses.

Reclassification of financial instruments

The following table provides information regarding certain securities that we reclassified in prior reporting periods:

Financial instruments reclassified in prior periods

(Millions of Canadian dollars)	As at	
	October 31 2014	October 31 2013
	Total carrying value and fair value	Total carrying value and fair value
Financial assets – FVTPL reclassified to available-for-sale ⁽¹⁾		
CDOs	\$ 751	\$ 1,154
Mortgage-backed securities	44	59
	\$ 795	\$ 1,213

(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.

Note 4 Securities (continued)

(Millions of Canadian dollars)	For the year ended					
	October 31, 2014		October 31, 2013		October 31, 2012	
	Change in fair value during the period (1)	Interest income/ (losses) recognized in net income during the period	Change in fair value during the period (1)	Interest income/ (losses) recognized in net income during the period	Change in fair value during the period (1)	Interest income/ (losses) recognized in net income during the period
FVTPL reclassified to available-for-sale						
CDOs	\$ (29)	\$ 58	\$ (5)	\$ 59	\$ 60	\$ 76
Mortgage-backed securities	(2)	4	–	8	2	8
	\$ (31)	\$ 62	\$ (5)	\$ 67	\$ 62	\$ 84

(1) This change represents the fair value gains or losses that would have been recognized in profit or loss had the assets not been reclassified.

Note 5 Loans

(Millions of Canadian dollars)	As at							
	October 31, 2014				October 31, 2013			
	Canada	United States	Other International	Total	Canada	United States	Other International	Total
Retail (1)								
Residential mortgages	\$ 215,624	\$ 539	\$ 3,094	\$ 219,257	\$ 206,134	\$ 378	\$ 2,726	\$ 209,238
Personal	86,984	4,082	4,955	96,021	85,701	3,306	3,852	92,859
Credit cards	14,650	65	209	14,924	13,902	50	190	14,142
Small business (2)	4,785	–	–	4,785	4,388	–	–	4,388
	\$ 322,043	\$ 4,686	\$ 8,258	\$ 334,987	\$ 310,125	\$ 3,734	\$ 6,768	\$ 320,627
Wholesale (1)								
Business (3)	54,656	23,544	20,250	98,450	51,122	19,395	16,009	86,526
Bank (4)	413	30	758	1,201	823	28	469	1,320
Sovereign (5)	1,797	–	788	2,585	1,747	–	589	2,336
	\$ 56,866	\$ 23,574	\$ 21,796	\$ 102,236	\$ 53,692	\$ 19,423	\$ 17,067	\$ 90,182
Total loans	\$ 378,909	\$ 28,260	\$ 30,054	\$ 437,223	\$ 363,817	\$ 23,157	\$ 23,835	\$ 410,809
Allowance for loan losses	(1,466)	(100)	(428)	(1,994)	(1,482)	(105)	(372)	(1,959)
Total loans net of allowance for loan losses	\$ 377,443	\$ 28,160	\$ 29,626	\$ 435,229	\$ 362,335	\$ 23,052	\$ 23,463	\$ 408,850

(1) Geographic information is based on residence of borrower.

(2) Includes small business exposure managed on a pooled basis.

(3) Includes small business exposure managed on an individual client basis.

(4) Bank refers primarily to regulated deposit-taking institutions and securities firms.

(5) Sovereign refers to all central governments and agencies, central banks, as well as other qualifying public sector entities and multilateral development banks.

Loans maturity and rate sensitivity

(Millions of Canadian dollars)	As at October 31, 2014							
	Maturity term (1)				Rate sensitivity			
	Under 1 year (2)	1 to 5 years	Over 5 years	Total	Floating	Fixed Rate	Non-rate-sensitive	Total
Retail	\$ 184,647	\$ 140,785	\$ 9,555	\$ 334,987	\$ 121,451	\$ 208,956	\$ 4,580	\$ 334,987
Wholesale	83,263	15,526	3,447	102,236	43,808	57,284	1,144	102,236
Total loans	\$ 267,910	\$ 156,311	\$ 13,002	\$ 437,223	\$ 165,259	\$ 266,240	\$ 5,724	\$ 437,223
Allowance for loan losses				(1,994)				(1,994)
Total loans net of allowance for loan losses				\$ 435,229				\$ 435,229

(Millions of Canadian dollars)	As at October 31, 2013							
	Maturity term (1)				Rate sensitivity			
	Under 1 year (2)	1 to 5 years	Over 5 years	Total	Floating	Fixed Rate	Non-rate-sensitive	Total
Retail	\$ 175,673	\$ 133,501	\$ 11,453	\$ 320,627	\$ 125,836	\$ 189,628	\$ 5,163	\$ 320,627
Wholesale	73,050	12,010	5,122	90,182	47,061	41,611	1,510	90,182
Total loans	\$ 248,723	\$ 145,511	\$ 16,575	\$ 410,809	\$ 172,897	\$ 231,239	\$ 6,673	\$ 410,809
Allowance for loan losses				(1,959)				(1,959)
Total loans net of allowance for loan losses				\$ 408,850				\$ 408,850

(1) Generally, based on the earlier of contractual repricing or maturity date.

(2) Includes variable rate loans that can be repriced at the clients' discretion without penalty.

Allowance for credit losses

	For the year ended October 31, 2014						
	Balance at beginning of period	Provision for credit losses	Write-offs	Recoveries	Unwind of discount	Exchange rate changes/ other	Balance at end of period
(Millions of Canadian dollars)							
Retail							
Residential mortgages	\$ 151	\$ 95	\$ (30)	\$ 2	\$ (26)	\$ 48	\$ 240
Personal	583	444	(565)	106	(23)	(10)	535
Credit cards	385	353	(466)	114	–	(1)	385
Small business	61	44	(47)	9	(2)	(1)	64
	1,180	936	(1,108)	231	(51)	36	1,224
Wholesale							
Business	777	228	(221)	32	(36)	(12)	768
Bank (1)	2	–	–	–	–	–	2
	779	228	(221)	32	(36)	(12)	770
Total allowance for loan losses	1,959	1,164	(1,329)	263	(87)	24	1,994
Allowance for off-balance sheet and other items (2)	91	–	–	–	–	–	91
Total allowance for credit losses	\$ 2,050	\$ 1,164	\$ (1,329)	\$ 263	\$ (87)	\$ 24	\$ 2,085
Individually assessed	240	160	(188)	16	(24)	10	214
Collectively assessed	1,810	1,004	(1,141)	247	(63)	14	1,871
Total allowance for credit losses	\$ 2,050	\$ 1,164	\$ (1,329)	\$ 263	\$ (87)	\$ 24	\$ 2,085

	For the year ended October 31, 2013						
	Balance at beginning of period	Provision for credit losses	Write-offs	Recoveries	Unwind of discount	Exchange rate changes/ other	Balance at end of period
(Millions of Canadian dollars)							
Retail							
Residential mortgages	\$ 124	\$ 41	\$ (24)	\$ 2	\$ (24)	\$ 32	\$ 151
Personal	543	455	(498)	96	(17)	4	583
Credit cards	403	354	(466)	112	–	(18)	385
Small business	72	32	(35)	9	(2)	(15)	61
	1,142	882	(1,023)	219	(43)	3	1,180
Wholesale							
Business	852	355	(448)	51	(43)	10	777
Bank (1)	2	–	–	–	–	–	2
	854	355	(448)	51	(43)	10	779
Total allowance for loan losses	1,996	1,237	(1,471)	270	(86)	13	1,959
Allowance for off-balance sheet and other items (2)	91	–	–	–	–	–	91
Total allowance for credit losses	\$ 2,087	\$ 1,237	\$ (1,471)	\$ 270	\$ (86)	\$ 13	\$ 2,050
Individually assessed	298	287	(346)	31	(28)	(2)	240
Collectively assessed	1,789	950	(1,125)	239	(58)	15	1,810
Total allowance for credit losses	\$ 2,087	\$ 1,237	\$ (1,471)	\$ 270	\$ (86)	\$ 13	\$ 2,050

For the year ended October 31, 2012

(Millions of Canadian dollars)	Balance at beginning of period	Provision for credit losses	Write-offs	Recoveries	Unwind of discount	Exchange rate changes/ other	Balance at end of period
Retail							
Residential mortgages	\$ 112	\$ 64	\$ (32)	\$ 1	\$ (34)	\$ 13	\$ 124
Personal	557	437	(499)	83	(23)	(12)	543
Credit cards	415	403	(496)	102	–	(21)	403
Small business	75	43	(50)	8	(2)	(2)	72
	1,159	947	(1,077)	194	(59)	(22)	1,142
Wholesale							
Business	773	352	(288)	39	(51)	27	852
Bank (1)	33	–	(32)	–	–	1	2
	806	352	(320)	39	(51)	28	854
Total allowance for loan losses	1,965	1,299	(1,397)	233	(110)	6	1,996
Allowance for off-balance sheet and other items (2)	91	–	–	–	–	–	91
Total allowance for credit losses	\$ 2,056	\$ 1,299	\$ (1,397)	\$ 233	\$ (110)	\$ 6	\$ 2,087
Individually assessed	252	244	(202)	19	(26)	11	298
Collectively assessed	1,804	1,055	(1,195)	214	(84)	(5)	1,789
Total allowance for credit losses	\$ 2,056	\$ 1,299	\$ (1,397)	\$ 233	\$ (110)	\$ 6	\$ 2,087

(1) Bank refers primarily to regulated deposit-taking institutions and securities firms.

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

Net interest income after provision for credit losses

(Millions of Canadian dollars)	For the year ended		
	October 31 2014	October 31 2013	October 31 2012
Net interest income	\$ 14,116	\$ 13,249	\$ 12,439
Provision for credit losses	1,164	1,237	1,299
Net interest income after provision for credit losses	\$ 12,952	\$ 12,012	\$ 11,140

Loans past due but not impaired

(Millions of Canadian dollars)	As at							
	October 31, 2014				October 31, 2013			
	1 to 29 days	30 to 89 days	90 days and greater	Total	1 to 29 days	30 to 89 days	90 days and greater	Total
Retail	\$ 3,055	\$ 1,284	\$ 316	\$ 4,655	\$ 2,953	\$ 1,358	\$ 329	\$ 4,640
Wholesale	431	322	–	753	624	303	17	944
	\$ 3,486	\$ 1,606	\$ 316	\$ 5,408	\$ 3,577	\$ 1,661	\$ 346	\$ 5,584

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

(Millions of Canadian dollars)	As at	
	October 31 2014	October 31 2013
Retail	\$ –	71
Wholesale		
Business	631	815
Bank (2)	2	3
	\$ 633	\$ 889

(1) Average balance of gross individually assessed impaired loans for the year ended October 31, 2014 was \$690 million (October 31, 2013 – \$887 million).

(2) Bank refers primarily to regulated deposit-taking institutions and securities firms.

Note 6 Derecognition of financial assets

We enter into transactions in which we transfer financial assets such as loans or securities to structured entities or other third parties. The transferred financial assets are derecognized from our Consolidated Balance Sheets when we transfer substantially all of the risks and rewards of ownership of the financial assets. When we are exposed to substantially all of the risks and rewards of the assets, or when we have neither transferred nor retained substantially all of the risks and rewards but retain control of the financial assets, we continue to recognize the financial assets on our Consolidated Balance Sheets and a liability is recognized for the cash proceeds received.

The majority of assets transferred under repurchase agreements, securities lending agreements, and in our Canadian residential mortgage securitization transactions do not qualify for derecognition.

Transferred financial assets not derecognized

Securitization of Canadian residential mortgage loans

We securitize insured Canadian residential mortgage loans through the creation of MBS pools under the National Housing Act MBS (NHA MBS) program. All loans securitized under the NHA MBS program are required to be insured by the Canadian Mortgage Housing Corporation (CMHC) or a third-party insurer. We require the borrower to pay the insurance for mortgages in which the loan amount is greater than 80% of the original appraised value of the property (loan-to-value (LTV) ratio). For residential mortgage loans securitized under this program with an LTV ratio less than 80%, we are required to insure the mortgages at our own expense. Under the NHA-MBS program, we are responsible for making all payments due on our issued MBS, regardless of whether we collect the necessary funds from the mortgagor or the insurer. When the borrower defaults on the mortgage payment, we submit a claim to the insurer if the amount recovered from the collection or foreclosure process is lower than the sum of the principal balance, accrued interest and collection costs on the outstanding loan. The insurance claim process is managed by the insurance provider in accordance with the insurer's policies and covers the entire unpaid loan balance plus generally up to 12 months of interest, selling costs and other eligible expenses. If an insurance claim is denied, a loss is recognized in Provision for credit losses in our Consolidated Statements of Income. The amount recorded as a loss is not significant to our Consolidated Financial Statements and no significant losses were incurred due to legal action arising from a mortgage default during 2014 and 2013.

We sell the NHA MBS pools primarily to a government-sponsored structured entity under the Canada Mortgage Bond (CMB) program. The entity periodically issues CMBs, which are guaranteed by the government, and sells them to third-party investors. Proceeds of the CMB issuances are used by the entity to purchase the NHA MBS pools from eligible NHA MBS issuers who participate in the issuance of a particular CMB series. Our continuing involvement includes servicing the underlying residential mortgage loans we have securitized, either ourselves or through a third-party servicer. We also act as counterparty in interest rate swap agreements where we pay the entity the interest due to CMB investors and receive the interest on the underlying MBS and reinvested assets. As part of the swap, we are also required to maintain a principal reinvestment account for principal payments received on the underlying mortgage loans to meet the repayment obligation upon maturity of the CMB. We reinvest the collected principal payments in permitted investments as outlined in the swap agreement.

We have determined that all of the NHA MBS program loans transferred to the entity do not qualify for derecognition as we have not transferred substantially all of the risks and rewards of ownership. As a result, these transferred MBS continue to be classified as residential mortgage loans and recognized on our Consolidated Balance Sheets. The cash received for these transferred MBS is treated as a secured borrowing and a corresponding liability recorded in Deposits – Business and government on our Consolidated Balance Sheets.

Securities sold under repurchase agreements and securities loaned

We also enter into transactions such as repurchase agreements and securities lending agreements where we transfer assets under agreements to repurchase them on a future day and retain substantially all of the credit, 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, 2014				October 31, 2013			
	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 do not qualify derecognition	\$ 36,972	\$ 60,279	\$ 4,052	\$101,303	\$ 43,092	\$ 55,715	\$ 4,701	\$103,508
Carrying amount of associated liabilities	36,941	60,279	4,052	101,272	43,019	55,715	4,701	103,435
Fair value of transferred assets	\$ 37,010	\$ 60,279	\$ 4,052	\$101,341	\$ 42,921	\$ 55,715	\$ 4,701	\$103,337
Fair value of associated liabilities	37,769	60,279	4,052	102,100	43,418	55,715	4,701	103,834
Fair value of net position	\$ (759)	\$ –	\$ –	\$ (759)	\$ (497)	\$ –	\$ –	\$ (497)

(1) Includes Canadian residential mortgage loans transferred primarily to Canada Housing Trust at the initial securitization and other permitted investments used for funding requirements after the initial securitization.

(2) CMB investors have legal recourse only to the transferred assets, and do not have recourse to our general assets.

(3) Does not include over-collateralization of assets pledged.

Note 7 Structured entities

In the normal course of business, we engage in a variety of financial transactions with structured entities to support our financing and investing needs as well as those of our customers. A structured entity is an entity in which voting or similar rights are not the dominant factor in deciding control. Structured entities are generally created to achieve a narrow and well defined objective with restrictions around their ongoing activities. We consolidate a structured entity when we control the entity in accordance with our accounting policy described in Note 2. In other cases, we may sponsor or have an interest in such an entity but not consolidate it.

Consolidated structured entities

We consolidate the following structured entities, whose assets and liabilities are recorded on our Consolidated Balance Sheets. Third-party investors in these structured entities generally have recourse only to the assets of the related entity and do not have recourse to our general assets unless we breach our contractual obligations to those entities. In the ordinary course of business, the assets of each consolidated structured entity can generally only be used to settle the obligations of that entity.

Credit card securitization vehicle

We securitize a portion of our credit card receivables through a structured entity on a revolving basis. The entity 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 retained by us. The third-party investors have recourse only to the transferred assets.

We continue to service the credit card receivables sold and perform an administrative role for the entity. We also provide first-loss protection through our ownership of all the subordinated notes issued by the entity and our interest in the excess spread (residual net interest income after all trust expenses) which is subordinated to the obligations to the senior noteholders. Additionally, we may own some senior notes as investments or for market-making activities; we retain a cash reserve account of the entity from time to time; we provide subordinated loans to the entity to pay upfront expenses; and we act as counterparty to interest rate and cross currency swap agreements which hedge the entity's interest rate and currency risk exposure.

We consolidate the structured entity because we have decision making power over the timing and size of future issuances and other relevant activities which were predetermined by us at inception. We also obtain significant funding benefits and are exposed to the majority of the residual ownership risks through the credit support provided. As at October 31, 2014, \$8.5 billion of notes issued by our credit card securitization vehicle were included in Deposits on our Consolidated Balance Sheets (October 31, 2013 – \$7.0 billion).

Auto loan securitization vehicles

We obtained control of certain auto loan securitization vehicles as a result of the acquisition of the Canadian auto finance and deposit business of Ally Financial Inc. completed in 2013. These vehicles issued senior and subordinated notes collateralized by auto loan receivables originated and transferred to the entities by Ally Financial Inc. We continue to provide credit enhancement to the outstanding notes through overcollateralization, cash reserve accounts and our interest in the excess spread, which is subordinated to the noteholders. We also act as swap counterparty for one entity's interest rate swap agreements which hedge its interest rate risk exposure. The third-party investors have recourse only to the transferred assets.

We consolidate these vehicles because we have the decision making power over the relevant activities and are exposed to the majority of the residual ownership risks. As at October 31, 2014, there were \$407 million of deposits outstanding related to these structures (October 31, 2013 – \$944 million).

Collateralized commercial paper vehicle

We established a funding vehicle that provides loans to us and finances those loans by issuing commercial paper to third-party investors. The structured entity's commercial paper carries an equivalent credit rating to RBC because we are obligated to advance funds to the entity in the event there are insufficient funds from other sources to settle maturing commercial paper. We pledge collateral to secure the loans and are exposed to the market and credits risks of the pledged securities. We administer the entity and earn an administration fee for providing these services.

We consolidate the structured entity because we have decision making power over the relevant activities, are the sole borrower from the structure, and are exposed to a majority of the residual ownership risks through the credit support provided. As at October 31, 2014, \$7.8 billion of commercial paper was included in Deposits on our Consolidated Balance Sheets (October 31, 2013 – \$3.9 billion).

Innovative capital vehicles

RBC Capital Trust was created to issue innovative capital instruments, the proceeds from which were used to purchase mortgages from RBC. We consolidate the trust as, through our roles as trustee, administrative agent and equity investor, we have the decision making power over the relevant activities of the trust and are exposed to variability from the performance of the underlying mortgages. Refer to Note 20 for further details on our innovative capital instruments.

Covered bonds

RBC Covered Bond Guarantor Limited Partnership (Guarantor LP) was created to issue guarantees of covered bonds that we issue. We periodically transfer mortgages to Guarantor LP to support funding activities and asset coverage requirements under our covered bond program. The covered bonds guaranteed by Guarantor LP are direct, unsecured and unconditional obligations of RBC; therefore, investors have a claim against the Bank which will continue if the covered bonds are not paid by the Bank and the mortgage assets in Guarantor LP are insufficient to satisfy the obligations owing on the covered bonds.

We consolidate Guarantor LP as, through our roles as trustee, administrative agent and equity investor, we have the decision making power over the relevant activities of Guarantor LP and are exposed to variability from the performance of the underlying mortgages. As at October 31, 2014, the total amount of mortgages transferred and outstanding was \$38.3 billion (October 31, 2013 – \$37.1 billion) and \$26.4 billion of covered bonds were recorded as Deposits on our Consolidated Balance Sheets (October 31, 2013 – \$21.3 billion).

ARS TOB programs

We sold ARS into Tender Option Bond (TOB) trusts, 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 structured entities. 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 have decision making power over the relevant activities of the CE trust and are exposed to the variability from the performance of the underlying ARS through our provision of the credit enhancement and the liquidity facility. As at October 31, 2014, \$67 million of ARS were included in AFS securities related to consolidated TOB structures (October 31, 2013 – \$683 million) and a corresponding \$69 million of floating rate certificates were included in Deposits on our Consolidated Balance Sheets (October 31, 2013 - \$744 million).

Municipal bond TOB programs

We utilize the TOB funding vehicle to finance taxable and tax-exempt municipal bonds within our Capital Markets segment. The structure of municipal bond TOB programs that we are involved with is similar to the structure of the ARS TOB programs described above. However, in certain municipal bond TOB programs, we also purchase residual certificates issued by these TOB vehicles which expose us to credit risk of the underlying bonds as well as interest rate risk of the structure.

We consolidate programs in which we are the holder of the residual certificate as we have decision making power over the relevant activities, including the selection of the underlying municipal bonds and the ability to terminate the structure, and are exposed to variability from the performance of the underlying municipal bonds. As at October 31, 2014, \$3.3 billion of municipal bonds were included in AFS Securities related to consolidated TOB structures (October 31, 2013 – \$3.7 billion) and a corresponding \$3.3 billion of floating rate certificates were included in Deposits on our Consolidated Balance Sheets (October 31, 2013 - \$3.7 billion).

Non-RBC managed Investment funds

We enter into certain fee-based equity derivative transactions where our investments in the reference funds are held by an intermediate limited partnership entity (intermediate entity) in which we hold a substantial majority of the equity interests. We consolidate the intermediate entity because we have the decision making power to direct all the activities of the entity and are exposed to a majority of the risks and rewards through our equity investments. As at October 31, 2014, \$277 million of Trading securities representing our investments in the reference funds were recorded on our Consolidated Balance Sheets (October 31, 2013 – \$300 million).

RBC managed investment funds

We are sponsors and investment managers of mutual and pooled funds which gives us the ability to direct the investment decisions of the funds. We consolidate those mutual and pooled funds in which our interests, which include direct investment in seed capital plus management or performance fees, indicate that we are acting as a principal. As at October 31, 2014, \$499 million of Trading securities held in the consolidated funds (October 31, 2013 – \$295 million) and \$189 million of Other liabilities representing the fund units held by third parties (October 31, 2013 – \$26 million) were recorded on our Consolidated Balance Sheets.

Unconsolidated structured entities

We have interests in certain structured entities that we do not consolidate but have recorded assets and liabilities on our Consolidated Balance Sheets related to our transactions and involvement with these entities.

The following table presents the assets and liabilities recorded on our Consolidated Balance Sheets and our maximum exposure to loss related to our interests in unconsolidated structured entities. It also presents the size of each class of unconsolidated structured entity, as measured by the total assets of the entities in which RBC has an interest.

(Millions of Canadian dollars)	As at October 31, 2014								
	Multi-seller conduits (1)	Structured finance	Non-RBC managed investment funds	RBC managed investment funds	Third-party securitization vehicles	Trading portfolio investments	Other	Total	
On-balance sheet assets									
Securities	\$ 42	\$ –	\$ 3,343	\$ 151	\$ 1	\$ 3,345	\$ 718	\$ 7,600	
Loans	864	–	–	–	1,463	–	–	2,327	
Derivatives	–	3	–	–	–	–	8	11	
Other assets	–	913	1	220	–	–	286	1,420	
	\$ 906	\$ 916	\$ 3,344	\$ 371	\$ 1,464	\$ 3,345	\$ 1,012	\$ 11,358	
On-balance sheet liabilities									
Derivatives	\$ 85	\$ –	\$ –	\$ –	\$ 2	\$ –	\$ –	\$ 87	
Other liabilities	–	–	5	–	–	–	260	265	
	\$ 85	\$ –	\$ 5	\$ –	\$ 2	\$ –	\$ 260	\$ 352	
Maximum exposure to loss (2)	\$ 31,019	\$ 2,158	\$ 4,005	\$ 203	\$ 2,397	\$ 3,345	\$ 873	\$ 44,000	
Total assets of unconsolidated structured entities	\$ 30,428	\$ 13,118	\$ 621,938	\$ 272,852	\$ 27,095	\$ 875,438	\$ 64,963	\$ 1,905,832	

Note 7 Structured entities (continued)

(Millions of Canadian dollars)	As at October 31, 2013								Total
	Multi-seller conduits (1)	Structured finance	Non-RBC managed investment funds	RBC managed investment funds	Third-party securitization vehicles	Trading portfolio investments	Other		
On-balance sheet assets									
Securities	\$ 14	\$ –	\$ 2,629	\$ 143	\$ –	\$ 3,494	\$ 761	\$ 7,041	
Loans	896	–	–	–	1,454	–	3	2,353	
Derivatives	44	20	–	–	–	–	9	73	
Other assets	–	870	1	200	–	–	350	1,421	
	\$ 954	\$ 890	\$ 2,630	\$ 343	\$ 1,454	\$ 3,494	\$ 1,123	\$ 10,888	
On-balance sheet liabilities									
Deposits	\$ –	\$ –	\$ –	\$ –	\$ –	\$ –	\$ 903	\$ 903	
Derivatives	11	–	–	–	2	–	–	13	
Other liabilities	–	–	1	–	–	–	333	334	
	\$ 11	\$ –	\$ 1	\$ –	\$ 2	\$ –	\$ 1,236	\$ 1,250	
Maximum exposure to loss (2)	\$ 31,600	\$ 1,969	\$ 3,294	\$ 182	\$ 2,187	\$ 3,494	\$ 1,059	\$ 43,785	
Total assets of unconsolidated structured entities	\$ 31,075	\$ 22,733	\$ 810,866	\$ 238,348	\$ 40,183	\$ 736,756	\$ 58,102	\$ 1,938,063	

(1) Total assets of unconsolidated structured entities represent the maximum assets that may have to be purchased by the conduits under purchase commitments outstanding. Of the purchase commitments outstanding, the conduits have purchased financial assets totalling \$19.8 billion as at October 31, 2014 (October 31, 2013 - \$18.8 billion).

