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## Management's Responsibility for Financial Information

The management of The Bank of Nova Scotia (the Bank) is responsible for the integrity and fair presentation of the financial information contained in this Annual Report. The consolidated financial statements have been prepared in accordance with International Financial Reporting Standards as issued by the International Accounting Standards Board. The consolidated financial statements also comply with the accounting requirements of the Bank Act.

The consolidated financial statements, where necessary, include amounts which are based on the best estimates and judgment of management. Financial information presented elsewhere in this Annual Report is consistent with that shown in the consolidated financial statements.

Management has always recognized the importance of the Bank maintaining and reinforcing the highest possible standards of conduct in all of its actions, including the preparation and dissemination of statements fairly presenting the financial condition of the Bank. In this regard, management has developed and maintains a system of accounting and reporting which provides for the necessary internal controls to ensure that transactions are properly authorized and recorded, assets are safeguarded against unauthorized use or disposition, and liabilities are recognized. The system is augmented by written policies and procedures, the careful selection and training of qualified staff, the establishment of organizational structures providing an appropriate and well-defined division of responsibilities, and the communication of policies and guidelines of business conduct throughout the Bank.

Management, under the supervision of and the participation of the President and Chief Executive Officer and the Chief Financial Officer, have a process in place to evaluate disclosure controls and procedures and internal control over financial reporting in line with Canadian and U.S. securities regulations.

The system of internal controls is further supported by a professional staff of internal auditors who conduct periodic audits of all aspects of the Bank's operations. As well, the Bank's Chief Auditor has full and free access to, and meets periodically with the Audit and Conduct Review Committee of the Board of Directors. In addition, the Bank's compliance function maintains policies, procedures and programs directed at ensuring compliance with regulatory requirements, including conflict of interest rules.

The Office of the Superintendent of Financial Institutions Canada, which is mandated to protect the rights and interests of the depositors and creditors of the Bank, examines and enquires into the business and affairs of the Bank, as deemed necessary, to determine whether the provisions of the Bank Act are being complied with, and that the Bank is in a sound financial condition.

The Audit and Conduct Review Committee, composed entirely of outside directors, reviews the consolidated financial statements with both management and the independent auditors before such statements are approved by the Board of Directors and submitted to the shareholders of the Bank.

The Audit and Conduct Review Committee reviews and reports its findings to the Board of Directors on all related party transactions that may have a material impact on the Bank.

KPMG LLP, the independent auditors appointed by the shareholders of the Bank, have audited the consolidated financial position of the Bank as at October 31, 2015 and October 31, 2014 and its consolidated financial performance and its consolidated cash flows for each of the years in the three-year period ended October 31, 2015 prepared in accordance with International Financial Reporting Standards as issued by the International Accounting Standards Board in accordance with Canadian Generally Accepted Auditing Standards and the standards of the Public Company Accounting Oversight Board (United States) and the effectiveness of internal control over financial reporting and have expressed their opinion upon completion of such audits in the following report to the shareholders. The Shareholders' Auditors have full and free access to, and meet periodically with, the Audit and Conduct Review Committee to discuss their audits, including any findings as to the integrity of the Bank's accounting, financial reporting and related matters.

Brian J. Porter  
President and Chief Executive Officer

Sean McGuckin  
Chief Financial Officer

Toronto, Canada  
December 1, 2015

## Independent Auditors' Report of Registered Public Accounting Firm

To the Shareholders of The Bank of Nova Scotia

We have audited the accompanying consolidated financial statements of The Bank of Nova Scotia, which comprise the consolidated statements of financial position as at October 31, 2015 and October 31, 2014, the consolidated statements of income, comprehensive income, changes in equity and cash flows for each of the years in the three-year period ended October 31, 2015, and notes, comprising 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.

### *Auditors' 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 our 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, we consider internal control relevant to the Bank'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 consolidated financial position of The Bank of Nova Scotia as at October 31, 2015 and October 31, 2014 and its consolidated financial performance and its consolidated cash flows for each of the years in the three-year period ended October 31, 2015 in accordance with International Financial Reporting Standards as issued by the International Accounting Standards Board.

### *Other Matter*

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), The Bank of Nova Scotia's internal control over financial reporting as of October 31, 2015, based on the criteria established in *Internal Control – Integrated Framework* (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO), and our report dated December 1, 2015 expressed an unmodified (unqualified) opinion on the effectiveness of The Bank of Nova Scotia's internal control over financial reporting.



Chartered Professional Accountants, Licensed Public Accountants  
Toronto, Canada  
December 1, 2015

Consolidated Statement of Financial Position

As at October 31 (\$ millions)	Note	2015	2014
<b>Assets</b>			
Cash and deposits with financial institutions	6	\$ 73,927	\$ 56,730
Precious metals		10,550	7,286
<b>Trading assets</b>			
Securities	8(a)	78,380	95,363
Loans	8(b)	18,341	14,508
Other		2,419	3,377
		<b>99,140</b>	113,248
Financial instruments designated at fair value through profit or loss	9	320	111
Securities purchased under resale agreements and securities borrowed		87,312	93,866
Derivative financial instruments	10	41,003	33,439
Investment securities	12	43,216	38,662
<b>Loans</b>			
Residential mortgages	13	217,498	212,648
Personal and credit cards	13	91,477	84,204
Business and government	13	153,850	131,098
		<b>462,825</b>	427,950
Allowance for credit losses	13(d)	4,197	3,641
		<b>458,628</b>	424,309
<b>Other</b>			
Customers' liability under acceptances		10,296	9,876
Property and equipment	16	2,286	2,272
Investments in associates	17	4,033	3,461
Goodwill and other intangible assets	18	11,449	10,884
Deferred tax assets	27(c)	2,034	1,763
Other assets	19	12,303	9,759
		<b>42,401</b>	38,015
		<b>\$ 856,497</b>	\$ 805,666
<b>Liabilities</b>			
<b>Deposits</b>			
Personal	20	\$ 190,044	\$ 175,163
Business and government	20	375,144	342,367
Financial institutions	20	35,731	36,487
		<b>600,919</b>	554,017
Financial instruments designated at fair value through profit or loss	9	1,486	465
<b>Other</b>			
Acceptances		10,296	9,876
Obligations related to securities sold short		20,212	27,050
Derivative financial instruments	10	45,270	36,438
Obligations related to securities sold under repurchase agreements and securities lent		77,015	88,953
Subordinated debentures	21	6,182	4,871
Other liabilities	22	41,638	34,785
		<b>200,613</b>	201,973
		<b>803,018</b>	756,455
<b>Equity</b>			
<b>Common equity</b>			
Common shares	24(a)	15,141	15,231
Retained earnings		31,316	28,609
Accumulated other comprehensive income (loss)		2,455	949
Other reserves		173	176
Total common equity		<b>49,085</b>	44,965
Preferred shares	24(b)	2,934	2,934
Total equity attributable to equity holders of the Bank		<b>52,019</b>	47,899
Non-controlling interests in subsidiaries	31(b)	1,460	1,312
		<b>53,479</b>	49,211
		<b>\$ 856,497</b>	\$ 805,666

Thomas C. O'Neill  
Chairman of the Board

Brian J. Porter  
President and Chief Executive Officer

The accompanying notes are an integral part of these consolidated financial statements.

## Consolidated Statement of Income

For the year ended October 31 (\$ millions)

	Note	2015	2014 <sup>(1)</sup>	2013 <sup>(1)(2)</sup>
<b>Revenue</b>				
<b>Interest income</b>				
Loans		\$ 18,912	\$ 18,176	\$ 17,359
Securities		922	921	1,000
Securities purchased under resale agreements and securities borrowed		161	180	190
Deposits with financial institutions		292	263	279
		<b>20,287</b>	19,540	18,828
<b>Interest expense</b>				
Deposits		6,070	6,173	6,397
Subordinated debentures		187	204	339
Other		938	858	742
		<b>7,195</b>	7,235	7,478
<b>Net interest income</b>				
		<b>13,092</b>	12,305	11,350
<b>Non-interest income</b>				
Banking	32	3,360	3,170	3,000
Wealth management	32	3,269	3,023	2,665
Underwriting and other advisory		525	712	503
Non-trading foreign exchange		492	420	404
Trading revenues	33	1,185	1,114	1,300
Net gain on sale of investment securities	12(d)	639	741	375
Net income from investments in associated corporations	17	405	428	681
Insurance underwriting income, net of claims		556	474	448
Other	37	526	1,217	573
		<b>10,957</b>	11,299	9,949
<b>Total revenue</b>				
		<b>24,049</b>	23,604	21,299
Provision for credit losses	13(d)	1,942	1,703	1,288
		<b>22,107</b>	21,901	20,011
<b>Non-interest expenses</b>				
Salaries and employee benefits		6,681	6,547	6,239
Premises and technology		2,086	1,936	1,815
Depreciation and amortization		584	526	516
Communications		434	417	409
Advertising and business development		592	571	505
Professional		548	471	432
Business and capital taxes		361	314	274
Other		1,755	1,819	1,474
		<b>13,041</b>	12,601	11,664
<b>Income before taxes</b>				
		<b>9,066</b>	9,300	8,347
<b>Income tax expense</b>				
		<b>1,853</b>	2,002	1,737
<b>Net income</b>				
		<b>\$ 7,213</b>	\$ 7,298	\$ 6,610
<b>Net income attributable to non-controlling interests in subsidiaries</b>				
	31(b)	\$ 199	\$ 227	\$ 231
<b>Net income attributable to equity holders of the Bank</b>				
		<b>\$ 7,014</b>	\$ 7,071	\$ 6,379
Preferred shareholders		117	155	217
Common shareholders		<b>\$ 6,897</b>	\$ 6,916	\$ 6,162
<b>Earnings per common share (in dollars)</b>				
Basic	34	\$ 5.70	\$ 5.69	\$ 5.15
Diluted	34	\$ 5.67	\$ 5.66	\$ 5.11

(1) Certain prior period amounts have been restated to conform to the current period presentation.

(2) Certain prior period amounts are retrospectively adjusted to reflect the adoption of new and amended IFRS standards (IFRS10 and IAS 19) in 2014.

The accompanying notes are an integral part of these consolidated financial statements.

## Consolidated Statement of Comprehensive Income

For the year ended October 31 (\$ millions)

	2015	2014	2013 <sup>(1)</sup>
<b>Net income</b>	<b>\$ 7,213</b>	\$ 7,298	\$ 6,610
<b>Other comprehensive income (loss)</b>			
<b>Items that will be reclassified subsequently to net income</b>			
Net change in unrealized foreign currency translation gains (losses):			
Net unrealized foreign currency translation gains (losses)	<b>3,145</b>	1,607	687
Net gains (losses) on hedges of net investments in foreign operations	<b>(1,677)</b>	(943)	(469)
Income tax expense (benefit):			
Net unrealized foreign currency translation gains (losses)	<b>46</b>	25	(1)
Net gains (losses) on hedges of net investments in foreign operations	<b>(433)</b>	(250)	(127)
	<b>1,855</b>	889	346
Net change in unrealized gains (losses) on available-for-sale securities:			
Net unrealized gains (losses) on available-for-sale securities	<b>386</b>	801	378
Reclassification of net (gains) losses to net income <sup>(2)</sup>	<b>(966)</b>	(934)	(289)
Income tax expense (benefit):			
Net unrealized gains (losses) on available-for-sale securities	<b>161</b>	186	79
Reclassification of net (gains) losses to net income	<b>(261)</b>	(281)	(100)
	<b>(480)</b>	(38)	110
Net change in gains (losses) on derivative instruments designated as cash flow hedges:			
Net gains (losses) on derivative instruments designated as cash flow hedges	<b>1,519</b>	441	280
Reclassification of net (gains) losses to net income	<b>(1,444)</b>	(447)	(155)
Income tax expense (benefit):			
Net gains (losses) on derivative instruments designated as cash flow hedges	<b>450</b>	137	85
Reclassification of net (gains) losses to net income	<b>(430)</b>	(137)	(53)
	<b>55</b>	(6)	93
Other comprehensive income from investments in associates	<b>(9)</b>	60	20
<b>Items that will not be reclassified subsequently to net income</b>			
Net change in remeasurement of employee benefit plan asset and liability:			
Actuarial gains (losses) on employee benefit plans	<b>(3)</b>	(432)	774
Income tax expense (benefit)	<b>(2)</b>	(112)	211
	<b>(1)</b>	(320)	563
Net change in fair value due to change in own credit risk on financial liabilities designated under the fair value option: <sup>(3)</sup>			
Change in fair value due to change in own credit risk on financial liabilities designated under the fair value option	<b>20</b>	–	–
Income tax expense (benefit)	<b>5</b>	–	–
	<b>15</b>	–	–
Other comprehensive income from investments in associates	<b>1</b>	(2)	–
Other comprehensive income (loss)	<b>1,436</b>	583	1,132
<b>Comprehensive income</b>	<b>\$ 8,649</b>	\$ 7,881	\$ 7,742
Comprehensive income attributable to non-controlling interests	<b>\$ 124</b>	\$ 249	\$ 227
Comprehensive income attributable to equity holders of the Bank	<b>\$ 8,525</b>	\$ 7,632	\$ 7,515
Preferred shareholders	<b>117</b>	155	217
Common shareholders	<b>\$ 8,408</b>	\$ 7,477	\$ 7,298

(1) Certain prior period amounts are retrospectively adjusted to reflect the adoption of new and amended IFRS standards (IFRS 10 and IAS 19) in 2014.

(2) Includes amounts related to qualifying hedges.

(3) In accordance with the transition requirements for the own credit risk provisions of IFRS 9, prior period comparatives have not been restated for the adoption of this standard in 2015 (refer to Note 4).

The accompanying notes are an integral part of these consolidated financial statements.

## Consolidated Statement of Changes in Equity

	Accumulated other comprehensive income (loss)										Non-controlling interests				
	Common Shares (Note 24)	Retained earnings <sup>(1)</sup>	Foreign currency translation	Available-for-sale securities	Cash flow hedges	Share from associates <sup>(2)</sup>	Employee benefits <sup>(2)</sup>	Own credit risk <sup>(2)</sup>	Other reserves <sup>(3)</sup>	Total common equity	Preferred shares (Note 24)	Total common and preferred equity	Interests in subsidiaries (Note 31(b))	Capital instrument equity holders	Total
<b>Balance as at November 1, 2014</b>	\$ 15,231	\$ 28,609	\$ 700	\$ 664	\$ (48)	\$ 113	\$ (8)	\$ 15	\$ 176	\$ 44,965	\$ 2,934	\$ 47,899	\$ 1,312	\$ -	\$ 49,211
Net income	-	6,897	-	-	-	-	-	-	-	6,897	117	7,014	199	-	7,213
Other comprehensive income (loss)	-	-	1,933	(470)	55	(8)	(14)	15	-	1,511	-	1,511	(75)	-	1,436
<b>Total comprehensive income</b>	\$ -	\$ 6,897	\$ 1,933	\$ (470)	\$ 55	\$ (8)	\$ (14)	\$ 15	\$ -	\$ 8,408	\$ 117	\$ 8,525	\$ 124	\$ -	\$ 8,649
Shares issued	104	-	-	-	-	-	-	-	(17)	87	-	87	-	-	87
Shares repurchased/redeemed	(194)	(761)	-	-	-	-	-	-	-	(955)	-	(955)	-	-	(955)
Common dividends paid	-	(3,289)	-	-	-	-	-	-	-	(3,289)	-	(3,289)	-	-	(3,289)
Preferred dividends paid	-	-	-	-	-	-	-	-	-	(117)	-	(117)	-	-	(117)
Distributions to non-controlling interests	-	-	-	-	-	-	-	-	-	-	-	-	(86)	-	(86)
Share-based payments	-	-	-	-	-	-	-	-	14	14	-	14	-	-	14
Other	-	(140) <sup>(4)</sup>	-	-	-	-	-	(5) <sup>(5)</sup>	-	(145)	-	(145)	110 <sup>(6)</sup>	-	(35)
<b>Balance as at October 31, 2015</b>	\$ 15,141	\$ 31,316	\$ 2,633	\$ 194	\$ 7	\$ 105	\$ (494)	\$ 10	\$ 173	\$ 49,085	\$ 2,934	\$ 52,019	\$ 1,460	\$ -	\$ 53,479
<b>Balance as reported November 1, 2013</b>	\$ 14,516	\$ 25,315	\$ (173)	\$ 705	\$ (42)	\$ 55	\$ -	\$ -	\$ 193	\$ 40,569	\$ 4,084	\$ 44,653	\$ 1,155	\$ 743	\$ 46,551
Opening adjustment <sup>(7)</sup>	-	(247)	-	-	-	-	(157)	-	-	(404)	-	(404)	(17)	(743)	(1,164)
Restated balances	14,516	25,068	(173)	705	(42)	55	(157)	-	193	40,165	4,084	44,249	1,138	-	45,387
Net income	-	6,916	-	-	-	-	-	-	-	6,916	155	7,071	227	-	7,298
Other comprehensive income (loss)	-	-	873	(41)	(6)	58	(323)	-	-	561	-	561	22	-	583
<b>Total comprehensive income</b>	\$ -	\$ 6,916	\$ 873	\$ (41)	\$ (6)	\$ 58	\$ (323)	\$ -	\$ -	\$ 7,477	\$ 155	\$ 7,632	\$ 249	\$ -	\$ 7,881
Shares issued	771	3	-	-	-	-	-	(34)	-	740	-	740	-	-	740
Share repurchased/redeemed	(56)	(264)	-	-	-	-	-	-	-	(320)	(1,150)	(1,470)	-	-	(1,470)
Common dividends paid	-	(3,110)	-	-	-	-	-	-	-	(3,110)	-	(3,110)	-	-	(3,110)
Preferred dividends paid	-	-	-	-	-	-	-	-	-	(155)	-	(155)	-	-	(155)
Distributions to non-controlling interests	-	-	-	-	-	-	-	-	-	-	-	-	(76)	-	(76)
Share-based payments	-	-	-	-	-	-	-	-	30	30	-	30	-	-	30
Other	-	(4)	-	-	-	-	-	(13) <sup>(8)</sup>	-	(17)	-	(17)	1 <sup>(6)</sup>	-	(16)
<b>Balance as at October 31, 2014</b>	\$ 15,231	\$ 28,609	\$ 700	\$ 664	\$ (48)	\$ 113	\$ (480)	\$ -	\$ 176	\$ 44,965	\$ 2,934	\$ 47,899	\$ 1,312	\$ -	\$ 49,211
<b>Balance as reported November 1, 2012</b>	\$ 13,139	\$ 21,978	\$ (528)	\$ 597	\$ (135)	\$ 35	\$ -	\$ -	\$ 166	\$ 35,252	\$ 4,384	\$ 39,636	\$ 966	\$ 777	\$ 41,379
Opening adjustment <sup>(7)</sup>	-	(203)	-	-	-	-	(714)	-	-	(917)	-	(917)	(20)	(777)	(1,714)
Restated balances	13,139	21,775	(528)	597	(135)	35	(714)	-	166	34,335	4,384	38,719	946	-	39,665
Net income	-	6,162	-	-	-	-	-	-	-	6,162	217	6,379	231	-	6,610
Other comprehensive income (loss)	-	-	358	108	93	20	557	-	-	1,136	-	1,136	(4)	-	1,132
<b>Total comprehensive income</b>	\$ -	\$ 6,162	\$ 358	\$ 108	\$ 93	\$ 20	\$ 557	\$ -	\$ -	\$ 7,298	\$ 217	\$ 7,515	\$ 227	\$ -	\$ 7,742
Shares issued	1,377	1	-	-	-	-	-	(35)	-	1,343	-	1,343	-	-	1,343
Preferred shares redeemed	-	-	-	-	-	-	-	-	-	(300)	-	(300)	-	-	(300)
Common dividends paid	-	(2,858)	-	-	-	-	-	-	-	(2,858)	-	(2,858)	-	-	(2,858)
Preferred dividends paid	-	-	-	-	-	-	-	-	-	(217)	-	(217)	-	-	(217)
Distributions to non-controlling interests	-	-	-	-	-	-	-	-	-	-	-	-	(80)	-	(80)
Share-based payments	-	-	-	-	-	-	-	-	36	36	-	36	-	-	36
Other	-	(12)	(3)	-	-	-	-	-	26 <sup>(8)</sup>	11	-	11	45 <sup>(6)</sup>	-	56
<b>Balance as at October 31, 2013<sup>(7)</sup></b>	\$ 14,516	\$ 25,068	\$ (173)	\$ 705	\$ (42)	\$ 55	\$ (157)	\$ -	\$ 193	\$ 40,165	\$ 4,084	\$ 44,249	\$ 1,138	\$ -	\$ 45,387

(1) Includes undistributed retained earnings of \$61 (2014 - \$52; 2013 - \$43) related to a foreign associated corporation, which is subject to local regulatory restriction.  
(2) Represents amounts that will not be reclassified subsequently to net income. Share from associates \$1 (2014 - \$(2); 2013 - nil) will not be reclassified subsequently to net income.  
(3) Represents amounts on account of share-based payments (refer to Note 26).  
(4) Includes retrospective adjustments primarily related to foreign currency translation on Allowance for Credit Losses with respect to periods prior to 2013 (\$152).  
(5) Represents retrospective adjustments to reflect the adoption of the own credit risk provisions of IFRS 9 pertaining to financial liabilities designated at fair value through profit or loss (refer to Note 4).  
(6) Includes changes to non-controlling interests arising from business combinations.  
(7) Certain prior period amounts are retrospectively adjusted to reflect the adoption of new and amended IFRS standards (IFRS 10 and IAS 19) in 2014.  
(8) Includes impact of Tandem SARs voluntarily renounced by certain employees while retaining their corresponding option for shares.