(2) The maximum exposure to loss resulting from our interests in these entities consists mostly of investments, loans, fair value of derivatives, liquidity and credit enhancement facilities. The maximum exposure to loss of the multi-seller conduits is higher than the on-balance sheet assets primarily by the notional amounts of the backstop liquidity and credit enhancement facilities. Refer to Note 26.

Below is a description of our involvement with each significant class of unconsolidated structured entity.

Multi-seller conduits

We administer five multi-seller asset-backed commercial paper (ABCP) conduit programs (multi-seller conduits) – two in Canada and three in the U.S. These conduits primarily purchase financial assets from clients and finance those purchases by issuing ABCP.

We do not maintain any ownership or retained interests in the multi-seller conduits that we administer and have no rights to, or control of, their assets. As the administrative agent, we earn a residual fee for providing services such as coordinating funding activities, transaction structuring, documentation, execution and monitoring of transactions. The ABCP issued by each multi-seller conduit is in the conduit's own name with recourse to the financial assets owned by each multi-seller conduit, and is non-recourse to us except through our participation in liquidity and/or credit enhancement facilities. We may purchase ABCP issued by our multi-seller conduits from time to time in our capacity as placement agent in order to facilitate the overall program liquidity.

We provide transaction-specific and program-wide liquidity facilities to the multi-seller conduits. In addition, we provide program-wide credit enhancement to the multi-seller conduits which obligate us to purchase assets or advance funds in the event the multi-seller conduit does not otherwise have funds from other sources, such as from the liquidity facilities, to settle maturing ABCP. In some cases, we or another third party may provide transaction-specific credit enhancement which can take various forms. We receive market-based fees for providing these liquidity and credit facilities.

For certain transactions, we act as counterparty to foreign exchange rate forward contracts and interest rate swaps to facilitate our clients' securitization of fixed rate and/or foreign currency denominated assets through the conduits. These derivatives expose us to foreign exchange and interest rate risks that are centrally managed by our foreign exchange trading and swap desks, respectively, and credit risk on the underlying assets that is mitigated by the credit enhancement described below.

Each transaction is structured with transaction-specific first loss protection provided by the third-party seller. This enhancement can take various forms, including but not limited to overcollateralization, excess spread, subordinated classes of financial assets, guarantees or letters of credit. The amount of this enhancement varies but is generally sized to cover a multiple of loss experience.

An unrelated third party (expected loss investor) absorbs credit losses, up to a maximum contractual amount, that may occur in the future on the assets in the multi-seller conduits before the multi-seller conduits' debt holders and us. In return for assuming this multi-seller conduit first-loss position, each multi-seller conduit pays the expected loss investor a return commensurate with its risk position. The expected loss investor has substantive power to direct the majority of the activities which significantly impact the conduit's economic performance, including initial selection and approval of the asset purchase commitments and liquidity facilities, approval of renewal and amendment of these transactions and facilities, sale or transfer of assets, ongoing monitoring of asset performance, mitigation of credit losses, and management of the ABCP liabilities.

We do not consolidate these multi-seller conduits as we do not have the decision-making power to direct the relevant activities noted above.

Structured finance

We purchased U.S. ARS from certain trusts (U.S. ARS Trusts) which fund their long-term investments in student loans by issuing short-term senior and subordinated notes. We are subject to losses on these U.S. ARS Trusts if defaults are experienced on the underlying student loans; however, in the majority of these structures, the principal and accrued interest on the student loans is guaranteed by U.S. government agencies. We act as auction agent for some of these entities but have no legal obligation to purchase the notes issued by these entities in the auction process. We do not consolidate these U.S. ARS Trusts as we do not have decision making power over the investing and financing activities of the Trusts, which are the activities that most significantly affect the performance of the Trusts.

Additionally, we invest in certain municipal bond TOB programs that we do not consolidate. These programs are similar to those consolidated municipal bond TOB programs described above; however, the residual certificates are held by third-parties and we do not provide credit enhancement of the underlying assets. We only provide liquidity facilities on the floating-rate certificates which may be drawn if certificates are tendered but not able to be remarketed. We do not have decision making power over the relevant activities of the programs; therefore, we do not consolidate these programs. The assets transferred into these programs are derecognized from our Consolidated Balance Sheets.

Non-RBC managed investment funds

We enter into fee-based equity derivative transactions with third parties including mutual funds, unit investment trusts and other investment funds. These transactions provide their investors with the desired exposure to a reference fund, and we economically hedge our exposure to these derivatives by investing in those reference funds. We also act as custodian or administrator for several funds. We do not consolidate those reference funds that are managed by third parties as we do not have power to direct their investing activities.

We provide liquidity facilities to certain third-party investment funds. The funds issued unsecured variable-rate preferred shares and invest in portfolios of tax-exempt municipal bonds. Undrawn liquidity commitments expose us to liquidity risk of the preferred shares and drawn commitments expose us to the credit risk of the underlying municipal bonds. We do not consolidate these third-party managed funds as we do not have power to direct their investing activities.

RBC managed investment funds

We are sponsors and investment managers of mutual and pooled funds which gives us the ability to direct the investment decisions of the funds. We do not consolidate those mutual and pooled funds in which our interests indicate that we are exercising our decision making power as an agent of the other unit holders.

Third-party securitization vehicles

We hold interests in securitization vehicles that provide funding to certain third-parties on whose behalf the entities were created. The activities of these entities are limited to the purchase and sale of specified assets from the sponsor and the issuance of asset-backed notes collateralized by those assets. The underlying assets are typically receivables, including auto loans and leases. We, as well as other financial institutions, are obligated to provide funding up to our maximum commitment level and are exposed to credit losses on the underlying assets after various credit enhancements. Enhancement can take various forms, including but not limited to overcollateralization, excess spread, subordinated classes of financial assets, guarantees or letters of credit. The amount of this enhancement varies but is generally sized to cover a multiple of loss experience. We do not consolidate these entities as we do not have decision making power over the relevant activities, including the investing and financing activities.

Trading portfolio investments

We also invest in the securities issued by structured entities, including government-sponsored entities, as part of our trading activities. We did not create and are not the sponsor of these entities and our involvement is limited to that of a passive investor. These investments do not carry a funding commitment; therefore our maximum exposure to loss is limited to our investment. We do not consolidate these entities as we do not have any decision making power over their activities.

Other

Other structured entities include credit investment products and tax credit funds.

We use structured entities 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 entities (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 entities and, in some cases, fulfill other administrative functions for the entities. We do not consolidate these credit investment product entities as we do not have decision making power over the relevant activities, which include selection of the collateral and reference portfolio, and are not exposed to a majority of the benefits or risks of the entities.

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.

Sponsored entities

We are a sponsor of certain structured entities in which we have interests but do not consolidate. In determining whether we are a sponsor of a structured entity, we consider both qualitative and quantitative factors, including the purpose and nature of the entity, our initial and continuing involvement and whether we hold subordinated interests in the entity. We are considered to be the sponsor of certain credit investment products, tax credit entities, RBC-managed mutual funds and a commercial mortgage securitization vehicle. During the year end October 31, 2014, we transferred commercial mortgages with a carrying amount of \$173 million (October 31, 2013 – \$nil) to a sponsored securitization vehicle in which we did not have an interest as at the end of the reporting period.

Financial support provided to structured entities

During the years ended October 31, 2014, 2013 and 2012, we have not provided any financial or non-financial support to any consolidated or unconsolidated structured entities when we were not contractually obligated to do so. Furthermore, we have no intention to provide such support in the future.

Note 8 Derivative financial instruments and hedging activities

Derivative instruments are categorized as either financial or non-financial derivatives. Financial derivatives are financial contracts whose value is derived from an underlying interest rate, foreign exchange rate, credit risk, and equity or equity index. Non-financial derivatives are contracts whose value is derived from a precious metal, commodity instrument or index. Notional amount of derivatives represents the contract amount used as a reference point to calculate payments. Notional amounts are generally not exchanged by counterparties, and do not reflect our exposure at default.

Financial derivatives*Forwards and futures*

Forward contracts are effectively non-standardized agreements that are transacted between counterparties in the over-the-counter market, whereas futures are standardized contracts with respect to amounts and settlement dates, and are traded on regular futures exchanges. Examples of forwards and futures are described below:

Interest rate forwards (forward rate agreements) and futures are contractual obligations to buy or sell an interest-rate sensitive financial instrument on a predetermined future date at a specified price.

Foreign exchange forwards and futures are contractual obligations to exchange one currency for another at a specified price for settlement at a predetermined future date.

Equity forwards and futures are contractual obligations to buy or sell at a fixed value (the specified price) of an equity index, a basket of stocks or a single stock at a predetermined future date.

Swaps

Swaps are over-the-counter contracts in which two counterparties exchange a series of cash flows based on agreed upon rates to a notional amount. Examples of swap agreements are described below.

Interest rate swaps are agreements where two counterparties exchange a series of payments based on different interest rates applied to a notional amount in a single currency. Cross currency swaps involve the exchange of fixed payments in one currency for the receipt of fixed payments in another currency. Cross currency interest rate swaps involve the exchange of both interest and notional amounts in two different currencies.

Equity swaps are contracts in which one counterparty agrees to pay or receive from the other cash flows based on changes in the value of an equity index, a basket of stocks or a single stock.

Options

Options are contractual agreements under which the seller (writer) grants the purchaser the right, but not the obligation, either to buy (call option) or sell (put option), a security, exchange rate, interest rate, or other financial instrument or commodity at a predetermined price, at or by a specified future date. The seller (writer) of an option can also settle the contract by paying the cash settlement value of the purchaser's right. The seller (writer) receives a premium from the purchaser for this right. The various option agreements that we enter into include but are not limited to interest rate options, foreign currency options, equity options and index options.

Credit derivatives

Credit derivatives are over-the-counter contracts that transfer credit risk related to an underlying financial instrument (referenced asset) from one counterparty to another. Examples of credit derivatives are described below.

Credit default swaps provide protection against the decline in value of the referenced asset as a result of specified credit events such as default or bankruptcy. They are similar in structure to an option, whereby the purchaser pays a premium to the seller of the credit default swap in return for payment contingent on a credit event affecting the referenced asset.

Credit default baskets are similar to credit default swaps except that the underlying referenced financial instrument is a group of assets instead of a single asset.

Total return swaps are contracts where one counterparty agrees to pay or receive from the other cash flows based on changes in the value of the referenced asset.

Other derivative products

Certain warrants and loan commitments that meet the definition of derivative are also included as derivative instruments.

Non-financial derivatives

We also transact in non-financial derivative products including precious metal and commodity derivative contracts in both the over-the-counter and exchange markets.

Derivatives issued for trading purposes

Most of our derivative transactions relate to sales and trading activities. Sales activities include the structuring and marketing of derivative products to clients to enable them to transfer, modify or reduce current or expected risks. Trading involves market-making, positioning and arbitrage activities. Market-making involves quoting bid and offer prices to other market participants with the intention of generating revenue based on spread and volume. Positioning involves managing market risk positions with the expectation of profiting from favourable movements in prices, rates or indices. Arbitrage activities involve identifying and profiting from price differentials between markets and products.

Derivatives issued for other-than-trading purposes

We also use derivatives for purposes other than trading, primarily for hedging, in conjunction with the management of interest rate, credit, equity and foreign exchange risk related to our funding, lending, investment activities and asset/liability management.

Interest rate swaps are used to manage our exposure to interest rate risk by modifying the repricing or maturity characteristics of existing and/or forecasted assets and liabilities, including funding and investment activities. Purchased options are used to hedge redeemable deposits and other options embedded in consumer products. We manage our exposure to foreign currency risk with cross currency swaps and foreign exchange forward contracts. We predominantly use credit derivatives to manage our credit exposures. We mitigate industry sector concentrations and single-name exposures related to our credit portfolio by purchasing credit derivatives to transfer credit risk to third parties.

Certain derivatives and cash instruments are specifically designated and qualify for hedge accounting. We apply hedge accounting to minimize volatility in earnings and capital caused by changes in interest rates or foreign exchange rates. Interest rate and currency fluctuations will either cause assets and liabilities to appreciate or depreciate in market value or cause variability in forecasted cash flows. When a hedging relationship is effective, gains, losses, revenue and expenses of the hedging instrument will offset the gains, losses, revenue and expenses of the hedged item. We largely assess and measure the effectiveness of a hedging relationship based on the change in fair value of the derivative hedging instrument relative to the change in fair value of the hedged item. When cash instruments are designated as hedges of currency risks, only changes in their value due to currency risk are included in the assessment and measurement of hedge effectiveness.

From time to time, we also enter into derivative transactions to economically hedge certain exposures that do not otherwise qualify for hedge accounting, or where hedge accounting is not considered economically feasible to implement. In such circumstances, changes in fair value are reflected in Non-interest income.

After-tax unrealized gains relating to de-designated hedges of \$44 million (before-tax unrealized gains of \$60 million) included in Other components of equity as at October 31, 2014, 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

(Millions of Canadian dollars)	As at							
	October 31, 2014				October 31, 2013			
	Designated as hedging instruments in hedging relationships				Designated as hedging instruments in hedging relationships			
	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	\$ 504	\$ 1,392	\$ 87	\$ 85,419	\$ 555	\$ 1,461	\$ 32	\$ 72,774
Liabilities								
Derivative instruments	511	121	205	88,145	460	376	95	75,814
Non-derivative instruments	–	–	20,949	–	–	–	17,499	–

Results of hedge activities recorded in Net income and Other comprehensive income

(Millions of Canadian dollars)	October 31, 2014			For the year ended October 31, 2013			October 31, 2012		
	Net gains (losses) included in Non-interest income	Net gains (losses) included in Net interest income	After-tax unrealized gains (losses) included in OCI	Net gains (losses) included in Non-interest income	Net gains (losses) included in Net interest income	After-tax unrealized gains (losses) included in OCI	Net gains (losses) included in Non-interest income	Net gains (losses) included in Net interest income	After-tax unrealized gains (losses) included in OCI
	Fair value hedges								
Gains (losses) on hedging instruments	\$ 216	n.a.	n.a.	\$ (551)	n.a.	n.a.	\$ (66)	n.a.	n.a.
(Losses) gains on hedged items attributable to the hedged risk	(329)	n.a.	n.a.	459	n.a.	n.a.	(15)	n.a.	n.a.
Ineffective portion (1)	(113)	n.a.	n.a.	(92)	n.a.	n.a.	(81)	n.a.	n.a.
Cash flow hedges									
Ineffective portion	(13)	n.a.	n.a.	(13)	n.a.	n.a.	(4)	n.a.	n.a.
Effective portion	n.a.	n.a.	(108)	n.a.	n.a.	(11)	n.a.	n.a.	32
Reclassified to income during the period (2)	n.a.	(38)	n.a.	n.a.	40	n.a.	n.a.	(35)	n.a.
Net investment hedges									
Ineffective portion	1	n.a.	n.a.	1	n.a.	n.a.	1	n.a.	n.a.
Foreign currency gains (losses)	n.a.	n.a.	2,743	n.a.	n.a.	1,402	n.a.	n.a.	114
(Losses) gains from hedges	n.a.	n.a.	(1,585)	n.a.	n.a.	(912)	n.a.	n.a.	–
	\$ (125)	\$ (38)	\$ 1,050	\$ (104)	\$ 40	\$ 479	\$ (84)	\$ (35)	\$ 146

(1) Includes losses of \$109 million (2013 – \$82 million; 2012 – \$76 million) that are excluded from the assessment of hedge effectiveness. These amounts are recorded in Non-interest income and are offset by other economic hedges.

(2) After-tax losses of \$28 million were reclassified from Other components of equity to income during the year ended October 31, 2014 (October 31, 2013 – gains of \$30 million; October 31, 2012 – losses of \$25 million).

n.a. not applicable

Notional amount of derivatives by term to maturity (absolute amounts)

(Millions of Canadian dollars)	As at October 31, 2014					
	Term to maturity				Trading	Other than Trading
	Within 1 year	1 to 5 years	Over 5 years ⁽¹⁾	Total		
Over-the-counter contracts						
Interest rate contracts						
Forward rate agreements	\$ 324,707	\$ 47,227	\$ –	\$ 371,934	\$ 371,934	\$ –
Swaps	1,626,852	3,301,834	1,852,349	6,781,035	6,579,940	201,095
Options purchased	98,085	101,493	23,930	223,508	223,508	–
Options written	97,259	104,445	32,258	233,962	233,962	–
Foreign exchange contracts						
Forward contracts	1,019,102	30,832	1,094	1,051,028	1,018,520	32,508
Cross currency swaps	7,371	15,102	20,415	42,888	42,156	732
Cross currency interest rate swaps	148,340	424,982	218,011	791,333	763,764	27,569
Options purchased	27,159	12,665	4,058	43,882	43,882	–
Options written	28,287	12,220	4,475	44,982	44,982	–
Credit derivatives ⁽²⁾	1,702	16,188	8,124	26,014	24,707	1,307
Other contracts ⁽³⁾	62,652	58,982	20,685	142,319	140,168	2,151
Exchange-traded contracts						
Interest rate contracts						
Futures – long positions	14,429	16,614	47	31,090	31,090	–
Futures – short positions	52,345	19,373	1	71,719	71,719	–
Options purchased	21,303	5,229	–	26,532	26,532	–
Options written	4,322	–	–	4,322	4,322	–
Foreign exchange contracts						
Futures – long positions	960	–	–	960	960	–
Futures – short positions	1,167	–	–	1,167	1,167	–
Other contracts ⁽³⁾	132,399	33,755	420	166,574	166,571	3
	\$ 3,668,441	\$ 4,200,941	\$ 2,185,867	\$10,055,249	\$ 9,789,884	\$ 265,365

(Millions of Canadian dollars)	As at October 31, 2013					
	Term to maturity				Trading	Other than Trading
	Within 1 year	1 to 5 years	Over 5 years ⁽¹⁾	Total		
Over-the-counter contracts						
Interest rate contracts						
Forward rate agreements	\$ 364,918	\$ 93,570	\$ –	\$ 458,488	\$ 458,488	\$ –
Swaps	1,218,382	2,718,313	1,369,003	5,305,698	5,095,519	210,179
Options purchased	59,272	83,085	27,178	169,535	169,337	198
Options written	59,921	81,222	33,000	174,143	174,112	31
Foreign exchange contracts						
Forward contracts	887,156	30,991	1,079	919,226	858,547	60,679
Cross currency swaps	6,054	14,420	13,796	34,270	34,270	–
Cross currency interest rate swaps	131,805	308,927	144,779	585,511	555,841	29,670
Options purchased	19,217	10,917	4,732	34,866	34,866	–
Options written	19,737	11,729	4,682	36,148	36,148	–
Credit derivatives ⁽²⁾	1,650	11,498	8,961	22,109	20,704	1,405
Other contracts ⁽³⁾	57,593	42,101	20,647	120,341	120,336	5
Exchange-traded contracts						
Interest rate contracts						
Futures – long positions	10,332	6,809	–	17,141	17,103	38
Futures – short positions	20,727	13,952	–	34,679	34,604	75
Options purchased	13,831	3,557	–	17,388	17,388	–
Options written	11,371	1,277	–	12,648	12,648	–
Foreign exchange contracts						
Futures – long positions	6,092	9,646	102	15,840	15,840	–
Futures – short positions	11,381	12,617	–	23,998	23,998	–
Other contracts ⁽³⁾	140,471	29,786	387	170,644	170,641	3
	\$ 3,039,910	\$ 3,484,417	\$ 1,628,346	\$ 8,152,673	\$ 7,850,390	\$ 302,283

(1) Includes contracts maturing in over 10 years with a notional value of \$668 billion (October 31, 2013 – \$501 billion). The related gross positive replacement cost is \$39 billion (October 31, 2013 – \$25 billion).

(2) Credit derivatives include credit default swaps, total return swaps and credit default baskets, including credit derivatives given guarantee treatment for OSFI regulatory reporting purposes. Credit derivatives with a notional value of \$1.3 billion (October 31, 2013 – \$1.4 billion) are economic hedges. Trading credit derivatives comprise protection purchased of \$13.3 billion (October 31, 2013 – \$11.0 billion) and protection sold of \$11.4 billion (October 31, 2013 – \$9.7 billion).

(3) Other contracts include precious metal, commodity, stable value and equity derivative contracts.

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

(Millions of Canadian dollars)	As at October 31, 2014					
	Within 1 year	1 to 2 years	2 to 3 years	3 to 5 years	Over 5 years	Total
Cash inflows from assets	\$ 268	\$ 287	\$ 243	\$ 325	\$ 85	\$ 1,208
Cash outflows from liabilities	(540)	(446)	(384)	(269)	(87)	(1,726)
Net cash flows	\$ (272)	\$ (159)	\$ (141)	\$ 56	\$ (2)	\$ (518)

(Millions of Canadian dollars)	As at October 31, 2013					
	Within 1 year	1 to 2 years	2 to 3 years	3 to 5 years	Over 5 years	Total
Cash inflows from assets	\$ 267	\$ 232	\$ 218	\$ 314	\$ 321	\$ 1,352
Cash outflows from liabilities	(533)	(531)	(495)	(602)	(122)	(2,283)
Net cash flows	\$ (266)	\$ (299)	\$ (277)	\$ (288)	\$ 199	\$ (931)

Fair value of derivative instruments

(Millions of Canadian dollars)	As at							
	October 31, 2014				October 31, 2013			
	Average fair value for year ended (1)		Year end fair value		Average fair value for year ended (1)		Year end fair value	
	Positive	Negative	Positive	Negative	Positive	Negative	Positive	Negative
Held or issued for trading purposes								
Interest rate contracts								
Forward rate agreements	\$ 258	\$ 206	\$ 347	\$ 357	\$ 505	\$ 347	\$ 348	\$ 262
Swaps	78,884	75,195	95,960	91,386	80,490	78,156	73,164	69,897
Options purchased	3,671	–	4,123	–	2,792	–	3,253	–
Options written	–	4,509	–	5,101	–	3,619	–	3,966
	82,813	79,910	100,430	96,844	83,787	82,122	76,765	74,125
Foreign exchange contracts								
Forward contracts	8,416	8,741	12,155	11,752	9,229	9,381	6,774	7,629
Cross currency swaps	1,732	1,155	1,788	1,506	1,505	1,053	1,432	944
Cross currency interest rate swaps	10,433	14,261	16,034	19,165	9,692	16,333	9,308	12,058
Options purchased	1,645	–	2,621	–	1,900	–	2,234	–
Options written	–	1,349	–	2,222	–	1,704	–	1,744
	22,226	25,506	32,598	34,645	22,326	28,471	19,748	22,375
Credit derivatives (2)	225	281	254	301	229	254	225	276
Other contracts (3)	7,052	10,662	8,525	12,373	5,203	8,275	6,635	10,085
	112,316	116,359	141,807	144,163	111,545	119,122	103,373	106,861
Held or issued for other than trading purposes								
Interest rate contracts								
Swaps			2,098	626			2,106	787
Options purchased			–	–			1	–
Options written			–	–			–	1
			2,098	626			2,107	788
Foreign exchange contracts								
Forward contracts			326	259			194	194
Cross currency swaps			–	45			–	–
Cross currency interest rate swaps			885	754			843	339
Options purchased			–	–			–	–
Options written			–	–			–	–
			1,211	1,058			1,037	533
Credit derivatives (2)			–	41			–	56
Other contracts (3)			112	112			–	–
			3,421	1,837			3,144	1,377
Total gross fair values before netting			145,228	146,000			106,517	108,238
Valuation adjustments determined on a pooled basis (4)			(758)	(36)			(505)	n.a.
Impact of netting agreements that qualify for balance sheet offset			(57,068)	(56,982)			(31,190)	(31,493)
			87,402	88,982			74,822	76,745
Impact of netting agreements that do not qualify for balance sheet offset (5)			(60,546)	(60,546)			(51,653)	(51,653)
			\$ 26,856	\$ 28,436			\$ 23,169	\$ 25,092

(1) Average fair value amounts are calculated based on monthly balances.