The accompanying notes are an integral part of these consolidated financial statements

## Consolidated Statement of Cash Flows

Sources (uses) of cash flows for the year ended October 31 (\$ millions)

	2015	2014	2013 <sup>(1)</sup>
<b>Cash flows from operating activities</b>			
Net income	<b>\$ 7,213</b>	\$ 7,298	\$ 6,610
Adjustment for:			
Net interest income	<b>(13,092)</b>	(12,305)	(11,350)
Depreciation and amortization	<b>584</b>	526	516
Provisions for credit losses	<b>1,942</b>	1,703	1,288
Equity-settled share-based payment expense	<b>14</b>	30	36
Net gain on sale of investment securities	<b>(639)</b>	(741)	(375)
Realized gain on sale of an investment in an associate	–	(469)	–
Unrealized gain on reclassification of an investment in an associate	–	(174)	–
Net income from investments in associated corporations	<b>(405)</b>	(428)	(681)
Provision for income taxes	<b>1,853</b>	2,002	1,737
Changes in operating assets and liabilities:			
Trading assets	<b>20,302</b>	(13,848)	(6,793)
Securities purchased under resale agreements and securities borrowed	<b>13,991</b>	(7,526)	(9,866)
Loans	<b>(22,942)</b>	(16,785)	(16,006)
Deposits	<b>13,915</b>	20,224	6,028
Obligations related to securities sold short	<b>(8,101)</b>	1,506	5,458
Obligations related to assets sold under repurchase agreements and securities lent	<b>(18,982)</b>	7,306	17,455
Net derivative financial instruments	<b>2,442</b>	(1,147)	282
Other, net	<b>4,707</b>	7,181	4,708
Dividends received	<b>1,147</b>	1,063	1,139
Interest received	<b>19,145</b>	18,438	18,011
Interest paid	<b>(7,262)</b>	(7,509)	(7,688)
Income tax paid	<b>(1,985)</b>	(1,401)	(1,555)
Net cash from/(used in) operating activities	<b>13,847</b>	4,944	8,954
<b>Cash flows from investing activities</b>			
Interest-bearing deposits with financial institutions	<b>(8,448)</b>	213	(4,079)
Purchase of investment securities	<b>(44,684)</b>	(47,328)	(47,894)
Proceeds from sale and maturity of investment securities	<b>41,649</b>	44,876	52,652
Acquisition/sale of subsidiaries, associated corporations or business units, net of cash acquired	<b>(701)</b>	2,045	(3,439)
Property and equipment, net of disposals	<b>(282)</b>	(277)	(180)
Other, net	<b>(1,053)</b>	(115)	(324)
Net cash from/(used in) investing activities	<b>(13,519)</b>	(586)	(3,264)
<b>Cash flows from financing activities</b>			
Proceeds from issue of subordinated debentures	<b>1,248</b>	–	–
Redemption/repayment of subordinated debentures	<b>(18)</b>	(1,000)	(4,210)
Redemption of preferred shares	–	(1,150)	(300)
Proceeds from common shares issued	<b>101</b>	753	1,256
Common shares purchased for cancellation	<b>(955)</b>	(320)	–
Cash dividends paid	<b>(3,406)</b>	(3,265)	(3,075)
Distributions to non-controlling interests	<b>(86)</b>	(76)	(80)
Other, net	<b>3,379</b>	872	30
Net cash from/(used in) financing activities	<b>263</b>	(4,186)	(6,379)
Effect of exchange rate changes on cash and cash equivalents	<b>305</b>	207	102
Net change in cash and cash equivalents	<b>896</b>	379	(587)
Cash and cash equivalents at beginning of year <sup>(2)</sup>	<b>5,828</b>	5,449	6,036
Cash and cash equivalents at end of year <sup>(2)</sup>	<b>\$ 6,724</b>	\$ 5,828	\$ 5,449

(1) Certain prior period amounts are retrospectively adjusted to reflect the adoption of new and amended IFRS standards (IFRS10 and IAS 19) in 2014.

(2) Represents cash and non-interest bearing deposits with financial institutions (refer to Note 6).

The accompanying notes are an integral part of these consolidated financial statements.



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## 1 Reporting entity

The Bank of Nova Scotia (the Bank) is a chartered bank under the Bank Act (Canada) (the Bank Act). The Bank is a Schedule I Bank under the Bank Act and is regulated by the Office of the Superintendent of Financial Institutions (OSFI). The Bank is a global financial services provider offering a diverse range of products and services, including personal, commercial, corporate and investment banking. The head office of the Bank is located at 1709 Hollis Street, Halifax, Nova Scotia, Canada and its executive offices are at Scotia Plaza, 44 King Street West, Toronto, Canada. The common shares of the Bank are listed on the Toronto Stock Exchange and the New York Stock Exchange.

## 2 Basis of preparation

### Statement of compliance

These consolidated financial statements were prepared in accordance with International Financial Reporting Standards (IFRS) as issued by International Accounting Standards Board (IASB) and accounting requirements of OSFI in accordance with Section 308 of the Bank Act. Section 308 states that, except as otherwise specified by OSFI, the financial statements are to be prepared in accordance with IFRS.

The consolidated financial statements for the year ended October 31, 2015 have been approved by the Board of Directors for issue on December 1, 2015.

### Basis of measurement

The consolidated financial statements have been prepared on the historical cost basis except for the following material items that are measured at fair value in the Consolidated Statement of Financial Position:

- Financial assets and liabilities held-for-trading
- Financial assets and liabilities designated at fair value through profit or loss
- Derivative financial instruments
- Available-for-sale investment securities

### Functional and presentation currency

These consolidated financial statements are presented in Canadian dollars, which is the Bank's functional currency. All financial information presented in Canadian dollars has been rounded to the nearest million unless otherwise stated.

### Management's use of estimates, assumptions and judgments

The Bank's accounting policies require estimates, assumptions and judgments that relate to matters that are inherently uncertain. The Bank has established procedures to ensure that accounting policies are applied consistently and that the processes for changing methodologies for determining estimates are controlled and occur in a timely and systematic manner. Estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognized in the year in which the estimates are revised and in any future years affected.

### Use of estimates and assumptions

The preparation of these consolidated financial statements, in conformity with IFRS, requires management to make estimates and assumptions that affect the reported amount of assets and liabilities at the date of the consolidated financial statements, and income and expenses during the reporting period. Estimates made by management are based on historical experience and other assumptions that are believed to be reasonable. Key areas of estimation uncertainty include those relating to the allowance for credit losses, the fair value of financial instruments (including derivatives), corporate income taxes, employee benefits, the fair value of all identifiable assets and liabilities as a result of business combinations, impairment of investment securities, impairment of non-financial assets and derecognition of financial assets and liabilities. While management makes its best estimates and assumptions, actual results could differ from these and other estimates. Refer to the relevant accounting policies in Note 3 for details on the Bank's use of estimates and assumptions.

### Significant judgments

In the preparation of these consolidated financial statements, management is required to make significant judgments in the classification and presentation of transactions and instruments and accounting for involvement with other entities.

Significant estimates, assumptions and judgments have been made in the following areas and are discussed as noted in the consolidated financial statements:

Allowance for credit losses	Note 3 Note 13(d)
Fair value of financial instruments	Note 3 Note 7
Corporate income taxes	Note 3 Note 27
Employee benefits	Note 3 Note 28
Goodwill and intangible assets	Note 3 Note 18
Fair value of all identifiable assets and liabilities as a result of business combinations	Note 3 Note 37
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Impairment of non-financial assets	Note 3 Note 16
Structured entities	Note 3 Note 15
De facto control of other entities	Note 3 Note 31
Derecognition of financial assets and liabilities	Note 3 Note 14
Provisions	Note 3 Note 23

### 3 Significant accounting policies

The significant accounting policies used in the preparation of these consolidated financial statements, including any additional accounting requirements of OSFI, as set out below, have been applied consistently to all periods presented in these consolidated financial statements, unless otherwise stated.

#### Basis of consolidation

The consolidated financial statements include the assets, liabilities, financial performance and cash flows of the Bank and all of its subsidiaries, after elimination of intercompany transactions and balances. Subsidiaries are defined as entities controlled by the Bank and exclude associates and joint arrangements. The Bank's subsidiaries can be classified as entities controlled through voting interests or structured entities. The Bank consolidates a subsidiary from the date it obtains control. The Bank controls an investee when it is exposed, or has rights, to variable returns from its involvement with the investee and has the ability to affect those returns through its power over the investee. For the Bank to control an entity, all of the three elements of control should be in existence:

- power over the investee;
- exposure, or rights, to variable returns from involvement with the investee; and
- the ability to use power over the investee to affect the amount of the Bank's returns.

The Bank does not control an investee when it is acting as an agent. The Bank assesses whether it is an agent by determining whether it is primarily engaged to act on behalf of and for the benefit of another party or parties. The Bank reassesses whether it controls an investee if facts and circumstances indicate that one or more of the elements of control has changed. Non-controlling interests are presented within equity in the Consolidated Statement of Financial Position separate from equity attributable to common and preferred shareholders of the Bank. Partial sales and incremental purchases of interests in subsidiaries that do not result in a change of control are accounted for as equity transactions with non-controlling interest holders. Any difference between the carrying amount of the interest and the transaction amount is recorded as an adjustment to retained earnings.

#### Voting-interest subsidiaries

Control is presumed with an ownership interest of more than 50% of the voting rights in an entity unless there are other factors that indicate that the Bank does not control the entity despite having more than 50% of voting rights.

The Bank may consolidate an entity when it owns less than 50% of the voting rights when it has one or more other attributes of power:

- by virtue of an agreement, over more than half of the voting rights;
- to govern the financial and operating policies of the entity under a statute or an agreement;
- to appoint or remove the majority of the members of the board of directors or equivalent governing body and control of the entity is by that board or body; or
- to govern the financial and operating policies of the entity through the size of its holding of voting rights relative to the size and dispersion of holding of the other vote holders and voting patterns at shareholder meetings (i.e., *de facto* control).

#### Structured entities

Structured entities are designed to accomplish certain well-defined objectives and for which voting or similar rights are not the dominant factor in deciding who controls the entity. The Bank may become involved with structured entities either at the formation stage or at a later date. The Bank controls an investee when it is exposed, or has rights, to variable returns from its involvement with the investee and has the ability to affect those returns through its power over the investee.

The Bank consolidates all structured entities that it controls.

*Investments in associates*

An associate is an entity in which the Bank has significant influence, but not control, over the operating and financial policies of the entity. Significant influence is ordinarily presumed to exist when the Bank holds between 20% and 50% of the voting rights. The Bank may also be able to exercise significant influence through board representation. The effects of potential voting rights that are currently exercisable or convertible are considered in assessing whether the Bank has significant influence.

Investments in associates are recognized initially at cost, which includes the purchase price and other costs directly attributable to the purchase. Associates are accounted for using the equity method which reflects the Bank's share of the increase or decrease of the post-acquisition earnings and other movements in the associate's equity.

If there is a loss of significant influence and the investment ceases to be an associate, equity accounting is discontinued from the date of loss of significant influence. If the retained interest on the date of loss of significant influence is a financial asset, it is measured at fair value and the difference between the fair value and the carrying value is recorded as an unrealized gain or loss in the Consolidated Statement of Income.

Investments in associates are evaluated for impairment at the end of each financial reporting period, or more frequently if events or changes in circumstances indicate the existence of objective evidence of impairment.

For purposes of applying the equity method for an investment that has a different reporting period from the Bank, adjustments are made for the effects of any significant events or transactions that occur between the reporting date of the investment and the reporting date of the Bank.

*Joint arrangements*

A joint arrangement is an arrangement over which two or more parties have joint control. Joint control exists only when decisions about the relevant activities (i.e., those that significantly affect the returns of the arrangement) require the unanimous consent of the parties sharing the control of the arrangement. Investments in joint arrangements are classified as either joint operations or joint ventures depending on the contractual rights and obligations of each investor, rather than the legal structure of the joint arrangement.

For joint operations, the Bank recognizes its share of the joint operation represented by:

- its assets and liabilities held/incurred jointly
- its revenue and expenses incurred jointly arising from the joint operation

Similar to accounting for investment in associates, for joint ventures, investments are recognized initially at cost and accounted for using the equity method which reflects the Bank's share of the increase or decrease of the post-acquisition earnings and other movements in the joint venture's equity. Investments in joint ventures are evaluated for impairment at the end of each financial reporting period, or more frequently if events or changes in circumstances indicate the existence of objective evidence of impairment.

If there is a loss of joint control and it does not result in the Bank having significant influence over the entity, equity accounting is discontinued from the date of loss of joint control. If the retained interest in the former joint venture on the date of loss of joint control is a financial asset, it is measured at fair value and the difference between the fair value and the carrying value is recorded as an unrealized gain or loss in the Consolidated Statement of Income.

**Translation of foreign currencies**

The financial statements of each of the Bank's foreign operations are measured using its functional currency, being the currency of the primary economic environment of the foreign operation.

Translation gains and losses related to the Bank's monetary items are recognized in non-interest income in the Consolidated Statement of Income. Revenues and expenses denominated in foreign currencies are translated using average exchange rates, except for depreciation and amortization of buildings purchased in foreign currency, equipment and leasehold improvements of the Bank, which are translated using historical rates. Foreign currency non-monetary items that are measured at historical cost are translated into the functional currency at historical rates. Foreign currency non-monetary items measured at fair value are translated into functional currency using the rate of exchange at the date the fair value was determined. Foreign currency gains and losses on non-monetary items are recognized in the Consolidated Statement of Income or Consolidated Statement of Comprehensive Income consistent with the gain or loss on the non-monetary item.

Unrealized gains and losses arising upon translation of foreign operations, together with any gains or losses arising from hedges of those net investment positions to the extent effective, are credited or charged to net change in unrealized foreign currency translation gains/losses in the Consolidated Statement of Comprehensive Income. On disposal or partial disposal of a foreign operation, resulting in a loss of control, an appropriate portion of the translation differences previously recognized in other comprehensive income are recognized in the Consolidated Statement of Income.

**Financial assets and liabilities**

*Date of recognition*

The Bank initially recognizes loans, deposits, subordinated debentures and debt securities issued on the date at which they are originated or purchased. Regular-way purchases and sales of financial assets are recognized on the settlement date. All other financial assets and liabilities, including derivatives, are initially recognized on the trade date at which the Bank becomes a party to the contractual provisions of the instrument.

*Initial classification and measurement*

The classification of financial assets and liabilities at initial recognition depends on the purpose and intention for which the financial assets are acquired and liabilities issued and their characteristics. The initial measurement of a financial asset or liability is at fair value.

*Determination of fair value*

Fair value of a financial asset or liability is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants in the principal, or in its absence, the most advantageous market to which the Bank has access at the measurement date. The Bank values instruments carried at fair value using quoted market prices, where available. Quoted market prices represent a Level 1 valuation. When quoted market prices are not available, the Bank maximizes the use of observable inputs within valuation models. When all significant inputs are observable, the valuation is classified as Level 2. Valuations that require the significant use of unobservable inputs are considered Level 3.

Inception gains and losses are only recognized where the valuation is dependent on observable market data, otherwise, they are deferred and amortized over the life of the related contract or until the valuation inputs become observable.

IFRS 13 permits a measurement exception that allows an entity to determine the fair value of a group of financial assets and liabilities with offsetting risks based on the sale or transfer of its net exposure to a particular risk (or risks). The Bank has adopted this exception through an accounting policy choice. Consequently, the fair values of certain portfolios of financial instruments are determined based on the net exposure of those instruments to particular market, credit or funding risk.

In determining fair value for certain instruments or portfolios of instruments, valuation adjustments or reserves may be required to arrive at a more accurate representation of fair value. These adjustments include those made for credit risk, bid-offer spreads, unobservable parameters, constraints on prices in inactive or illiquid markets and when applicable funding costs.

#### *Derecognition of financial assets and liabilities*

##### **Derecognition of financial assets**

The derecognition criteria are applied to the transfer of part of an asset, rather than the asset as a whole, only if such part comprises specifically identified cash flows from the asset, a fully proportionate share of the cash flows from the asset, or a fully proportionate share of specifically identified cash flows from the asset.

A financial asset is derecognized when the contractual rights to the cash flows from the asset has expired; or the Bank transfers the contractual rights to receive the cash flows from the financial asset; or has assumed an obligation to pay those cash flows to an independent third-party; and the Bank has transferred substantially all the risks and rewards of ownership of that asset to an independent third-party. Management determines whether substantially all the risk and rewards of ownership have been transferred by quantitatively comparing the variability in cash flows before and after the transfer. If the variability in cash flows remains significantly similar subsequent to the transfer, the Bank has retained substantially all of the risks and rewards of ownership.

Where substantially all the risks and rewards of ownership of the financial asset are neither retained nor transferred, the Bank derecognizes the transferred asset only if it has lost control over that asset. Control over the asset is represented by the practical ability to sell the transferred asset. If the Bank retains control over the asset, it will continue to recognize the asset to the extent of its continuing involvement. At times such continuing involvement may be in the form of investment in senior or subordinated tranches of notes issued by non-consolidated structured entities.

On derecognition of a financial asset, the difference between the carrying amount and the sum of (i) the consideration received (including any new asset obtained less any new liability assumed) and (ii) any cumulative gain or loss that had been recognized in other comprehensive income is recognized in the Consolidated Statement of Income.

Transfers of financial assets that do not qualify for derecognition are reported as secured financings in the Consolidated Statement of Financial Position.

##### **Derecognition of financial liabilities**

A financial liability is derecognized when the obligation under the liability is discharged, canceled or expires. If an existing financial liability is replaced by another from the same counterparty on substantially different terms, or the terms of the existing liability are substantially modified, such an exchange or modification is treated as a derecognition of the original liability and the recognition of a new liability. The difference in the respective carrying amount of the existing liability and the new liability is recognized as a gain/loss in the Consolidated Statement of Income.

#### *Offsetting of financial instruments*

Financial assets and financial liabilities with the same counterparty are offset, with the net amount reported in the Consolidated Statement of Financial Position, only if there is currently a legally enforceable right to offset the recognized amounts and there is an intention to settle on a net basis, or to realize the assets and settle the liabilities simultaneously. When financial assets and financial liabilities are offset in the Consolidated Statement of Financial Position, the related income and expense items will also be offset in the Consolidated Statement of Income, unless specifically prohibited by an applicable accounting standard.

#### *Cash and deposits with financial institutions*

Cash and deposits with financial institutions comprises cash, cash equivalents, demand deposits with banks and other financial institutions, highly liquid investments that are readily convertible to cash, subject to insignificant risk of changes in value and may carry restrictions in certain circumstances. These investments are those with less than three months' maturity from the date of acquisition.

#### *Precious metals*

Precious metals are carried at fair value less costs to sell, and any changes in fair value less costs to sell are credited or charged to non-interest income – trading revenues in the Consolidated Statement of Income.

#### *Trading assets and liabilities*

Trading assets and liabilities are measured at fair value in the Consolidated Statement of Financial Position, with transaction costs recognized immediately in the Consolidated Statement of Income. Gains and losses realized on disposal and unrealized gains and losses due to fair value changes on trading assets and liabilities, other than certain derivatives, are recognized as part of non-interest income – trading revenues in the Consolidated Statement of Income. Trading assets and liabilities are not reclassified subsequent to their initial recognition.