(2) Credit derivatives include credit default swaps, total return swaps and credit default baskets, including credit derivatives given guarantee treatment for OSFI regulatory reporting purposes.

(3) Other contracts include precious metal, commodity, stable value and equity derivative contracts.

(4) IFRS 13 requirements are applied on a prospective basis and the standard permits an exception, through an accounting policy choice, to measure the fair value of a portfolio of financial instruments on a net open risk position basis when certain criteria are met. We have elected to use this policy choice to determine the fair value of certain portfolios of financial instruments, primarily derivatives, on a net exposure to market or credit risk. The valuation adjustment amounts in this table include those determined on a portfolio basis.

(5) Additional impact of offsetting credit exposures on contracts that do not qualify for balance sheet offset.

n.a. not applicable

Fair value of derivative instruments by term to maturity

(Millions of Canadian dollars)	As at							
	October 31, 2014				October 31, 2013			
	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	\$ 19,485	\$ 29,838	\$ 38,079	\$ 87,402	\$ 13,695	\$ 27,340	\$ 33,787	\$ 74,822
Derivative liabilities	19,980	32,640	36,362	88,982	15,672	29,104	31,969	76,745

Derivative-related credit risk

Credit risk from derivative transactions is generated by the potential for the counterparty to default on its contractual obligations when one or more transactions have a positive market value to us. Therefore, derivative-related credit risk is represented by the positive fair value of the instrument and is normally a small fraction of the contract's notional amount.

We subject our derivative-related credit risk to the same credit approval, limit and monitoring standards that we use for managing other transactions that create credit exposure. This includes evaluating the creditworthiness of counterparties, and managing the size, diversification and maturity structure of the portfolio. Credit utilization for all products is compared with established limits on a continual basis and is subject to a standard exception reporting process. We utilize a single internal rating system for all credit risk exposure. In most cases, these internal ratings approximate the external risk ratings of public rating agencies.

Netting is a technique that can reduce credit exposure from derivatives and is generally facilitated through the use of master netting agreements. A master netting agreement provides for a single net settlement of all financial instruments covered by the agreement in the event of default. However, credit risk is reduced only to the extent that our financial obligations to the same counterparty can be set off against obligations of the counterparty to us. We maximize the use of master netting agreements to reduce derivative-related credit exposure. Our overall exposure to credit risk that is reduced through master netting agreements may change substantially following the reporting date as the exposure is affected by each transaction subject to the agreement as well as by changes in underlying market rates. Measurement of our credit exposure arising out of derivative transactions is reduced to reflect the effects of netting in cases where the enforceability of that netting is supported by appropriate legal analysis as documented in our trading credit risk policies.

The use of collateral is another significant credit mitigation technique for managing derivative-related counterparty credit risk. Mark-to-market provisions in our agreements with some counterparties, typically in the form of a Credit Support Annex, provide us with the right to request that the counterparty pay down or collateralize the current market value of its derivatives positions when the value passes a specified threshold amount.

Replacement cost represents the total fair value of all outstanding contracts in a gain position after factoring in the master netting agreements. The credit equivalent amount is defined as the sum of the replacement cost plus an add-on amount for potential future credit exposure as defined by OSFI. The risk-weighted amount is determined by applying the standard OSFI defined measures of counterparty risk to the credit equivalent amount.

Derivative-related credit risk

(Millions of Canadian dollars)	As at					
	October 31, 2014 (1)			October 31, 2013 (1)		
	Replacement cost	Credit equivalent amount (2)	Risk-weighted equivalent (3)	Replacement cost	Credit equivalent amount (2)	Risk-weighted equivalent (3)
Over-the-counter contracts						
Interest rate contracts						
Forward rate agreements	\$ 183	\$ 276	\$ 70	\$ 94	\$ 278	\$ 48
Swaps	12,455	22,308	4,660	13,133	20,914	5,465
Options purchased	355	665	386	399	634	363
Foreign exchange contracts						
Forward contracts	5,731	11,049	3,201	2,463	6,891	2,232
Swaps	3,190	6,576	2,516	2,500	6,262	1,946
Options purchased	225	443	201	259	444	221
Credit derivatives (4)	178	2,053	1,136	106	1,480	719
Other contracts (5)	1,780	6,670	3,996	1,864	6,838	3,519
Exchange traded contracts	3,530	10,358	207	2,867	11,186	224
	\$ 27,627	\$ 60,398	\$ 16,373	\$ 23,685	\$ 54,927	\$ 14,737

(1) The amounts presented are net of master netting agreements in accordance with Basel III.

(2) The total credit equivalent amount includes collateral applied of \$11.4 billion (October 31, 2013 – \$9.6 billion).

(3) The risk-weighted balances are calculated in accordance with Basel III.

(4) Credit derivatives include credit default swaps, total return swaps and credit default baskets, and exclude credit derivatives issued for other-than-trading purposes related to bought protection.

(5) Other contracts include precious metal, commodity, stable value, and equity derivatives contracts.

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

(Millions of Canadian dollars)	As at October 31, 2014								
	Risk rating (1)				Total	Counterparty type (2)			
	AAA, AA	A	BBB	BB or lower		Banks	OECD governments	Other	Total
Gross positive replacement cost	\$ 25,765	\$ 98,566	\$ 13,995	\$ 6,915	\$ 145,241	\$ 52,986	12,427	\$ 79,828	\$ 145,241
Impact of master netting agreements	19,279	88,911	8,154	1,270	117,614	44,372	7,743	65,499	117,614
Replacement cost (after netting agreements)	\$ 6,486	\$ 9,655	\$ 5,841	\$ 5,645	\$ 27,627	\$ 8,614	\$ 4,684	\$ 14,329	\$ 27,627

(Millions of Canadian dollars)	As at October 31, 2013								
	Risk rating (1)				Total	Counterparty type (2)			
	AAA, AA	A	BBB	BB or lower		Banks	OECD governments	Other	Total
Gross positive replacement cost	\$ 20,610	\$ 68,471	\$ 11,604	\$ 5,844	\$ 106,529	\$ 48,730	\$ 10,634	\$ 47,165	\$ 106,529
Impact of master netting agreements	14,345	60,780	6,829	890	82,844	37,070	6,734	39,040	82,844
Replacement cost (after netting agreements)	\$ 6,265	\$ 7,691	\$ 4,775	\$ 4,954	\$ 23,685	\$ 11,660	\$ 3,900	\$ 8,125	\$ 23,685

(1) Our internal risk ratings for major counterparty types approximate those of public ratings agencies. Ratings of AAA, AA, A and BBB represent investment grade ratings and ratings of BB or lower represent non-investment grade ratings.

(2) Counterparty type is defined in accordance with the capital adequacy requirements of OSFI.

Note 9 Premises and equipment

(Millions of Canadian dollars)	Land	Buildings	Computer equipment	Furniture, fixtures and other equipment	Leasehold improvements	Work in process	Total
Cost							
Balance at October 31, 2013	\$ 134	\$ 1,358	\$ 1,516	\$ 1,434	\$ 2,040	\$ 113	\$ 6,595
Additions (1)	–	14	108	74	54	279	529
Acquisitions through business combinations	–	–	–	–	–	–	–
Transfers from work in process	1	17	43	34	90	(185)	–
Disposals	(2)	(1)	(412)	(303)	(67)	(1)	(786)
Foreign exchange translation	2	8	27	14	34	2	87
Other	2	(49)	(4)	(5)	41	–	(15)
Balance at October 31, 2014	\$ 137	\$ 1,347	\$ 1,278	\$ 1,248	\$ 2,192	\$ 208	\$ 6,410
Accumulated depreciation							
Balance at October 31, 2013	\$ –	\$ 499	\$ 1,155	\$ 1,015	\$ 1,290	\$ –	\$ 3,959
Depreciation	–	50	181	101	167	–	499
Disposals	–	(1)	(412)	(282)	(61)	–	(756)
Foreign exchange translation	–	3	21	9	20	–	53
Other	–	(52)	(20)	(4)	47	–	(29)
Balance at October 31, 2014	\$ –	\$ 499	\$ 925	\$ 839	\$ 1,463	\$ –	\$ 3,726
Net carrying amount at October 31, 2014	\$ 137	\$ 848	\$ 353	\$ 409	\$ 729	\$ 208	\$ 2,684

Note 9 Premises and equipment (continued)

(Millions of Canadian dollars)	Land	Buildings	Computer equipment	Furniture, fixtures and other equipment	Leasehold improvements	Work in process	Total
Cost							
Balance at October 31, 2012	\$ 128	\$ 1,274	\$ 1,430	\$ 1,369	\$ 1,864	\$ 199	\$ 6,264
Additions (1)	3	12	107	40	40	234	436
Acquisitions through business combinations	–	–	1	21	–	–	22
Transfers from work in process	2	44	31	52	155	(284)	–
Disposals	(1)	(3)	(59)	(56)	(6)	(3)	(128)
Foreign exchange translation	2	6	13	7	16	2	46
Other	–	25	(7)	1	(29)	(35)	(45)
Balance at October 31, 2013	\$ 134	\$ 1,358	\$ 1,516	\$ 1,434	\$ 2,040	\$ 113	\$ 6,595
Accumulated depreciation							
Balance at October 31, 2012	\$ –	\$ 455	\$ 1,048	\$ 950	\$ 1,147	\$ –	\$ 3,600
Depreciation	–	42	171	92	140	–	445
Disposals	–	(2)	(56)	(48)	(5)	–	(111)
Foreign exchange translation	–	2	9	4	8	–	23
Other	–	2	(17)	17	–	–	2
Balance at October 31, 2013	\$ –	\$ 499	\$ 1,155	\$ 1,015	\$ 1,290	\$ –	\$ 3,959
Net carrying amount at October 31, 2013	\$ 134	\$ 859	\$ 361	\$ 419	\$ 750	\$ 113	\$ 2,636

(1) At October 31, 2014, we had total contractual commitments of \$216 million to acquire premises and equipment (October 31, 2013 – \$122 million; October 31, 2012 – \$222 million).

Note 10 Goodwill and other intangible assets
Goodwill

The following table presents changes in the carrying amount of goodwill by CGU for the years ended October 31, 2014 and 2013.

(Millions of Canadian dollars)	Canadian Banking	Caribbean Banking	Canadian Wealth Management	Global Asset Management	U.S. Wealth Management	International Wealth Management	Insurance	Investor & Treasury Services	Capital Markets	Total
At October 31, 2012	\$ 1,929	\$ 1,446	\$ 543	\$ 1,889	\$ 517	\$ 127	\$ 118	\$ 52	\$ 837	\$ 7,458
Acquisitions	598	–	–	–	–	–	–	96	11	705
Currency translations	–	58	5	48	22	5	–	1	30	169
At October 31, 2013	\$ 2,527	\$ 1,504	\$ 548	\$ 1,937	\$ 539	\$ 132	\$ 118	\$ 149	\$ 878	\$ 8,332
Dispositions	–	(51)	–	–	–	–	–	–	–	(51)
Currency translations	–	140	10	105	43	9	–	–	59	366
At October 31, 2014	\$ 2,527	\$ 1,593	\$ 558	\$ 2,042	\$ 582	\$ 141	\$ 118	\$ 149	\$ 937	\$ 8,647

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 of disposal and its recoverable amount is the greater of its value in use and fair value less costs of disposal. Our annual impairment test is performed as at August 1.

In our 2014 annual impairment test, the recoverable amounts of our Caribbean Banking and International Wealth Management CGUs were based on fair value less costs of disposal (2013 annual impairment test – Caribbean Banking CGU). In 2014 and 2013, the recoverable amounts of all other CGUs tested were based on value in use.

Value in use

We calculate value in use using a five-year discounted cash flow method. Future cash flows are based on financial plans agreed by management for a five-year period, estimated based on forecast results, business initiatives, capital required to support future cash flows and returns to shareholders. Key drivers of future cash flows include net interest margins and average interest-earning assets. The values assigned to these drivers over the forecast period are based on past experience, external and internal economic forecasts, and management's expectations of the impact of economic conditions on our financial results. Beyond the initial five-year period, cash flows are assumed to increase at a constant rate using a nominal long-term growth rate (terminal growth rate). Terminal growth rates are based on the current market assessment of gross domestic product and inflation for the countries within which the CGU operates. The discount rates used to determine the present value of each CGU's projected future cash flows are based on the bank-wide cost of capital, adjusted for the risks to which each CGU is exposed. CGU-specific risks include: country risk, business/operational risk, geographic risk (including political risk, devaluation risk, and government regulation), currency risk, and price risk (including product pricing risk and inflation).

The estimation of value in use involves significant judgment in the determination of inputs to the discounted cash flow 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 post-tax discount rates were increased by 1%, terminal growth rates were decreased by 1%, and future cash flows were reduced by 10%. As at August 1, 2014, no change in an individual key input or assumption, as described, would result in a CGU's carrying amount exceeding its recoverable amount based on value in use.

The terminal growth rates and pre-tax discount rates used in our discounted cash flow models are summarized below.

	As at			
	August 1, 2014		August 1, 2013	
	Discount rate (1)	Terminal growth rate	Discount rate (1)	Terminal growth rate
Group of cash generating units				
Canadian Banking	10.6%	3.0%	10.6%	3.0%
Caribbean Banking	13.0	4.2	12.9	4.2
Canadian Wealth Management	11.9	3.0	11.9	3.0
Global Asset Management	11.6	3.0	11.8	3.0
U.S. Wealth Management	15.7	3.0	15.9	3.0
International Wealth Management	10.3	3.0	11.8	3.0
Insurance	10.1	3.0	10.2	3.0
Investor & Treasury Services	12.8	3.0	12.5	3.0
Capital Markets	15.9	3.0	15.6	3.0

(1) Pre-tax discount rates are determined implicitly based on post-tax discount rates.

Fair value less costs of disposal – Caribbean Banking

For our Caribbean Banking CGU, we calculated fair value less costs of disposal using a discounted cash flow method that projects future cash flows over a 5-year period. Cash flows are based on management forecasts, adjusted to approximate the considerations of a prospective third-party buyer. Cash flows beyond the initial 5-year period are assumed to increase at a constant rate using a nominal long-term growth rate. Future cash flows, terminal growth rates, and discount rates are based on the same factors noted above. This fair value measurement is categorized as level 3 in the fair value hierarchy as certain significant inputs are not observable.

The estimation of fair value less costs of disposal involves significant judgment in the determination of inputs to the discounted cash flow 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 were tested for sensitivity by applying a reasonably possible change to those assumptions. The post-tax discount rates were increased by 1%, terminal growth rates were decreased by 1%, and future cash flows were reduced by 10%. As at August 1, 2014, the recoverable amount, based on fair value less costs of disposal, was 120% of its carrying amount. No reasonably possible change in an individual key input or assumption, as described, would result in a CGU's carrying amount exceeding its recoverable amount based on fair value less costs of disposal.

Fair value less costs of disposal – International Wealth Management

For our International Wealth Management CGU, we calculated fair value less costs of disposal using a multiples-based approach. Each business within the CGU was valued using either a Price-to-assets-under-administration (P/AUA) or Price-to-revenue (P/Rev) multiple, as appropriate, to reflect the considerations of a prospective third-party buyer. For the applicable businesses, we applied a P/AUA multiple of 2.5% to AUA as at August 1, 2014 and a P/Rev multiple of 2.5x to revenue for the 12 months preceding the testing date. These multiples represent our best estimate from a range of reasonably possible inputs based on precedent transactions for comparable businesses. This fair value measurement is categorized as level 3 in the fair value hierarchy as certain significant inputs are not observable.

The estimation of fair value less costs of disposal involves significant judgment in the determination of the appropriate valuation approach and inputs and is most sensitive to changes in the P/AUA and P/Rev multiples. If the multiples used were each reduced to the low end of the range of reasonably possible inputs considered, the recoverable amount of the CGU based on fair value less costs of disposal would still exceed its carrying amount.

Other intangible assets

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

	As at October 31, 2014					
	Internally generated software	Other software	Core deposit intangibles	Customer list and relationships	In process software	Total
(Millions of Canadian dollars)						
Gross carrying amount						
Balance at October 31, 2013	\$ 2,554	\$ 1,128	\$ 157	\$ 1,509	\$ 711	\$ 6,059
Additions	48	57	–	–	545	650
Transfers	750	22	–	–	(772)	–
Dispositions	(4)	(2)	(3)	–	–	(9)
Impairment losses	–	–	–	(8)	–	(8)
Currency translations	32	15	14	48	8	117
Other changes	22	(34)	–	(38)	(5)	(55)
Balance at October 31, 2014	\$ 3,402	\$ 1,186	\$ 168	\$ 1,511	\$ 487	\$ 6,754
Accumulated amortization						
Balance at October 31, 2013	\$ (1,815)	\$ (811)	\$ (117)	\$ (539)	\$ –	\$ (3,282)
Amortization charge for the year	(460)	(60)	(22)	(124)	–	(666)
Dispositions	4	1	–	–	–	5
Impairment losses	–	–	–	–	–	–
Currency translations	(22)	(13)	(12)	(22)	–	(69)
Other changes	–	(5)	–	38	–	33
Balance at October 31, 2014	\$ (2,293)	\$ (888)	\$ (151)	\$ (647)	\$ –	\$ (3,979)
Net balance, at October 31, 2014	\$ 1,109	\$ 298	\$ 17	\$ 864	\$ 487	\$ 2,775

(Millions of Canadian dollars)	As at October 31, 2013					
	Internally generated software	Other software	Core deposit intangibles	Customer list and relationships	In process software	Total
Gross carrying amount						
Balance at October 31, 2012	\$ 2,206	\$ 976	\$ 150	\$ 1,365	\$ 650	\$ 5,347
Additions	30	63	–	120	581	794
Transfers	400	122	–	–	(522)	–
Dispositions	(2)	(2)	–	–	–	(4)
Impairment losses	(7)	(4)	–	–	(2)	(13)
Currency translations	15	9	7	25	2	58
Other changes	(88)	(36)	–	(1)	2	(123)
Balance at October 31, 2013	\$ 2,554	\$ 1,128	\$ 157	\$ 1,509	\$ 711	\$ 6,059
Accumulated amortization						
Balance at October 31, 2012	\$ (1,442)	\$ (730)	\$ (90)	\$ (413)	\$ –	\$ (2,675)
Amortization charge for the year	(361)	(66)	(22)	(117)	–	(566)
Dispositions	1	1	–	–	–	2
Impairment losses	3	–	–	–	–	3
Currency translations	(9)	(7)	(5)	(11)	–	(32)
Other changes	(7)	(9)	–	2	–	(14)
Balance at October 31, 2013	\$ (1,815)	\$ (811)	\$ (117)	\$ (539)	\$ –	\$ (3,282)
Net balance, at October 31, 2013	\$ 739	\$ 317	\$ 40	\$ 970	\$ 711	\$ 2,777

Note 11 Significant dispositions
Personal & Commercial Banking
Caribbean Banking

On June 27, 2014, we completed the sale of RBC Royal Bank (Jamaica) Limited and RBTT Securities Jamaica Limited (collectively, RBC Jamaica) to Sagicor Group Jamaica Limited, as announced on January 29, 2014. As a result of the transaction, we recorded a total loss on disposal of \$100 million (before and after-tax), including a loss of \$60 million in the first quarter and \$40 million primarily relating to foreign currency translation losses reclassified from Other components of equity in the third quarter of 2014. The loss on disposal has been included in Non-Interest expense – Other.

U.S. 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. As a result of the transaction, we recorded a total loss on sale of \$294 million after-tax, including an estimated loss of \$304 million in 2011 and a reduction to loss on sale of \$10 million in 2012. The loss on disposal was recorded in Net loss from discontinued operations.

The results of the operations sold to PNC and certain of our U.S. regional banking assets have been presented in our Consolidated Financial Statements as discontinued operations for all periods presented. Select financial information is set out in the tables below.

Total discontinued operations – Statements of Income

(Millions of Canadian dollars)	For the year ended		
	October 31 2014	October 31 2013	October 31 2012
Net interest income	\$ –	\$ –	\$ 200
Non-interest income	–	–	68
Total Revenue	–	–	268
Provision for credit losses	–	–	117
Non-interest expense	–	–	258
Net loss before income taxes	–	–	(107)
Net loss	–	–	(61)
Gain on sale	–	–	10
Net loss from discontinued operations	–	–	–
U.S. regional retail banking operations sold to PNC	–	–	(36)
Other U.S. regional banking assets	–	–	(15)
Total	\$ –	\$ –	\$ (51)

Total discontinued operations – Statements of Cash Flows

(Millions of Canadian dollars)	For the year ended		
	October 31 2014	October 31 2013	October 31 2012
Net cash used in operating activities	\$ –	\$ –	\$ (6,727)
Net cash from investing activities	–	–	4,054
Net cash used in financing activities	–	–	(24)
Effect of exchange rate changes on cash and due from banks	–	–	(19)
Net change in cash and due from banks	–	–	(2,716)
Cash and due from banks at beginning of year	–	–	2,716
Cash and due from banks at end of year	\$ –	\$ –	\$ –

Note 12 Joint ventures and associated companies

The following table summarizes the carrying value of our interests in joint ventures and associated companies accounted for under the equity method as well as our share of the income of those entities.

(Millions of Canadian dollars)	Joint ventures			Associated companies		
	As at and for the year ended					
	October 31 2014	October 31 2013	October 31 2012	October 31 2014	October 31 2013	October 31 2012
Carrying amount	\$ 180	\$ 135	\$ 452	\$ 115	\$ 112	\$ 125
Share of:						
Net income (1)	131	133	139	31	26	24
Other comprehensive income	5	5	25	–	–	–
	\$ 136	\$ 138	\$ 164	\$ 31	\$ 26	\$ 24

(1) Net income for the year ended October 31, 2012 reflects our share of the 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.

We do not have any joint ventures or associated companies that are individually material to our financial results. Previously, our principal joint ventures included a 50% interest in RBC Dexia. In the third quarter of 2012, we completed the acquisition of RBC Dexia and as a result, it is no longer a joint venture.

During the year ended October 31, 2014, we recognized no impairment losses in respect of our interests in associated companies (October 31, 2013 – \$20 million; October 31, 2012 – none) and \$62 million of gains on sales of associated companies (October 31, 2013 – none; October 31, 2012 – none). During the year ended October 31, 2012, we recognized an impairment loss of \$168 million related to our interest in our previous joint venture, RBC Dexia.

Note 13 Other assets

(Millions of Canadian dollars)	As at	
	October 31 2014	October 31 2013
Cash collateral and margin deposits	\$ 12,481	\$ 11,689
Accounts receivable and prepaids	3,773	3,563
Receivable from brokers, dealers and clients	2,354	1,474
Insurance-related assets		
Collateral loans	1,121	1,273
Policy loans	113	132
Reinsurance assets	512	422
Other	400	355
Deferred income tax asset	2,382	2,141
Accrued interest receivable	1,554	1,789
Taxes receivable	1,620	1,252
Precious metals	223	173
Other	4,162	2,375
	\$ 30,695	\$ 26,638

Note 14 Deposits

The following table details our deposit liabilities:

(Millions of Canadian dollars)	As at							
	October 31, 2014				October 31, 2013			
	Demand (1)	Notice (2)	Term (3)	Total	Demand (1)	Notice (2)	Term (3)	Total
Personal	\$ 120,444	\$ 17,793	\$ 70,980	\$ 209,217	\$ 111,566	\$ 15,732	\$ 67,645	\$ 194,943
Business and government	162,988	3,038	220,634	386,660	146,985	1,209	206,399	354,593
Bank	5,771	11	12,441	18,223	5,734	11	7,798	13,543
	\$ 289,203	\$ 20,842	\$ 304,055	\$ 614,100	\$ 264,285	\$ 16,952	\$ 281,842	\$ 563,079
Non-interest-bearing (4)								
Canada	\$ 65,774	\$ 3,478	\$ -	\$ 69,252	\$ 60,201	\$ 3,282	\$ -	\$ 63,483
United States	1,777	15	-	1,792	1,444	7	-	1,451
Europe (5)	3,314	1	-	3,315	3,810	1	-	3,811
Other International	5,057	279	-	5,336	4,684	315	-	4,999
Interest-bearing (4)								
Canada	175,172	10,895	241,902	427,969	158,743	9,604	223,409	391,756
United States	3,497	2,144	45,359	51,000	3,488	202	42,863	46,553
Europe (5)	31,118	418	9,282	40,818	28,985	45	7,992	37,022
Other International	3,494	3,612	7,512	14,618	2,930	3,496	7,578	14,004
	\$ 289,203	\$ 20,842	\$ 304,055	\$ 614,100	\$ 264,285	\$ 16,952	\$ 281,842	\$ 563,079

(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, 2014, the balance of term deposits also include senior deposit notes we have issued to provide long-term funding of \$150 billion (October 31, 2013 – \$134 billion).

(4) The geographical splits of the deposits are based on the point of origin of the deposits and where the revenue is recognized. As at October 31, 2014, deposits denominated in U.S. dollars, Sterling, Euro and other foreign currencies were \$183 billion, \$11 billion, \$23 billion and \$22 billion, respectively (October 31, 2013 – \$152 billion, \$8 billion, \$20 billion and \$21 billion).

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

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

(Millions of Canadian dollars)	As at	
	October 31 2014	October 31 2013
Within 1 year:		
less than 3 months	\$ 57,840	\$ 43,426
3 to 6 months	32,880	34,532
6 to 12 months	50,300	33,450
1 to 2 years	54,354	62,443
2 to 3 years	31,559	34,519
3 to 4 years	28,946	22,358
4 to 5 years	24,673	25,596
Over 5 years	23,503	25,518
	\$ 304,055	\$ 281,842
Aggregate amount of term deposits in denominations of \$100,000 or more	\$ 270,000	\$ 247,000

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

(Millions of Canadian dollars, except for percentage amounts)	For the year ended					
	October 31, 2014		October 31, 2013		October 31, 2012	
	Average balances	Average rates	Average balances	Average rates	Average balances	Average rates
Canada	\$ 477,316	1.13%	\$ 435,842	1.20%	\$ 403,610	1.33%
United States	52,058	0.30	44,512	0.38	41,617	0.50
Europe (1)	43,429	0.21	38,791	0.27	33,394	0.62
Other International	20,299	1.03	18,571	0.95	11,979	2.20
	\$ 593,102	0.99%	\$ 537,716	1.06%	\$ 490,600	1.23%

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

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. We do not have a high degree of concentration risk due to our geographic diversity and business mix. Concentration risk is not a major concern for the life and health insurance business as it does not have a material level of regional specific characteristics like those exhibited in the property and casualty insurance business. Exposure to concentrations of insurance risks for the property and casualty business is primarily mitigated through a robust Insurance Risk Framework including prudent underwriting practices and diversification by product offerings and geographical areas. Reinsurance is also used for all insurance businesses to lower our risk profile and limit the liability on a single claim. 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.

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

(Millions of Canadian dollars)	For the year ended		
	October 31 2014	October 31 2013	October 31 2012
Gross premiums	\$ 4,962	\$ 4,785	\$ 4,739
Premiums ceded to reinsurers	(1,220)	(1,111)	(1,034)
Net premiums	\$ 3,742	\$ 3,674	\$ 3,705
Gross claims and benefits	\$ 3,692	\$ 2,768	\$ 3,472
Reinsurers' share of claims and benefits	(498)	(442)	(417)
Net claims	\$ 3,194	\$ 2,326	\$ 3,055

Insurance claims and policy benefit liabilities

All actuarial assumptions are set in conjunction with Canadian Institute of Actuaries Standards of Practice and OSFI requirements. The assumptions that have the greatest effect on the measurement of insurance liabilities, the processes used to determine them and the assumptions used as at October 31, 2014 are as follows:

Life insurance

Mortality and morbidity – Mortality estimates are based on standard industry and national mortality tables, adjusted where appropriate to reflect our own experience. Morbidity assumptions are made with respect to the rates of claim incidence and claim termination for health insurance policies and are based on a combination of industry and our own experience.

Future investment yield – Assumptions are based on the current yield rate, a reinvestment assumption and an allowance for future credit losses for each line of business, and are developed using interest rate scenario testing, including prescribed scenarios for determination of minimum liabilities as set out in the actuarial standards.

Policyholder behaviour – Under certain policies, the policyholder has a contractual right to change benefits and premiums, as well as convert policies to permanent forms of insurance. All policyholders have the right to terminate their policies through lapse. Lapses represent the termination of policies due to non-payment of premiums. Lapse assumptions are primarily based on our recent experience adjusted for emerging industry experience where applicable.

Non-life insurance

Assumptions related to unpaid claims concern the patterns of development of claims from inception to ultimate settlement. The reserving assumptions, based on historical paid/incurred development patterns adjusted for changes in products, claims processes and legislative trends, result in a collective loss ratio when compared with earned premium.

The portfolio assumptions that have the greatest effect on the net liabilities included in our Consolidated Balance Sheets are listed below:

Significant insurance assumptions

	As at	
	October 31 2014	October 31 2013
Life Insurance		
Canadian Insurance		
Mortality rates (1)	0.12%	0.12%
Morbidity rates (2)	1.82	1.99
Reinvestment yield (3)	3.15	3.15
Lapse rates (4)	0.50	0.50
International Insurance		
Mortality rates (1)	0.43	0.46
Reinvestment yield (3)	2.19	2.29
Non-life Insurance		
Expected loss ratio (5), (6)	60.16	62.14

(1) Average annual death rate for the largest portfolio of insured policies.

(2) Average net settlement rate for the individual and group disability insurance portfolio.

(3) Ultimate reinvestment rate of the insurance operations.

(4) Ultimate policy termination rate (lapse rate) for the largest permanent life insurance portfolio that relies on higher termination rate to maintain its profitability (lapse-supported policies).

(5) Ratio of incurred claim losses and claim expenses to Net premiums of the property and casualty business, measuring the profitability or loss experience on our total book of business.

(6) Amounts have been revised from those previously reported.

The following table summarizes our gross and reinsurers' share of insurance liabilities at the end of the year.

Insurance claims and policy benefit liabilities

(Millions of Canadian dollars)	As at					
	October 31, 2014			October 31, 2013		
	Gross	Ceded	Net	Gross	Ceded	Net
Life insurance policyholder liabilities						
Life, health and annuity	\$ 7,555	\$ 390	\$ 7,165	\$ 7,029	\$ 300	\$ 6,729
Investment contracts (1)	5	–	5	1	–	1
	\$ 7,560	\$ 390	\$ 7,170	\$ 7,030	\$ 300	\$ 6,730
Non-life insurance policyholder liabilities						
Unearned premium provision (1)	\$ 419	\$ –	\$ 419	\$ 410	\$ –	\$ 410
Unpaid claims provision	1,010	29	981	1,005	21	984
	\$ 1,429	\$ 29	\$ 1,400	\$ 1,415	\$ 21	\$ 1,394
	\$ 8,989	\$ 419	\$ 8,570	\$ 8,445	\$ 321	\$ 8,124

(1) Insurance claims and policy benefit liabilities include Investment contracts and Unearned premium provision, both of which are reported in Other liabilities on the Consolidated Balance Sheets.

Reconciliation of life insurance policyholder liabilities

(Millions of Canadian dollars)	October 31, 2014			October 31, 2013		
	Gross	Ceded	Net	Gross	Ceded	Net
Balances, beginning of the year	\$ 7,030	\$ 300	\$ 6,730	\$ 6,989	\$ 206	\$ 6,783
New and in-force policies	621	90	531	(67)	94	(161)
Changes in assumption and methodology	(95)	–	(95)	108	–	108
Net change in investment contracts	4	–	4	–	–	–
Balances, end of the year	\$ 7,560	\$ 390	\$ 7,170	\$ 7,030	\$ 300	\$ 6,730

Reconciliation of non-life insurance policyholder liabilities

(Millions of Canadian dollars)	October 31, 2014			October 31, 2013		
	Gross	Ceded	Net	Gross	Ceded	Net
Balances, beginning of the year	\$ 1,415	\$ 21	\$ 1,394	\$ 1,354	\$ 27	\$ 1,327
Changes in unearned premiums provision						
Written premiums	942	91	851	980	32	948
Less: Net premiums earned	(933)	(91)	(842)	(990)	(32)	(958)
Changes in unpaid claims provision and adjustment expenses						
Incurred claims	595	38	557	652	33	619
Less: Claims paid	(590)	(30)	(560)	(581)	(39)	(542)
Balances, end of the year	\$ 1,429	\$ 29	\$ 1,400	\$ 1,415	\$ 21	\$ 1,394

The net increase in Insurance claims and policy benefit liabilities over the prior year was comprised of the net increase in life and health, reinsurance and property and casualty liabilities attributable to business growth and market movements on assets backing life and health liabilities. During the year, we reviewed all key actuarial methods and assumptions which are used in determining the policy benefit liabilities resulting in a \$102 million net decrease to insurance liabilities comprised of: (i) a decrease of \$37 million for assumption updates due to net favourable interest rate and equity market changes; (ii) a decrease of \$36 million due to liability impacts of significant business projects; (iii) a decrease of \$21 million due to valuation system and data changes; and (iv) a decrease of \$8 million arising from insurance risk related assumption updates largely due to mortality, morbidity, maintenance, property and casualty margin for adverse deviation and expense assumptions. 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.

Sensitivity analysis

The following table presents the sensitivity of the level of insurance policyholder liabilities disclosed in this note to reasonably possible changes in the actuarial assumptions used to calculate them. The percentage change in variable is applied to a range of existing actuarial modelling assumptions to derive the possible impact on net income. 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 impact for year ended	
		October 31 2014	October 31 2013
Increase in market interest rates (1)	1%	\$ 1	\$ 27
Decrease in market interest rates (1)	1	(3)	(35)
Increase in equity market values	10	6	8
Decrease in equity market values	10	(3)	(2)
Increase in maintenance expenses	5	(25)	(30)
Life Insurance			
Adverse change in annuitant mortality rates	2	(72)	(53)
Adverse change in assurance mortality rates	2	(47)	(46)
Adverse change in morbidity rates	5	(156)	(191)
Adverse change in lapse	10	(192)	(170)
Non-life Insurance			
Increase in expected loss ratio	5	(10)	(11)

(1) Sensitivities for market interest rates have been calculated by increasing or decreasing 100 basis points at all points on the yield curve, with changes persisting for one year. In the prior year we also included a corresponding impact of 15 basis points on the ultimate reinvestment rate that is no longer required due to actuarial changes in the determination of the ultimate reinvestment rate implemented in the current period.

Note 16 Segregated funds

We offer certain individual variable insurance contracts that allow policyholders to invest in segregated funds. The investment returns on these funds are passed directly to the policyholders. Amounts invested are at the policyholders' risk, except where the policyholders have selected options providing maturity and death benefit guarantees. A liability for the guarantees is recorded in Insurance claims and policy benefit liabilities.

Segregated funds net assets are recorded at fair value. All of our segregated funds net assets are categorized as Level 1 in the fair value hierarchy. The fair value of the segregated funds liabilities is equal to the fair value of the segregated funds net assets. Segregated funds net assets and segregated funds liabilities are presented on separate lines on the Consolidated Balance Sheets. The following tables present the composition of net assets and the changes in net assets for the year.

Segregated funds net assets

(Millions of Canadian dollars)	As at	
	October 31 2014	October 31 2013
Cash	\$ 1	\$ 6
Investment in mutual funds	675	509
Other liabilities, net	(1)	(2)
	\$ 675	\$ 513

Changes in net assets

(Millions of Canadian dollars)	For the year ended	
	October 31 2014	October 31 2013
Net assets, beginning of year	\$ 513	\$ 383
Additions (deductions):		
Deposits from policyholders	239	188
Net realized and unrealized gains	52	45
Interest and dividend	19	13
Payment to policyholders	(132)	(105)
Management and administrative fees	(16)	(11)
Net assets, end of year	\$ 675	\$ 513

Plan characteristics

We sponsor a number of programs that provide pension and post-employment benefits to eligible employees. The pension plans are administered by separate trustees that are legally segregated from the Bank. The majority of beneficiaries of the pension plans are located in Canada and other beneficiaries of the pension plans are primarily located in the United States, the United Kingdom and the Caribbean. The pension arrangements including investment, plan benefits and funding decisions are governed by local pension committees, trustees (U.K.), or management. Significant plan changes require the approval of the Board of Directors.

Our defined benefit pension plans provide pension benefits based on years of service, contributions and average earnings at retirement. Our principal defined benefit pension plans are closed to new members. New employees are generally eligible to join defined contribution pension plans. The specific features of these plans vary by location. We also provide supplemental non-registered (non-qualified) pension plans for certain executives and senior management that are typically unfunded or partially funded.

Our defined contribution pension plans provide pension benefits based on accumulated employee and company contributions. The company contributions are based on a percentage of an employee's annual earnings and a portion of the company contribution is dependent on the amount being contributed by the employee and their years of service.

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. These plans are unfunded unless required by legislation.

We measure our benefit obligations and pension assets as at October 31 each year. All plans are valued using the projected unit-credit method. 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 primary pension plan, the most recent funding actuarial valuation was completed on January 1, 2014, and the next valuation will be completed on January 1, 2015.

For the year ended October 31, 2014, total company contributions to our pension plans (defined benefit and defined contribution plans) and other post-employment benefit plans were \$537 million and \$63 million (October 31, 2013 – \$389 million and \$55 million), respectively. For 2015, total contributions to our pension plans and other post-employment benefit plans are expected to be \$363 million and \$70 million, respectively.

Risks

By their design, the defined benefit pension plans expose the Bank to risks such as investment performance, reductions in discount rates used to value the obligations, increased longevity of plan members, future inflation levels impacting future salary increases as well as future increases in healthcare costs. By closing our principal defined benefit pension plans and migrating to defined contribution pension plans, the volatility associated with future service costs will reduce over time.

The following table presents the financial position related to all of our material pension and other post-employment benefit plans worldwide, including executive retirement arrangements.

	As at			
	October 31, 2014		October 31, 2013	
	Defined benefit pension plans	Other post-employment benefit plans	Defined benefit pension plans	Other post-employment benefit plans
<i>(Millions of Canadian dollars)</i>				
Canada				
Fair value of plan assets	\$ 10,419	\$ 4	\$ 9,454	\$ 3
Present value of defined benefit obligation	10,767	1,754	9,519	1,636
Net deficit	\$ (348)	\$ (1,750)	\$ (65)	\$ (1,633)
International				
Fair value of plan assets	\$ 932	\$ –	\$ 812	\$ –
Present value of defined benefit obligation	1,038	78	894	86
Net deficit	\$ (106)	\$ (78)	\$ (82)	\$ (86)
Total				
Fair value of plan assets	\$ 11,351	\$ 4	\$ 10,266	\$ 3
Present value of defined benefit obligation	11,805	1,832	10,413	1,722
Total net deficit	\$ (454)	\$ (1,828)	\$ (147)	\$ (1,719)
Amounts recognized in our Consolidated Balance Sheets				
Employee benefit assets	\$ 138	\$ –	\$ 161	\$ –
Employee benefit liabilities	(592)	(1,828)	(308)	(1,719)
Total net deficit	\$ (454)	\$ (1,828)	\$ (147)	\$ (1,719)

The following table presents an analysis of the movement in the financial position related to all of our material pension and other post-employment benefit plans worldwide, including executive retirement arrangements.

(Millions of Canadian dollars)	As at or for the year ended			
	October 31, 2014		October 31, 2013	
	Defined benefit pension plans ⁽¹⁾	Other post-employment benefit plans	Defined benefit pension plans ⁽¹⁾	Other post-employment benefit plans
Change in fair value of plan assets				
Opening fair value of plan assets	\$ 10,266	\$ 3	\$ 9,348	\$ 1
Interest income	472	–	408	–
Remeasurements				
Return on plan assets (excluding interest income)	647	–	601	–
Change in foreign currency exchange rate	60	–	32	–
Contributions – Employer	400	63	272	55
Contributions – Plan participant	52	13	52	12
Payments	(456)	(75)	(430)	(65)
Payments – amount paid of any settlements	(78)	–	(4)	–
Other	(12)	–	(13)	–
Closing fair value of plan assets	\$ 11,351	\$ 4	\$ 10,266	\$ 3
Change in present value of benefit obligation				
Opening benefit obligation	\$ 10,413	\$ 1,722	\$ 9,857	\$ 1,682
Current service costs	315	31	298	28
Past service costs	97	–	(2)	(2)
Interest expense	486	80	438	73
Remeasurements				
Actuarial (gains) losses from demographic assumptions	76	(58)	382	51
Actuarial (gains) losses from financial assumptions	830	119	(265)	(65)
Actuarial losses from experience adjustments	6	7	49	4
Change in foreign currency exchange rate	67	6	38	4
Contributions – Plan participant	52	13	52	12
Payments	(456)	(75)	(430)	(65)
Payments – amount paid of any settlements	(78)	–	(4)	–
Business combinations/Disposals	–	(11)	–	–
Other	(3)	(2)	–	–
Closing benefit obligation	\$ 11,805	\$ 1,832	\$ 10,413	\$ 1,722
Unfunded obligation	\$ 28	\$ 1,670	\$ 27	\$ 1,557
Wholly or partly funded obligation	11,777	162	10,386	165
Total benefit obligation	\$ 11,805	\$ 1,832	\$ 10,413	\$ 1,722

(1) For pension plans with funding deficits, the benefit obligations and fair value of plan assets as at October 31, 2014 were \$10,180 million and \$9,587 million, respectively (October 31, 2013 – \$8,996 million and \$8,688 million, respectively).

Pension and other post-employment benefit expense

The following table presents the composition of our pension and other post-employment benefit expense.

(Millions of Canadian dollars)	For the year ended						
	October 31 2014	Pension plans			Other post-employment benefit plans		
		October 31 2013	October 31 2012	October 31 2014	October 31 2013	October 31 2012	
Current service costs	\$ 315	\$ 298	\$ 221	\$ 31	\$ 28	\$ 25	
Past service costs	97	(2)	1	–	(2)	(4)	
Net interest expense (income)	14	30	(4)	80	73	79	
Remeasurements of other long term benefits	–	–	–	9	(5)	2	
Administrative expense	13	11	11	–	–	–	
Defined benefit pension expense	\$ 439	\$ 337	\$ 229	\$ 120	\$ 94	\$ 102	
Defined contribution pension expense	137	117	91	–	–	–	
Total benefit expense	\$ 576	\$ 454	\$ 320	\$ 120	\$ 94	\$ 102	

Total service costs for the year ended October 31, 2014 totalled \$307 million (October 31, 2013 – \$284 million; October 31, 2012 – \$212 million) for pension plans in Canada and \$105 million (October 31, 2013 – \$12 million; October 31, 2012 – \$10 million) for International plans. Net interest expense for the year ended October 31, 2014 totalled \$10 million (October 31, 2013 – \$26 million; October 31, 2012 – net interest income of \$8 million) for pension plans in Canada and \$4 million (October 31, 2013 – \$4 million; October 31, 2012 – \$4 million) for International plans.

Remeasurements of employee benefit plans

The following table presents the composition of our remeasurements recorded in OCI.

(Millions of Canadian dollars)	For the year ended					
	Defined benefit pension plans			Other post-employment benefit plans		
	October 31 2014	October 31 2013	October 31 2012	October 31 2014	October 31 2013	October 31 2012
Actuarial (gains) losses:						
Changes in demographic assumptions	\$ 76	\$ 382	\$ (1)	\$ (54)	\$ 53	\$ (65)
Changes in financial assumptions	830	(265)	1,159	113	(62)	190
Experience adjustments	6	49	8	–	4	(2)
Return on plan assets (excluding interest based on discount rate)	(647)	(601)	(231)	–	–	–
	\$ 265	\$ (435)	\$ 935	\$ 59	\$ (5)	\$ 123

Total remeasurements recorded in OCI for the year ended October 31, 2014 were loss of \$238 million (October 31, 2013 – gain of \$424 million; October 31, 2012 – loss of \$871 million) for pension plans in Canada and loss of \$27 million (October 31, 2013 – gain of \$11 million; October 31, 2012 – loss of \$64 million) for International plans.

Investment policy and strategies

Defined benefit pension plan assets are invested prudently in order to meet our longer term pension obligations. The pension plan's investment strategy is to hold a diversified mix of investments by asset class and geographic location, in order to reduce investment-specific risk to the funded status while maximizing the expected returns to meet pension obligations. Investment of the plan's assets is conducted with careful consideration of the pension obligation's exposure to interest rates, credit spreads and inflation which are key risk factors impacting the obligation. The asset mix policy is therefore consistent with an asset/liability framework. Factors taken into consideration in developing our asset mix 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 expectations for 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 asset and liability volatility and correlations.

To implement our asset mix policy, we may invest in equity securities, debt securities, alternative investments and derivative instruments. Our holdings in certain investments, including common shares, emerging market equity and debt, debt securities rated lower than BBB and residential and commercial mortgages, cannot exceed a defined percentage of the market value of our defined benefit pension plan assets. We may use derivative instruments as either a synthetic investment to more efficiently replicate the performance of an underlying security, or as a hedge against financial risks associated with the underlying portfolio. To manage our credit risk exposure, counterparties of our derivative instruments are required to meet minimum credit ratings and enter into collateral agreements.

Our defined benefit pension plan assets are primarily comprised of equity and debt securities. Our equity securities generally have unadjusted quoted market prices in an active market (Level 1) and our debt securities generally have quoted market prices for similar assets in an active market (Level 2). Alternative investments and other includes cash, hedge funds, and private fund investments including infrastructure, real estate leases, private equity and derivative financial instruments. In the case of private fund investments, no quoted market prices are usually available (Level 2 or Level 3). These fund assets are either valued by an independent valuator or priced using observable market inputs.

During the year, investment changes and risk factor diversification continued in support of our efforts to reduce variability in the funded status. As a result, equity risk was reduced through redeployment of equity investments into a diverse mix of quality alternative investments with low correlation to equity markets, including investments in hedge funds, infrastructure, private equity and real estate. In addition, an increasing allocation to debt securities is used to reduce asset liability duration mismatch and hence variability of the plan's funded status due to interest rate changes. Longer maturity debt securities, given their price sensitivity to movements in interest rates, are considered to be a good economic hedge to risk associated with the plan's liabilities, which are discounted using predominately long maturity bond interest rates as inputs. We expect to continue to move towards a higher weighting of debt securities as market conditions permit, to further reduce risk of variability in the funded status.

Asset allocation of defined benefit pension plans ⁽¹⁾

(Millions of Canadian dollars, except percentages)	As at					
	October 31, 2014			October 31, 2013		
	Fair value	Percentage of total plan assets	Quoted in active market ⁽²⁾	Fair value	Percentage of total plan assets	Quoted in active market ⁽²⁾
Equity securities						
Domestic	\$ 1,623	14%	100%	\$ 1,354	13%	100%
Foreign	2,530	22	100	2,625	25	100
Debt securities						
Domestic government bonds	2,199	19	–	2,377	23	–
Foreign government bonds	530	5	–	495	5	–
Corporate and other bonds	2,097	19	–	1,601	16	–
Alternative investments and other	2,372	21	11	1,814	18	15
	\$ 11,351	100%	39%	\$ 10,266	100%	41%

(1) The asset allocation is based on the underlying investments held directly and indirectly through the funds as this is how we manage our investment policy and strategies.

(2) If our assessment of quoted in an active market was based on the direct investments, 45% of our total plan assets would be classified as quoted in an active market (October 31, 2013 – 48%).

The allocation to equity securities of our pension plan in Canada is 38% (October 31, 2013 – 40%) and that of our International plan is 18% (October 31, 2013 – 24%). The allocation to debt securities of our pension plan in Canada is 41% (October 31, 2013 – 42%) and that of our International plan is 58% (October 31, 2013 – 62%). The allocation to alternative investments and other in our pension plan in Canada is 21% (October 31, 2013 – 18%) and that of our International plan is 24% (October 31, 2013 – 14%).

As at October 31, 2014, the plan assets include 1 million (October 31, 2013 – 1 million) of our common shares with a fair value of \$107 million (October 31, 2013 – \$84 million) and \$39 million (October 31, 2013 – \$13 million) of our debt securities. For the year ended October 31, 2014, dividends received on our common shares held in the plan assets were \$4 million (October 31, 2013 – \$3 million).

Maturity profile

The following table presents the maturity profile of our defined benefit pension plan obligation.