#### *Financial assets and liabilities designated at fair value through profit or loss*

Financial assets and financial liabilities classified in this category are those that have been designated by the Bank on initial recognition or on transition to IFRS. The Bank may only designate an instrument at fair value through profit or loss when one of the following criteria is met, and designation is determined on an instrument by instrument basis:

- The designation eliminates or significantly reduces the inconsistent treatment that would otherwise arise from measuring the assets or liabilities or recognizing gains or losses on them on a different basis; or

- The assets and liabilities are part of a group of financial assets, financial liabilities or both which are managed together and their performance evaluated on a fair value basis, in accordance with a documented risk management or investment strategy and the information about the group is provided to key management personnel and it can be demonstrated that significant financial risks are eliminated or significantly reduced; or
- The financial instrument contains one or more embedded derivatives which significantly modify the cash flows otherwise required.

Financial assets and financial liabilities designated at fair value through profit or loss are recorded in the Consolidated Statement of Financial Position at fair value. For assets designated at fair value through profit or loss, changes in fair value are recognized in the Consolidated Statement of Income. For liabilities designated at fair value through profit or loss, changes in fair value arising from changes in the Bank's own credit risk are recognized in the Consolidated Statement of Comprehensive Income (OCI), without subsequent reclassification to the Consolidated Statement of Income, unless doing so would create or increase an accounting mismatch. All other changes in fair value are recognized in the Consolidated Statement of Income.

*Securities purchased and sold under resale agreements*

Securities purchased under resale agreements (reverse repurchase agreements) and securities sold under agreements to repurchase (repurchase agreements) are treated as collateralized financing arrangements and are recorded at amortized cost. The party disbursing the cash takes possession of the securities serving as collateral for the financing and having a market value equal to, or in excess of, the principal amount loaned. The securities received under reverse repurchase agreements and securities delivered under repurchase agreements are not recognized on, or derecognized from, the Consolidated Statement of Financial Position, unless the risks and rewards of ownership are obtained or relinquished. The related income and interest expense are recorded on an accrual basis in the Consolidated Statement of Income.

*Obligations related to securities sold short*

Obligations related to securities sold short arise in dealing and market-making activities where debt securities and equity shares are sold without possessing such securities.

Similarly, if securities purchased under an agreement to resell are subsequently sold to third parties, the obligation to return the securities is recorded as a short sale within obligations related to securities sold short in the Consolidated Statement of Financial Position. These trading liabilities are measured at fair value with any gains or losses included in non-interest income – trading revenues in the Consolidated Statement of Income. Interest expense accruing on debt securities sold short is recorded in interest expense – other.

*Securities lending and borrowing*

Securities lending and borrowing transactions are usually collateralized by securities or cash. The transfer of the securities to counterparties is only reflected on the Consolidated Statement of Financial Position if the risks and rewards of ownership are also transferred. Cash advanced or received as collateral is recorded as an asset or liability. Fees received and paid are reported as fee and commission revenues and expenses in the Consolidated Statement of Income, respectively.

Securities borrowed are not recognized on the Consolidated Statement of Financial Position, unless they are then sold to third parties, in which case the obligation to return the securities is recorded as a trading liability and measured at fair value with any gains or losses included in non-interest income – trading revenues, in the Consolidated Statement of Income.

*Derivative financial instruments*

Derivative financial instruments are contracts whose value is derived from interest rates, foreign exchange rates, commodities, equity prices or other financial variables. Most derivative financial instruments can be characterized as interest rate contracts, foreign exchange and gold contracts, commodity contracts, equity contracts or credit contracts. Derivative financial instruments are either exchange-traded contracts or negotiated over-the-counter contracts. Negotiated over-the-counter contracts include swaps, forwards and options.

The Bank enters into these derivative contracts for trading purposes, as well as to manage its risk exposures (i.e., to manage the Bank's non-trading interest rate, foreign currency and other exposures). Trading activities are undertaken to meet the needs of the Bank's customers, as well as for the Bank's own account to generate income from trading operations.

Derivatives embedded in other financial instruments or host contracts are treated as separate derivatives when the following conditions are met:

- their economic characteristics and risks are not closely related to those of the host contract;
- a separate instrument with the same terms as the embedded derivative would meet the definition of a derivative; and
- the combined contract is not held for trading or designated at fair value through profit or loss.

Where an embedded derivative is separable from the host contract but the fair value, as at the acquisition or reporting date, cannot be reliably measured separately, the entire combined contract is measured at fair value. 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. Subsequent changes in fair value of embedded derivatives are recognized in non-interest income – other in the Consolidated Statement of Income.

All derivatives, including embedded derivatives that must be separately accounted for, are recorded at fair value in the Consolidated Statement of Financial Position. The determination of the fair value of derivatives includes consideration of credit risk, estimated funding costs and ongoing direct costs over the life of the instruments. Inception gains or losses on derivatives are only recognized where the valuation is dependent on observable market data, otherwise, they are deferred and amortized over the life of the related contract, or until the valuation inputs become observable.

The gains and losses resulting from changes in fair values of trading derivatives are included in non-interest income – trading revenues in the Consolidated Statement of Income.

Changes in the fair value of non-trading derivatives that do not qualify for hedge accounting are recorded in the Consolidated Statement of Income in non-interest income – other. Where derivative instruments are used to manage the volatility of share-based payment expense, these derivatives are carried at fair value with changes in the fair value in relation to units hedged included in non-interest expenses – salaries and employee benefits in the Consolidated Statement of Income.

Changes in the fair value of derivatives that qualify for hedge accounting are recorded as non-interest income – other in the Consolidated Statement of Income for fair value hedges and other comprehensive income in the Consolidated Statement of Comprehensive Income for cash flow hedges and net investment hedges.

#### *Investment securities*

Investment securities are comprised of available-for-sale and held-to-maturity securities.

#### **Available-for-sale investment securities**

Available-for-sale investment securities include equity and debt securities. Equity investments classified as available-for-sale are those which are neither classified as held-for-trading nor designated at fair value through profit or loss. Debt securities in this category are those which are intended to be held for an indefinite period of time and which may be sold in response to needs for liquidity or in response to changes in the market conditions. Available-for-sale investment securities are recorded at fair value with unrealized gains and losses recorded in other comprehensive income. When realized, these gains and losses are reclassified from the Consolidated Statement of Comprehensive Income and recorded in the Consolidated Statement of Income on an average cost basis. For non-monetary investment securities designated as available-for-sale, the gain or loss recognized in other comprehensive income includes any related foreign exchange gains or losses. Foreign exchange gains and losses that relate to the amortized cost of an available-for-sale debt security are recognized in the Consolidated Statement of Income.

Premiums, discounts and related transaction costs on available-for-sale debt securities are amortized over the expected life of the instrument to interest income – securities in the Consolidated Statement of Income using the effective interest method.

Transaction costs on available-for-sale equity securities are initially capitalized and then recognized as part of the net realized gain/loss on subsequent sale of the instrument in the Consolidated Statement of Income.

#### **Held-to-maturity investment securities**

Held-to-maturity investment securities are non-derivative assets with fixed or determinable payments and fixed maturity that the Bank has the positive intent and ability to hold to maturity, and which do not meet the definition of a loan, are not held-for-trading, and are not designated at fair value through profit or loss or as available-for-sale. After initial measurement, held-to-maturity investment securities are carried at amortized cost using the effective interest method, less impairment. Amortized cost is calculated by taking into account any discount or premium on acquisition, transaction costs and fees that are an integral part of the effective interest rate. The amortization is included in interest income – securities in the Consolidated Statement of Income.

A sale or reclassification of a more than an insignificant amount of held-to-maturity investments would result in the reclassification of all held-to-maturity investments as available-for-sale, and would prevent the Bank from classifying investment securities as held-to-maturity for the current and the following two financial years. However, sales and reclassifications in any of the following circumstances would not trigger a reclassification:

- Sales or reclassifications that are so close to maturity that changes in the market rate of interest would not have a significant effect on the financial asset's fair value;
- Sales or reclassifications after the Bank has collected substantially all of the asset's original principal; or
- Sales or reclassifications attributable to non-recurring isolated events beyond the Bank's control that could not have been reasonably anticipated.

#### **Impairment of investment securities**

Investment securities are evaluated for impairment at the end of each reporting period, or more frequently if events or changes in circumstances indicate the existence of objective evidence of impairment.

In the case of equity instruments classified as available-for-sale, a significant or prolonged decline in the fair value of the security below its original cost is objective evidence of impairment. In the case of debt instruments classified as available-for-sale and held-to-maturity investment securities, impairment is assessed based on the same criteria as impairment of loans.

When a decline in value of available-for-sale debt or equity instrument is due to impairment, the carrying value of the security continues to reflect fair value. Losses arising from impairment are reclassified from accumulated other comprehensive income and included in net gain on investment securities within non-interest income in the Consolidated Statement of Income.

The losses arising from impairment of held-to-maturity investment securities are recognized in net gain on investment securities within non-interest income in the Consolidated Statement of Income.

Reversals of impairment losses on available-for-sale debt instruments resulting from disposals or increases in fair value related to events occurring after the date of impairment are included in net gain on investment securities within non-interest income in the Consolidated Statement of Income, to a maximum of the original impairment charge. Reversals of impairment on available-for-sale equity instruments are not recognized in the Consolidated Statement of Income; increases in fair value of such instruments after impairment are recognized in equity.

Reversals of impairment losses on held-to-maturity investment securities are included in net gain on investment securities within non-interest income in the Consolidated Statement of Income, to a maximum of the amortized cost of the investment before the original impairment charge.

#### *Loans*

Loans include loans and advances originated or purchased by the Bank which are not classified as held-for-trading, held-to-maturity or designated at fair value. Debt securities, which are not trading securities or have not been designated as available-for-sale securities and that are not quoted in an active market, are also classified as loans.

Loans originated by the Bank are recognized when cash is advanced to a borrower. Loans purchased are recognized when cash consideration is paid by the Bank. Loans are measured at amortized cost using the effective interest method, less any impairment losses. Loans are stated net of allowance for credit losses.

#### **Purchased loans**

All purchased loans are initially measured at fair value on the date of acquisition. In arriving at the fair value, the Bank considers interest rate mark adjustments and credit mark adjustments. As a result of recording all purchased loans at fair value, no allowances for credit losses are recorded in the



Consolidated Statement of Financial Position on the date of acquisition. Consequently none of the purchased loans are considered to be impaired on the date of acquisition.

The interest rate mark on the date of acquisition is principally set up for fixed interest rate loans and captures the impact of the interest rate differential between the contractual rate of interest on the loan and the prevailing interest rate on the loan on the date of acquisition for the remaining term. The interest rate mark is fully amortized into interest income in the Consolidated Statement of Income over the expected life of the loan using the effective interest method.

An aggregate credit mark adjustment is established to capture management's best estimate of cash flow shortfalls on the loans over their life time as determined at the date of acquisition. The credit mark adjustment comprises of both an incurred loss mark and a future expected loss mark.

For individually assessed loans, the credit mark established at the date of acquisition is tracked over the life of the loan. Changes to the expected cash flows of these loans from those expected at the date of acquisition are recorded as a charge/recovery in the provision for credit losses in the Consolidated Statement of Income.

Where loans are not individually assessed for determining losses, a portfolio approach is taken to determine expected losses at the date of acquisition. The portfolio approach will result in both an incurred loss mark and a future expected loss mark. The incurred loss mark is assessed at the end of each reporting period against the performance of the loan portfolio and an increase in expected cash flows will result in recovery in provision for credit losses in the Consolidated Statement of Income while any cash flows lower than expected will result in an additional provision for credit losses. The future expected loss mark is amortized into income as losses are recognized or as the portfolio of loans winds down over its expected life. An assessment is required at the end of each reporting period to determine the reasonableness of the unamortized balance in relation to the loan portfolio. An overall benefit is only recognized to the extent that the amortized amount is greater than the actual losses incurred. A net charge is recorded if the actual losses exceed the amortized amounts.

#### **Loan impairment and allowance for credit losses**

The Bank considers a loan to be impaired when there is objective evidence of impairment as a result of one or more loss events that occurred after the date of initial recognition of the loan and the loss event has an impact on the estimated future cash flows of the loan that can be reliably estimated.

Objective evidence is represented by observable data that comes to the attention of the Bank and includes events that indicate:

- significant financial difficulty of the borrower;
- a default or delinquency in interest or principal payments;
- a high probability of the borrower entering a phase of bankruptcy or a financial reorganization;
- a measurable decrease in the estimated future cash flows from loan or the underlying assets that back the loan.

If a payment on a loan is contractually 90 days in arrears, the loan will be classified as impaired, if not already classified as such, unless the loan is fully secured, the collection of the debt is in process, and the collection efforts are reasonably expected to result in repayment of the loan or in restoring it to a current status within 180 days from the date a payment has become contractually in arrears. Finally, a loan that is contractually 180 days in arrears is classified as impaired in all situations, except when it is guaranteed or insured by the Canadian government, the provinces or a Canadian government agency; such loans are classified as impaired if the loan is contractually in arrears for 365 days. Any credit card loan that has a payment that is contractually 180 days in arrears is written off. Losses expected as a result of future events, are not recognized.

The Bank considers evidence of impairment for loans and advances at both an individual and collective level.

#### **Individual impairment allowance**

For all loans that are considered individually significant, the Bank assesses on a case-by-case basis at each reporting period whether an individual allowance for loan losses is required.

For those loans where objective evidence of impairment exists and the Bank has determined the loan to be impaired, impairment losses are determined based on the Bank's aggregate exposure to the customer considering the following factors:

- the customer's ability to generate sufficient cash flow to service debt obligations;
- the extent of other creditors' commitments ranking ahead of, or *pari passu* with, the Bank and the likelihood of other creditors continuing to support the company;
- the complexity of determining the aggregate amount and ranking of all creditor claims and the extent to which legal and insurance uncertainties are evident; and
- the realizable value of security (or other credit mitigants) and likelihood of successful repossession.

Impairment losses are calculated by discounting the expected future cash flows of a loan at its original effective interest rate, and comparing the resultant present value with the loan's current carrying amount. This results in interest income being recognized using the original effective interest rate.

#### **Collective impairment allowance**

For loans that have not been individually assessed as being impaired, the Bank pools them into groups to assess them on a collective basis. Collective allowances are calculated for impaired loans and performing loans. Allowances related to performing loans estimate probable incurred losses that are inherent in the portfolio but have not yet been specifically identified as impaired.

Internal risk rating parameters are used in the calculation of the collective impairment allowance. For non-retail loan portfolios, internal risk rating parameters form the basis for calculating the quantitative portion of the collective allowance for performing loans:

- Probability of Default rates (PD) which are based upon the internal risk rating for each borrower;
- Loss Given Default rates (LGD); and
- Exposure at Default factors (EAD).

Funded exposures are multiplied by the borrower's PD and by the relevant LGD parameter.



Committed but undrawn exposures are multiplied by the borrower's PD, by the relevant LGD parameter, and by the relevant EAD parameter. A model stress component is also applied to recognize uncertainty in the credit risk parameters and the fact that current actual loss rates may differ from the long term averages included in the model.

#### **Retail loans**

Retail loans represented by residential mortgages, credit cards and other personal loans are considered by the Bank to be homogeneous groups of loans that are not considered individually significant. All homogeneous groups of loans are assessed for impairment on a collective basis.

Mortgages are collectively assessed for impairment, taking into account number of days past due, historical loss experience and incorporating both quantitative and qualitative factors including the current business and economic environment and the realizable value of collateral to determine the appropriate level of the collective impairment allowance.

A roll rate methodology is used to determine impairment losses on a collective basis for credit cards and other personal loans because individual loan assessment is impracticable. Under this methodology, loans with similar credit characteristics are grouped into ranges according to the number of days past due and statistical analysis is used to estimate the likelihood that loans in each range will progress through the various stages of delinquency and ultimately prove irrecoverable. This methodology employs statistical analyses of historical data and experience of delinquency and default to estimate the amount of loans that will eventually be written off as a result of the events not identifiable on an individual loan basis. When the portfolio size is small or when information is insufficient or not reliable enough to adopt a roll rate methodology, the Bank adopts a basic formulaic approach based on historical loss rate experience.

#### **Performing loans**

Over and above the individually assessed and retail roll rate allowances, loans that were subject to individual assessment for which no evidence of impairment existed, are grouped together according to their credit risk characteristics for the purpose of reassessing them on a collective basis. This reflects impairment losses that the Bank has incurred as a result of events that have occurred but where the individual loss has not been identified.

The collective impairment allowance for such loans is determined after taking into account:

- historical loss experience in portfolios of similar credit risk characteristics (for example, by industry sector, loan grade or product);
- the estimated period between impairment occurring and the loss being identified and evidenced by the establishment of an appropriate allowance against the individual loan; and
- management's experienced judgment as to whether current economic and credit conditions are such that the actual level of inherent losses at the reporting date is likely to be greater or less than that suggested by historical experience. As soon as information becomes available which identifies losses on individual loans within the group, those loans are removed from the group and assessed on an individual basis for impairment.

#### **Provision for credit losses on off-balance sheet positions**

A provision is set up for the Bank's off-balance sheet positions and recorded in other liabilities on the Consolidated Statement of Financial Position. The process to determine the provision for off-balance sheet positions is similar to the methodology used for loans. Any change in the provision is recorded in the Consolidated Statement of Income as provision for credit losses.

#### **Write-off of loans**

Loans (and the related impairment allowance accounts) are normally written off, either partially or in full, when there is no realistic prospect of recovery. Where loans are secured, write-off is generally after receipt of any proceeds from the realization of security. 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.

#### **Reversals of impairment**

If the amount of an impairment loss related to loans decreases in a subsequent period, and the decrease can be related objectively to an event occurring after the impairment was recognized, the excess is written back by reducing the loan impairment allowance account accordingly. The write-back is recognized in the provision for credit losses in the Consolidated Statement of Income.

#### **Restructured loans**

Restructured loans include loans where the Bank has renegotiated the original terms of a loan by granting a concession to the borrower (concessions). These concessions include interest rate adjustments, deferral or extension of principal or interest payments and forgiveness of a portion of principal or interest. Once the terms of the loan have been renegotiated and agreed upon with the borrower the loan is considered a restructured loan. The investment in the loan is reduced as of the date of the restructuring to the amount of the net expected cash flows receivable under the modified terms, discounted at the original effective interest rate inherent in the loan. The loan is no longer considered past due and the reduction in the carrying value of the loan is recognized as a charge for loan impairment in the Consolidated Statement of Income in the period in which the loan is restructured. In other cases, restructuring may be considered substantial enough to result in recognition of a new loan.

#### *Customer's liability under acceptances*

The Bank's potential liability under acceptances is reported as a liability in the Consolidated Statement of Financial Position. The Bank has equivalent claims against its customers in the event of a call on these commitments, which are reported as an asset. Fees earned are reported in fee and commission revenues – banking fees in the Consolidated Statement of Income.

#### **Hedge accounting**

The Bank formally documents all hedging relationships and its risk management objective and strategy for undertaking these hedge transactions at inception. The hedge documentation includes identification of the asset, liability, firm commitment or highly probable forecasted transaction being hedged, the nature of the risk being hedged, the hedging instrument used and the method used to assess the effectiveness of the hedge. The Bank also formally assesses, both at each hedge's inception and on an ongoing basis, whether the hedging instruments are highly effective in offsetting changes in fair value or cash flows of hedged items. Hedge ineffectiveness is measured and recorded in non-interest income – other in the Consolidated Statement of Income.

There are three types of hedges: (i) fair value hedges, (ii) cash flow hedges and (iii) net investment hedges.

*Fair value hedges*

For fair value hedges, the change in fair value of the hedging instrument is offset in the Consolidated Statement of Income by the change in fair value of the hedged item attributable to the hedged risk. The Bank utilizes fair value hedges primarily to convert fixed rate financial instruments to floating rate financial instruments. Hedged items include available-for-sale debt and equity securities, loans, deposit liabilities and subordinated debentures. Hedging instruments include single-currency interest rate swaps, cross-currency interest rate swaps, foreign currency forwards and foreign currency liabilities.

*Cash flow hedges*

For cash flow hedges, the change in fair value of the hedging instrument, to the extent effective, is recorded in other comprehensive income until the corresponding gains and losses on the hedged item is recognized in income. The Bank utilizes cash flow hedges primarily to hedge the variability in cash flows relating to floating rate financial instruments and highly probable forecasted revenues. Hedged items include available-for-sale debt securities, loans, deposit liabilities and highly probable forecasted transactions. Hedging instruments include single-currency interest rate swaps, cross-currency interest rate swaps, total return swaps and foreign currency forwards.

*Net investment hedges*

For net investment hedges, the change in fair value of the hedging instrument, to the extent effective, is recorded in other comprehensive income until the corresponding cumulative translation adjustments on the hedged net investment are recognized in income. The Bank designates foreign currency liabilities and foreign currency forwards as hedging instruments to manage the foreign currency exposure and impact on capital ratios arising from foreign operations.

**Property and equipment**

*Land, buildings and equipment*

Land is carried at cost. Buildings (including building fittings), equipment, and leasehold improvements are carried at cost less accumulated depreciation and accumulated impairment losses, if any. Cost includes expenditures that are directly attributable to the acquisition of the asset. Depreciation is calculated using the straight-line method over the estimated useful life of the related asset less any residual value as follows: buildings – 40 years, building fittings – 15 years, equipment 3 to 10 years, and leasehold improvements – term of lease plus one renewal period up to a maximum of 15 years. Depreciation expense is included in the Consolidated Statement of Income under operating expenses – depreciation and amortization. Depreciation methods, useful lives and residual values are reassessed at each financial year-end and adjusted as appropriate.

When major components of building and equipment have different useful lives, they are accounted for separately and depreciated over each component's estimated useful life.

Net gains and losses on disposal are included in non-interest income – other in the Consolidated Statement of Income in the year of disposal.

*Investment property*

Investment property is property held either for rental income or for capital appreciation or for both. The Bank holds certain investment properties which are presented in property and equipment on the Consolidated Statement of Financial Position.

Investment property is carried at cost less accumulated depreciation and any accumulated impairment losses. Depreciation is calculated using the straight-line method over the estimated useful life of 40 years. Depreciation methods, useful lives and residual values are reassessed at each financial year-end and adjusted as appropriate.

**Assets held-for-sale**

Non-current non-financial assets (and disposal groups) are classified as held-for-sale if their carrying amount will be recovered principally through a sale transaction rather than through continuing use. These assets meet the criteria for classification as held-for-sale if they are available for immediate sale in their present condition and their sale is considered highly probable to occur within one year.

Non-current non-financial assets classified as held-for-sale are measured at the lower of their carrying amount and fair value (less costs to sell) and are presented within other assets in the Consolidated Statement of Financial Position. Any subsequent write-down to fair value less costs to sell is recognized in the Consolidated Statement of Income, in non-interest income. Any subsequent increase in the fair value less costs to sell, to the extent this does not exceed the cumulative write-down, is also recognized in non-interest income, together with any realized gains or losses on disposal.

Non-financial assets acquired in exchange for loans as part of an orderly realization are recorded as assets held-for-sale or assets held-for-use. If the acquired asset does not meet the requirement to be considered held-for-sale, the asset is considered held-for-use, measured initially at cost which equals the carrying value of the loan and accounted for in the same manner as a similar asset acquired in the normal course of business.

**Business combinations and goodwill**

The Bank follows the acquisition method of accounting for the acquisition of subsidiaries. The Bank considers the date on which control is obtained and it legally transfers the consideration for the acquired assets and assumed liabilities of the subsidiary to be the date of acquisition. The cost of an acquisition is measured at the fair value of the consideration paid. The fair value of the consideration transferred by the Bank in a business combination is calculated as the sum of the acquisition date fair value of the assets transferred by the Bank, the liabilities incurred by the Bank to former owners of the acquiree, and the equity interests, including any options, issued by the Bank. The Bank recognizes the acquisition date fair values of any previously held investment in the subsidiary and contingent consideration as part of the consideration transferred in exchange for the acquisition. A gain or loss on any previously held investments of an acquiree is recognized in non-interest income – other in the Consolidated Statement of Income.

In general, all identifiable assets acquired (including intangible assets) and liabilities assumed (including any contingent liabilities) are measured at the acquisition date fair value. The Bank records identifiable intangible assets irrespective of whether the assets have been recognized by the acquiree before the business combination. Non-controlling interests, if any, are recognized at their proportionate share of the fair value of identifiable assets and liabilities, unless otherwise indicated. Where the Bank has an obligation to purchase a non-controlling interest for cash or another financial asset,

a portion of the non-controlling interest is recognized as a financial liability based on management's best estimate of the present value of the redemption amount. Where the Bank has a corresponding option to settle the purchase of a non-controlling interest by issuing its own common shares, no financial liability is recorded.

Any excess of the cost of acquisition over the Bank's share of the net fair value of the identifiable assets acquired and liabilities assumed is recorded as goodwill. If the cost of acquisition is less than the fair value of the Bank's share of the identifiable assets acquired and liabilities assumed, the resulting gain is recognized immediately in non-interest income – other in the Consolidated Statement of Income.

During the measurement period (which is within one year from the acquisition date), the Bank may, on a retrospective basis, adjust the amounts recognized at the acquisition date to reflect new information obtained about facts and circumstances that existed as of the acquisition date.

The Bank accounts for acquisition-related costs as expenses in the periods in which the costs are incurred and the services are received.

Subsequent to acquisition, the Bank accounts for the following assets and liabilities recognized in a business combination as described below:

- Contingent liabilities, until resolved, are measured at the higher of the amount that would be recognized as a provision or the amount initially recognized, with any change recognized in the Consolidated Statement of Income.
- Indemnification assets are measured on the same basis as the item to which the indemnification relates.
- Contingent consideration classified as a liability is measured at fair value, with any change recognized in the Consolidated Statement of Income.
- Liabilities to non-controlling interest holders when remeasured at the end of each reporting period, a corresponding change is recorded in equity.

After initial recognition of goodwill in a business combination, goodwill in aggregate is measured at cost less any accumulated impairment losses. Goodwill is not amortized but tested for impairment annually and when circumstances indicate that the carrying value may be impaired.

Goodwill is reviewed at each reporting date to determine whether there is any indication of impairment. For the purpose of impairment testing, goodwill acquired in a business combination is, on the acquisition date, allocated to each of the Bank's group of cash-generating units (CGUs) that is expected to benefit from the combination. CGUs to which goodwill has been allocated are aggregated so that the level at which impairment is tested reflects the lowest level at which goodwill is monitored for internal management purposes. Goodwill impairment, at a standalone subsidiary level, may not in itself result in an impairment at the consolidated Bank level.

The carrying amount of the CGU is determined by management using approved internal economic capital models. These models consider various factors including credit risk, market risk, operational risk and other relevant business risks for each CGU. The recoverable amount is the greater of fair value less costs of disposal and value in use. If either fair value less costs of disposal or value in use exceeds the carrying amount, there is no need to determine the other. The recoverable amount of the CGU has been determined using the fair value less costs of disposal method. The estimation of fair value less costs of disposal involves significant judgment in the determination of inputs. In determining fair value less costs of disposal, an appropriate valuation model is used which considers various factors including normalized net income, control premiums and price earnings multiples. These calculations are corroborated by valuation multiples, quoted share prices for publicly traded subsidiaries or other available fair value indicators. An impairment loss is recognized if the carrying amount of the CGU exceeds the recoverable amount. An impairment loss, in respect of goodwill, is not reversed.

#### Intangible assets

Intangible assets represent identifiable non-monetary assets and are acquired either separately or through a business combination or generated internally. The Bank's intangible assets are mainly comprised of computer software, customer relationships, contract intangibles, core deposit intangibles and fund management contracts.

The cost of a separately acquired intangible asset includes its purchase price and directly attributable costs of preparing the asset for its intended use. Intangibles acquired as part of a business combination are initially recognized at fair value.

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.

After initial recognition, an intangible asset is carried at its cost less any accumulated amortization and accumulated impairment losses.

Intangible assets that have finite useful lives are initially measured at cost and are amortized on a straight-line basis over their useful lives as follows: computer software – 5 to 10 years; and other intangible assets – 5 to 20 years. Amortization expense is included in the Consolidated Statement of Income under operating expenses – depreciation and amortization. As intangible assets are considered to be non-financial assets, the impairment model for non-financial assets is applied. Intangible assets with indefinite useful lives are not amortized but are tested for impairment annually and when circumstances indicate that the carrying value may be impaired.

#### Impairment of non-financial assets

The carrying amount of the Bank's non-financial assets, other than goodwill and indefinite life intangible assets and deferred tax assets which are separately addressed, is reviewed at each reporting date to determine whether there is any indication of impairment. For the purpose of impairment testing, non-financial assets that cannot be tested individually are grouped together into the smallest group of assets that generate cash inflows from continuing use that are largely independent from the cash inflows of other assets or groups of assets.

If any indication of impairment exists then the asset's recoverable amount is estimated. The recoverable amount of an asset or CGU is the greater of its value in use and its fair value less costs of disposal. The Bank's corporate assets do not generate separate cash inflows. If there is an indication that a corporate asset may be impaired, then the recoverable amount is determined for the CGU to which the corporate asset belongs.

An impairment loss is recognized if the carrying amount of an asset or a CGU exceeds its recoverable amount. Impairment losses of continuing operations are recognized in the Consolidated Statement of Income in those expense categories consistent with the nature of the impaired asset. Impairment losses recognized in prior periods are reassessed at each reporting date for any indication that the loss had decreased or no longer exists. An impairment loss is reversed if there has been a change in the estimates used to determine the recoverable amount. An impairment loss is reversed only to the extent that the asset's carrying amount does not exceed the carrying amount that would have been determined, net of depreciation or amortization, if no impairment loss had been recognized. Such reversal is recognized in the Consolidated Statement of Income.

Significant judgment is applied in determining the non-financial asset's recoverable amount and assessing whether certain events or circumstances constitute objective evidence of impairment.

#### Corporate income taxes

The Bank follows the balance sheet liability method for corporate income taxes. Under this method, deferred tax assets and liabilities represent the cumulative amount of tax applicable to temporary differences which are the differences between the carrying amount of the assets and liabilities, and their values for tax purposes. Deferred tax assets are recognized only to the extent it is probable that sufficient taxable profits will be available against which the benefit of these deferred tax assets can be utilized.

Deferred tax assets and liabilities are measured using enacted or substantively enacted tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled.

Deferred and current tax assets and liabilities are only offset when they arise in the same tax reporting group and where the Bank has both the legal right and the intention to settle on a net basis or to realize the asset and settle the liability simultaneously.

The Bank maintains provisions for uncertain tax positions that it believes appropriately reflect the risk of tax positions under discussion, audit, dispute, or appeal with tax authorities, or which are otherwise considered to involve uncertainty. These provisions are made using the Bank's best estimate of the amount expected to be paid based on an assessment of all relevant factors, which are reviewed at the end of each reporting period.

Income tax is recognized in the Consolidated Statement of Income except where it relates to items recognized in other comprehensive income or directly in equity, in which case income tax is recognized in the same line as the related item.

#### Leases

##### *Bank as a lessor*

Assets leased to customers under agreements which transfer substantially all the risks and rewards of ownership, with or without ultimate legal title, are classified as finance leases and presented within loans in the Consolidated Statement of Financial Position. When assets held are subject to a finance lease, the leased assets are derecognized and a receivable is recognized which is equal to the present value of the minimum lease payments, discounted at the interest rate implicit in the lease. Initial direct costs incurred in negotiating and arranging a finance lease are incorporated into the receivable through the discount rate applied to the lease. Finance lease income is recognized over the lease term based on a pattern reflecting a constant periodic rate of return on the net investment in the finance lease. Finance lease income is included in the Consolidated Statement of Income under interest income from loans.

Assets leased to customers under agreements which do not transfer substantially all the risks and rewards of ownership are classified as operating leases. The leased assets are included within property and equipment on the Bank's Consolidated Statement of Financial Position. Rental income is recognized on a straight-line basis over the period of the lease in non-interest income – other in the Consolidated Statement of Income. Initial direct costs incurred in negotiating and arranging an operating lease are added to the carrying amount of the leased asset and recognized as an expense on a straight-line basis over the lease term.

##### *Bank as a lessee*

Assets held under finance leases are initially recognized as property and equipment in the Consolidated Statement of Financial Position at an amount equal to the fair value of the leased asset or, if lower, the present value of the minimum lease payments. The corresponding finance lease obligation is included in other liabilities in the Consolidated Statement of Financial Position. The discount rate used in calculating the present value of the minimum lease payments is the interest rate implicit in the lease. Contingent rentals are recognized as expense in the periods in which they are incurred.

Operating lease rentals payable are recognized as an expense on a straight-line basis over the lease term, which commences when the lessee controls the physical use of the asset. Lease incentives are treated as a reduction of rental expense and are also recognized over the lease term on a straight-line basis. Contingent rentals arising under operating leases are recognized as an expense in the period in which they are incurred.

##### *Sale and lease-back*

Where the Bank enters into a sale leaseback transaction for a non-financial asset at fair market value that results in the Bank retaining an operating lease (where the buyer/lessor retains substantially all risks and rewards of ownership), any gains and losses are recognized immediately in net income. Where the sale leaseback transaction results in a finance lease, any gain on sale is deferred and recognized in net income over the remaining term of the lease.

##### *Leasehold improvements*

Leasehold improvements are investments made to customize buildings and offices occupied under operating lease contracts to make them suitable for their intended purpose. The present value of estimated reinstatement costs to bring a leased property into its original condition at the end of the lease, if required, is capitalized as part of the total leasehold improvements costs. At the same time, a corresponding liability is recognized to reflect the obligation incurred. Reinstatement costs are recognized in net income through depreciation of the capitalized leasehold improvements over their estimated useful life.

#### Provisions

A provision, including for restructuring, is recognized if, as a result of a past event, the Bank has a present legal or constructive obligation that can be estimated reliably, and it is probable that an outflow of economic benefits will be required to settle the obligation.

The amount recognized as a provision is the Bank's best estimate of the consideration required to settle the present obligation, taking into account the risks and uncertainties surrounding the obligation. If the effect of the time value of money is considered material, provisions are determined by discounting the expected future cash flows at a pre-tax rate that reflects current market assessments of the time value of money and, where appropriate, the risks specific to the liability. The increase in the provision due to the passage of time is recorded as interest expense – other in the Consolidated Statement of Income.

### Insurance contracts

Gross premiums for life insurance contracts are recognized as income when due. Gross premiums for non-life insurance business primarily property and casualty are recognized as income over the term of the insurance contracts. Unearned premiums represent the portion of premiums written in the current year that relate to the period of risk after the reporting date. Insurance claims recoveries are accounted as income in the same period as the related claims.

Gross insurance claims for life insurance contracts reflect the cost of all claims arising during the year. Gross insurance claims for property and casualty insurance contracts include paid claims and movements in outstanding claim liabilities. Insurance premiums ceded to reinsurers are accounted as an expense in the same period as the premiums for the direct insurance contracts to which they relate.

### Guarantees

A guarantee is a contract that contingently requires the Bank to make specified payments to reimburse the holder for a loss it incurs because a specified debtor failed to make payment when due in accordance with the original or modified terms of a debt instrument. Guarantees include standby letters of credit, letters of guarantee, indemnifications, credit enhancements and other similar contracts. Guarantees that qualify as a derivative are accounted for in accordance with the policy for derivative instruments. For guarantees that do not qualify as a derivative, a liability is recorded for the fair value of the obligation assumed at inception. The fair value of the obligation at inception is generally based on the discounted cash flow of the premium to be received for the guarantee, resulting in a corresponding asset. Subsequent to initial recognition, such guarantees are measured at the higher of the initial amount, less amortization to recognize any fee income earned over the period, and the best estimate of the amount required to settle any financial obligation arising as a result of the guarantee. Any increase in the liability is reported in the Consolidated Statement of Income.

### Employee benefits

The Bank provides pension and other benefit plans for eligible employees in Canada, the United States and other international operations. Pension benefits are predominantly offered in the form of defined benefit pension plans (generally based on an employee's length of service and the final five years' average salary), with some pension benefits offered in the form of defined contribution pension plans (where the Bank's contribution is fixed and there is no legal or constructive obligation to pay further amounts). Other benefits provided include post-retirement health care, dental care and life insurance, along with other long-term employee benefits such as long-term disability benefits.

#### *Defined benefit pension plans and other post-retirement benefit plans*

The cost of these employee benefits is actuarially determined each year using the projected unit credit method. The calculation uses management's best estimate of a number of assumptions – including the discount rate, future compensation, health care costs, mortality, as well as the retirement age of employees. The discount rate is based on the yield at the reporting date on high quality corporate bonds that have durations approximating the terms of the Bank's obligations. This discount rate must also be used to determine the annual benefit expense.

The Bank's net asset or liability in respect of employee benefit plans is calculated separately for each plan as the difference between the present value of future benefits earned in respect of service for prior periods and the fair value of plan assets. The net asset or liability is included in other assets and other liabilities, as appropriate, in the Consolidated Statement of Financial Position. When the net amount in the Consolidated Statement of Financial Position is an asset, the recognized asset is limited to the present value of any economic benefits available in the form of refunds from the plan or reductions in future contributions to the plan.

The current service cost, net interest expense (income), past service cost, and administrative expense are recognized in net income. Net interest income or expense is calculated by applying the discount rate used to measure the obligation at the beginning of the annual period to the net defined benefit asset or liability. When the benefits of a plan are improved (reduced), a past service cost (credit) is recognized immediately in net income.

Remeasurements comprising of actuarial gains and losses, the effect of the asset ceiling and the change in the return on plan assets are recognized immediately in the Consolidated Statement of Financial Position with a charge or credit to the Statement of Comprehensive Income (OCI) in the period in which they occur. Amounts recorded in OCI are not recycled to the Consolidated Statement of Income.

#### *Other long-term employee benefits*

Other long-term employee benefits are accounted for similar to defined benefit pension plans and other post-retirement benefit plans described above except that remeasurements are recognized in the Consolidated Statement of Income in the period in which they arise.

#### *Defined contribution plans*

The cost of such plans are equal to contributions payable by the Bank to employees' accounts for service rendered during the period and expensed.

#### *Short-term employee benefits*

Short-term employee benefits are expensed as the related service is provided and a liability is measured on an undiscounted basis net of payments made.

### Recognition of income and expenses

Revenue is recognized to the extent that it is probable that the economic benefits will flow to the Bank and the revenue can be reliably measured. The following specific criteria must also be met before revenue is recognized:

#### *Interest and similar income and expenses*

For all non-trading interest-bearing financial instruments, interest income or expense is recorded in net interest income using the effective interest rate. This is the rate that exactly discounts estimated future cash payments or receipts through the expected life of the financial instrument or a shorter period, where appropriate, to the net carrying amount of the financial asset or financial liability. The calculation takes into account all the contractual terms of the financial instrument (for example, prepayment options) and includes any fees or incremental costs that are directly attributable to the instrument and are an integral part of the effective interest rate, but not future credit losses.

For trading financial instruments, mark-to-market changes including related interest income or expense is recorded in trading revenues.

The carrying amount of interest-bearing financial instruments, measured at amortized cost or classified as available-for-sale, is adjusted if the Bank revises its estimates of payments or receipts. The adjusted carrying amount is calculated based on the original effective interest rate and the change in carrying amount is recorded as non-interest income in the Consolidated Statement of Income.

Once the carrying value of a financial asset or a group of similar financial assets has been reduced due to an impairment loss, interest income continues to be recognized based on net effective interest rate inherent in the investment.

Loan origination costs are deferred and amortized into interest income using the effective interest method over the expected term of the loan. Loan fees are recognized in interest income over the appropriate lending or commitment period. Mortgage prepayment fees are recognized in interest income when received, unless they relate to a minor modification to the terms of the mortgage, in which case the fees are deferred and amortized using the effective interest method over the remaining period of the original mortgage.

Loan syndication fees are recognized when no other services are required of the Bank and the fees are non-refundable unless the yield we retain is less than that of comparable lenders in the syndicate. In such cases, an appropriate portion will be deferred and amortized in interest income over the term of the loan.

Loan commitment fees for loans that are likely to be drawn down and other credit related fees are deferred (together with any incremental costs) and recognized as part of the effective interest on the loan. When it is unlikely that a loan will be drawn down, the loan commitment fees are recognized over the commitment period on a straight-line basis.

Interest income and interest expense from trading operations are presented in trading revenues, in the Consolidated Statement of Income.

#### *Fee and commission revenues*

The Bank earns fee and commission revenues from a diverse range of services it provides to its customers. Fee income can be divided into the following two categories:

Fees earned for the provision of services over a period of time are accrued over that period the services are provided. These fees include commission income, investment management, custody and other management and advisory fees. Investment management fees and custodial fees are mainly calculated as a percentage of daily or period-end market value of the assets under management (AUM) or assets under administration (AUA) and are received monthly, quarterly, semi-annually, or annually based on the underlying investment management contracts. Performance-based fees related to AUM are earned based on exceeding certain benchmarks or other performance targets, are recognized at the end of the performance period in which the target is met.

Fees arising from negotiating or participating in the negotiation of a transaction for a third-party, such as the arrangement of the acquisition of shares or other securities or the purchase or sale of businesses, are recognized on completion of the underlying transaction. Fees or components of fees that are linked to a certain performance are recognized after fulfilling the corresponding criteria.

#### *Fee and commission expenses*

Fee and commission expenses relate to transaction and service fees which are expensed as the services are received.

#### *Dividend income*

Dividend income on equity securities is recognized in interest income when the Bank's right to receive payment is established.