(Millions of Canadian dollars, except participants and years)	As at		
	October 31, 2014		
	Canada	International	Total
Number of plan participants	75,250	10,084	85,334
Actual benefit payments 2014	\$ 405	\$ 51	\$ 456
Benefits expected to be paid 2015	488	40	528
Benefits expected to be paid 2016	512	41	553
Benefits expected to be paid 2017	537	39	576
Benefits expected to be paid 2018	560	40	600
Benefits expected to be paid 2019	581	43	624
Benefits expected to be paid 2020-2024	3,192	263	3,455
Weighted average duration of defined benefit payments	15.2 years	19.8 years	15.5 years

Significant assumptions

Our methodologies to determine significant assumptions used in calculating the defined benefit pension and other post-employment benefit expense are as follows:

Discount rate

For the Canadian pension and other post-employment benefit 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 International pension and other post-employment benefit 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.

Rate of increase in future compensation

The assumptions for increases in future compensation are developed separately for each plan, where relevant. Each assumption is set based on the price inflation assumption and compensation policies in each market, as well as relevant local statutory and plan-specific requirements.

Healthcare cost trend rates

Healthcare cost calculations are based on both short and long term trend assumptions established based on the plan's recent trend experience as well as on market expectations.

	As at					
	Defined benefit pension plans			Other post-employment benefit plans		
	October 31 2014	October 31 2013	October 31 2012	October 31 2014	October 31 2013	October 31 2012
Weighted average assumptions to determine benefit obligation						
Discount rate	4.10%	4.60%	4.40%	4.20%	4.70%	4.50%
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.	3.50%	3.80%	3.90%
– Dental	n.a.	n.a.	n.a.	4.00%	4.00%	4.00%

(1) For our other post-employment benefit plans, the assumed medical healthcare cost trend rates used to measure the expected cost of benefits were 3.50% for the next year decreasing to an ultimate rate of 2.50% in 2030.

n.a. not applicable

Note 17 Employee benefits - Pension and other post-employment benefits (continued)

Mortality assumptions

Mortality assumptions are significant in measuring our obligations under the defined benefit pension plans. These assumptions have been set based on country specific statistics. Future longevity improvements have been considered and included where appropriate. The following table summarizes the mortality assumptions used for major plans.

(In years)	As at							
	October 31, 2014				October 31, 2013			
	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	
	Male	Female	Male	Female	Male	Female	Male	Female
Country								
Canada	23.0	23.5	24.0	24.5	22.4	23.2	23.5	24.1
United States	20.6	22.9	21.1	23.4	20.5	22.8	21.0	23.3
United Kingdom	23.9	25.2	26.1	27.6	23.8	25.1	26.0	27.5

Sensitivity analysis

Assumptions adopted can have a significant effect on the obligations for defined benefit pension and other post-employment benefit plans. The increase (decrease) in obligation in the following table has been determined assuming all other assumptions are held constant. In practice, this is unlikely to occur, as changes in some of the assumptions may be correlated. The following table presents the sensitivity analysis of key assumptions for 2014:

(Millions of Canadian dollars)	Defined benefit pension plans – Increase (decrease) in obligation	Other post-employment benefit plans – Increase (decrease) in obligation
Discount rate		
Impact of 50bps increase in discount rate	\$ (864)	\$ (125)
Impact of 50bps decrease in discount rate	960	140
Rate of increase in future compensation		
Impact of 50bps increase in rate of increase in future compensation	65	n.a.
Impact of 50bps decrease in rate of increase in future compensation	(66)	n.a.
Mortality rate		
Impact of an increase in longevity by one additional year	265	46
Healthcare cost trend rate		
Impact of 100bps increase in healthcare cost trend rate	n.a.	131
Impact of 100bps decrease in healthcare cost trend rate	n.a.	(112)

n.a. not applicable

Note 18 Other liabilities

(Millions of Canadian dollars)	As at	
	October 31 2014	October 31 2013
Cash collateral	\$ 10,500	\$ 8,855
Accounts payable and accrued expenses	2,386	2,917
Payroll and related compensation	6,582	5,911
Payable to brokers, dealers and clients	2,063	1,821
Negotiable instruments	2,416	2,172
Accrued interest payable	1,748	1,796
Deferred income	1,937	1,783
Taxes payable	1,691	1,480
Precious metals certificates	572	677
Dividends payable	1,127	1,027
Insurance related liabilities	617	566
Deferred income taxes	204	170
Provisions	500	271
Other	4,966	5,501
	\$ 37,309	\$ 34,947

Note 19 Subordinated debentures

The debentures are unsecured obligations and are subordinated in right of payment to the claims of depositors and certain other creditors. All redemptions, cancellations and exchanges of subordinated debentures are subject to the consent and approval of OSFI. All subordinated debentures are redeemable at our option. The amounts presented below include the impact of fair value hedging for interest rate risk and are net of our holdings in these securities which have not been cancelled and are still outstanding.

Maturity	Earliest par value redemption date	Interest rate	Denominated in foreign currency (millions)	As at	
				October 31 2014	October 31 2013
November 14, 2014 ⁽¹⁾		10.00%		\$ 200	\$ 217
November 4, 2018	November 4, 2013 ⁽²⁾	5.45% ⁽³⁾		–	1,000
June 15, 2020	June 15, 2015	4.35% ⁽⁴⁾		1,491	1,508
November 2, 2020	November 2, 2015	3.18% ⁽⁵⁾		1,483	1,488
June 8, 2023		9.30%		110	110
July 17, 2024 ⁽⁶⁾	July 17, 2019	3.04% ⁽⁷⁾		1,002	–
December 6, 2024	December 6, 2019	2.99% ⁽⁸⁾		1,992	1,947
September 29, 2026 ⁽⁶⁾	September 29, 2021	3.45% ⁽⁹⁾		1,009	–
November 1, 2027	November 1, 2022	4.75%	TT\$300	53	49
June 26, 2037	June 26, 2017	2.86%	JPY 10,000	106	109
October 1, 2083	Any interest payment date	⁽¹⁰⁾		224	224
June 29, 2085	Any interest payment date	⁽¹¹⁾	US\$174	196	181
June 18, 2103	June 18, 2009 ⁽¹²⁾	5.95% ⁽¹³⁾		–	615
				\$ 7,866	\$ 7,448
Deferred financing costs				(7)	(5)
				\$ 7,859	\$ 7,443

The terms and conditions of the debentures are as follows:

- (1) All \$200 million outstanding 10.00% subordinated debentures matured on November 14, 2014.
- (2) All \$1 billion outstanding subordinated debentures were redeemed on November 4, 2013 for 100% of their principal amount plus accrued interest to the redemption date.
- (3) 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.
- (4) 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.
- (5) 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.
- (6) The notes include non-viability contingency capital (NVCC) provisions, necessary for the notes to qualify as Tier 2 regulatory capital under Basel III. NVCC provisions require the conversion of the instrument into a variable number of common shares in the event that OSFI deems the Bank non-viable or a federal or provincial government in Canada publicly announces that the Bank has accepted or agreed to accept a capital injection. In such an event, each note is convertible into common shares pursuant to an automatic conversion formula with a multiplier of 1.5 and a conversion price based on the greater of: (i) a floor price of \$5.00 and (ii) the current market price of our common shares based on the volume weighted average trading price of our common shares on the Toronto Stock Exchange. The number of shares issued is determined by dividing the par value of the note (including accrued and unpaid interest on such note) by the conversion price and then times the multiplier.
- (7) Interest at stated interest rate until earliest par value redemption date, and thereafter at a rate of 1.08% above the 90-day Bankers' Acceptance rate.
- (8) Interest at stated interest rate until earliest par value redemption date, and thereafter at a rate of 1.10% above the 90-day Bankers' Acceptance rate.
- (9) Interest at stated interest rate until earliest par value redemption date, and thereafter at a rate of 1.12% above the 90-day Bankers' Acceptance rate.
- (10) Interest at a rate of 40 basis points above the 30-day Bankers' Acceptance rate.
- (11) Interest at a rate of 25 basis points above the U.S. dollar 3-month LIMEAN. In the event of a reduction of the annual dividend we declare on our common shares, the interest payable on the debentures is reduced pro rata to the dividend reduction and the interest reduction is payable with the proceeds from the sale of newly issued common shares.
- (12) All \$600 million outstanding subordinated debentures were redeemed on June 18, 2014 for 100% of their principal amount plus accrued interest to the redemption date.
- (13) Interest at stated rate 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 2014
Within 1 year	\$ 200
5 to 10 years	4,086
Thereafter	3,580
	\$ 7,866

Note 20 Trust capital securities

We issued innovative capital instruments, RBC Trust Capital Securities (RBC TruCS), through two structured entities: RBC Capital Trust (Trust) and RBC Capital Trust II (Trust II). Trust II was wound up in 2014 after the redemption of the RBC TruCS Series 2013 (RBC TruCS 2013) on December 31, 2013.

The Trust has issued non-voting RBC TruCS Series 2010, 2011, 2015 and 2008-1 (RBC TruCS 2010, 2011, 2015 and 2008-1). RBC TruCS 2010 and 2011 were redeemed in 2010 and 2011, respectively.

The holders of RBC TruCS 2015 and 2008-1 do not have any conversion rights or any other redemption rights. As a result, upon consolidation of the Trust, RBC TruCS 2015 and 2008-1 are classified as Non-controlling interests. Holders of RBC TruCS 2015 and 2008-1 are eligible to receive semi-annual non-cumulative fixed cash distributions until December 31, 2015 and June 30, 2018, respectively, and a floating-rate cash distribution thereafter.

No cash distributions will be payable by the Trust 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 Trust will be distributed to us as holders of residual interest in the Trust. Should the Trust fail to pay the semi-annual distributions in full, we will not declare dividends of any kind on any of our preferred or common shares for a specified period of time.

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

Significant terms and conditions of RBC Trust Capital Securities

(Millions of Canadian dollars, except for percentage amounts)	Issuance date	Distribution dates	Annual yield	Earliest redemption date	Conversion date	As at	
				At the option of the issuer	At the option of the holder	October 31 2014 Principal amount	October 31 2013 Principal amount
RBC Capital Trust (1),(2),(3),(4),(5),(6),(7)							
Included in Non-controlling interests							
1,200,000 Trust Capital Securities							
– Series 2015	October 28, 2005	June 30, December 31	4.87% (8)	December 31, 2010	n.a.	\$ 1,200	\$ 1,200
500,000 Trust Capital Securities							
– Series 2008-1	April 28, 2008	June 30, December 31	6.82% (8)	June 30, 2013	n.a.	500	500
RBC Capital Trust II (2),(3),(4),(5),(6),(7),(9)							
Included in Deposits							
900,000 Trust Capital Securities							
– Series 2013 (10)	July 23, 2003	June 30, December 31	5.812%	December 31, 2008	Any time	\$ –	\$ 900

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

- (1) Subject to the approval of OSFI, the Trust may, on the earliest redemption date specified above, and on any distribution date thereafter, redeem in whole (but not in part) the RBC TruCS 2008-1 and 2015, without the consent of the holders.
 - (2) Subject to the approval of OSFI, upon occurrence of a special event as defined, prior to the earliest redemption date specified above, the trusts may redeem in whole (but not in part) the RBC TruCS 2008-1, 2013 or 2015 without the consent of the holders.
 - (3) Issuer Redemption Price: The RBC TruCS 2008-1 may be redeemed for cash equivalent to (i) the Early Redemption Price if the redemption occurs prior to June 30, 2018 or (ii) the Redemption Price if the redemption occurs on or after June 30, 2018. The RBC TruCS 2013 and 2015 may be redeemed for cash equivalent to (i) the Early Redemption Price if the redemption occurs prior to December 31, 2013 and 2015, respectively, or (ii) the Redemption Price if the redemption occurs on or after December 31, 2013 and 2015, respectively. Redemption Price refers to an amount equal to \$1,000 plus the unpaid distributions to the redemption date. Early Redemption Price refers to an amount equal to the greater of (i) the Redemption Price and (ii) the price calculated to provide an annual yield, equal to the yield on a Government of Canada bond issued on the redemption date with a maturity date of June 30, 2018, plus 77 basis points, for RBC TruCS 2008-1, and a maturity date of December 31, 2013 and 2015, plus 23 basis points and 19.5 basis points, for RBC TruCS 2013 and 2015, respectively.
 - (4) Automatic Exchange Event: Without the consent of the holders, each RBC TruCS 2008-1, 2013 and 2015 will be exchanged automatically for 40 of our non-cumulative redeemable First Preferred Shares Series A1, T and Z, respectively, upon occurrence of any one of the following events: (i) proceedings are commenced for our winding-up; (ii) OSFI takes control of us; (iii) we have Tier 1 capital ratio of less than 5% or Total capital ratio of less than 8%; or (iv) OSFI has directed us to increase our capital or provide additional liquidity and we elect such automatic exchange or we fail to comply with such direction. The First Preferred Shares Series A1, 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, 2014, we held \$9 million of RBC TruCS 2015 (October 31, 2013 – \$nil) and \$3 million of the RBC TruCS 2008-1 (October 31, 2013 – \$nil) as treasury holdings which were deducted from regulatory capital.
 - (6) Regulatory capital: In accordance with OSFI Capital Adequacy Requirements, effective January 2013, RBC TruCS no longer qualify as additional Tier 1 capital due to their lack of non-viability contingent capital terms and conditions. As such, outstanding RBC TruCS are being phased out of regulatory capital in accordance with OSFI guidelines.
 - (7) Holder Exchange Right: Holders of RBC TruCS 2013 may, at any time, exchange all or part of their holdings for 40 non-cumulative redeemable First Preferred Shares Series U, for each RBC TruCS 2013 held. The First Preferred Shares Series U pay semi-annual non-cumulative cash dividends as and when declared by our Board of Directors and are convertible at the option of the holder into a variable number of common shares. Holders of RBC TruCS 2008-1 and RBC TruCS 2015 do not have similar exchange rights.
 - (8) The non-cumulative cash distribution on the RBC TruCS 2015 will be 4.87% paid semi-annually until December 31, 2015, and at one half of the sum of 180-day Bankers' Acceptance rate plus 1.5%, thereafter. The non-cumulative cash distribution on the RBC TruCS 2008-1 will be 6.82% paid semi-annually until June 30, 2018, and at one half of the sum of 180-day Bankers' Acceptance rate plus 3.5% thereafter.
 - (9) Subject to the approval of OSFI, Trust II may, in whole or in part, on the redemption date specified above, and on any distribution date thereafter, redeem any outstanding RBC TruCS 2013 without the consent of the holders.
 - (10) On December 31, 2013, Trust II redeemed all \$900 million principal amount of RBC TruCS 2013 for cash at a redemption price of \$1,000 per unit.
- n.a. not applicable

Share capital
Authorized share capital

Preferred – An unlimited number of First Preferred Shares and Second Preferred Shares without nominal or par value, issuable in series; the aggregate consideration for which all the First Preferred Shares and all the Second Preferred Shares that may be issued may not exceed \$20 billion and \$5 billion, respectively.

Common – An unlimited number of shares without nominal or par value may be issued.

Outstanding share capital

The following table details our common and preferred shares outstanding.

(Millions of Canadian dollars, except the number of shares and dividends per share)	As at					
	October 31, 2014			October 31, 2013		
	Number of shares (thousands)	Amount	Dividends declared per share	Number of shares (thousands)	Amount	Dividends declared per share
Preferred shares						
First preferred ⁽¹⁾						
Non-cumulative, fixed rate						
Series W	12,000	\$ 300	\$ 1.23	12,000	\$ 300	\$ 1.23
Series AA	12,000	300	1.11	12,000	300	1.11
Series AB	12,000	300	1.18	12,000	300	1.18
Series AC	8,000	200	1.15	8,000	200	1.15
Series AD	10,000	250	1.13	10,000	250	1.13
Series AE	10,000	250	1.13	10,000	250	1.13
Series AF	8,000	200	1.11	8,000	200	1.11
Series AG	10,000	250	1.13	10,000	250	1.13
Series AH ⁽²⁾	–	–	–	–	–	0.86
Non-cumulative, 5-Year Rate Reset						
Series AJ ⁽³⁾	13,579	339	0.97	16,000	400	1.25
Series AL	12,000	300	1.15	12,000	300	1.40
Series AN ⁽⁴⁾	–	–	0.39	9,000	225	1.56
Series AP ⁽⁴⁾	–	–	0.39	11,000	275	1.56
Series AR ⁽⁴⁾	–	–	0.39	14,000	350	1.56
Series AT ⁽⁵⁾	–	–	1.17	11,000	275	1.56
Series AV ⁽⁵⁾	–	–	1.17	16,000	400	1.56
Series AX ⁽⁶⁾	13,000	325	1.53	13,000	325	1.53
Series AZ	20,000	500	0.50	–	–	–
Series BB	20,000	500	0.46	–	–	–
Non-cumulative, floating rate						
Series AK ⁽³⁾	2,421	61	0.53	–	–	–
		\$ 4,075			\$ 4,600	
Common shares						
Balance at beginning of year	1,441,056	\$ 14,377		1,445,303	\$ 14,323	
Issued under the stock option plan ⁽⁷⁾	2,723	150		2,528	121	
Purchased for cancellation ⁽⁸⁾	(1,546)	(16)		(6,775)	(67)	
Balance at end of year	1,442,233	\$ 14,511	\$ 2.84	1,441,056	\$ 14,377	\$ 2.53
Treasury shares – Preferred shares						
Balance at beginning of year	47	\$ 1		42	\$ 1	
Sales	4,919	124		4,892	127	
Purchases	(4,965)	(125)		(4,887)	(127)	
Balance at end of year	1	\$ –		47	\$ 1	
Treasury shares – Common shares						
Balance at beginning of year	666	\$ 41		543	\$ 30	
Sales	70,684	5,333		71,361	4,453	
Purchases	(70,458)	(5,303)		(71,238)	(4,442)	
Balance at end of year	892	\$ 71		666	\$ 41	

(1) First Preferred Shares Series were issued at \$25 per share.

(2) On July 2, 2013, we redeemed all 8.5 million of issued and outstanding Non-Cumulative First Preferred Shares Series AH for cash at a redemption price of \$26 per share plus declared dividends. This amount is comprised of the \$25 per share original issue price plus a \$1 per share redemption premium.

(3) On February 24, 2014, we issued 2.4 million Non-Cumulative Floating Rate First Preferred Shares, Series AK, totalling \$61 million through a holder option, one-for-one conversion of some of our Non-Cumulative 5-Year Rate Reset First Preferred Shares, Series AJ.

(4) On February 24, 2014, we redeemed all issued and outstanding Non-Cumulative 5-Year Rate Reset First Preferred Shares, Series AN (9 million shares), Series AP (11 million shares), and Series AR (14 million shares) for cash at a redemption price of \$25 per share.

(5) On August 24, 2014, we redeemed all issued and outstanding Non-Cumulative 5-Year Rate Reset First Preferred Shares, Series AT (11 million shares) and Series AV (16 million shares) for cash at a redemption price of \$25 per share.

(6) On November 24, 2014, we redeemed all 13 million of issued and outstanding Non-Cumulative 5-year Rate Reset First Preferred Shares Series AX for cash at a redemption price of \$25 per share.

(7) Includes fair value adjustments to stock options of \$16 million (2013 – \$14 million).

(8) During the year ended October 31, 2014, we purchased for cancellation common shares at an average cost of \$72.64 per share (October 31, 2013 – \$60.34 per share) with a book value of \$10.03 per share (October 31, 2013 – \$9.94 per share).

As at October 31, 2014	Initial Period Annual Yield	Premium	Current Dividend per share (1)	Earliest redemption date (2)	Issue Date	Redemption price (2), (3)
Preferred shares						
First preferred						
Non-cumulative, fixed rate						
Series W (4)	4.90%		\$.306250	February 24, 2010	January 31, 2005	\$ 25.00
Series AA	4.45%		.278125	May 24, 2011	April 4, 2006	25.25
Series AB	4.70%		.293750	August 24, 2011	July 20, 2006	25.25
Series AC	4.60%		.287500	November 24, 2011	November 1, 2006	25.50
Series AD	4.50%		.281250	February 24, 2012	December 13, 2006	25.50
Series AE	4.50%		.281250	February 24, 2012	January 19, 2007	25.50
Series AF	4.45%		.278125	May 24, 2012	March 14, 2007	25.50
Series AG	4.50%		.281250	May 24, 2012	April 26, 2007	25.50
Non-cumulative, 5-Year Rate Reset (5)						
Series AJ	5.00%	1.93%	.220000	February 24, 2014	September 16, 2008	25.00
Series AL	5.60%	2.67%	.266250	February 24, 2014	November 3, 2008	25.00
Series AX	6.10%	4.13%	.381250	November 24, 2014	April 29, 2009	25.00
Series AZ (6)	4.00%	2.21%	.250000	May 24, 2019	January 30, 2014	25.00
Series BB (6)	3.90%	2.26%	.243750	August 24, 2019	June 3, 2014	25.00
Non-cumulative, floating rate						
Series AK (7)		1.93%	.180786	February 24, 2019	February 24, 2014	25.00

- (1) Non-cumulative preferential dividends of each Series are payable quarterly, as and when declared by the Board of Directors, on or about the 24th day of February, May, August and November.
- (2) The redemption price represents the price as at October 31, 2014 or the contractual redemption price, whichever is applicable. Subject to the consent of OSFI and the requirements of the *Bank Act* (Canada), we may, on or after the dates specified above, redeem First Preferred Shares. Unless otherwise noted, shares may be redeemed for cash at a price per share of \$25 if redeemed on the earliest redemption date and on the same date every fifth year thereafter. In the case of Series W, AA, AB, AC, AD, AE, AF and AG, these may be redeemed for cash at a price per share of \$26 if redeemed during the 12 months commencing on the earliest redemption date and decreasing by \$0.25 each 12-month period thereafter to a price per share of \$25 if redeemed four years from the earliest redemption date or thereafter.
- (3) Subject to the consent of OSFI and the requirements of the *Bank Act* (Canada), we may purchase the First Preferred Shares of each Series for cancellation at the lowest price or prices at which, in the opinion of the Board of Directors, such shares are obtainable.
- (4) Subject to the approval of the Toronto Stock Exchange, we may, on or after February 24, 2010, convert First Preferred Shares Series W into our common shares. First Preferred Shares Series W may be converted into that number of common shares determined by dividing the current redemption price by the greater of \$2.50 and 95% of the weighted average trading price of common shares at such time.
- (5) 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.
- (6) The preferred shares include non-viability contingency capital (NVCC) provisions, necessary for the shares to qualify as Tier 1 regulatory capital under Basel III. NVCC provisions require the conversion of the instrument into a variable number of common shares in the event that OSFI deems the Bank non-viable or a federal or provincial government in Canada publicly announces that the Bank has accepted or agreed to accept a capital injection. In such an event, each preferred share is convertible into common shares pursuant to an automatic conversion formula with a conversion price based on the greater of: (i) a floor price of \$5.00 and (ii) the current market price of our common shares based on the volume weighted average trading price of our common shares on the Toronto Stock Exchange. The number of shares issued is determined by dividing the preferred share value (\$25.00 plus declared and unpaid dividends) by the conversion price.
- (7) The dividend rate is equal to the three-month Government of Canada Treasury Bill rate plus the premium indicated. The holders have the option to convert their shares into non-cumulative First Preferred Shares, Series AJ subject to certain conditions on February 24, 2019 and every fifth year thereafter.

Restrictions on the payment of dividends

We are prohibited by the *Bank Act* (Canada) from declaring any dividends on our preferred or common shares when we are, or would be placed as a result of the declaration, in contravention of the capital adequacy and liquidity regulations or any regulatory directives issued under the Act. We may not pay dividends on our common shares at any time unless all dividends to which preferred shareholders are then entitled have been declared and paid or set apart for payment. We have agreed that if the Trust fails to pay any required distribution on the trust capital securities in full, we will not declare dividends of any kind on any of our preferred or common shares. Refer to Note 20.

Currently, these limitations do not restrict the payment of dividends on our preferred or common shares.

Dividend reinvestment plan

Our dividend reinvestment plan (DRIP) provides common and preferred shareholders with a means to receive additional common shares rather than cash dividends. The plan is only open to 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. During 2014 and 2013, the requirements of our DRIP were satisfied through open market share purchases.

Shares available for future issuances

As at October 31, 2014, 43.7 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	
	October 31 2014	October 31 2013
(Millions of Canadian dollars)		
RBC Trust Capital Securities (1)		
Series 2015	\$ 1,211	\$ 1,220
Series 2008-1	508	511
Other	94	64
	\$ 1,813	\$ 1,795

(1) As at October 31, 2014, RBC TruCS Series 2015 includes \$20 million of accrued interest (October 31, 2013 – \$20 million), net of \$9 million of treasury holdings (October 31, 2013 – \$nil). Series 2008-1 includes \$11 million of accrued interest (October 31, 2013 – \$11 million), net of \$3 million of treasury holdings (October 31, 2013 – \$nil).