#### *Share-based payments*

Share-based payments awarded to employees are recognized as compensation expense in the Consolidated Statement of Income over the vesting period based on the number of awards expected to vest including the impact of expected forfeitures. For awards that are delivered in tranches, each tranche is considered a separate award and accounted for separately.

Stock appreciation rights and other awards that must be settled for cash are classified as liabilities. Liability-classified awards are re-measured to fair value at each reporting date while they remain outstanding, with any changes in fair value recognized in compensation expense in the period. The liability is expensed over the vesting period which incorporates the re-measurement of the fair value and a revised forfeiture rate that anticipates units expected to vest.

Employee stock options with tandem stock appreciation rights give the employee the right to exercise for shares or settle in cash. These options are classified as liabilities and are re-measured to fair value at each reporting date while they remain outstanding. If an option is exercised, thereby cancelling the tandem stock appreciation right, both the exercise price proceeds together with the accrued liability and associated taxes are credited to equity – common shares in the Consolidated Statement of Financial Position.

Plain vanilla options and other awards that must be settled for shares are classified as equity awards. Equity-classified awards are expensed based on the grant date fair value with a corresponding increase to equity – other reserves in the Consolidated Statement of Financial Position. If an option is exercised, both the exercise price proceeds together with the amount recorded in other reserves is credited to equity – common shares in the Consolidated Statement of Financial Position.

For tandem stock appreciation rights, stock appreciation rights and plain vanilla options, the Bank estimates fair value using an option pricing model. The option pricing model requires inputs such as the exercise price of the option, the current share price, the risk free interest rate, expected dividends, expected volatility (calculated using an equal weighting of implied and historical volatility) and specific employee exercise behaviour patterns based on statistical data. For other awards, fair value is the quoted market price of the Bank's common shares at the reporting date.

Where derivatives are used to economically hedge share-based payment expense, related mark-to-market gains and losses are included in non-interest expenses – salaries and employee benefits in the Consolidated Statement of Income.

A voluntary renouncement of a tandem stock appreciation right where an employee retains the corresponding option for shares with no change in the overall fair value of the award, results in a reclassification of the accrued liability and associated tax to equity – other reserves in the Consolidated Statement of Financial Position. This reclassification is measured at the fair value of the renounced awards as of the renouncement date. Subsequent to the voluntary renouncement, these awards are accounted for as plain vanilla options, based on the fair value as of the renouncement date.

#### *Customer loyalty programs*

The Bank operates loyalty points programs, which allow customers to accumulate points when they use the Bank's products and services. The points can then be redeemed for free or discounted products or services, subject to certain conditions.



Consideration received is allocated between the products sold or services rendered and points issued, with the consideration allocated to points equal to their fair value. The fair value of points is generally based on equivalent retail prices for the mix of awards expected to be redeemed. The fair value of the points issued is deferred in other liabilities and recognized as banking revenues when the points are redeemed or lapsed. Management judgment is involved in determining the redemption rate to be used in the estimate of points to be redeemed.

#### Dividends on shares

Dividends on common and preferred shares are recognized as a liability and deducted from equity when they are approved by the Bank's Board. Dividends are deducted from equity when they are declared and no longer at the discretion of the Bank.

#### Segment reporting

Management's internal view is the basis for the determination of operating segments. The operating segments are those whose operating results are regularly reviewed by the Bank's chief operating decision-maker to make decisions about resources to be allocated to the segment and assess its performance. The Bank has three operating segments: Canadian Banking, International Banking, and Global Banking and Markets. The other category represents smaller operating segments, including Group Treasury and other corporate items, which are not allocated to an operating segment. These segments offer different products and services and are managed separately based on the Bank's management and internal reporting structure. The results of these business segments are based upon the internal financial reporting systems of the Bank. The accounting policies used in these segments are generally consistent with those followed in the preparation of the consolidated financial statements by the Bank. The only notable accounting measurement difference is the grossing up of revenues which are tax-exempt and income from associate corporations to an equivalent before-tax basis for those affected segments. This change in measurement enables comparison of income arising from taxable and tax-exempt sources. Because of the complexity of the Bank, various estimates and allocation methodologies are used in the preparation of the business segment financial information. The funding value of assets and liabilities is transfer-priced at wholesale market rates, and corporate expenses are allocated to each segment on an equitable basis using various parameters. As well, capital is apportioned to the business segments on a risk-based methodology. Transactions between segments are recorded within segment results as if conducted with a third-party and are eliminated on consolidation.

#### Earnings per share (EPS)

Basic EPS is computed by dividing net income for the period attributable to the Bank's common shareholders by the weighted-average number of common shares outstanding during the period.

Diluted EPS is calculated by dividing adjusted net income for the period attributable to common shareholders by the weighted-average number of diluted common shares outstanding for the period. In the calculation of diluted earnings per share, earnings are adjusted for changes in income or expenses that would result from the issuance of dilutive shares. The weighted-average number of diluted common shares outstanding for the period reflects the potential dilution that would occur if options, securities or other contracts that entitle their holders to obtain common shares had been outstanding from the beginning of the period (or a later date) to the end of the period (or an earlier date). Instruments determined to have an antidilutive impact for the period are excluded from the calculation of diluted EPS.

Earnings are adjusted by the after-tax amount of distributions related to dilutive capital instruments recognized in the period. For tandem stock appreciation rights that are carried as liabilities, the after-tax re-measurement included in salaries and employee benefits expense, net of related hedges, is adjusted to reflect the expense had these rights been equity-classified.

The number of additional shares for inclusion in diluted EPS for share-based payment options is determined using the treasury share method. Under this method, the net number of incremental common shares is determined by assuming that in-the-money stock options are exercised and the proceeds are used to purchase common shares at the average market price during the period.

The number of additional shares associated with capital instruments that potentially result in the issuance of common shares is based on the terms of the contract.

## 4 Recently adopted accounting standards

### Changes in accounting policies during the year

The Bank has adopted the following new accounting standards issued by the IASB effective November 1, 2014. The new accounting policies used by the Bank have been described below:

#### *Presentation of own credit risk (IFRS 9)*

The own credit risk provisions of IFRS 9, *Financial Instruments*, changes the accounting for liabilities designated at fair value through profit or loss such that changes in fair value arising from changes in the Bank's own credit risk are recognized in other comprehensive income unless doing so creates or increases an accounting mismatch. Cumulative fair value changes related to own credit risk recognized in other comprehensive income cannot be subsequently reclassified to net income. This replaces the previous requirement in IAS 39, *Financial Instruments: Recognition and Measurement*, to recognize such changes in net income.

In July 2014, the IASB issued the final IFRS 9 standard which permitted entities to early adopt this requirement prior to the IFRS 9 mandatory effective date of January 1, 2018. The Bank early adopted this requirement as it relates to deposit note liabilities designated at fair value through profit or loss, effective November 1, 2014. This change was applied retrospectively. However, in accordance with the IFRS 9 transition provisions, prior period comparatives have not been restated. The impact of this change on opening retained earnings was an increase of \$5 million and on accumulated other comprehensive income was a decrease of \$5 million.

#### *Levies (IFRIC 21)*

IFRIC 21, *Levies*, provides guidance on when to recognize a liability to pay a levy imposed by government that is accounted for in accordance with IAS 37, *Provisions, Contingent Liabilities and Contingent Assets*, and also for a liability to pay a levy whose timing and amount is certain. The interpretation clarifies that an obligating event, as identified by the legislation would trigger the recognition of a liability to pay a levy. While the interpretation discusses the timing of the recognition, it does not change the measurement of the amount to be recognized. The adoption of IFRIC 21 did not have a significant impact on the Bank.

*Novation of derivatives and contribution of hedge accounting (IAS 39)*

The amendment to IAS 39, *Financial Instruments: Recognition and Measurement*, adds a limited exception to IAS 39 to allow hedge accounting to continue in a situation where a derivative, which has been designated as a hedging instrument, is novated to effect clearing with a central counterparty as a result of laws and regulation, if specific conditions are met. The amendment did not have a significant impact to the Bank.

*Financial instruments: presentation (IAS 32)*

The amendments to IAS 32, *Financial Instruments: Presentation*, clarifies the requirements relating to offsetting financial assets and financial liabilities. The adoption of these amendments did not have a significant impact on the Bank.

*Disclosures of non-financial assets (IAS 36)*

The IASB issued narrow-scope amendments to the disclosure requirements in IAS 36, *Impairment of Assets*, to require additional disclosures for an individual asset or cash-generating unit for which a material impairment loss has been recognized or reversed where its determination is based on fair value less costs of disposal (FVL COD). If there has been a change in the valuation technique, the Bank is also required to disclose the reason for making the change. No additional disclosure was made as a result of this amendment since the Bank did not recognize or reverse an impairment loss for non-financial assets where the recoverable amount was determined based on FVL COD.

## 5 Future accounting developments

The Bank actively monitors developments and changes in standards from the IASB as well as regulatory requirements from the Canadian Securities Administrators and OSFI. The Bank is currently assessing the impact of adoption of IFRS 9, *Financial Instruments* and IFRS 15, *Revenue from Contracts with Customers*, on its consolidated financials.

*Effective November 1, 2017*

### Financial instruments

On July 24, 2014, the IASB issued IFRS 9, *Financial Instruments*, which will replace IAS 39. The standard covers three broad topics: Classification and Measurement, Impairment and Hedging.

On January 9, 2015, the Office of the Superintendent of Financial Institutions (OSFI) issued an advisory on the early adoption of IFRS 9 for Domestic Systematically Important Banks (D-SIBs) for annual reporting periods beginning on November 1, 2017. The Bank has been identified as a D-SIB and is required to adopt IFRS 9 beginning on November 1, 2017, with the exception of the own credit risk of liabilities designated at fair value through profit or loss, which the Bank early adopted effective November 1, 2014.

#### *Classification and measurement*

The standard requires the Bank to consider two criteria when determining the measurement basis for debt instruments held as financial assets, i) its business model for managing those financial assets and ii) the cash flows characteristics of the asset. Equity investments are measured at FVTPL; however, at initial recognition of, and date of transition of, a non-trading equity investment, the Bank may irrevocably elect to designate the investment as FVOCI with no subsequent recycling to profit and loss. IFRS 9 requirements related to financial liabilities have been carried forward unchanged from IAS39. In addition, the Bank may, at initial recognition, irrevocably elect to designate a financial asset as FVTPL, if doing so eliminates or significantly reduces an accounting mismatch which would otherwise arise.

#### *Impairment*

The standard introduces a new single model for the measurement of impairment losses on all financial instruments including loans and debt securities measured at amortized cost or at fair value through OCI. The IFRS 9 expected credit loss (ECL) model replaces the current "incurred loss" model of IAS 39.

The ECL model contains a three stage approach which is based on the change in credit quality of loans since initial recognition. Under the first stage, where there has not been a significant increase in credit risk since initial recognition, an amount equal to 12 months ECL will be recorded. Under the second stage, where there has been a significant increase in credit risk since initial recognition; however, the financial instruments are not considered credit impaired, an amount equal to the lifetime ECL will be recorded.

Under the third stage, where there is an objective evidence of impairment at the reporting date these financial assets will be classified as credit impaired and an amount equal to the lifetime expected credit losses will be recorded for the financial assets.

The ECL model is forward looking and requires the use of reasonable and supportable forecasts of future economic conditions in the determination of significant increases in credit risk and measurement of expected credit losses.

#### *Hedging*

The standard expands the scope of hedged items and hedging items to which hedge accounting can be applied and aims to better align the accounting with the risk management activities of the Bank.

#### *Financial instruments: disclosures (IFRS 7)*

IFRS 7, *Financial Instruments: Disclosures*, has been amended to include more extensive qualitative and quantitative disclosure relating to IFRS 9 such as new classification categories, three stage impairment model, new hedge accounting requirements and transition provisions.

IFRS 9 must be adopted retrospectively. Restatement of comparatives is not required; however it is permitted. The Bank is currently assessing the impact of adopting this new standard.

#### *Transition elections*

The Bank is permitted to defer the adoption of the hedge accounting requirements of IFRS 9 to a future period and continue to apply the hedge accounting requirements of IAS 39. However, the hedging disclosure requirements of IFRS 9 will apply to the Bank regardless of the choice made.

At the date of transition, the Bank is permitted to make a one-time irrevocable reassessment of its fair value option designations for its financial assets and liabilities.



Effective November 1, 2018

### Revenue from contracts with customers

On May 28, 2014, the IASB issued IFRS 15, *Revenue from Contracts with Customers*, which provides a single principle based framework to be applied to all contracts with customers. IFRS 15 replaces the previous revenue standard IAS 18, *Revenue*, and the related Interpretations on revenue recognition. The standard scopes out contracts that are considered to be lease contracts, insurance contracts and financial instruments, and as such will impact the businesses that earn fee and commission revenues. The new standard is a control-based model as compared to the existing revenue standard which is primarily focused on risks and rewards. Under the new standard revenue is recognized when a customer obtains control of a good or service. Transfer of control occurs when the customer has the ability to direct the use of and obtain the benefits of the good or service. The standard is effective for the Bank on November 1, 2018, with early adoption permitted, using either a full retrospective approach or a modified retrospective approach. A majority of the Bank's revenue generating instruments meets the definition of financial instruments and remains out of scope. The areas of focus for the Bank's assessment will be fees and commission revenues from wealth management and other banking services.

## 6 Cash and deposits with financial institutions

As at October 31 (\$ millions)

	2015	2014
Cash and non-interest-bearing deposits with financial institutions	\$ 6,724	\$ 5,828
Interest-bearing deposits with financial institutions	67,203	50,902
<b>Total</b>	<b>\$ 73,927</b>	<b>\$ 56,730</b>

The Bank is required to maintain balances with central banks, other regulatory authorities and certain counterparties and these amount to \$6,219 million (2014 – \$4,628 million).

## 7 Fair value of financial instruments

### Determination of fair value

The calculation of fair value is based on market conditions at a specific point in time and therefore may not be reflective of future fair values. The Bank has controls and processes in place to ensure that the valuation of financial instruments is appropriately determined.

The best evidence of fair value for a financial instrument is the quoted price in an active market. Quoted market prices represent a Level 1 valuation. Where possible, valuations are based on quoted prices or observable inputs obtained from active markets. Independent Price Verification (IPV) is undertaken to assess the reliability and accuracy of prices and inputs used in the determination of fair value. The IPV process is performed by price verification groups that are independent from the business. The Bank maintains a list of pricing sources that are used in the IPV process. These sources include, but are not limited to, brokers, dealers and consensus pricing services. The valuation policies relating to the IPV process require that all pricing or rate sources used be external to the Bank. On a periodic basis, an independent assessment of pricing or rate sources is performed to determine market presence or market representative levels.

Quoted prices are not always available for over-the-counter transactions, as well as transactions in inactive or illiquid markets. In these instances, internal models that maximize the use of observable inputs are used to estimate fair value. The chosen valuation technique incorporates all the factors that market participants would take into account in pricing a transaction. When all significant inputs to models are observable, the valuation is classified as Level 2. Financial instruments traded in a less active market are valued using indicative market prices, present value of cash-flows or other valuation techniques. Fair value estimates normally do not consider forced or liquidation sales.

Where financial instruments trade in inactive markets or when using models where observable parameters do not exist, greater management judgment is required for valuation purposes. Valuations that require the significant use of unobservable inputs are considered Level 3.

The specific inputs and valuation techniques used in determining the fair value of financial instruments are noted below. For Level 3 instruments, additional information is disclosed in the Level 3 sensitivity analysis on page 156.

The fair values of cash and deposits with banks, securities purchased under resale agreements and securities borrowed, customers' liability under acceptances, obligations related to securities sold under repurchase agreements and securities lent, acceptances, and obligations related to securities sold short are assumed to approximate their carrying values, either due to their short-term nature or because they are frequently repriced to current market rates.

### Trading loans

Trading loans as they relate to precious metals (primarily gold and silver) are valued using a discounted cash flow model incorporating market-observable inputs, including precious metals spot and forward prices and interest rate curves (Level 2). Other trading loans that serve as hedges to loan-based credit total return swaps are valued using consensus prices from Bank approved independent pricing services (Level 2).

### Government issued or guaranteed securities

The fair values of government issued or guaranteed debt securities are primarily based on quoted prices in active markets, where available. Where quoted prices are not available, the fair value is determined by utilizing recent transaction prices, broker quotes, or pricing services (Level 2).

For securities that are not actively traded, the Bank uses a discounted cash flow method, using the effective yield of a similar instrument adjusted for instrument-specific risk factors such as credit spread and contracted features (Level 2).

### Corporate and other debt

Corporate and other debt securities are valued using prices from independent market data providers or third-party broker quotes. Where prices are not available consistently, the last available data is used and verified with a yield-based valuation approach (Level 2). In some instances, interpolated yields of

similar bonds are used to price securities (Level 2). The Bank uses pricing models with observable inputs from market sources such as credit spread, interest rate curves, and recovery rates (Level 2). These inputs are verified through an Independent Pricing Valuation process on a monthly basis. For certain securities where there is no active market, no consensus market pricing and no indicative or executable independent third-party quotes, the Bank uses pricing by third-party providers or internal pricing models and cannot readily observe the market inputs used to price such instruments (Level 3).

#### Mortgage-backed securities

The fair value of residential mortgage-backed securities is primarily determined using third-party broker quotes and independent market data providers, where the market is more active (Level 2). Where the market is inactive, an internal price-based model is used (Level 3).

#### Equity securities

The fair value of equity securities is based on quoted prices in active markets, where available. Where equity securities are less frequently traded, the most recent exchange-quoted pricing is used to determine fair value. Where there is a wide bid-offer spread, fair value is determined based on quoted market prices for similar securities (Level 2).

Where quoted prices in active markets are not readily available, such as for private equity securities, the fair value is determined as a multiple of the underlying earnings or percentage of underlying assets obtained from third-party general partner statements (Level 3).

#### Income funds and hedge funds

The fair value of income funds and hedge funds is based on observable quoted prices where available. Where quoted or active market prices are unavailable, the last available Net Asset Value, fund statements and other financial information available from third-party fund managers at the fund level are used in arriving at the fair value. These inputs are not considered observable because we cannot redeem these funds at Net Asset Value (Level 3).

#### Derivatives

Fair values of exchange-traded derivatives are based on quoted market prices. Fair values of over-the-counter (OTC) derivatives or inactive exchange-traded derivatives are determined using pricing models, which take into account input factors such as current market and contractual prices of the underlying instruments, as well as time value and yield curve or volatility factors underlying the positions (Level 2). The determination of the fair value of derivatives includes consideration of credit risk, estimated funding costs and ongoing direct costs over the life of the instruments.

Derivative products valued using a valuation technique with market-observable inputs mainly include interest rate swaps and options, currency swaps and forward foreign exchange contracts. The most frequently applied valuation techniques include forward pricing and swap models, using present value calculations. The models incorporate various inputs including foreign exchange spot and forward rates and interest rate curves (Level 2).

Derivative products valued using a valuation technique with significant unobservable inputs are long dated contracts (interest rate swaps, currency swaps, forward foreign exchange contracts, option contracts and certain credit default swaps) and other derivative products that reference a basket of assets, commodities or currencies. These models incorporate certain significant non-observable inputs such as volatility and correlation (Level 3).

#### Loans

The estimated fair value of loans carried at amortized cost reflects changes in the general level of interest rates and credit worthiness of borrowers that have occurred since the loans were originated or purchased. The particular valuation methods used are as follows:

- Canadian fixed rate residential mortgages are fair valued by discounting the expected future contractual cash flows, taking into account expected prepayments and using management's best estimate of average market interest rates currently offered for mortgages with similar remaining terms (Level 3).
- For fixed rate business and government loans, fair value is determined by discounting the expected future contractual cash flows of these loans at interest rates estimated by using the appropriate currency swap curves for the remaining term, adjusted for a credit mark of the expected losses in the portfolio (Level 3).
- For all other fixed rate loans, fair value is determined by discounting the expected future contractual cash flows of these loans at interest rates estimated by using the appropriate currency swap curves for the remaining term (Level 3).
- For all floating rate loans fair value is assumed to equal book value.

The fair value of loans is not adjusted for the value of any credit protection the Bank has purchased to mitigate credit risk.

#### Deposits

The fair values of deposits payable on demand or after notice or floating rate deposits payable on a fixed date is assumed to equal book value.

The estimated fair values of Canadian personal fixed rate deposits payable on a fixed date are fair valued by discounting the expected future contractual cash outflows, using management's best estimate of average market interest rates currently offered for deposits with similar remaining terms (Level 2).

Deposits under the Canada Mortgage Bond (CMB) program are fair valued by discounting expected future contractual cash flows using market observable inputs (Level 2).

For all other fixed rate deposits, fair value is determined by discounting the expected future contractual cash flows of these deposits at interest rates estimated by using the appropriate currency swap curves for the remaining term (Level 2).

For structured deposit notes containing embedded features that are bifurcated from the deposit notes, the fair value of the embedded derivatives is determined using option pricing models with inputs similar to other interest rate or equity derivative contracts (Level 2). The fair value of certain embedded derivatives is determined using net asset values (Level 3).

#### Subordinated debentures and other liabilities

The fair values of subordinated debentures, including debentures issued by subsidiaries which are included in other liabilities, are determined by reference to quoted market prices where available or market prices for debt with similar terms and risks (Level 2). The fair values of other liabilities is determined by the discounted contractual cash flow method with appropriate currency swap curves for the remaining term (Level 2).

### Fair value of financial instruments

The following table sets out the fair values of financial instruments of the Bank using the valuation methods and assumptions described above. The fair values disclosed do not include non-financial assets, such as property and equipment, investments in associates, precious metals, goodwill and other intangible assets.

As at October 31 (\$ millions)	2015			2014		
	Total fair value	Total carrying value	Favourable/ (Unfavourable)	Total fair value	Total carrying value	Favourable/ (Unfavourable)
<b>Assets:</b>						
Cash and deposits with financial institutions	\$ 73,927	\$ 73,927	\$ –	\$ 56,730	\$ 56,730	\$ –
Trading assets	99,140	99,140	–	113,248	113,248	–
Financial instruments designated at fair value through profit or loss	320	320	–	111	111	–
Securities purchased under resale agreements and securities borrowed	87,312	87,312	–	93,866	93,866	–
Derivative financial instruments	41,003	41,003	–	33,439	33,439	–
Investment securities	43,281	43,216	65	38,662	38,662	–
Loans	463,047	458,628	4,419	428,616	424,309	4,307
Customers' liability under acceptances	10,296	10,296	–	9,876	9,876	–
Other financial assets	9,024	9,024	–	7,029	7,029	–
<b>Liabilities:</b>						
Deposits	602,606	600,919	(1,687)	555,754	554,017	(1,737)
Financial instruments designated at fair value through profit or loss	1,486	1,486	–	465	465	–
Acceptances	10,296	10,296	–	9,876	9,876	–
Obligations related to securities sold short	20,212	20,212	–	27,050	27,050	–
Derivative financial instruments	45,270	45,270	–	36,438	36,438	–
Obligations related to securities sold under repurchase agreements and securities lent	77,015	77,015	–	88,953	88,953	–
Subordinated debentures	6,234	6,182	(52)	5,073	4,871	(202)
Other financial liabilities	25,778	25,443	(335)	21,668	21,218	(450)

Changes in interest rates, credit spreads and liquidity costs are the main cause of changes in the fair value of the Bank's financial instruments resulting in a favourable or unfavourable variance compared to carrying value. For the Bank's financial instruments carried at cost or amortized cost, the carrying value is not adjusted to reflect increases or decreases in fair value due to market fluctuations, including those due to interest rate changes. For available-for-sale investment securities, derivatives and financial instruments held for trading purposes or designated as fair value through profit and loss, the carrying value is adjusted regularly to reflect the fair value.

**Fair value hierarchy**

The following table outlines the fair value hierarchy of instruments carried at fair value on a recurring basis and of instruments not carried at fair value.

As at October 31, (\$ millions)	2015				2014			
	Level 1	Level 2	Level 3	Total	Level 1	Level 2	Level 3	Total
<b>Instruments carried at fair value on a recurring basis:</b>								
<b>Assets:</b>								
Precious metals <sup>(1)</sup>	\$ –	\$ 10,550	\$ –	\$ 10,550	\$ –	\$ 7,286	\$ –	\$ 7,286
<b>Trading assets</b>								
Loans	–	18,341	–	18,341	–	14,508	–	14,508
Canadian federal government and government guaranteed debt	7,295	–	–	7,295	13,848	–	–	13,848
Canadian provincial and municipal debt	–	5,281	–	5,281	–	7,531	–	7,531
US treasury and other US agencies' debt	5,313	368	–	5,681	9,212	1,764	–	10,976
Other foreign governments' debt	9,512	1,515	–	11,027	8,004	2,230	–	10,234
Corporate and other debt	163	13,162	67	13,392	85	12,453	32	12,570
Income funds and hedge funds	93	1,728	1,218	3,039	144	2,946	1,282	4,372
Equity securities	32,553	107	5	32,665	35,564	217	51	35,832
Other <sup>(2)</sup>	2,419	–	–	2,419	3,377	–	–	3,377
	<b>\$ 57,348</b>	<b>\$ 51,052</b>	<b>\$ 1,290</b>	<b>\$ 109,690</b>	<b>\$ 70,234</b>	<b>\$ 48,935</b>	<b>\$ 1,365</b>	<b>\$ 120,534</b>
<b>Financial instruments designated at fair value through profit or loss</b>								
	\$ 16	\$ 279	\$ 25	\$ 320	\$ –	\$ 90	\$ 21	\$ 111
<b>Investment securities<sup>(3)</sup></b>								
Canadian federal government and government guaranteed debt	\$ 5,752	\$ 1,997	\$ –	\$ 7,749	\$ 5,520	\$ 1,331	\$ –	\$ 6,851
Canadian provincial government and municipal debt	1,085	2,621	–	3,706	803	2,500	–	3,303
US treasury and other US agencies' debt	9,678	150	–	9,828	6,096	130	–	6,226
Other foreign governments' debt	6,003	6,233	447	12,683	5,793	4,779	411	10,983
Bonds of designated emerging markets	–	–	–	–	–	45	–	45
Corporate and other debt	921	4,212	137	5,270	889	5,260	500	6,649
Mortgage-backed securities	97	187	23	307	–	99	39	138
Equity securities	1,665	224	1,133	3,022	3,087	208	1,006	4,301
	<b>\$ 25,201</b>	<b>\$ 15,624</b>	<b>\$ 1,740</b>	<b>\$ 42,565</b>	<b>\$ 22,188</b>	<b>\$ 14,352</b>	<b>\$ 1,956</b>	<b>\$ 38,496</b>
<b>Derivative financial instruments</b>								
Interest rate contracts	\$ –	\$ 14,584	\$ 36	\$ 14,620	\$ –	\$ 12,668	\$ 146	\$ 12,814
Foreign exchange and gold contracts	1	19,741	–	19,742	2	14,996	–	14,998
Equity contracts	173	2,032	102	2,307	237	1,547	573	2,357
Credit contracts	–	850	–	850	–	970	4	974
Commodity contracts	1,656	1,828	–	3,484	875	1,380	41	2,296
	<b>\$ 1,830</b>	<b>\$ 39,035</b>	<b>\$ 138</b>	<b>\$ 41,003</b>	<b>\$ 1,114</b>	<b>\$ 31,561</b>	<b>\$ 764</b>	<b>\$ 33,439</b>
<b>Liabilities:</b>								
Deposits <sup>(4)</sup>	\$ –	\$ 43	\$ 1,192	\$ 1,235	\$ –	\$ 136	\$ 1,011	\$ 1,147
<b>Financial instruments designated at fair value through profit or loss</b>								
Obligations related to securities sold short	\$ –	\$ 1,486	\$ –	\$ 1,486	\$ –	\$ 465	\$ –	\$ 465
	<b>\$ 17,073</b>	<b>\$ 3,139</b>	<b>\$ –</b>	<b>\$ 20,212</b>	<b>\$ 24,025</b>	<b>\$ 3,025</b>	<b>\$ –</b>	<b>\$ 27,050</b>
<b>Derivative financial instruments</b>								
Interest rate contracts	\$ –	\$ 13,443	\$ 81	\$ 13,524	\$ –	\$ 13,003	\$ 52	\$ 13,055
Foreign exchange and gold contracts	3	21,470	–	21,473	3	13,927	–	13,930
Equity contracts	233	2,172	170	2,575	463	1,711	456	2,630
Credit contracts	–	2,542	12	2,554	–	3,947	2	3,949
Commodity contracts	1,201	3,943	–	5,144	579	2,295	–	2,874
	<b>\$ 1,437</b>	<b>\$ 43,570</b>	<b>\$ 263</b>	<b>\$ 45,270</b>	<b>\$ 1,045</b>	<b>\$ 34,883</b>	<b>\$ 510</b>	<b>\$ 36,438</b>
<b>Instruments not carried at fair value<sup>(5)</sup>:</b>								
<b>Assets:</b>								
Investment securities – Held to maturity	\$ 131	\$ 585	\$ –	\$ 716	\$ –	\$ 166	\$ –	\$ 166
Loans <sup>(6)</sup>	–	–	260,583	260,583	–	–	248,177	248,177
<b>Liabilities:</b>								
Deposits <sup>(6)(7)</sup>	–	252,382	–	252,382	–	267,343	–	267,343
Subordinated debt	–	6,234	–	6,234	–	5,073	–	5,073
Other liabilities	–	11,041	–	11,041	–	10,318	–	10,318

(1) The fair value of precious metals is determined based on quoted market prices and forward spot prices.

(2) Consists primarily of base metal positions. The fair value of these positions is determined based on quoted prices in active markets.

(3) Excludes investments which are held-to-maturity of \$716 (2014 – \$166).

(4) These amounts represent embedded derivatives bifurcated from structured deposit notes.

(5) Represents the fair value of financial assets and liabilities where the carrying amount is not a reasonable approximation of fair value.

(6) Excludes floating rate instruments as carrying value approximates fair value.

(7) Excludes embedded derivatives bifurcated from structured deposit notes.

### Non-recurring fair value measurements

There were no non-recurring fair value measurements at October 31, 2015 and October 31, 2014.

### Level 3 instrument fair value changes

Financial instruments categorized as Level 3 in the fair value hierarchy comprise certain illiquid government bonds, highly-structured corporate bonds, mortgage-backed securities, illiquid investments in funds, private equity securities, income funds, hedge funds, complex derivatives, and embedded derivatives in structured deposit notes.

The following tables summarize changes in Level 3 instruments carried at fair value for the year ended October 31, 2015.

All positive balances represent assets and negative balances represent liabilities. Consequently, positive amounts indicate purchases of assets or settlement of liabilities and negative amounts indicate sales of assets or issuances of liabilities.

(\$ millions)	As at October 31, 2015							Change in unrealized gains/(losses) recorded in income for instruments still held <sup>(3)</sup>
	Fair value November 1 2014	Gains/(losses) recorded in income <sup>(1)</sup>	Gains/(losses) recorded in OCI <sup>(2)</sup>	Purchases/ Issuances	Sales/ Settlements	Transfers into/out of Level 3	Fair value October 31 2015	
<b>Trading assets<sup>(4)</sup></b>								
Corporate and other debt	\$ 32	\$ (3)	\$ –	\$ 38	\$ –	\$ –	\$ 67	\$ (3)
Income funds and hedge funds	1,303	193	–	16	(269)	–	1,243	185 <sup>(5)</sup>
Equity securities	51	6	–	–	(52)	–	5	2
	1,386	196	–	54	(321)	–	1,315	184
<b>Investment securities</b>								
Other foreign governments' debt	411	5	25	678	(672)	–	447	–
Corporate and other debt	500	39	(17)	3	(388)	–	137	–
Mortgage-backed securities	39	–	–	–	(16)	–	23	–
Equity securities	1,006	101	82	157	(213)	–	1,133	–
	1,956	145	90	838	(1,289)	–	1,740	–
<b>Derivative financial instruments-assets</b>								
Interest rate contracts	146	1	–	15	(26)	(100)	36	1
Equity contracts	573	71	–	19	(99)	(462)	102	67 <sup>(6)</sup>
Credit contracts	4	(4)	–	–	–	–	–	(4)
Commodity contracts	41	4	–	–	(12)	(33)	–	–
<b>Derivative financial instruments – liabilities</b>								
Interest rate contracts	(52)	–	–	(38)	9	–	(81)	(6)
Equity contracts	(456)	(56)	–	(16)	168	190	(170)	(67) <sup>(6)</sup>
Credit contracts	(2)	(4)	–	(6)	–	–	(12)	(4)
Commodity and other contracts	–	–	–	–	258	(258)	–	–
	254	12	–	(26)	298	(663)	(125)	(13)
<b>Deposits<sup>(7)</sup></b>	(1,011)	(181)	–	–	–	–	(1,192)	(181) <sup>(5)</sup>
<b>Total</b>	<b>2,585</b>	<b>172</b>	<b>90</b>	<b>866</b>	<b>(1,312)</b>	<b>(663)</b>	<b>1,738</b>	<b>(10)</b>

(1) Gains and losses on trading assets and all derivative financial instruments are included in trading revenues in the Consolidated Statement of Income. Gains and losses on disposal of investment securities are included in net gain on sale of investment securities in the Consolidated Statement of Income.

(2) Gains and losses from fair value changes of investment securities are presented in the net change in unrealized gains (losses) on available-for-sale securities in the Consolidated Statement of Comprehensive Income.

(3) These amounts represent the gains and losses from fair value changes of Level 3 instruments still held at the end of the period that are recorded in the Consolidated Statement of Income.

(4) Trading assets include an insignificant amount of financial assets designated at fair value through profit or loss.

(5) The unrealized gain on income fund and hedge fund units is mostly offset by the mark-to-market changes in an equity-linked note and certain other derivative instruments in structured transactions. Both gains and offsetting losses are included in trading revenues in the Consolidated Statement of Income.

(6) Certain unrealized gains and losses on derivative assets and liabilities are largely offset by mark-to-market changes on other instruments included in trading revenues in the Consolidated Statement of Income, since these instruments act as an economic hedge to certain derivative assets and liabilities.

(7) These amounts represent embedded derivatives bifurcated from structured deposit notes.

The following table summarizes the changes in Level 3 instruments carried at fair value for the year ended October 31, 2014.

(\$ millions)	As at October 31, 2014						
	Fair value November 1 2013	Gains/(losses) recorded in income <sup>(1)</sup>	Gains/(losses) recorded in OCI	Purchases/ Issuances	Sales/ Settlements	Transfers into/out of Level 3	Fair value October 31 2014
<b>Trading assets<sup>(2)</sup></b>	\$ 1,400	\$ 107	\$ –	\$ 121	\$ (242)	\$ –	\$ 1,386
<b>Investment securities</b>	2,014	460	(164)	990	(1,344)	–	1,956
<b>Derivative financial instruments</b>	(337)	(41)	–	303	449	(120)	254
<b>Deposits<sup>(3)</sup></b>	(937)	(74)	–	–	–	–	(1,011)

(1) Gains and losses for items in Level 3 may be offset with losses and gains on related hedges in Level 1 or Level 2.

(2) Trading assets include an insignificant amount of financial assets designated at fair value through profit or loss.

(3) These amounts represent embedded derivatives bifurcated from structured deposit notes.

**Significant transfers**

Significant transfers can occur between the fair value hierarchy levels due to additional or new information becoming available on valuation inputs and their observability. The Bank recognizes transfers between levels of the fair value hierarchy as of the end of the reporting period during which the change has occurred. The following significant transfers were made among Levels 1, 2 and 3 for the year ended October 31, 2015:

A net amount of derivative assets of \$595 million was transferred out of Level 3 into Level 2 primarily for equity derivatives. A net amount of derivative liabilities of \$68 million was transferred into Level 3. \$67 million was transferred out of Level 2 and \$1 million was transferred out of Level 1.

The following significant transfers were made among Levels 1, 2 and 3 for the year ended October 31, 2014:

A net amount of derivative assets of \$30 million was transferred out of Level 3 to Level 2, and a net amount of derivative liabilities of \$90 million was transferred into Level 3 from Level 2.

All transfers were as a result of new information being obtained regarding the observability of inputs used in the valuation.

**Level 3 sensitivity analysis**

The fair value of Level 3 instruments is determined using management’s judgments about the appropriate value of unobservable inputs. Due to the unobservable nature of the inputs used, there may be uncertainty about the valuation of Level 3 instruments. Management has used reasonably possible alternative assumptions to determine the sensitivity of these inputs and the resulting potential impact on fair value of these Level 3 instruments as set out in the table below:

	Valuation technique	Significant unobservable inputs	Range of estimates (weighted average) for unobservable inputs <sup>(1)</sup>	Changes in fair value from reasonably possible alternatives (\$ millions)
<b>Trading assets<sup>(2)</sup></b>				
Corporate and other debt	Model based	Default correlation	56% - 84%	–
<b>Investment securities<sup>(2)</sup></b>				
Other foreign governments’ debt	Price based	Price	100%	(2)/–
Corporate and other debt	Price based Model based	Price Default correlation	95% 56% - 84%	(1)/1
Mortgage-backed securities	Price based	Price	95%	(1)/1
<b>Derivative financial instruments</b>				
Interest rate contracts	Option pricing model	Interest rate volatility	7% - 157%	(19)/19
Equity contracts	Option pricing model	Equity volatility Single stock correlation	4% - 98% (77)% - 98%	(5)/5
Credit contracts	Model based	Default correlation	43% - 84%	(1)/1

(1) The range of estimates represents the actual lowest and highest level inputs used to fair value financial instruments within each financial statement category.

(2) The valuation of private equity, hedge fund investments and embedded derivatives, bifurcated from structured notes, utilize net asset values as reported by fund managers. Net asset values are not considered observable as the Bank cannot redeem these instruments at such values. The range for net asset values per unit or price per share has not been disclosed for these instruments since the valuations are not model based.

The Bank applies judgment in determining unobservable inputs used to calculate the fair value of Level 3 instruments.

The following section discusses the significant unobservable inputs for Level 3 instruments.

**Correlation**

Correlation in a credit derivative or debt instrument refers to the likelihood of a single default causing a succession of defaults. It affects the distribution of the defaults throughout the portfolio and therefore affects the valuation of instruments such as collateralized debt obligation tranches. A higher correlation may increase or decrease fair value depending on the seniority of the instrument.

Correlation becomes an input into equity derivative pricing when the relationship between price movements of two or more of the underlying assets is relevant.

**Volatility**

Volatility is a measure of security price fluctuation. Historic volatility is often calculated as the annualized standard deviation of daily price variation for a given time period. Implied volatility is volatility, when input into an option pricing model, that returns a value equal to the current market value of the option.

## 8 Trading assets

### (a) Trading securities

An analysis of the carrying value of trading securities is as follows:

As at October 31, 2015 (\$ millions)	Remaining term to maturity						Carrying value
	Within three months	Three to twelve months	One to five years	Five to ten years	Over ten years	No specific maturity	
<b>Trading securities:</b>							
Canadian federal government and government guaranteed debt	\$ 338	\$ 1,054	\$ 3,154	\$ 991	\$ 1,758	\$ –	\$ 7,295
Canadian provincial and municipal debt	420	594	1,422	1,169	1,676	–	5,281
U.S. treasury and other U.S. agencies' debt	728	455	1,314	1,555	1,629	–	5,681
Other foreign governments' debt	1,902	2,501	3,142	1,631	1,851	–	11,027
Common shares	–	–	–	–	–	35,704	35,704
Other	1,294	2,212	6,137	1,963	1,751	35	13,392
<b>Total</b>	<b>\$ 4,682</b>	<b>\$ 6,816</b>	<b>\$ 15,169</b>	<b>\$ 7,309</b>	<b>\$ 8,665</b>	<b>\$ 35,739</b>	<b>\$ 78,380</b>
<b>Total by currency (in Canadian equivalent):</b>							
Canadian dollar	\$ 1,429	\$ 1,971	\$ 5,457	\$ 2,633	\$ 3,937	\$ 18,992	\$ 34,419
U.S. dollar	1,289	2,348	6,312	2,995	2,906	5,918	21,768
Mexican peso	389	689	959	28	84	680	2,829
Other currencies	1,575	1,808	2,441	1,653	1,738	10,149	19,364
<b>Total trading securities</b>	<b>\$ 4,682</b>	<b>\$ 6,816</b>	<b>\$ 15,169</b>	<b>\$ 7,309</b>	<b>\$ 8,665</b>	<b>\$ 35,739</b>	<b>\$ 78,380</b>

As at October 31, 2014 (\$ millions)	Remaining term to maturity						Carrying value
	Within three months	Three to twelve months	One to five years	Five to ten years	Over ten years	No specific maturity	
<b>Trading securities:</b>							
Canadian federal government and government guaranteed debt	\$ 1,222	\$ 1,115	\$ 5,778	\$ 3,895	\$ 1,838	\$ –	\$ 13,848
Canadian provincial and municipal debt	1,323	1,530	2,161	869	1,648	–	7,531
U.S. treasury and other U.S. agencies' debt	54	365	4,525	2,699	3,333	–	10,976
Other foreign governments' debt	1,809	1,363	3,773	1,483	1,806	–	10,234
Common shares	–	–	–	–	–	40,204	40,204
Other	723	1,605	6,604	1,903	1,735	–	12,570
<b>Total</b>	<b>\$ 5,131</b>	<b>\$ 5,978</b>	<b>\$ 22,841</b>	<b>\$ 10,849</b>	<b>\$ 10,360</b>	<b>\$ 40,204</b>	<b>\$ 95,363</b>
<b>Total by currency (in Canadian equivalent):</b>							
Canadian dollar	\$ 3,012	\$ 2,877	\$ 10,542	\$ 5,481	\$ 5,265	\$ 30,435	\$ 57,612
U.S. dollar	743	1,575	7,710	3,930	3,356	3,013	20,327
Mexican peso	218	216	573	80	60	475	1,622
Other currencies	1,158	1,310	4,016	1,358	1,679	6,281	15,802
<b>Total trading securities</b>	<b>\$ 5,131</b>	<b>\$ 5,978</b>	<b>\$ 22,841</b>	<b>\$ 10,849</b>	<b>\$ 10,360</b>	<b>\$ 40,204</b>	<b>\$ 95,363</b>



**(b) Trading loans**

The following table provides the geographic breakdown of trading loans:

As at October 31 (\$ millions)	2015	2014
<b>Trading loans<sup>(1)(2)</sup></b>		
U.S. <sup>(3)</sup>	<b>\$ 9,990</b>	\$ 8,266
Europe <sup>(4)</sup>	<b>3,525</b>	2,408
Asia Pacific <sup>(4)</sup>	<b>3,657</b>	2,957
Canada <sup>(4)</sup>	<b>394</b>	123
Other <sup>(4)</sup>	<b>775</b>	754
<b>Total</b>	<b>\$ 18,341</b>	\$ 14,508

(1) Geographic segmentation of trading loans is based upon the location of the ultimate risk of the underlying asset.