Note 22 Share-based compensation

Stock option plans

We have stock option plans for certain key employees. Under the plans, options are periodically granted to purchase common shares. The exercise price for each grant is determined as the higher of the volume-weighted average of the trading prices per board lot (100 shares) of our common shares on the Toronto Stock Exchange (i) on the day preceding the day of grant; and (ii) the five consecutive trading days immediately preceding the day of grant. The options vest over a four-year period for employees, and are exercisable for a period not exceeding 10 years from the grant date.

The compensation expense recorded for the year ended October 31, 2014, in respect of the stock option plans was \$7 million (October 31, 2013 – \$7 million; October 31, 2012 – \$7 million). The compensation expense related to non-vested options was \$4 million at October 31, 2014 (October 31, 2013 – \$5 million; October 31, 2012 – \$7 million), to be recognized over the weighted average period of 1.4 years (October 31, 2013 – 1.1 years; October 31, 2012 – 1.5 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, 2014		October 31, 2013		October 31, 2012	
	Number of options (thousands)	Weighted average exercise price	Number of options (thousands)	Weighted average exercise price	Number of options (thousands)	Weighted average exercise price
(Canadian dollars per share except share amounts)						
Outstanding at beginning of year	10,604	\$ 50.39	12,304	\$ 48.12	14,413	\$ 45.06
Granted	705	69.17	906	58.65	1,161	48.93
Exercised (1), (2)	(2,723)	49.03	(2,528)	42.22	(3,174)	34.36
Forfeited in the year	(7)	52.92	(78)	53.27	(96)	52.37
Outstanding at end of year	8,579	\$ 52.36	10,604	\$ 50.39	12,304	\$ 48.12
Exercisable at end of year	4,987	\$ 49.60	5,711	\$ 47.80	6,544	\$ 45.43
Available for grant	11,443		12,140		12,968	

(1) Cash received for options exercised during the year was \$133 million (October 31, 2013 – \$107 million; October 31, 2012 – \$109 million) and the weighted average share price at the date of exercise was \$74.27 (October 31, 2013 – \$63.17; October 31, 2012 – \$54.48).

(2) New shares were issued for all stock options exercised in 2014, 2013 and 2012. See Note 21.

Options outstanding as at October 31, 2014 by range of exercise price:

	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)
(Canadian dollars per share except share amounts)					
\$31.70 - \$35.37	1,031	\$ 35.35	4.09	1,031	\$ 35.35
\$44.13 - \$48.93	1,448	47.86	5.75	322	44.13
\$50.55 - \$52.94	2,323	52.66	5.02	1,452	52.70
\$54.99 - \$57.90	2,182	55.08	4.33	2,182	55.08
\$58.65 - \$69.17	1,595	63.30	8.55	–	–
	8,579	\$ 52.36	5.51	4,987	\$ 49.60

(1) The weighted average exercise prices have been revised to reflect the conversion of foreign currency-denominated options at the exchange rate as of October 31, 2014.

The weighted average fair value of options granted during the year ended October 31, 2014 was estimated at \$7.19 (October 31, 2013 – \$5.33; October 31, 2012 – \$4.42). This was determined by applying the Black-Scholes model on the date of grant, taking into account the specific terms and conditions under which the options are granted, such as the vesting period and expected share price volatility estimated by considering both historic average share price volatility and implied volatility derived from traded options over our common shares of similar maturity to those of the employee options. The following assumptions were used to determine the fair value of options granted:

Weighted average assumptions

	For the year ended		
	October 31 2014	October 31 2013	October 31 2012
(Canadian dollars per share except percentages)			
Share price at grant date	\$ 68.75	\$ 58.65	\$ 48.19
Risk-free interest rate	1.95%	1.38%	1.38%
Expected dividend yield	3.94%	4.19%	3.93%
Expected share price volatility	18%	18%	18%
Expected life of option	6 years	6 years	6 years

Employee savings and share ownership plans

We offer many employees an opportunity to own our common shares through savings and share ownership plans. Under these plans, the employees can generally contribute between 1% and 10% of their annual salary or benefit base for commissioned based employees. For each contribution between 1% and 6%, we will match 50% of the employee contributions in our common shares. For the RBC Dominion Securities Savings Plan, our maximum annual contribution is \$4,500 per employee. For the RBC U.K. Share Incentive Plan, our maximum annual contribution is £1,500 per employee. For the year ended October 31, 2014, we contributed \$85 million (October 31, 2013 – \$77 million; October 31, 2012 – \$75 million), under the terms of these plans, towards the purchase of our common shares. As at October 31, 2014, an aggregate of 38 million common shares were held under these plans (October 31, 2013 – 38 million common shares; October 31, 2012 – 37 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. The deferred bonus is invested as RBC share units and a specified percentage vests on each of the three anniversary dates following the grant date. Each vested amount is paid in cash and is based on the original number of RBC share units plus accumulated dividends valued using the average closing price of RBC common shares during the five trading days immediately preceding the vesting date.

We offer performance deferred share award plans to certain key employees, all of which vest at the end of three years. Upon vesting, the award is paid in cash and is based on the original number of RBC share units granted plus accumulated dividends valued using the average closing price of RBC common shares during the five trading days immediately preceding the vesting date. A portion of the award under certain plans can be increased or decreased up to 25%, depending on our total shareholder return compared to a defined peer group of global financial institutions. We previously offered deferred compensation to certain employees in the form of common shares that were held in trust and accumulated dividends during the three year vesting period.

We maintain a non-qualified deferred compensation plan for key employees in the United States under an arrangement called the RBC U.S. Wealth Accumulation Plan. This plan allows eligible employees to defer a portion of their annual income and allocate the deferrals among various fund choices, which include a share unit fund that tracks the value of our common shares. Certain deferrals may also be eligible for matching contributions, all of which are allocated to the RBC share unit fund.

Our liabilities for the awards granted under the deferred share and other plans are measured at fair value, determined based on the quoted market price of our common shares. The following tables present our obligations under the deferred share and other plans, and the related compensation expenses (recoveries) recognized for the year.

Obligation under deferred share and other plans

	October 31, 2014			October 31, 2013			October 31, 2012		
	Units granted during the year		Units outstanding at the end of the year	Units granted during the year		Units Outstanding at the end of the year	Units granted during the year		Units outstanding at the end of the year
	Number granted (thousands)	Weighted average fair value	Carrying amount	Number granted (thousands)	Weighted average fair value	Carrying amount	Number granted (thousands)	Weighted average fair value	Carrying amount
(Millions of Canadian dollars except units and per unit amounts)									
Deferred share unit plans	315	\$ 71.57	\$ 333	265	\$ 60.83	\$ 307	302	\$ 59.60	\$ 229
Deferred bonus plan	5,339	78.97	1,585	5,215	69.45	1,517	8,917	56.72	1,494
Performance deferred share award plans	2,181	68.09	503	2,337	58.62	440	2,570	49.03	307
RBC U.S. Wealth Accumulation Plan	69	74.68	343	374	61.23	301	458	51.91	253
Other share-based plans	845	70.32	118	809	60.47	76	437	51.34	45
	8,749	\$ 75.12	\$ 2,882	9,000	\$ 65.23	\$ 2,641	12,684	\$ 54.87	\$ 2,328

Compensation expenses recognized under deferred share and other plans

(Millions of Canadian dollars)	For the year ended		
	October 31 2014	October 31 2013	October 31 2012
Deferred share unit plans	\$ 61	\$ 53	\$ 29
Deferred bonus plan	121	284	185
Performance deferred share award plans	243	249	151
RBC U.S. Wealth Accumulation Plan	147	211	136
Other share-based plans	65	46	29
	\$ 637	\$ 843	\$ 530

Note 23 Income and expenses from selected financial instruments

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

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

(Millions of Canadian dollars)	For the year ended		
	October 31 2014	October 31 2013	October 31 2012
Net gains (losses)			
Classified as at fair value through profit or loss ⁽²⁾	\$ 922	\$ 875	\$ 1,217
Designated as at fair value through profit or loss ⁽³⁾	(132)	(30)	(54)
	\$ 790	\$ 845	\$ 1,163
By product line			
Interest rate and credit	\$ 603	\$ 593	\$ 805
Equities	(190)	(55)	(8)
Foreign exchange and commodities	377	307	366
	\$ 790	\$ 845	\$ 1,163

(1) The following related to our insurance operations are excluded from Non-interest income and included in Insurance premiums, investment and fee income in the Consolidated Statements of Income: Net gains (losses) from financial instruments designated as at FVTPL were \$515 million (October 31, 2013 – \$(496) million; October 31, 2012 – \$439 million).

(2) Excludes derivatives designated in a hedging relationship. Refer to Note 8 for net gains (losses) on these derivatives.

(3) For the year ended October 31, 2014, \$414 million of net fair value losses on financial liabilities designated as at FVTPL, other than those attributable to changes in our own credit risk, were included in Non-interest income.

Net interest income from financial instruments ⁽¹⁾

(Millions of Canadian dollars)	For the year ended		
	October 31 2014	October 31 2013	October 31 2012
Interest income			
Financial instruments held as at fair value through profit or loss	\$ 4,246	\$ 3,959	\$ 4,955
Other categories of financial instruments ⁽²⁾	17,773	17,189	15,814
	22,019	21,148	20,769
Interest expense			
Financial instruments held as at fair value through profit or loss	\$ 2,198	\$ 2,260	\$ 3,029
Other categories of financial instruments	5,705	5,639	5,301
	7,903	7,899	8,330
Net interest income	\$ 14,116	\$ 13,249	\$ 12,439

(1) The following related to our insurance operations are excluded from Net-interest income and included in Insurance premiums, investment and fee income in the Consolidated Statements of Income: Interest income of \$435 million (October 31, 2013 – \$470 million; October 31, 2012 – \$466 million), Interest expense of \$nil million (October 31, 2013 – \$nil million; October 31, 2012 – \$nil million).

(2) Refer to Note 5 for interest income accrued on impaired financial assets.

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

(Millions of Canadian dollars)	For the year ended		
	October 31 2014	October 31 2013	October 31 2012
Net gains (losses) arising from financial instruments measured at amortized cost ⁽³⁾	\$ (7)	\$ –	\$ (4)
Net fee income which does not form an integral part of the effective interest rate of financial assets and liabilities	4,190	3,869	3,378
Net fee income arising from trust and other fiduciary activities	9,138	7,990	6,595

(1) Refer to Note 4 for net gains (losses) on AFS securities.

(2) Refer to Note 4 for impairment losses on AFS and held-to-maturity securities, and Note 5 for impairment losses on loans.

(3) Financial instruments measured at amortized cost include held-to-maturity securities, loans and financial liabilities measured at amortized cost.

The components of tax expense are as follows:

(Millions of Canadian dollars)	For the year ended		
	October 31 2014	October 31 2013	October 31 2012
Income taxes (recoveries) in Consolidated Statements of Income			
Current tax			
Tax expense for current year	\$ 2,858	\$ 2,516	\$ 2,166
Adjustments for prior years	(64)	(289)	(184)
Recoveries arising from previously unrecognized tax loss, tax credit or temporary difference of a prior period	(4)	(2)	–
	2,790	2,225	1,982
Deferred tax			
Origination and reversal of temporary difference	(156)	(100)	(107)
Effects of changes in tax rates	(3)	(1)	2
Adjustments for prior years	74	(5)	167
Recoveries arising from previously unrecognized tax loss, tax credit or temporary difference of a prior period	(3)	(46)	(16)
Write-down	4	32	–
	(84)	(120)	46
	2,706	2,105	2,028
Income taxes in Consolidated Statements of Comprehensive Income and Changes in Equity			
Other comprehensive income			
Net unrealized gains on available-for-sale securities	70	3	72
Reclassification of gains on available-for-sale securities to income	(12)	(20)	(2)
Unrealized foreign currency translation gains	5	2	1
Foreign currency translation (losses) gains from hedging activities	(561)	(322)	39
Reclassification of (gains) losses on net investment hedging activities	1	–	(59)
Net unrealized (losses) gains on derivatives designated as cash flow hedges	(39)	(4)	11
Reclassification of (gains) losses on derivatives designated as cash flow hedges to income	10	(11)	10
Remeasurement of employee benefit plans	(88)	121	(279)
Net fair value change due to credit risk on financial liabilities designed as at fair value through profit and loss	(22)	–	–
Issuance costs	(7)	–	–
	(643)	(231)	(207)
Total income taxes	\$ 2,063	\$ 1,874	\$ 1,821

Our effective tax rate changed from 20.1% for 2013 to 23.1% for 2014, principally due to a net favourable tax adjustment of \$214 million related to prior years recorded in 2013, which is presented in Other in the table below.

The following is an analysis of the differences between the income tax expense reflected in the Consolidated Statements of Income and the amounts calculated at the Canadian statutory rate.

Reconciliation to statutory tax rate

(Millions of Canadian dollars, except for percentage amounts)	For the year ended					
	October 31, 2014		October 31, 2013		October 31, 2012	
Income taxes at Canadian statutory tax rate	\$ 3,080	26.3%	\$ 2,737	26.2%	\$ 2,531	26.4%
(Decrease) increase in income taxes resulting from						
Lower average tax rate applicable to subsidiaries	(272)	(2.3)	(190)	(1.8)	(299)	(3.1)
Goodwill Impairment	–	–	–	–	37	0.4
Tax-exempt income from securities	(386)	(3.3)	(294)	(2.8)	(330)	(3.4)
Tax rate change	(3)	–	(1)	–	2	–
Effect of previously unrecognized tax loss, tax credit or temporary differences	(7)	(0.1)	(48)	(0.5)	(16)	(0.1)
Other	294	2.5	(99)	(1.0)	103	1.0
Income taxes reported in Consolidated Statements of Income / effective tax rate	\$ 2,706	23.1%	\$ 2,105	20.1%	\$ 2,028	21.2%

Deferred tax assets and liabilities result from tax loss carryforwards 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

(Millions of Canadian dollars)	As at October 31, 2014							Net Asset October 31, 2014
	Net Asset November 1, 2013	Change through equity	Change through profit or loss	Exchange rate differences	Acquisitions/ disposals	Other		
Net deferred tax asset/(liability)								
Allowance for credit losses	\$ 413	\$ –	\$ (37)	\$ –	\$ –	\$ –	\$ –	\$ 376
Deferred compensation	1,290	–	151	72	–	–	–	1,513
Business realignment charges	6	–	3	–	–	–	–	9
Tax loss carryforwards	62	–	(19)	1	–	–	–	44
Deferred income	42	–	78	–	–	–	–	120
Available-for-sale securities	102	(49)	(19)	(4)	–	–	–	30
Premises and equipment	(227)	–	(99)	4	–	–	–	(322)
Deferred expense	(80)	7	(25)	–	–	–	–	(98)
Pension and post-employment related	492	88	(16)	2	–	–	–	566
Intangibles	(279)	–	5	(8)	–	–	–	(282)
Other	150	–	62	10	–	–	–	222
	\$ 1,971	\$ 46	\$ 84	\$ 77	\$ –	\$ –	\$ –	\$ 2,178
Comprising								
Deferred tax assets	\$ 2,141							\$ 2,382
Deferred tax liabilities	(170)							(204)
	\$ 1,971							\$ 2,178

(Millions of Canadian dollars)	As at October 31, 2013							Net Asset October 31, 2013
	Net Asset November 1, 2012	Change through equity	Change through profit or loss	Exchange rate differences	Acquisitions/ disposals	Other		
Net deferred tax asset/(liability)								
Allowance for credit losses	\$ 418	\$ –	\$ (55)	\$ (1)	\$ 58	\$ (7)	\$ –	\$ 413
Deferred compensation	988	–	270	33	–	(1)	–	1,290
Business realignment charges	39	–	(33)	–	–	–	–	6
Tax loss carryforwards	72	1	(13)	–	–	2	–	62
Deferred income	97	–	2	–	(57)	–	–	42
Available-for-sale securities	140	(1)	(39)	2	–	–	–	102
Premises and equipment	(150)	–	(83)	1	–	5	–	(227)
Deferred expense	(81)	–	1	–	–	–	–	(80)
Pension and post-employment related	555	(121)	53	5	–	–	–	492
Intangibles	(230)	–	(15)	(7)	(31)	4	–	(279)
Other	80	1	32	1	31	5	–	150
	\$ 1,928	\$ (120)	\$ 120	\$ 34	\$ 1	\$ 8	\$ –	\$ 1,971
Comprising								
Deferred tax assets	\$ 2,071							\$ 2,141
Deferred tax liabilities	(143)							(170)
	\$ 1,928							\$ 1,971

The tax loss carryforwards amount of deferred tax assets was related to losses in our Luxembourg, U.K., U.S., Caribbean and Japanese operations. Deferred tax assets of \$44 million (October 31, 2013 – \$62 million) were recognized at October 31, 2014 in respect of tax losses incurred in current or preceding years which recognition is dependent on the projection of future taxable profits. Management's forecasts support the assumption that it is probable that the results of future operations will generate sufficient taxable income to utilize the deferred tax assets. The forecasts rely on continued liquidity and capital support to our business operations, including tax planning strategies implemented in relation to such support.

As at October 31, 2014, unused tax losses, tax credits and deductible temporary differences of \$532 million, \$267 million and \$7 million (October 31, 2013 – \$514 million, \$183 million and \$nil) 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 \$167 million (October 31, 2013 – \$168 million) which expire in two to four years, and \$365 million (October 31, 2013 – \$346 million) which expire after four years. There are \$6 million of tax credits (October 31, 2013 – \$nil) that will expire in two to four years, and \$261 million (October 31, 2013 – \$183 million) that will expire after four years. In addition, there are deductible temporary differences of \$7 million (October 31, 2013 – \$nil) 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 the parent bank is \$9.0 billion as at October 31, 2014 (October 31, 2013 – \$7.7 billion).

Note 25 Earnings per share

	For the year ended		
	October 31 2014	October 31 2013	October 31 2012
(Millions of Canadian dollars, except share and per share amounts)			
Basic earnings per share			
Net Income	\$ 9,004	\$ 8,342	\$ 7,507
Net loss from discontinued operations	–	–	(51)
Net income from continuing operations	9,004	8,342	7,558
Preferred share dividends	(213)	(253)	(258)
Net income attributable to non-controlling interest	(94)	(98)	(97)
Net income available to common shareholders from continuing operations	8,697	7,991	7,203
Weighted average number of common shares (in thousands)	1,442,553	1,443,735	1,442,167
Basic earnings (loss) per share			
Continuing operations (in dollars)	\$ 6.03	\$ 5.53	\$ 4.99
Discontinued operations (in dollars)	–	–	(0.03)
	\$ 6.03	\$ 5.53	\$ 4.96
Diluted earnings per share			
Net income available to common shareholders from continuing operations	\$ 8,697	\$ 7,991	\$ 7,203
Dilutive impact of exchangeable shares	21	53	53
Net income from continuing operations available to common shareholders including dilutive impact of exchangeable shares	8,718	8,044	7,256
Net loss from discontinued operations available to common shareholders	–	–	(51)
Weighted average number of common shares (in thousands)	1,442,553	1,443,735	1,442,167
Stock options ⁽¹⁾	2,938	2,320	1,626
Issuable under other share-based compensation plans	–	74	433
Exchangeable shares ⁽²⁾	6,512	20,400	24,061
Average number of diluted common shares (in thousands)	1,452,003	1,466,529	1,468,287
Diluted earnings (loss) per share			
Continuing operations (in dollars)	\$ 6.00	\$ 5.49	\$ 4.94
Discontinued operations (in dollars)	–	–	(0.03)
	\$ 6.00	\$ 5.49	\$ 4.91

- (1) The dilutive effect of stock options was calculated using the treasury stock method. When the exercise price of options outstanding is greater than the average market price of our common shares, the options are excluded from the calculation of diluted earnings per share. The following amounts were excluded from the calculation of diluted earnings per share: for the years ended October 31, 2014 and 2013 – no outstanding options were excluded from the calculation of diluted earnings per share; for the year ended October 31, 2012 – an average of 3,992,229 outstanding options with an average exercise price of \$55.05.
- (2) Includes exchangeable preferred shares and trust capital securities.

Note 26 Guarantees, commitments, pledged assets and contingencies

Guarantees and commitments

We utilize guarantees and other off-balance sheet credit instruments to meet the financing needs of our clients.

The table below summarizes our maximum exposure to credit losses related to our guarantees and commitments provided to third parties. The maximum exposure to credit risk relating to a guarantee is the maximum risk of loss if there was a total default by the guaranteed parties, without consideration of possible recoveries under recourse provisions, insurance policies or from collateral held or pledged. The maximum exposure to credit risk relating to a loan commitment is the full amount of the commitment. In both cases, the maximum risk exposure is significantly greater than the amount recognized as a liability in our Consolidated Balance Sheets.

	Maximum exposure to credit losses	
	As at	
	October 31 2014	October 31 2013
(Millions of Canadian dollars)		
Financial guarantees		
Financial standby letters of credit	\$ 17,208	\$ 15,592
Commitments to extend credit		
Backstop liquidity facilities	31,467	32,142
Credit enhancements	3,246	3,181
Documentary and commercial letters of credit	180	139
Other commitments to extend credit	137,623	117,704
Other commitments		
Securities lending indemnifications	62,319	57,749
Performance guarantees	6,115	5,221

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 remaining 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 remaining 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.

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, custodial and service agreements, director/officer contracts and leasing transactions. These indemnification agreements may require us to compensate the counterparties for costs incurred as a result of changes in laws and regulations (including tax legislation) or as a result of litigation claims or statutory sanctions that may be suffered by the counterparty as a consequence of the transaction. The terms of these indemnification agreements will vary based on the contract. The nature of the indemnification agreements prevents us from making a reasonable estimate of the maximum potential amount we could be required to pay to counterparties. Historically, we have not made any significant payments under such indemnifications.

Uncommitted amounts

Uncommitted amounts represent undrawn credit facilities for which we have the ability to unilaterally withdraw the credit extended to the borrower. These include both retail and commercial commitments. As at October 31, 2014, the total balance of uncommitted amounts was \$195 billion (October 31, 2013 – \$183 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, 2014, we had on average \$3.1 billion of assets pledged intraday to the Bank of Canada on a daily basis (October 31, 2013 – \$3.0 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, 2014 and October 31, 2013.

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

	As at	
	October 31 2014	October 31 2013 (1)
<i>(Millions of Canadian dollars)</i>		
Sources of pledged assets and collateral		
Bank assets		
Cash and due from banks	\$ 243	\$ 204
Interest-bearing deposits with banks	90	83
Loans	72,191	74,138
Securities	59,476	50,527
Other assets	11,887	11,678
	\$ 143,887	\$ 136,630
Client assets		
Collateral received and available for sale or re-pledging	189,229	164,397
Less: not sold or re-pledged	(67,747)	(49,612)
	121,482	114,785
	265,369	251,415
Uses of pledged assets and collateral		
Securities lent	\$ 21,550	\$ 19,535
Securities borrowed	25,150	27,951
Obligations related to securities sold short	50,345	47,128
Obligations related to securities lent or sold under repurchase agreements	61,184	56,580
Securitization	45,089	49,899
Covered bonds	26,589	22,750
Derivative transactions	17,068	14,363
Foreign governments and central banks	2,167	1,928
Clearing systems, payment systems and depositories	4,947	3,672
Other	11,280	7,609
	\$ 265,369	\$ 251,415

(1) Certain amounts have been revised from those previously reported.

Lease commitments
Finance lease commitments

We lease computer equipment from third parties under finance lease arrangements. The leases have various terms, escalation and renewal rights. The future minimum lease payments under the finance leases are as follows:

	As at					
	October 31, 2014			October 31, 2013		
	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
<i>(Millions of Canadian dollars)</i>						
Future minimum lease payments						
No later than one year	\$ 59	\$ (6)	\$ 53	\$ 69	\$ (8)	\$ 61
Later than one year and no later than five years	51	(6)	45	86	(10)	76
	\$ 110	\$ (12)	\$ 98	\$ 155	\$ (18)	\$ 137

The net carrying amount of computer equipment held under finance lease as at October 31, 2014 was \$113 million (October 31, 2013 – \$153 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, 2014		October 31, 2013	
(Millions of Canadian dollars)	Land and buildings	Equipment	Land and buildings	Equipment
Future minimum lease payments				
No later than one year	\$ 536	\$ 134	\$ 586	\$ 138
Later than one year and no later than five years	1,663	200	1,752	314
Later than five years	1,294	–	1,349	–
	3,493	334	3,687	452
Less: Future minimum sublease payments to be received	(17)	–	(25)	–
Net future minimum lease payments	\$ 3,476	\$ 334	\$ 3,662	\$ 452

Note 27 Litigation

We are a large global institution that is subject to many different complex legal and regulatory requirements that continue to evolve. As a result, Royal Bank of Canada and its subsidiaries are and have been subject to a variety of legal proceedings, including civil claims and lawsuits, regulatory examinations, investigations, audits and requests for information by various governmental regulatory agencies and law enforcement authorities in various jurisdictions. Some of these matters may involve novel legal theories and interpretations and may be advanced under criminal as well as civil statutes, and some proceedings could result in the imposition of civil, regulatory enforcement or criminal penalties. 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. This is an area of significant judgment and uncertainty and the extent of our financial and other exposure to these proceedings could be material to our results of operations in any particular period. The following is a description of our significant legal proceedings.