(2) Loans denominated in U.S. dollars.

(3) Includes trading loans that serve as a hedge to loan-based credit total return swaps of \$7,094 (2014 – \$5,437), while the remaining relates to short-term precious metals trading and lending activities.

(4) These loans are primarily related to short-term precious metals trading and lending activities.

**9 Financial instruments designated at fair value through profit or loss**

In accordance with its risk management strategy, the Bank has elected to designate certain financial instruments at fair value through profit or loss.

These include:

- certain investments, in order to significantly reduce an accounting mismatch between fair value changes in these assets and fair value changes in related derivatives.
- certain deposit note liabilities containing extension and equity linked features, in order to significantly reduce an accounting mismatch between fair value changes in these liabilities and fair value changes in related derivatives.

For assets designated at fair value through profit or loss, changes in fair value are recognized in net income. For liabilities designated at fair value through profit or loss, changes in fair value arising from changes in the Bank's own credit risk are recognized in other comprehensive income, without subsequent reclassification to net income, unless doing so would create or increase an accounting mismatch. All other changes in fair value are recognized in net income.

For deposit note liabilities designated at fair value through profit or loss, presenting changes in fair value due to changes in the Bank's own credit risk in other comprehensive income would not create or increase an accounting mismatch in net income since the Bank does not currently hedge its own credit risk.

The cumulative fair value adjustment due to own credit risk is determined at a point in time by comparing the present value of expected future cash flows over the term of these liabilities discounted at the Bank's effective funding rate, and the present value of expected future cash flows discounted under a benchmark rate. The change in fair value attributable to change in credit risk is determined by the change in the cumulative fair value adjustment due to own credit risk.

The following table presents the fair value of financial assets and liabilities designated at fair value through profit or loss and their changes in fair value.

October 31 (\$ millions)	Fair value		Change in fair value		Cumulative change in FV <sup>(1)</sup>	
	As at		For the year ended			
	2015	2014	2015	2014	2015	2014
Investment securities <sup>(2)</sup>	<b>\$ 107</b>	\$ 111	<b>\$(1)</b>	\$ –	<b>\$ 12</b>	\$ 13
Loans <sup>(2)</sup>	<b>213</b>	–	<b>18</b>	–	<b>18</b>	–
Deposit note liabilities <sup>(3)</sup>	<b>1,486</b>	465	<b>106</b>	16	<b>124</b>	18

(1) The cumulative change in fair value is measured from the instruments' date of initial recognition.

(2) Changes in fair value are recorded in non-interest income – other.

(3) Changes in fair value attributable to changes in the Bank's own credit risk are recorded in other comprehensive income. Other changes in fair value are recorded in non-interest income – other.

The following tables present the changes in fair value attributable to changes in the Bank's own credit risk for financial liabilities designated at fair value through profit or loss as well as their contractual maturity and carrying amounts.

	Term deposits				
	Contractual maturity amount <sup>(1)</sup>	Carrying Value	Difference between carrying value and contractual maturity amount	Changes in fair value for the period attributable to changes in own credit risk recorded in other comprehensive income	Cumulative changes in fair value attributable to changes in own credit risk <sup>(1)</sup>
				2015	
<b>As at October 31, 2015</b>	<b>\$1,610</b>	<b>\$1,486</b>	<b>\$124</b>	<b>\$ 20</b>	<b>\$15</b>
As at October 31, 2014	\$ 483	\$ 465	\$ 18	\$n/a	\$ (5)

(1) The cumulative change in fair value is measured from the instruments' date of initial recognition.



## 10 Derivative financial instruments

### (a) Notional amounts

The following table provides the aggregate notional amounts of derivative financial instruments outstanding by type and segregated between those used by the Bank in its dealer capacity (Trading) and those derivatives designated in hedging relationships. The notional amounts of these contracts represent the derivatives volume outstanding and do not represent the potential gain or loss associated with the market risk or credit risk of such instruments. The notional amounts represent the amount to which a rate or price is applied to determine the amount of cash flows to be exchanged. Credit derivatives within other derivative contracts are comprised primarily of purchased and sold credit default swap transactions. To a lesser extent, this category also includes total return swaps referenced to loans and debt securities. Other derivative contracts – other includes precious metals other than gold, and other commodities including energy and base metal derivatives.

As at October 31 (\$ millions)	2015			2014		
	Trading	Hedging	Total	Trading	Hedging	Total
<b>Interest rate contracts</b>						
Exchange-traded:						
Futures	\$ 140,240	\$ –	\$ 140,240	\$ 206,138	\$ –	\$ 206,138
Options purchased	29,670	–	29,670	31,294	–	31,294
Options written	28,755	–	28,755	31,953	–	31,953
	<b>198,665</b>	<b>–</b>	<b>198,665</b>	<b>269,385</b>	<b>–</b>	<b>269,385</b>
Over-the-counter:						
Forward rate agreements	4,613	–	4,613	32,582	–	32,582
Swaps	582,414	31,280	613,694	605,342	47,291	652,633
Options purchased	31,734	–	31,734	16,622	–	16,622
Options written	32,900	–	32,900	18,757	–	18,757
	<b>651,661</b>	<b>31,280</b>	<b>682,941</b>	<b>673,303</b>	<b>47,291</b>	<b>720,594</b>
Over-the-counter (settled through central counterparties):						
Forward rate agreements	852,416	–	852,416	567,049	–	567,049
Swaps	2,136,724	64,994	2,201,718	2,394,336	46,129	2,440,465
Options purchased	–	–	–	–	–	–
Options written	–	–	–	–	–	–
	<b>2,989,140</b>	<b>64,994</b>	<b>3,054,134</b>	<b>2,961,385</b>	<b>46,129</b>	<b>3,007,514</b>
<b>Total</b>	<b>\$ 3,839,466</b>	<b>\$ 96,274</b>	<b>\$ 3,935,740</b>	<b>\$ 3,904,073</b>	<b>\$ 93,420</b>	<b>\$ 3,997,493</b>
<b>Foreign exchange and gold contracts</b>						
Exchange-traded:						
Futures	\$ 6,626	\$ –	\$ 6,626	\$ 4,666	\$ –	\$ 4,666
Options purchased	251	–	251	64	–	64
Options written	–	–	–	–	–	–
	<b>6,877</b>	<b>–</b>	<b>6,877</b>	<b>4,730</b>	<b>–</b>	<b>4,730</b>
Over-the-counter:						
Spot and forwards	431,211	20,419	451,630	430,878	13,422	444,300
Swaps	296,670	41,658	338,328	235,281	30,705	265,986
Options purchased	5,382	–	5,382	3,083	–	3,083
Options written	4,884	–	4,884	2,308	–	2,308
	<b>738,147</b>	<b>62,077</b>	<b>800,224</b>	<b>671,550</b>	<b>44,127</b>	<b>715,677</b>
Over-the-counter (settled through central counterparties):						
Spot and forwards	–	–	–	11	–	11
Swaps	–	–	–	–	–	–
Options purchased	–	–	–	–	–	–
Options written	–	–	–	334	–	334
	<b>–</b>	<b>–</b>	<b>–</b>	<b>345</b>	<b>–</b>	<b>345</b>
<b>Total</b>	<b>\$ 745,024</b>	<b>\$ 62,077</b>	<b>\$ 807,101</b>	<b>\$ 676,625</b>	<b>\$ 44,127</b>	<b>\$ 720,752</b>
<b>Other derivative contracts</b>						
Exchange-traded:						
Equity: over-the-counter	\$ 13,594	\$ –	\$ 13,594	\$ 15,986	\$ –	\$ 15,986
Credit: over-the-counter	–	–	–	–	–	–
Commodity and other contracts	106,181	–	106,181	82,512	–	82,512
	<b>119,775</b>	<b>–</b>	<b>119,775</b>	<b>98,498</b>	<b>–</b>	<b>98,498</b>
Over-the-counter:						
Equity: over-the-counter	47,152	605	47,757	49,887	–	49,887
Credit: over-the-counter	54,020	–	54,020	54,647	–	54,647
Commodity and other contracts	43,524	–	43,524	44,017	–	44,017
	<b>144,696</b>	<b>605</b>	<b>145,301</b>	<b>148,551</b>	<b>–</b>	<b>148,551</b>
Over-the-counter (settled through central counterparties):						
Equity: over-the-counter	1,198	–	1,198	735	–	735
Credit: over-the-counter	9,913	–	9,913	3,276	–	3,276
Commodity and other contracts	101	–	101	512	–	512
	<b>11,212</b>	<b>–</b>	<b>11,212</b>	<b>4,523</b>	<b>–</b>	<b>4,523</b>
<b>Total</b>	<b>\$ 275,683</b>	<b>\$ 605</b>	<b>\$ 276,288</b>	<b>\$ 251,572</b>	<b>\$ –</b>	<b>\$ 251,572</b>
<b>Total notional amounts outstanding</b>	<b>\$ 4,860,173</b>	<b>\$ 158,956</b>	<b>\$ 5,019,129</b>	<b>\$ 4,832,270</b>	<b>\$ 137,547</b>	<b>\$ 4,969,817</b>

**(b) Remaining term to maturity**

The following table summarizes the remaining term to maturity of the notional amounts of the Bank's derivative financial instruments by type:

As at October 31, 2015 (\$ millions)	Within one year	One to five years	Over five years	Total
<b>Interest rate contracts</b>				
Futures	\$ 140,106	\$ 133	\$ 1	\$ 140,240
Forward rate agreements	735,756	121,273	–	857,029
Swaps	945,149	1,264,240	606,023	2,815,412
Options purchased	32,246	22,636	6,522	61,404
Options written	31,630	23,269	6,756	61,655
	<b>1,884,887</b>	<b>1,431,551</b>	<b>619,302</b>	<b>3,935,740</b>
<b>Foreign exchange and gold contracts</b>				
Futures	1,535	5,091	–	6,626
Spot and forwards	420,551	30,622	457	451,630
Swaps	69,370	187,566	81,392	338,328
Options purchased	3,657	1,926	50	5,633
Options written	3,638	1,198	48	4,884
	<b>498,751</b>	<b>226,403</b>	<b>81,947</b>	<b>807,101</b>
<b>Other derivative contracts</b>				
Equity	34,689	26,792	1,068	62,549
Credit	22,747	37,526	3,660	63,933
Commodity and other contracts	89,482	60,324	–	149,806
	<b>146,918</b>	<b>124,642</b>	<b>4,728</b>	<b>276,288</b>
<b>Total</b>	<b>\$ 2,530,556</b>	<b>\$ 1,782,596</b>	<b>\$ 705,977</b>	<b>\$ 5,019,129</b>

As at October 31, 2014 (\$ millions)	Within one year	One to five years	Over five years	Total
<b>Interest rate contracts</b>				
Futures	\$ 205,986	\$ 71	\$ 81	\$ 206,138
Forward rate agreements	423,781	175,099	751	599,631
Swaps	1,189,834	1,378,480	524,784	3,093,098
Options purchased	43,987	–	3,929	47,916
Options written	46,033	–	4,677	50,710
	<b>1,909,621</b>	<b>1,553,650</b>	<b>534,222</b>	<b>3,997,493</b>
<b>Foreign exchange and gold contracts</b>				
Futures	4,421	245	–	4,666
Spot and forwards	397,044	46,484	783	444,311
Swaps	46,395	148,764	70,827	265,986
Options purchased	2,420	727	–	3,147
Options written	2,317	325	–	2,642
	<b>452,597</b>	<b>196,545</b>	<b>71,610</b>	<b>720,752</b>
<b>Other derivative contracts</b>				
Equity	40,211	25,595	802	66,608
Credit	17,729	37,676	2,518	57,923
Commodity and other contracts	81,465	45,099	477	127,041
	<b>139,405</b>	<b>108,370</b>	<b>3,797</b>	<b>251,572</b>
<b>Total</b>	<b>\$ 2,501,623</b>	<b>\$ 1,858,565</b>	<b>\$ 609,629</b>	<b>\$ 4,969,817</b>

**(c) Credit risk**

As with other financial assets, derivative instruments are subject to credit risk. Credit risk arises from the possibility that counterparties may default on their obligations to the Bank. However, whereas the credit risk of other financial assets is represented by the principal amount net of any applicable allowance for credit losses, the credit risk associated with derivatives is normally a small fraction of the notional amount of the derivative instrument.

Derivative contracts generally expose the Bank to credit loss if changes in market rates affect a counterparty's position unfavourably and the counterparty defaults on payment. Accordingly, exposure to credit risk of derivatives is represented by the positive fair value of the instrument.

Negotiated over-the-counter derivatives often present greater credit exposure than exchange-traded contracts. The net change in the exchange-traded contracts is normally settled daily in cash with the exchange. Holders of these contracts look to the exchange for performance under the contract.

The Bank strives to limit credit risk by dealing with counterparties that it believes are creditworthy, and investment grade counterparties account for a significant portion of the credit risk exposure arising from the Bank's derivative transactions as at October 31, 2015. To control credit risk associated with derivatives, the Bank uses the same credit risk management activities and procedures that are used in the lending business in assessing and adjudicating potential credit exposure. The Bank applies limits to each counterparty, measures exposure as the current positive fair value plus potential future exposure, and uses credit mitigation techniques, such as netting and collateralization.

The Bank obtains the benefit of netting by entering into master netting arrangements with counterparties (typically industry standard International Swaps and Derivatives Association (ISDA) agreements), which allow for a single net settlement of all transactions covered by that agreement in the event of a default or early termination of the transactions. In this manner, the credit risk associated with favourable contracts is eliminated by the master netting arrangement to the extent that unfavourable contracts with the same counterparty are not settled before favourable contracts.

Collateralization is typically documented by way of an ISDA Credit Support Annex (CSA), the terms of which may vary according to each party's view of the other party's creditworthiness. CSAs can require one party to post initial margin at the onset of each transaction. CSAs also allow for variation margin to be called if total uncollateralized mark-to-market exposure exceeds an agreed upon threshold. Such variation margin provisions can be one way (only one party will ever post collateral) or bi-lateral (either party may post collateral depending upon which party is in-the-money). The CSA will also detail the types of collateral that are acceptable to each party, and the adjustments that will be applied against each collateral type. The terms of the ISDA master netting agreements and CSAs are taken into consideration in the calculation of counterparty credit risk exposure (see also page 76 of the 2015 Annual Report).

Derivatives instruments used by the Bank include credit derivatives in its investment and loan portfolios: credit protection is sold as an alternative to acquiring exposure to bond or loan assets, while credit protection is bought to manage or mitigate credit exposures.

The following table summarizes the credit exposure of the Bank's derivative financial instruments. The credit risk amount (CRA) represents the estimated replacement cost, or positive fair value, for all contracts taking into account master netting or collateral arrangements that have been made. The CRA does not reflect actual or expected losses.

The credit equivalent amount (CEA) is the CRA plus an add-on for potential future exposure. The add-on amount is based on a formula prescribed in the Capital Adequacy Requirements (CAR) Guideline of the Superintendent. The risk-weighted balance is calculated by multiplying the CEA by the capital requirement (K) times 12.5, where K is a function of the probability of default (PD), loss given default (LGD), maturity and prescribed correlation factors. Other derivative contracts – other includes precious metals other than gold, and other commodities, including energy and base metal derivatives.

As at October 31 (\$ millions)	2015				2014			
	Notional amount	Credit risk amount (CRA) <sup>(1)</sup>	Credit equivalent amount (CEA) <sup>(1)</sup>	CET1 Risk Weighted Assets <sup>(2)</sup>	Notional amount	Credit risk amount (CRA) <sup>(1)</sup>	Credit equivalent amount (CEA) <sup>(1)</sup>	Risk Weighted Assets <sup>(1)</sup>
<b>Interest rate contracts</b>								
Futures	\$ 140,240	\$ –	\$ 3	\$ –	\$ 206,138	\$ –	\$ 1,030	\$ 21
Forward rate agreements	857,029	250	525	45	599,631	106	459	23
Swaps	2,815,412	2,222	10,416	1,871	3,093,098	1,858	9,053	1,475
Options purchased	61,404	–	149	138	47,916	18	106	125
Options written	61,655	–	–	–	50,710	–	–	–
	<b>3,935,740</b>	<b>2,472</b>	<b>11,093</b>	<b>2,054</b>	<b>3,997,493</b>	<b>1,982</b>	<b>10,648</b>	<b>1,644</b>
<b>Foreign exchange and gold contracts</b>								
Futures	6,626	–	249	5	4,666	–	232	5
Spot and forwards	451,630	2,328	6,742	1,860	444,311	2,451	6,303	1,565
Swaps	338,328	1,759	8,592	2,214	265,986	1,495	6,190	1,426
Options purchased	5,633	199	328	98	3,147	19	69	19
Options written	4,884	–	–	–	2,642	–	–	–
	<b>807,101</b>	<b>4,286</b>	<b>15,911</b>	<b>4,177</b>	<b>720,752</b>	<b>3,965</b>	<b>12,794</b>	<b>3,015</b>
<b>Other derivative contracts</b>								
Equity	62,549	1,228	6,534	2,049	66,608	860	5,726	2,260
Credit	63,933	261	2,643	608	57,923	548	1,405	374
Commodity and other contracts	149,806	2,288	11,347	1,945	127,041	1,582	11,863	1,702
	<b>276,288</b>	<b>3,777</b>	<b>20,524</b>	<b>4,602</b>	<b>251,572</b>	<b>2,990</b>	<b>18,994</b>	<b>4,336</b>
Credit Valuation Adjustment <sup>(2)</sup>	–	–	–	7,183	–	–	–	5,632
<b>Total derivatives</b>	<b>\$ 5,019,129</b>	<b>\$ 10,535</b>	<b>\$ 47,528</b>	<b>\$ 18,016</b>	<b>\$ 4,969,817</b>	<b>\$ 8,937</b>	<b>\$ 42,436</b>	<b>\$ 14,627</b>
<b>Amount settled through central counterparties<sup>(3)</sup></b>								
Exchange-traded	325,317	–	8,172	163	372,613	–	9,247	185
Over-the-counter	3,065,346	–	6,331	127	3,012,382	–	6,072	121
	<b>\$ 3,390,663</b>	<b>\$ –</b>	<b>\$ 14,503</b>	<b>\$ 290</b>	<b>\$ 3,384,995</b>	<b>\$ –</b>	<b>\$ 15,319</b>	<b>\$ 306</b>

(1) The amounts presented are net of collateral and master netting agreements at the product level. The total amounts relating to netting and collateral were \$30,467 (2014 – \$24,502) for CRA, and \$50,078 (2014 – \$39,276) for CEA.

(2) As per OSFI guideline, effective 2014, Credit Valuation Adjustment (CVA) to CET1 RWA for derivatives was phased-in at 0.57. In 2015, the CVA was 0.64.

(3) Amounts are included under total derivatives above. Amounts include exposures settled directly through central counterparties and exposures settled through clearing members of central counterparties.