LIBOR inquiries and litigation

Various regulators and competition and enforcement authorities around the world, including in Canada, the United Kingdom, and the U.S., are conducting investigations related to certain past submissions made by panel banks in connection with the setting of the U.S. dollar London interbank offered rate (LIBOR). As Royal Bank of Canada is a member of certain LIBOR panels, including the U.S. dollar LIBOR panel, we have been the subject of regulatory demands for information and are cooperating with those investigations. In addition, Royal Bank of Canada and other U.S. dollar panel banks have been named as defendants in private lawsuits filed in the U.S. with respect to the setting of LIBOR, including a number of class action lawsuits which have been consolidated before the U.S. District Court for the Southern District of New York (the Court). The complaints in those actions assert claims against us and other panel banks under various U.S. laws including U.S. antitrust laws, the U.S. Commodity Exchange Act (CEA), and state law. The Court has issued three detailed rulings on various motions in the consolidated cases, on March 29, 2013, August 23, 2013 and June 23, 2014, which have collectively narrowed the scope of claims against us and the other panel bank defendants. A procedural aspect of these rulings is currently on appeal to the U.S. Supreme Court which may cause the scope of the claims against us to change. Based on the facts currently known, it is not possible at this time for us to predict the resolution of these regulatory investigations or private lawsuits, including the timing and potential impact on Royal Bank of Canada.

CFTC litigation

Royal Bank of Canada is a defendant in a civil lawsuit brought by the Commodity Futures Trading Commission (CFTC) in the U.S. The lawsuit alleges that certain inter-affiliate transactions were improper wash trades and effected in a non competitive manner. At this time, management does not believe that the ultimate resolution of this matter will have a material adverse effect on our consolidated financial position or results of operations.

Wisconsin school districts litigation

Royal Bank of Canada is a defendant in a lawsuit relating to our role in transactions involving investments made by a number of Wisconsin school districts in certain collateralized debt obligations. These transactions were also the subject of a regulatory investigation. Despite reaching a settlement with the Securities and Exchange Commission in September 2011, which was paid to the school districts through a Fair Fund, the lawsuit is continuing. Based on the facts currently known, it is not possible at this time to predict the ultimate outcome of this proceeding or the timing of its resolution; however, management believes the ultimate resolution of this proceeding will not have a material adverse effect on our consolidated financial position or results of operations.

Rural/Metro litigation

On October 10, 2014, the Delaware Court of Chancery in a class action brought by former shareholders of Rural/Metro Corporation held Royal Bank of Canada liable in the amount of US\$75.8 million, plus interest, for aiding and abetting a breach of fiduciary duty by three Rural/Metro directors. Plaintiffs' attorneys' fee application is pending and must be resolved before a final judgment will be entered. Management believes that the ultimate resolution of this proceeding, including any possible appeal, 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, 2014, would result in a change in the under-one-year gap from \$11.4 billion to \$75.6 billion.

(Millions of Canadian dollars)	As at October 31, 2014							
	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	\$ 10,912	\$ 8,638	\$ 1	\$ –	\$ –	\$ –	\$ 6,269	\$ 25,820
Trading securities	105	27,518	9,181	8,408	23,001	32,464	50,703	151,380
Available-for-sale securities	–	23,387	2,414	1,465	14,264	4,416	1,822	47,768
Assets purchased under reverse repurchase agreements and securities borrowed	1,004	115,025	15,933	3,618	–	–	–	135,580
Loans (net of allowance for loan losses)	165,259	65,121	12,339	25,191	156,311	7,278	3,730	435,229
Derivatives	87,402	–	–	–	–	–	–	87,402
Segregated fund net assets	–	–	–	–	–	–	675	675
Other assets	33	12,428	1	–	–	113	44,121	56,696
	\$ 264,715	\$ 252,117	\$ 39,869	\$ 38,682	\$ 193,576	\$ 44,271	\$ 107,320	\$ 940,550
Liabilities								
Deposits	\$ 236,376	\$ 119,539	\$ 18,251	\$ 37,724	101,572	\$ 20,943	\$ 79,695	\$ 614,100
Obligations related to assets sold under repurchase agreements and securities loaned	592	61,308	806	1,625	–	–	–	64,331
Obligations related to securities sold short	450	938	1,790	824	10,392	14,633	21,318	50,345
Derivatives	88,982	–	–	–	–	–	–	88,982
Segregated fund net liabilities	–	–	–	–	–	–	675	675
Other liabilities	71	10,605	31	61	1,720	6,710	40,557	59,755
Subordinated debentures	–	620	–	1,491	2,591	3,157	–	7,859
Non-controlling interests	–	–	–	–	1,719	–	94	1,813
Shareholders' equity	–	825	–	1,050	2,200	–	48,615	52,690
	\$ 326,471	\$ 193,835	\$ 20,878	\$ 42,775	\$ 120,194	\$ 45,443	\$ 190,954	\$ 940,550
Total gap	\$ (61,756)	\$ 58,282	\$ 18,991	\$ (4,093)	\$ 73,382	\$ (1,172)	\$ (83,634)	\$ –
Canadian dollar	\$ (39,220)	\$ 11,370	\$ 4,683	\$ (1,898)	\$ 97,840	\$ (6,936)	\$ (65,948)	\$ (109)
Foreign currency	(22,536)	46,912	14,308	(2,195)	(24,458)	5,764	(17,686)	109
Total gap	\$ (61,756)	\$ 58,282	\$ 18,991	\$ (4,093)	\$ 73,382	\$ (1,172)	\$ (83,634)	\$ –

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 President and Chief Executive Officer and individuals that report directly to him, including the Chief Administrative Officer and Chief Financial Officer, Chief Human Resources 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.

(Millions of Canadian dollars)	For the year ended		
	October 31 2014 ⁽¹⁾	October 31 2013	October 31 2012
Salaries and other short-term employee benefits ⁽²⁾	\$ 22	\$ 23	\$ 21
Post-employment benefits	7	3	2
Share-based payments	26	30	25
	\$ 55	\$ 56	\$ 48

- (1) During the year, certain executives who were members of the Bank's Group Executive as at October 31, 2013 have left the Bank and therefore, are no longer part of key management personnel. Compensation for the year ended October 31, 2014, attributable to the former executives, including current year benefits and share based payments relating to awards granted in prior years was \$60 million.
- (2) Includes the portion of the annual variable short-term incentive bonus that certain executives elected to receive in the form of DSUs. Refer to Note 22 for further details.

Stock options, stock awards and shares held by key management personnel, Directors and their close family members

(Millions of Canadian dollars, except number of shares)	As at			
	October 31, 2014 ⁽¹⁾		October 31, 2013	
	No. of units held	Value	No. of units held	Value
Stock options	2,472,134	\$ 66	4,566,316	\$ 84
Other non-option stock based awards	1,447,763	116	2,467,532	173
RBC common shares	686,674	55	1,485,843	104
	4,606,571	\$ 237	8,519,691	\$ 361

- (1) During the year, certain executives who were members of the Bank's Group Executive as at October 31, 2013 have left the Bank and therefore, are no longer part of key management personnel. Total stock options, stock awards and shares held by these executives upon their departure were 3,459,347 units with a value of \$194 million.

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, 2014, total loans to key management personnel, Directors and their close family members were \$7 million (October 31, 2013 – \$6 million). No guarantees, pledges or commitments have been given to key management personnel, Directors or their close family members.

Joint ventures and associates

In the normal course of business, we provide certain banking and financial services to our joint ventures and associates, 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, 2014, loans to joint ventures and associates were \$57 million (October 31, 2013 – \$48 million) and deposits from joint ventures and associates were \$14 million (October 31, 2013 – \$12 million).

Other transactions, arrangements or agreements involving joint ventures or associates

(Millions of Canadian dollars)	As at or for the year ended		
	October 31 2014	October 31 2013	October 31 2012
Commitments and other contingencies	\$ 315	\$ 240	\$ 349
Other fees received for services rendered	45	47	84
Other fees paid for services received	185	191	245

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, 2014, restricted net assets of these subsidiaries and joint ventures were \$16.0 billion (October 31, 2013 – \$16.2 billion).

Note 30 Results by business segment

Composition of business segments

For management purposes, based on the products and services offered, we are organized into five business segments: Personal & Commercial Banking, Wealth Management, Insurance, Investor & Treasury Services and Capital Markets.

Personal & Commercial Banking is comprised of our personal and business banking operations, auto financing and retail investment businesses and operates through four business lines: Personal Financial Services, Business Financial Services and Cards and Payment Solutions (Canadian Banking), and Caribbean & U.S. Banking. In Canada we provide a broad suite of financial products and services to our individual and business clients through our extensive branch, automated teller machines, online and telephone banking networks, as well as through a large number of proprietary sales professionals. In the Caribbean we offer a broad range of financial products and services to individuals, business clients and public institutions in their respective markets. In the United States, we serve the cross-border banking needs of Canadian clients within the United States, as well as the banking needs of our U.S. wealth management clients.

Wealth Management is comprised of 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 is comprised of our insurance operations in Canada and globally and operates under two business lines: Canadian Insurance and International Insurance, providing a wide range of life, health, property and casualty, and reinsurance products and solutions. In Canada, we offer our products and services through our proprietary distribution channels, comprised of the field sales force which includes retail insurance branches, our field sales representatives, call centers and online network, as well as through independent insurance advisors and affinity relationships. Outside North America, we operate in reinsurance markets globally.

Investor & Treasury Services offers global custody, fund and pension administration, as well as an integrated suite of products to institutional investors worldwide. We also provide cash management, correspondent banking and trade finance services to financial institutions globally and funding and liquidity management for RBC as well as other select institutions.

Capital Markets is comprised of 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, 2014 was \$492 million (October 31, 2013 – \$380 million, October 31, 2012 – \$431 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.

(Millions of Canadian dollars)	For the year ended October 31, 2014									
	Personal & Commercial Banking	Wealth Management	Insurance	Investor & Treasury Services	Capital Markets (1)	Corporate Support (1)	Total	Canada	United States	Other International
Net interest income (2), (3)	\$ 9,743	\$ 469	\$ –	\$ 732	\$ 3,485	\$ (313)	\$ 14,116	\$ 11,121	\$ 1,896	\$ 1,099
Non-interest income	3,987	5,844	4,964	1,152	3,881	164	19,992	10,495	4,256	5,241
Total revenue	13,730	6,313	4,964	1,884	7,366	(149)	34,108	21,616	6,152	6,340
Provision for credit losses	1,103	19	–	–	44	(2)	1,164	922	52	190
Insurance policyholder benefits, claims and acquisition expense	–	–	3,573	–	–	–	3,573	2,188	1	1,384
Non-interest expense	6,563	4,800	579	1,286	4,344	89	17,661	9,650	4,222	3,789
Net income (loss) before income taxes	6,064	1,494	812	598	2,978	(236)	11,710	8,856	1,877	977
Income taxes (recoveries)	1,589	411	31	157	923	(405)	2,706	1,983	672	51
Net income from continuing operations	4,475	1,083	781	441	2,055	169	9,004	6,873	1,205	926
Net income from discontinued operations	–	–	–	–	–	–	–	–	–	–
Net income	\$ 4,475	\$ 1,083	\$ 781	\$ 441	\$ 2,055	\$ 169	\$ 9,004	\$ 6,873	\$ 1,205	\$ 926
Non-interest expense includes:										
Depreciation and amortization	\$ 339	\$ 147	\$ 16	\$ 58	\$ 28	\$ 577	\$ 1,165	\$ 971	\$ 39	\$ 155
Impairment of other intangibles	–	6	–	–	2	–	8	2	6	–
Restructuring provisions	20	16	–	–	–	–	36	–	16	20
Total assets	\$377,051	\$ 27,084	\$12,930	\$103,822	\$400,314	\$ 19,349	\$ 940,550	\$ 496,055	\$ 215,985	\$ 228,510
Total assets include: Additions to property, plant, equipment and intangibles	\$ 318	\$ 105	\$ 16	\$ 30	\$ 147	\$ 563	\$ 1,179	\$ 924	\$ 154	\$ 101
Total liabilities	\$376,154	\$ 27,022	\$12,988	\$103,798	\$400,114	\$(34,029)	\$ 886,047	\$ 441,535	\$ 216,052	\$ 228,460

(Millions of Canadian dollars)	For the year ended October 31, 2013									
	Personal & Commercial Banking	Wealth Management	Insurance	Investor & Treasury Services	Capital Markets (1)	Corporate Support (1)	Total	Canada	United States	Other International
Net interest income (2), (3)	\$ 9,434	\$ 396	\$ –	\$ 671	\$ 2,872	\$ (124)	\$ 13,249	\$ 10,956	\$ 1,603	\$ 690
Non-interest income	3,585	5,091	3,928	1,133	3,708	(12)	17,433	8,606	3,835	4,992
Total revenue	13,019	5,487	3,928	1,804	6,580	(136)	30,682	19,562	5,438	5,682
Provision for credit losses	995	51	–	–	188	3	1,237	892	78	267
Insurance policyholder benefits, claims and acquisition expense	–	–	2,784	–	–	–	2,784	1,425	10	1,349
Non-interest expense	6,168	4,219	551	1,348	3,856	72	16,214	9,210	3,681	3,323
Net income (loss) before income taxes	5,856	1,217	593	456	2,536	(211)	10,447	8,035	1,669	743
Income taxes (recoveries)	1,476	331	(2)	117	836	(653)	2,105	1,709	396	–
Net income from continuing operations	4,380	886	595	339	1,700	442	8,342	6,326	1,273	743
Net income from discontinued operations	–	–	–	–	–	–	–	–	–	–
Net income	\$ 4,380	\$ 886	\$ 595	\$ 339	\$ 1,700	\$ 442	\$ 8,342	\$ 6,326	\$ 1,273	\$ 743
Non-interest expense includes:										
Depreciation and amortization	\$ 281	\$ 135	\$ 13	\$ 56	\$ 25	\$ 501	\$ 1,011	\$ 838	\$ 36	\$ 137
Impairment of other intangibles	1	–	–	5	–	4	10	10	–	–
Restructuring provisions	21	–	–	44	–	–	65	9	–	56
Total assets	\$363,894	\$ 23,361	\$12,275	\$ 90,621	\$358,036	\$ 11,558	\$ 859,745	\$ 494,306	\$ 181,703	\$ 183,736
Total assets include: Additions to property, plant, equipment and intangibles	\$ 468	\$ 90	\$ 13	\$ 35	\$ 107	\$ 517	\$ 1,230	\$ 966	\$ 132	\$ 132
Total liabilities	\$362,892	\$ 23,306	\$12,325	\$ 90,793	\$357,872	\$(36,903)	\$ 810,285	\$ 444,781	\$ 181,815	\$ 183,689

Note 30 Results by business segment (continued)

For the year ended October 31, 2012										
(Millions of Canadian dollars)	Personal & Commercial Banking	Wealth Management	Insurance	Investor & Treasury Services	Capital Markets (1)	Corporate Support (1)	Total	Canada	United States	Other International
Net interest income (2), (3)	\$ 9,059	\$ 393	\$ –	\$ 612	\$ 2,559	\$ (184)	\$ 12,439	\$ 10,391	\$ 1,308	\$ 740
Non-interest income	3,379	4,442	4,897	293	3,629	68	16,708	9,059	3,569	4,080
Total revenue	12,438	4,835	4,897	905	6,188	(116)	29,147	19,450	4,877	4,820
Provision for credit losses	1,165	(1)	–	–	135	–	1,299	1,018	90	191
Insurance policyholder benefits, claims and acquisition expense	–	–	3,621	–	–	–	3,621	2,315	21	1,285
Non-interest expense	5,822	3,809	518	701	3,752	39	14,641	8,586	3,406	2,649
Net income (loss) before income taxes	5,451	1,027	758	204	2,301	(155)	9,586	7,531	1,360	695
Income taxes (recoveries)	1,395	274	45	102	725	(513)	2,028	1,527	521	(20)
Net income from continuing operations	4,056	753	713	102	1,576	358	7,558	6,004	839	715
Net income from discontinued operations	–	–	–	–	–	–	(51)	–	(51)	–
Net income	\$ 4,056	\$ 753	\$ 713	\$ 102	\$ 1,576	\$ 358	\$ 7,507	\$ 6,004	\$ 788	\$ 715
Non-interest expense includes:										
Depreciation and amortization	\$ 253	\$ 136	\$ 14	\$ 15	\$ 27	\$ 452	\$ 897	\$ 723	\$ 38	\$ 136
Impairment of other intangibles	–	–	–	–	–	–	–	–	–	–
Restructuring provisions	–	–	–	–	–	–	–	–	–	–
Total assets	\$342,514	\$ 21,993	\$ 12,322	\$ 77,255	\$ 355,153	\$ 14,717	\$ 823,954	\$ 457,386	\$ 173,179	\$ 193,389
Total assets include:										
Additions to property, plant, equipment and intangibles	\$ 240	\$ 133	\$ 11	\$ 304	\$ 128	\$ 877	\$ 1,693	\$ 1,069	\$ 145	\$ 479
Total liabilities	\$341,368	\$ 21,979	\$ 12,372	\$ 77,276	\$ 355,030	\$(28,992)	\$ 779,033	\$ 412,406	\$ 173,308	\$ 193,319

(1) Taxable equivalent basis (Teb).

(2) Inter-segment revenue and share of profits in associates are not material.

(3) Interest revenue is reported net of interest expense as management relies primarily on net interest income as a performance measure.

Revenue by business line

(Millions of Canadian dollars)	For the year ended		
	October 31 2014	October 31 2013	October 31 2012
Personal Financial Services	\$ 7,285	\$ 6,948	\$ 6,591
Business Financial Services	3,135	2,990	2,894
Cards and Payment Solutions	2,449	2,282	2,129
Caribbean & U.S. Banking	861	799	824
Canadian Wealth Management	2,186	1,889	1,741
U.S. & International Wealth Management	2,430	2,225	1,977
Global Asset Management	1,697	1,373	1,117
Insurance	4,964	3,928	4,897
Investor & Treasury services	1,884	1,804	905
Corporate and Investment Banking	3,437	3,014	2,533
Global Markets	3,930	3,492	3,635
Other Capital Markets	(1)	74	20
Corporate Support	(149)	(136)	(116)
	\$ 34,108	\$ 30,682	\$ 29,147

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 52 to 77 of the Management's 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 certain of our on- and off-balance sheet financial instruments are summarized in the following table.

(Millions of Canadian dollars, except percentage amounts)	As at October 31, 2014								
	Canada	%	United States	%	Europe	%	Other International	%	Total
On-balance sheet assets other than derivatives (1)	\$ 422,498	72%	\$ 79,140	14%	\$ 46,596	8%	\$ 36,031	6%	\$ 584,265
Derivatives before master netting agreement (2), (3)	12,825	9	23,039	16	102,368	70	7,009	5	145,241
	\$ 435,323	60%	\$ 102,179	14%	\$ 148,964	20%	\$ 43,040	6%	\$ 729,506
Off-balance sheet credit instruments (4)									
Committed and uncommitted (5)	\$ 224,849	62%	\$ 102,253	28%	\$ 28,312	8%	\$ 7,876	2%	\$ 363,290
Other	44,808	52	24,569	29	11,189	13	5,076	6	85,642
	\$ 269,657	60%	\$ 126,822	28%	\$ 39,501	9%	\$ 12,952	3%	\$ 448,932

(Millions of Canadian dollars, except percentage amounts)	As at October 31, 2013 (6)								
	Canada	%	United States	%	Europe	%	Other International	%	Total
On-balance sheet assets other than derivatives (1)	\$ 401,206	74%	\$ 62,739	12%	\$ 42,935	8%	\$ 31,399	6%	\$ 538,279
Derivatives before master netting agreement (2), (3)	10,842	10	18,249	17	71,085	67	6,353	6	106,529
	\$ 412,048	64%	\$ 80,988	12%	\$ 114,020	18%	\$ 37,752	6%	\$ 644,808
Off-balance sheet credit instruments (4)									
Committed and uncommitted (5)	\$ 213,602	64%	\$ 86,834	26%	\$ 24,020	7%	\$ 8,242	3%	\$ 332,698
Other	43,173	55	20,840	27	11,361	14	3,188	4	78,562
	\$ 256,775	62%	\$ 107,674	26%	\$ 35,381	9%	\$ 11,430	3%	\$ 411,260

- (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 46% (October 31, 2013 – 45%), the Prairies at 21% (October 31, 2013 – 21%), British Columbia and the territories at 16% (October 31, 2013 – 17%) and Quebec at 12% (October 31, 2013 – 12%). No industry accounts for more than 33% (October 31, 2013 – 31%) of total on-balance sheet credit instruments.
- (2) The largest concentration of credit exposure by counterparty type is banks at 36% (October 31, 2013 – 46%).
- (3) Excludes credit derivatives classified as other than trading.
- (4) Represents financial instruments with contractual amounts representing credit risk.
- (5) Retail and wholesale commitments comprise 38% (October 31, 2013 – 39%) and 62% (October 31, 2013 – 61%), respectively, of our total commitments. The largest sector concentrations in the wholesale portfolio relate to Energy at 18% (October 31, 2013 – 18%), Financing products at 14% (October 31, 2013 – 16%), Non-bank financial services at 9% (October 31, 2013 – 10%), Real estate and related at 9% (October 31, 2013 – 9%), and Technology and media at 7% (October 31, 2013 – 6%).
- (6) Certain amounts have been revised from results previously reported.

Note 32 Capital management

Regulatory capital and capital ratios

OSFI formally establishes risk-based capital targets for deposit-taking institutions in Canada. We are required to calculate our capital ratios and Assets-to-capital multiple using the Basel III framework. Under Basel III, regulatory capital includes Common Equity Tier 1 (CET1), Tier 1 and Tier 2 capital. CET1 capital mainly consists of common shares, retained earnings and other components of equity. Regulatory adjustments under Basel III include full deductions of intangibles (excluding mortgage servicing rights), certain deferred tax assets, defined benefit pension fund assets and liabilities, and non-significant investments in banking, financial and insurance entities. Tier 1 capital comprises predominantly CET1, with additional items that consist of capital instruments such as certain preferred shares, and certain non-controlling interests in subsidiaries. Tier 2 capital includes subordinated debentures that meet certain criteria and certain loan loss allowances. Total Capital is the sum of CET1, additional Tier 1 capital and Tier 2 capital. Regulatory capital ratios are calculated by dividing CET1, Tier 1 and Total capital by risk-weighted assets. The Assets-to-capital multiple is calculated by dividing gross adjusted assets by Total capital. During 2014 and 2013, we have complied with all capital requirements imposed by OSFI.

	As at	
	October 31 2014	October 31 2013
(Millions of Canadian dollars, except percentage and multiple amounts)		
Capital		
Common Equity Tier 1 capital	\$ 36,406	\$ 30,541
Tier 1 capital	42,202	37,196
Total capital	50,020	44,716
Risk-weighted assets used in calculation of capital ratios (1), (2)		
Common Equity Tier 1 capital ratio	368,594	318,981
Tier 1 capital ratio	369,976	318,981
Total capital ratio	372,050	318,981
Total capital risk-weighted assets (1)		
Credit risk	\$ 286,327	\$ 232,641
Market risk	38,460	42,184
Operational risk	47,263	44,156
	\$ 372,050	\$ 318,981
Capital ratios and multiples (1)		
Common Equity Tier 1 capital ratio	9.9%	9.6%
Tier 1 capital ratio	11.4%	11.7%
Total capital ratio	13.4%	14.0%
Assets-to-capital multiple (3)	17.0X	16.6X

(1) Capital, risk-weighted assets and capital ratios and multiples are calculated using OSFI Capital Adequacy Requirements based on the Basel III framework.

(2) Effective third quarter, the credit valuation adjustment to our risk-weighted asset calculation implemented in the first quarter, must reflect different percentages for each tier of capital. This change reflects a phase-in of credit valuation adjustments ending in the fourth quarter of 2018. During this phase-in period, risk-weighted assets for CET1, Tier 1 capital and Total capital ratios will be subject to different annual credit valuation adjustment percentages.

(3) Gross adjusted assets as at October 31, 2014 were \$885 billion (October 31, 2013 – \$807 billion).

Note 33 Offsetting financial assets and financial liabilities

Offsetting within our balance sheet may be achieved where financial assets and liabilities are subject to master netting arrangements that provide the currently enforceable right of offset and where there is an intention to settle on a net basis, or realize the assets and liabilities simultaneously. For derivative contracts and repurchase and reverse repurchase arrangements, this is generally achieved when there is a market mechanism for settlement (e.g. central counterparty exchange, or clearing house) which provides daily net settlement of cash flows arising from these contracts. Margin receivables and margin payables are generally offset as they settle simultaneously through a market settlement mechanism. These are generally classified as Other assets or Other liabilities.

Amounts that do not qualify for offsetting include master netting arrangements that only permit outstanding transactions with the same counterparty to be offset in an event of default or occurrence of other predetermined events. Such master netting arrangements include the ISDA Master Agreement or derivative exchange or clearing counterparty agreements for derivative contracts, global master repurchase agreement and global master securities lending agreements for repurchase, reverse repurchase and other similar secured lending and borrowing arrangements.

The amount of the financial collateral received or pledged subject to master netting arrangement or similar agreements but not qualified for offsetting refers to the collateral received or pledged to cover the net exposure between counterparties by enabling the collateral to be realized in an event of default or the occurrence of other predetermined events. Certain amounts of collateral are restricted from being sold or re-pledged unless there is an event of default or the occurrence of other predetermined events.

The table below provides the amount of financial instruments that have been offset on the Consolidated Balance Sheet and the amounts that do not qualify for offsetting but are subject to enforceable master netting arrangements or similar agreements. The amounts presented are not intended to represent our actual exposure to credit risk.

Financial assets subject to offsetting, enforceable master netting arrangements and similar agreements

	As at October 31, 2014							
	Amounts subject to offsetting and enforceable netting arrangements			Amounts subject to master netting arrangements or similar agreements but do not qualify on offsetting on the balance sheet (1)			Total amount recognized on the balance sheet	
	Gross amounts of financial assets before balance sheet offsetting	Amounts of financial liabilities offset on the balance sheet	Net amount of financial assets presented on the balance sheet	Impact of master netting agreements	Financial collateral received (2)	Net amount		Amounts not subject to enforceable netting arrangements
Assets purchased under reverse repurchase agreements and securities borrowed	\$ 149,348	\$ 14,038	\$ 135,310	\$ 56	\$ 134,985	\$ 269	\$ 270	\$ 135,580
Derivative assets (3)	136,230	57,068	79,162	60,546	8,993	9,623	8,240	87,402
Other financial assets	1,264	1,240	24	–	–	24	–	24
	\$ 286,842	\$ 72,346	\$ 214,496	\$ 60,602	\$ 143,978	\$ 9,916	\$ 8,510	\$ 223,006

As at October 31, 2013								
Amounts subject to offsetting and enforceable netting arrangements								
				Amounts subject to master netting arrangements or similar agreements but do not qualify on offsetting on the balance sheet (1)				
	Gross amounts of financial assets before balance sheet offsetting	Amounts of financial liabilities offset on the balance sheet	Net amount of financial assets presented on the balance sheet	Impact of master netting agreements	Financial collateral received (2)	Net amount	Amounts not subject to enforceable netting arrangements	Total amount recognized on the balance sheet
Assets purchased under reverse repurchase agreements and securities borrowed	\$ 127,549	\$ 11,156	\$ 116,393	\$ 41	\$ 116,013	\$ 339	\$ 1,124	\$ 117,517
Derivative assets (3)	98,878	31,190	67,688	51,653	8,459	7,576	7,134	74,822
Other financial assets	1,302	1,290	12	–	–	12	–	12
	\$ 227,729	\$ 43,636	\$ 184,093	\$ 51,694	\$ 124,472	\$ 7,927	\$ 8,258	\$ 192,351

(1) Financial collateral is reflected at fair value. The amount of financial instruments and financial collateral disclosed is limited to the net balance sheet exposure, and any over-collateralization is excluded from the table.

(2) Includes cash collateral of \$8,687 million (October 31, 2013 – \$6,027 million) and non-cash collaterals of \$135 billion (October 31, 2013 – \$118 billion).

(3) Includes cash margin of \$1,326 million (October 31, 2013 – \$988 million) which offset against the derivative balance on the balance sheet.

Financial liabilities subject to offsetting, enforceable master netting arrangements and similar agreements

As at October 31, 2014								
Amounts subject to offsetting and enforceable netting arrangements								
				Amounts subject to master netting arrangements or similar agreements but do not qualify on offsetting on the balance sheet (1)				
	Gross amounts of financial liabilities before balance sheet offsetting	Amounts of financial assets offset on the balance sheet	Net amount of financial liabilities presented on the balance sheet	Impact of master netting agreements	Financial collateral pledged (2)	Net amount	Amounts not subject to enforceable netting arrangements	Total amount recognized on the balance sheet
Obligations related to assets sold under repurchase agreements and securities loaned	\$ 78,029	\$ 14,038	\$ 63,991	\$ 56	\$ 63,790	\$ 145	\$ 340	\$ 64,331
Derivative liabilities (3)	135,662	56,982	78,680	60,546	9,184	8,950	10,302	88,982
Other financial liabilities	1,381	1,326	55	–	–	55	–	55
	\$ 215,072	\$ 72,346	\$ 142,726	\$ 60,602	\$ 72,974	\$ 9,150	\$ 10,642	\$ 153,368

As at October 31, 2013								
Amounts subject to offsetting and enforceable netting arrangements								
				Amounts subject to master netting arrangements or similar agreements but do not qualify on offsetting on the balance sheet (1)				
	Gross amounts of financial liabilities before balance sheet offsetting	Amounts of financial assets offset on the balance sheet	Net amount of financial liabilities presented on the balance sheet	Impact of master netting agreements	Financial collateral pledged (2)	Net amount	Amounts not subject to enforceable netting arrangements	Total amount recognized on the balance sheet
Obligations related to assets sold under repurchase agreements and securities loaned	\$ 70,306	\$ 11,155	\$ 59,151	\$ 41	\$ 59,024	\$ 86	\$ 1,265	\$ 60,416
Derivative liabilities (3)	99,122	31,493	67,629	51,653	8,040	7,936	9,116	76,745
Other financial liabilities	989	988	1	–	–	1	–	1
	\$ 170,417	\$ 43,636	\$ 126,781	\$ 51,694	\$ 67,064	\$ 8,023	\$ 10,381	\$ 137,162

(1) Financial collateral is reflected at fair value. The amount of financial instruments and financial collateral disclosed is limited to the net balance sheet exposure, and any over-collateralization is excluded from the table.

(2) Includes cash collateral of \$6,709 million (October 31, 2013 – \$6,281 million) and non-cash collateral of \$66 billion (October 31, 2013 – \$61 billion).

(3) Includes cash margin of \$1,240 million (October 31, 2013 – \$1,290 million) which offset against the derivative balance on the balance sheet.

Note 34 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.

(Millions of Canadian dollars)	As at					
	October 31, 2014			October 31, 2013 (1)		
	Within one year	After one year	Total	Within one year	After one year	Total
Assets						
Cash and due from banks (2)	\$ 16,649	\$ 772	\$ 17,421	\$ 13,665	\$ 1,885	\$ 15,550
Interest-bearing deposits with banks	7,494	905	8,399	5,732	3,307	9,039
Securities						
Trading securities (3)	141,399	9,981	151,380	135,484	8,539	144,023
Available-for-sale securities	12,318	35,450	47,768	11,388	27,299	38,687
Assets purchased under reverse repurchase agreements and securities borrowed	126,451	9,129	135,580	104,860	12,657	117,517
Loans						
Retail	52,196	282,791	334,987	43,338	277,289	320,627
Wholesale	38,290	63,946	102,236	36,710	53,472	90,182
Allowance for loan losses			(1,994)			(1,959)
Segregated fund net assets	–	675	675	–	513	513
Other						
Customers' liability under acceptances	11,456	6	11,462	9,953	–	9,953
Derivatives (3)	19,485	67,917	87,402	13,695	61,127	74,822
Premises and equipment, net	–	2,684	2,684	3	2,633	2,636
Goodwill	–	8,647	8,647	–	8,332	8,332
Other intangibles	–	2,775	2,775	–	2,777	2,777
Investments in joint ventures and associates	–	295	295	–	247	247
Employee benefit assets	–	138	138	–	161	161
Other assets	24,414	6,281	30,695	21,039	5,599	26,638
	\$ 450,152	\$ 492,392	\$ 940,550	\$ 395,867	\$ 465,837	\$ 859,745
Liabilities						
Deposits (4)	\$ 451,065	\$ 163,035	\$ 614,100	\$ 392,645	\$ 170,434	\$ 563,079
Segregated fund net liabilities	–	675	675	–	513	513
Other						
Acceptances	11,456	6	11,462	9,953	–	9,953
Obligations related to securities sold short	46,125	4,220	50,345	44,231	2,897	47,128
Obligations related to assets sold under repurchase agreements and securities loaned	62,391	1,940	64,331	57,855	2,561	60,416
Derivatives (3)	19,980	69,002	88,982	15,671	61,074	76,745
Insurance claims and policy benefit liabilities	135	8,429	8,564	338	7,696	8,034
Employee benefit liabilities	–	2,420	2,420	–	2,027	2,027
Other liabilities	25,228	12,081	37,309	24,204	10,743	34,947
Subordinated debentures	200	7,659	7,859	–	7,443	7,443
	\$ 616,580	\$ 269,467	\$ 886,047	\$ 544,897	\$ 265,388	\$ 810,285

(1) Certain amounts have been revised from those previously reported.

(2) Cash and due from banks are assumed to be recovered within one year, except for cash balances not available for use by the bank.

(3) 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.

(4) Demand deposits of \$289 billion (October 31, 2013 – \$264 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 35 Parent company information

The following table presents information regarding the legal entity of Royal Bank of Canada with its subsidiaries presented on an equity accounted basis.

Condensed Balance Sheets

(Millions of Canadian dollars)	As at	
	October 31 2014	October 31 2013
Assets		
Cash and due from banks	\$ 7,333	\$ 3,561
Interest-bearing deposits with banks	5,788	2,707
Securities	111,159	100,574
Investments in bank subsidiaries and associated corporations	20,240	24,302
Investments in other subsidiaries and associated corporations	53,131	42,298
Assets purchased under reverse repurchase agreements	17,075	14,578
Loans, net of allowances for loan losses	407,440	384,906
Net balances due from bank subsidiaries	10,466	–
Other assets	120,052	105,219
	\$ 752,684	\$ 678,145
Liabilities and shareholders' equity		
Deposits	\$ 497,053	\$ 455,625
Net balances due to bank subsidiaries	–	4,892
Net balances due to other subsidiaries	56,146	35,899
Other liabilities	138,989	126,670
	692,188	623,086
Subordinated debentures	7,806	7,394
Shareholders' equity	52,690	47,665
	\$ 752,684	\$ 678,145

Condensed Statements of Income

(Millions of Canadian dollars)	For the year ended		
	October 31 2014	October 31 2013	October 31 2012
Interest income (1)	\$ 18,415	\$ 18,573	\$ 18,842
Interest expense	5,882	5,795	6,914
Net interest income	12,533	12,778	11,928
Non-interest income (2)	6,007	4,626	1,737
Total revenue	18,540	17,404	13,665
Provision for credit losses	1,010	1,147	1,139
Non-interest expense	7,801	7,304	6,974
Income before income taxes	9,729	8,953	5,552
Income taxes	2,283	1,537	1,423
Net income before equity in undistributed income of subsidiaries	7,446	7,416	4,129
Equity in undistributed income of subsidiaries	1,558	926	3,378
Net income	\$ 9,004	\$ 8,342	\$ 7,507

(1) Includes dividend income from investments in subsidiaries and associated corporations of \$10 million (2013 – \$1,313 million; 2012 – \$1,292 million).

(2) Includes gain from associated corporations of \$7 million (2013 – loss of \$9 million; 2012 – gain of \$2 million).

Condensed Statements of Cash Flows

	For the year ended		
	October 31 2014	October 31 2013	October 31 2012
(Millions of Canadian dollars)			
Cash flows from operating activities			
Net income	\$ 9,004	\$ 8,342	\$ 7,507
Adjustments to determine net cash from operating activities:			
Change in undistributed earnings of subsidiaries	(1,558)	(926)	(3,378)
Change in deposits	41,428	31,183	9,772
Change in loans, net of loan securitizations	(22,865)	(18,927)	(29,324)
Change in trading securities	(4,193)	(19,048)	9,440
Change in obligations related to assets sold under repurchase agreements and securities loaned	(2,712)	1,730	(229)
Change in assets purchased under reverse repurchase agreements and securities borrowed	(2,497)	(3,668)	(2,164)
Change in obligations related to securities sold short	(1,305)	388	(2,713)
Other operating activities, net	182	(8,210)	(2,571)
Net cash from (used in) operating activities	15,484	(9,136)	(13,660)
Cash flows from investing activities			
Change in interest-bearing deposits with banks	(3,081)	(1,548)	400
Proceeds from sale of available-for-sale securities	1,225	1,641	3,991
Proceeds from maturity of available-for-sale securities	28,875	28,056	28,994
Purchases of available-for-sale securities	(36,165)	(26,392)	(29,307)
Net acquisitions of premises and equipment and other intangibles	(803)	(754)	(867)
Change in cash invested in subsidiaries	(2,409)	(7,323)	163
Change in net funding provided to subsidiaries	4,889	20,164	10,158
Proceeds from sale of an associate	70	-	-
Net cash (used in) from investing activities	(7,399)	13,844	13,532
Cash flows from financing activities			
Issue of subordinated debentures	2,000	2,046	-
Repayment of subordinated debentures	(1,600)	(2,000)	(1,006)
Issue of preferred shares	1,000	-	-
Issuance costs	(14)	-	-
Redemption of preferred shares for cancellation	(1,525)	(222)	-
Issue of common shares	150	121	126
Redemption of common shares for cancellation	(113)	(408)	-
Dividends paid	(4,211)	(3,810)	(3,272)
Net cash used in financing activities	(4,313)	(4,273)	(4,152)
Net change in cash and due from banks	3,772	435	(4,280)
Cash and due from banks at beginning of year	3,561	3,126	7,406
Cash and due from banks at end of year	\$ 7,333	\$ 3,561	\$ 3,126
Supplemental disclosure of cash flow information			
Amount of interest paid in year	\$ 5,814	\$ 5,943	\$ 7,372
Amount of interest received in year	18,582	17,281	17,502
Amount of dividends received in year	10	1,313	1,302
Amount of income taxes paid in year	1,286	265	1,951

Note 36 Subsequent events

On November 14, 2014, all \$200 million outstanding 10% subordinated debentures matured. The maturity proceeds plus accrued interest were paid to the noteholders on the maturity date.

On November 24, 2014, we redeemed all 13 million of issued and outstanding Non-Cumulative 5-Year Rate Reset First Preferred Shares, Series AX for cash at a redemption price of \$25 per share.

Condensed Balance Sheet

(Millions of Canadian dollars)	IFRS				CGAAP						
	2014 (1)	2013 (1)	2012 (1)	2011	2011	2010	2009	2008	2007	2006	2005
Assets											
Cash and due from banks	\$ 17,421	\$ 15,550	\$ 12,428	\$ 12,428	\$ 13,247	\$ 8,440	\$ 7,584	\$ 11,086	\$ 4,226	\$ 4,401	\$ 5,001
Interest-bearing deposits with banks	8,399	9,039	10,246	6,460	12,181	13,254	8,919	20,041	11,881	10,502	5,237
Securities	199,148	182,710	161,602	167,022	179,558	183,519	177,298	171,134	178,255	184,869	160,495
Assets purchased under reverse repurchase agreements and securities borrowed	135,580	117,517	112,257	84,947	84,947	72,698	41,580	44,818	64,313	59,378	42,973
Loans net of allowance	435,229	408,850	378,241	347,530	296,284	273,006	258,395	289,540	237,936	208,530	190,416
Other	144,773	126,079	149,180	175,446	165,485	175,289	161,213	187,240	103,735	69,100	65,399
Total Assets	\$ 940,550	\$ 859,745	\$ 823,954	\$ 793,833	\$ 751,702	\$ 726,206	\$ 654,989	\$ 723,859	\$ 600,346	\$ 536,780	\$ 469,521
Liabilities											
Deposits	\$ 614,100	\$ 563,079	\$ 512,244	\$ 479,102	\$ 444,181	\$ 414,561	\$ 378,457	\$ 438,575	\$ 365,205	\$ 343,523	\$ 306,860
Other	264,088	239,763	259,174	263,625	256,124	263,030	229,699	242,744	201,404	160,575	131,003
Subordinated debentures	7,859	7,443	7,615	8,749	7,749	6,681	6,461	8,131	6,235	7,103	8,167
Trust capital securities	–	–	–	894	–	727	1,395	1,400	1,400	1,383	1,400
Preferred shares liabilities	–	–	–	–	–	–	–	–	300	298	300
Non-controlling interest in subsidiaries	–	n.a.	n.a.	n.a.	1,941	2,256	2,071	2,371	1,483	1,775	1,944
Total Liabilities	886,047	810,285	779,033	752,370	709,995	687,255	618,083	693,221	576,027	514,657	449,674
Equity attributable to shareholders	52,690	47,665	43,160	39,702	41,707	38,951	36,906	30,638	24,319	22,123	19,847
Non-controlling interest	1,813	1,795	1,761	1,761	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total equity	54,503	49,460	44,921	41,463	41,707	38,951	36,906	30,638	24,319	22,123	19,847
Total liabilities and equity	\$ 940,550	\$ 859,745	\$ 823,954	\$ 793,833	\$ 751,702	\$ 726,206	\$ 654,989	\$ 723,859	\$ 600,346	\$ 536,780	\$ 469,521

Condensed Income Statement

(Millions of Canadian dollars)	IFRS				CGAAP						
	2014	2013	2012	2011	2011	2010	2009	2008	2007	2006	2005
Net interest income	\$ 14,116	\$ 13,249	\$ 12,439	\$ 11,357	\$ 10,600	\$ 10,338	\$ 10,705	\$ 9,054	\$ 7,700	\$ 6,796	\$ 6,793
Non-interest income	19,992	17,433	16,708	16,281	16,830	15,744	15,736	12,528	14,762	13,481	12,391
Total revenue	34,108	30,682	29,147	27,638	27,430	26,082	26,441	21,582	22,462	20,637	19,184
Provision for credit losses (PCL)	1,164	1,237	1,299	1,133	975	1,240	2,167	1,595	791	429	455
Insurance policyholder benefits, claims and acquisition expense	3,573	2,784	3,621	3,358	3,360	3,546	3,042	1,631	2,173	2,509	2,625
Non-interest expense (NIE)	17,661	16,214	14,641	14,167	14,453	13,469	13,436	12,351	12,473	11,495	11,402
Non-controlling interest	n.a.	n.a.	n.a.	n.a.	104	99	100	81	141	44	(13)
Net income from continuing operations	9,004	8,342	7,558	6,970	6,650	5,732	5,681	4,555	5,492	4,757	3,437
Net loss from discontinued operations	–	–	(51)	(526)	(1,798)	(509)	(1,823)	–	–	(29)	(50)
Net income	9,004	8,342	7,507	6,444	4,852	5,223	3,858	4,555	5,492	4,728	3,387

(1) Current and two preceding periods reflect changes in accounting standards and presentation changes as disclosed in Note 2 of our Annual Consolidated Financial Statements.

Other Statistics – reported

(Millions of Canadian dollars, except percentages and per share amounts)

	IFRS				CGAAP							
	2014 (1)	2013 (1)	2012 (1)	2011	2011	2010	2009	2008	2007	2006	2005	
PROFITABILITY MEASURES (2)												
Earnings per shares (EPS)												
– basic	\$ 6.03	\$ 5.53	\$ 4.96	\$ 4.25	\$ 3.21	\$ 3.49	\$ 2.59	\$ 3.41	\$ 4.24	\$ 3.65	\$ 2.61	
– diluted	\$ 6.00	\$ 5.49	\$ 4.91	\$ 4.19	\$ 3.19	\$ 3.46	\$ 2.57	\$ 3.38	\$ 4.19	\$ 3.59	\$ 2.57	
Return on common equity (ROE)	19.0%	19.7%	19.6%	18.7%	12.9%	14.9%	11.9%	18.1%	24.7%	23.5%	18.0%	
Return on risk-weighted assets (RWA)	2.52%	2.67%	2.70%	2.44%	1.87%	2.03%	1.50%	1.78%	2.23%	2.21%	1.77%	
Efficiency ratio (3)	51.8%	52.8%	50.2%	51.3%	52.7%	51.6%	50.8%	57.2%	55.5%	55.7%	59.2%	
KEY RATIOS												
PCL on impaired loans as a % of Average net loans and acceptances	0.27%	0.31%	0.35%	0.33%	0.34%	0.45%	0.72%	0.53%	0.33%	0.23%	0.21%	
Net interest margin (total average assets)	1.56%	1.56%	1.55%	1.52%	1.49%	1.59%	1.64%	1.39%	1.33%	1.35%	1.53%	
Non-interest income as a % of total revenue	58.6%	56.8%	57.3%	58.9%	61.4%	60.4%	59.5%	58.0%	65.7%	67.1%	64.6%	
SHARE INFORMATION (2)												
Common shares outstanding (000s) – end of period	1,442,233	1,441,056	1,445,303	1,438,376	1,438,376	1,424,922	1,417,610	1,341,260	1,276,260	1,280,890	1,293,502	
Dividends declared per common share	\$ 2.84	\$ 2.53	\$ 2.28	\$ 2.08	\$ 2.08	\$ 2.00	\$ 2.00	\$ 2.00	\$ 1.82	\$ 1.44	\$ 1.18	
Dividend yield	3.8%	4.0%	4.5%	3.9%	3.9%	3.6%	4.8%	4.2%	3.3%	3.1%	3.2%	
Dividend payout ratio (3)	47%	46%	46%	45%	47%	52%	52%	59%	43%	40%	45%	
Book value per share	\$ 33.69	\$ 29.87	\$ 26.52	\$ 24.25	\$ 25.65	\$ 23.99	\$ 22.67	\$ 20.90	\$ 17.49	\$ 16.52	\$ 14.89	
Common share price (RY on TSX) – close, end of period	\$ 80.01	\$ 70.02	\$ 56.94	\$ 48.62	\$ 48.62	\$ 54.39	\$ 54.80	\$ 46.84	\$ 56.04	\$ 49.80	\$ 41.67	
Market capitalization (TSX)	115,393	100,903	82,296	69,934	69,934	77,502	77,685	62,825	71,522	63,788	53,894	
Market price to book value	2.38	2.34	2.15	2.00	1.90	2.27	2.42	2.24	3.20	3.01	2.80	
CAPITAL MEASURES - CONSOLIDATED (4)												
Common Equity Tier 1 capital ratio	9.9%	9.6%	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	
Tier 1 capital ratio	11.4%	11.7%	13.1%	n.a.	13.3%	13.0%	13.0%	9.0%	9.4%	9.6%	9.6%	
Total capital ratio	13.4%	14.0%	15.1%	n.a.	15.3%	14.4%	14.2%	11.0%	11.5%	11.9%	13.1%	
Assets-to-capital multiple	17.0X	16.6X	16.7X	n.a.	16.1X	16.5X	16.3X	20.1X	20.0X	19.7X	17.6X	

(1) Current and two preceding periods reflect changes in accounting standards and presentation changes as disclosed in Note 2 of our Annual Consolidated Financial Statements.

(2) On April 6, 2006, we paid a stock dividend of one common share on each of our issued and outstanding common shares. The effect was the same as two-for-one split of our common shares. All common share and per share information have been adjusted retroactively for the stock dividend.

(3) Ratios for 2009-2012 represent continuing operations.

(4) Effective 2013 we calculate the capital ratios and multiples using the Basel III (all-in basis) framework unless otherwise stated. 2008-2012 capital ratios and multiples were calculated using the Basel II framework. 2004-2007 capital ratios and 2005-2007 asset-to-capital multiples were calculated using the Basel I framework. Capital ratios and multiples prior to 2011 were determined under Canadian GAAP.