**(d) Fair value**

The following table summarizes the fair value of derivatives segregated by type and segregated between trading and those derivatives designated in hedging relationships.

As at October 31 (\$ millions)	2015		2015		2014	
	Average fair value		Year-end fair value		Year-end fair value <sup>(1)</sup>	
	Favourable	Unfavourable	Favourable	Unfavourable	Favourable	Unfavourable
<b>Trading</b>						
<b>Interest rate contracts</b>						
Forward rate agreements	\$ 166	\$ 3	\$ 250	\$ 3	\$ 113	\$ 4
Swaps	14,008	13,406	12,871	12,770	11,908	12,374
Options	135	159	107	104	119	152
	<b>14,309</b>	<b>13,568</b>	<b>13,228</b>	<b>12,877</b>	12,140	12,530
<b>Foreign exchange and gold contracts</b>						
Forwards	7,891	6,696	5,358	5,192	7,573	6,423
Swaps	9,679	11,772	10,694	13,517	6,055	6,534
Options	185	122	227	131	50	53
	<b>17,755</b>	<b>18,590</b>	<b>16,279</b>	<b>18,840</b>	13,678	13,010
<b>Other derivative contracts</b>						
Equity	2,716	2,379	2,276	2,574	2,346	2,631
Credit	654	3,350	841	2,554	910	3,948
Commodity and other contracts	3,516	5,132	3,507	5,143	2,327	2,873
	<b>6,886</b>	<b>10,861</b>	<b>6,624</b>	<b>10,271</b>	5,583	9,452
Trading derivatives' market valuation	<b>\$ 38,950</b>	<b>\$ 43,019</b>	<b>\$ 36,131</b>	<b>\$ 41,988</b>	\$ 31,401	\$ 34,992
<b>Hedging</b>						
<b>Interest rate contracts</b>						
Swaps			\$ 1,316	\$ 679	\$ 696	\$ 494
<b>Foreign exchange and gold contracts</b>						
Forwards			301	578	77	273
Swaps			3,223	2,025	1,265	679
			<b>\$ 3,524</b>	<b>\$ 2,603</b>	\$ 1,342	\$ 952
<b>Other derivative contracts</b>						
Equity			\$ 32	\$ -	\$ -	\$ -
Hedging derivatives' market valuation			<b>\$ 4,872</b>	<b>\$ 3,282</b>	\$ 2,038	\$ 1,446
Total derivative financial instruments as per Statement of Financial Position			<b>\$ 41,003</b>	<b>\$ 45,270</b>	\$ 33,439	\$ 36,438
Less: impact of master netting and collateral <sup>(2)</sup>			<b>30,468</b>	<b>30,468</b>	24,502	24,502
Net derivative financial instruments <sup>(2)</sup>			<b>\$ 10,535</b>	<b>\$ 14,802</b>	\$ 8,937	\$ 11,936

(1) The average fair value of trading derivatives' market valuation for the year ended October 31, 2014 was: favourable \$25,829 and unfavourable \$29,502. Average fair value amounts are based on the latest 13 month-end balances.

(2) Master netting agreement amounts are based on the capital adequacy criteria of the Basel Committee on Banking Supervision (BCBS) and OSFI. These criteria allow netting where there are legally enforceable contracts which enable net settlement in the event of a default, bankruptcy, liquidation or similar circumstances.

**(e) Hedging activities**

The Bank's hedging activities that qualify for hedge accounting consist of fair value hedges, cash flow hedges, and net investment hedges.

**Ineffectiveness of hedge relationships**

Due to the ineffective portion of designated hedges, the Bank recorded the following amounts in non-interest income – other:

For the year ended October 31 (\$ millions)	2015	2014
<b>Fair value hedges</b>		
Gain (loss) recorded on hedged items	\$ (220)	\$ 55
Gain (loss) recorded on hedging instruments	198	(74)
Ineffectiveness	<b>\$ (22)</b>	\$ (19)
<b>Cash flow hedges</b>		
Ineffectiveness	<b>\$ (27)</b>	\$ (2)

**Hedging instruments**

Market valuation is disclosed by the type of relationship:

As at October 31 (\$ millions)	2015		2014	
	Favourable	Unfavourable	Favourable	Unfavourable
Derivatives designated in fair value hedging relationships <sup>(1)</sup>	\$ 1,557	\$ 715	\$ 791	\$ 566
Derivatives designated in cash flow hedging relationships	3,205	2,055	1,183	632
Derivatives designated in net investment hedging relationships <sup>(1)</sup>	110	512	64	248
Total derivatives designated in hedging relationships	<b>\$ 4,872</b>	<b>\$ 3,282</b>	\$ 2,038	\$ 1,446

(1) As at October 31, 2015, the fair value of non-derivative instruments designated as net investment hedges and fair value hedges was \$7,428 (2014 – \$6,666). These non-derivative hedging instruments are presented as deposits – financial institutions on the Consolidated Statement of Financial Position.

## Cash flow hedges

The period when cash flows of designated hedged items are expected to occur and impact the Consolidated Statement of Income are as follows:

As at October 31, 2015 (\$ millions)	Within one year	Within one to five years	More than five years
Cash inflows from assets	\$ 1,431	\$ 9,543	\$ 3,801
Cash outflows from liabilities	(14,803)	(18,172)	(3,296)
Net cash flows	\$ (13,372)	\$ (8,629)	\$ 505

  

As at October 31, 2014 (\$ millions)	Within one year	Within one to five years	More than five years
Cash inflows from assets	\$ 619	\$ 665	\$ 2,363
Cash outflows from liabilities	(5,992)	(11,515)	(2,287)
Net cash flows	\$ (5,373)	\$ (10,850)	\$ 76

Income related to interest cash flows is recognized using the effective interest method over the life of the underlying instrument. Foreign currency gains and losses related to future cash flows of on-balance sheet monetary items are recognized as incurred. Forecasted revenue is recognized over the period to which it relates.

## 11 Offsetting financial assets and financial liabilities

The Bank is eligible to present certain financial assets and financial liabilities as listed in the table below on a net basis on the Consolidated Statement of Financial Position pursuant to criteria described in Note 3 – Significant accounting policies.

The following tables provide information on the impact of offsetting on the Bank's Consolidated Statement of Financial Position, as well as the financial impact of netting for instruments that are subject to enforceable master netting arrangements or similar agreements, but do not qualify for offsetting in the Consolidated Statement of Financial Position, as well as available cash and financial instrument collateral.

Types of financial assets	Gross amounts of recognized financial assets	Gross amounts of recognized financial liabilities offset in the consolidated statement of financial position	Net amounts of financial assets presented in the consolidated statement of financial position	Related amounts not offset in the consolidated statement of financial position		
				Impact of master netting arrangements or similar agreements <sup>(1)</sup>	Collateral <sup>(2)</sup>	Net amount <sup>(3)</sup>
Derivative financial instruments <sup>(4)</sup>	\$ 65,026	\$ (24,023)	\$ 41,003	\$ (22,357)	\$ (8,451)	\$ 10,195
Securities purchased under resale agreements and securities borrowed	95,757	(8,445)	87,312	(8,107)	(74,308)	4,897
Total	\$ 160,783	\$ (32,468)	\$ 128,315	\$ (30,464)	\$ (82,759)	\$ 15,092

Types of financial liabilities	Gross amounts of recognized financial liabilities	Gross amounts of recognized financial assets offset in the consolidated statement of financial position	Net amounts of financial liabilities presented in the consolidated statement of financial position	Related amounts not offset in the consolidated statement of financial position		
				Impact of master netting arrangements or similar agreements <sup>(1)</sup>	Collateral <sup>(2)</sup>	Net amount <sup>(3)</sup>
Derivative financial instruments <sup>(4)</sup>	\$ 69,293	\$ (24,023)	\$ 45,270	\$ (22,357)	\$ (8,560)	\$ 14,353
Obligations related to securities sold under repurchase agreements and securities lent	85,460	(8,445)	77,015	(8,107)	(58,090)	10,818
Total	\$ 154,753	\$ (32,468)	\$ 122,285	\$ (30,464)	\$ (66,650)	\$ 25,171

- (1) Amounts that are subject to master netting arrangements or similar agreements but were not offset in the Consolidated Statement of Financial Position because they did not meet the net settlement/simultaneous settlement criteria; or because the rights of set off are conditional upon the default of the counterparty only.
- (2) Cash and financial instrument collateral amounts received or pledged in relation to the total amounts of financial assets and financial liabilities, including those that were not offset in the Consolidated Statement of Financial Position. These amounts are disclosed at fair value and the rights of set off are conditional upon the default of the counterparty.
- (3) Not intended to represent the Bank's actual exposure to credit risk, as a variety of credit mitigation strategies are employed in addition to offsetting and collateral arrangements.
- (4) For fiscal 2015, the cash collateral received against the positive market values of derivative financial instruments of \$1,173 and the cash collateral pledged towards the negative mark to market of derivative financial instruments of \$675 are recorded within other liabilities and other assets respectively.

## CONSOLIDATED FINANCIAL STATEMENTS

As at October 31, 2014 (\$ millions)

Types of financial assets	Gross amounts of recognized financial assets	Gross amounts of recognized financial liabilities offset in the consolidated statement of financial position	Net amounts of financial assets presented in the consolidated statement of financial position	Related amounts not offset in the consolidated statement of financial position		
				Impact of master netting arrangements or similar agreements <sup>(1)</sup>	Collateral <sup>(2)</sup>	Net amount <sup>(3)</sup>
Derivative financial instruments <sup>(4)</sup>	\$ 47,036	\$ (13,597)	\$ 33,439	\$ (19,878)	\$ (4,849)	\$ 8,712
Securities purchased under resale agreements and securities borrowed	102,569	(8,703)	93,866	(13,183)	(75,697)	4,986
<b>Total</b>	<b>\$ 149,605</b>	<b>\$ (22,300)</b>	<b>\$ 127,305</b>	<b>\$ (33,061)</b>	<b>\$ (80,546)</b>	<b>\$ 13,698</b>

As at October 31, 2014 (\$ millions)

Types of financial liabilities	Gross amounts of recognized financial liabilities	Gross amounts of recognized financial assets offset in the consolidated statement of financial position	Net amounts of financial liabilities presented in the consolidated statement of financial position	Related amounts not offset in the consolidated statement of financial position		
				Impact of master netting arrangements or similar agreements <sup>(1)</sup>	Collateral <sup>(2)</sup>	Net amount <sup>(3)</sup>
Derivative financial instruments <sup>(4)</sup>	\$ 50,035	\$ (13,597)	\$ 36,438	\$ (19,878)	\$ (3,557)	\$ 13,003
Obligations related to securities sold under repurchase agreements and securities lent	97,656	(8,703)	88,953	(13,183)	(68,168)	7,602
<b>Total</b>	<b>\$ 147,691</b>	<b>\$ (22,300)</b>	<b>\$ 125,391</b>	<b>\$ (33,061)</b>	<b>\$ (71,725)</b>	<b>\$ 20,605</b>

- (1) Amounts that are subject to master netting arrangements or similar agreements but were not offset in the Consolidated Statement of Financial Position because they did not meet the net settlement/simultaneous settlement criteria; or because the rights of set off are conditional upon the default of the counterparty only.
- (2) Cash and financial instrument collateral amounts received or pledged in relation to the total amounts of financial assets and financial liabilities, including those that were not offset in the Consolidated Statement of Financial Position. These amounts are disclosed at fair value and the rights of set off are conditional upon the default of the counterparty.
- (3) Not intended to represent the Bank's actual exposure to credit risk, as a variety of credit mitigation strategies are employed in addition to offsetting and collateral arrangements.
- (4) For fiscal 2014, the cash collateral received against the positive market values of derivative financial instruments of \$1,268 and the cash collateral pledged towards the negative mark to market of derivative financial instruments of \$493 are recorded within other liabilities and other assets, respectively.

## 12 Investment securities

Investment securities includes held-to-maturity securities and available-for-sale securities.

(a) An analysis of the carrying value of investment securities is as follows:

As at October 31, 2015 (\$ millions)	Remaining term to maturity						Carrying value
	Within three months	Three to twelve months	One to five years	Five to ten years	Over ten years	No specific maturity	
<b>Available-for-sale</b>							
Canadian federal government issued or guaranteed debt	\$ 2	\$ 199	\$ 5,105	\$ 1,279	\$ 1,164	\$ -	\$ 7,749
Yield <sup>(1)</sup> %	0.6	1.0	1.3	2.2	3.1	-	1.7
Canadian provincial and municipal debt	12	1,034	2,482	166	12	-	3,706
Yield <sup>(1)</sup> %	0.1	1.3	1.3	2.3	2.9	-	1.3
U.S. treasury and other U.S. agency debt	373	1,118	8,197	140	-	-	9,828
Yield <sup>(1)</sup> %	0.2	0.3	1.1	1.6	-	-	1.0
Other foreign government debt	2,274	4,838	4,323	1,053	195	-	12,683
Yield <sup>(1)</sup> %	2.4	2.0	3.3	4.3	5.4	-	2.8
Bonds of designated emerging markets	-	-	-	-	-	-	-
Yield <sup>(1)</sup> %	-	-	-	-	-	-	-
Other debt	846	947	3,503	67	214	-	5,577
Yield <sup>(1)</sup> %	1.2	0.7	1.5	1.7	2.3	-	1.4
Preferred shares	-	-	-	-	-	255	255
Common shares	-	-	-	-	-	2,767	2,767
<b>Total available-for-sale securities</b>	<b>3,507</b>	<b>8,136</b>	<b>23,610</b>	<b>2,705</b>	<b>1,585</b>	<b>3,022</b>	<b>42,565</b>
<b>Held-to-maturity</b>							
Canadian provincial and municipal debt	-	-	74	-	-	-	74
Other foreign government debt	-	69	268	8	-	-	345
Other debt	-	-	232	-	-	-	232
<b>Total held-to-maturity assets</b>	<b>-</b>	<b>69</b>	<b>574</b>	<b>8</b>	<b>-</b>	<b>-</b>	<b>651</b>
<b>Total investment securities</b>	<b>\$ 3,507</b>	<b>\$ 8,205</b>	<b>\$ 24,184</b>	<b>\$ 2,713</b>	<b>\$ 1,585</b>	<b>\$ 3,022</b>	<b>\$ 43,216</b>
<b>Total by currency (in Canadian equivalent):</b>							
Canadian dollar	\$ 5	\$ 761	\$ 5,899	\$ 1,359	\$ 1,207	\$ 956	\$ 10,187
U.S. dollar	674	2,033	13,796	498	193	1,536	18,730
Mexican peso	161	997	1,259	120	83	40	2,660
Other currencies	2,667	4,414	3,230	736	102	490	11,639
<b>Total investment securities</b>	<b>\$ 3,507</b>	<b>\$ 8,205</b>	<b>\$ 24,184</b>	<b>\$ 2,713</b>	<b>\$ 1,585</b>	<b>\$ 3,022</b>	<b>\$ 43,216</b>

(1) Represents the weighted-average yield of fixed income securities.

As at October 31, 2014 (\$ millions)	Remaining term to maturity						Carrying value
	Within three months	Three to twelve months	One to five years	Five to ten years	Over ten years	No specific maturity	
<b>Available-for-sale</b>							
Canadian federal government issued or guaranteed debt	\$ 11	\$ 237	\$ 4,205	\$ 1,310	\$ 1,088	\$ –	\$ 6,851
Yield <sup>(1)</sup> %	1.0	2.8	1.7	2.5	1.5	–	1.8
Canadian provincial and municipal debt	–	202	2,614	480	7	–	3,303
Yield <sup>(1)</sup> %	–	1.7	1.5	1.8	3.2	–	1.5
U.S. treasury and other U.S. agency debt	321	637	5,261	–	7	–	6,226
Yield <sup>(1)</sup> %	–	–	0.6	–	0.3	–	0.5
Other foreign government debt	2,179	3,784	3,905	661	454	–	10,983
Yield <sup>(1)</sup> %	2.0	2.2	3.5	6.1	6.3	–	3.0
Bonds of designated emerging markets	7	–	11	27	–	–	45
Yield <sup>(1)</sup> %	10.7	–	12.4	4.4	–	–	7.8
Other debt	1,003	1,406	3,734	497	147	–	6,787
Yield <sup>(1)</sup> %	3.0	1.9	1.5	1.2	2.5	–	1.8
Preferred shares	–	–	–	–	–	368	368
Common shares	–	–	–	–	–	3,933	3,933
<b>Total available-for-sale securities</b>	<b>3,521</b>	<b>6,266</b>	<b>19,730</b>	<b>2,975</b>	<b>1,703</b>	<b>4,301</b>	<b>38,496</b>
<b>Held-to-maturity</b>							
Other foreign government debt	–	–	146	20	–	–	166
<b>Total investment securities</b>	<b>\$ 3,521</b>	<b>\$ 6,266</b>	<b>\$ 19,876</b>	<b>\$ 2,995</b>	<b>\$ 1,703</b>	<b>\$ 4,301</b>	<b>\$ 38,662</b>
<b>Total by currency (in Canadian equivalent):</b>							
Canadian dollar	\$ 13	\$ 263	\$ 6,249	\$ 1,352	\$ 1,110	\$ 1,938	\$ 10,925
U.S. dollar	549	1,681	7,781	267	150	1,736	12,164
Mexican peso	332	92	2,170	126	85	44	2,849
Other currencies	2,627	4,230	3,676	1,250	358	583	12,724
<b>Total investment securities</b>	<b>\$ 3,521</b>	<b>\$ 6,266</b>	<b>\$ 19,876</b>	<b>\$ 2,995</b>	<b>\$ 1,703</b>	<b>\$ 4,301</b>	<b>\$ 38,662</b>

(1) Represents the weighted-average yield of fixed income securities.

(b) An analysis of unrealized gains and losses on available-for-sale securities is as follows:

As at October 31, 2015 (\$ millions)	Cost	Gross unrealized gains	Gross unrealized losses	Fair value
Canadian provincial and municipal debt	3,685	25	4	3,706
U.S. treasury and other U.S. agency debt	9,806	29	7	9,828
Other foreign government debt	12,701	32	50	12,683
Bonds of designated emerging markets	–	–	–	–
Other debt	5,531	58	12	5,577
Preferred shares	413	6	164	255
Common shares	2,104	706	43	2,767
<b>Total available-for-sale securities</b>	<b>\$ 41,798</b>	<b>\$ 1,058</b>	<b>\$ 291</b>	<b>\$ 42,565</b>

  

As at October 31, 2014 (\$ millions)	Cost	Gross unrealized gains	Gross unrealized losses	Fair value
Canadian provincial and municipal debt	3,284	20	1	3,303
U.S. treasury and other U.S. agency debt	6,218	11	3	6,226
Other foreign government debt	10,940	60	17	10,983
Bonds of designated emerging markets	39	7	1	45
Other debt	6,666	128	7	6,787
Preferred shares	412	15	59	368
Common shares	3,097	871	35	3,933
<b>Total available-for-sale securities</b>	<b>\$ 37,360</b>	<b>\$ 1,259</b>	<b>\$ 123</b>	<b>\$ 38,496</b>

The net unrealized gain on available-for-sale securities of \$767 million (2014 – gain of \$1,136 million) decreases to a net unrealized gain of \$267 million (2014 – gain of \$847 million) after the impact of qualifying hedges is taken into account. The net unrealized gain on available-for-sale securities is recorded in Accumulated Other Comprehensive Income.



## (c) An analysis of available-for-sale securities with continuous unrealized losses:

As at October 31, 2015 (\$ millions)	Less than twelve months			Twelve months or greater			Total		
	Cost	Fair value	Unrealized losses	Cost	Fair value	Unrealized losses	Cost	Fair value	Unrealized losses
Canadian federal government issued or guaranteed debt	\$ 2,362	\$ 2,351	\$ 11	\$ –	\$ –	\$ –	\$ 2,362	\$ 2,351	\$ 11
Canadian provincial and municipal debt	1,302	1,298	4	–	–	–	1,302	1,298	4
U.S. treasury and other U.S. agency debt	977	973	4	10	7	3	987	980	7
Other foreign government debt	3,532	3,499	33	1,140	1,123	17	4,672	4,622	50
Other debt	1,625	1,617	8	132	128	4	1,757	1,745	12
Preferred shares	1	1	–	383	219	164	384	220	164
Common shares	419	379	40	39	36	3	458	415	43
<b>Total available-for-sale securities</b>	<b>\$ 10,218</b>	<b>\$ 10,118</b>	<b>\$ 100</b>	<b>\$ 1,704</b>	<b>\$ 1,513</b>	<b>\$ 191</b>	<b>\$ 11,922</b>	<b>\$ 11,631</b>	<b>\$ 291</b>

As at October 31, 2014 (\$ millions)	Less than twelve months			Twelve months or greater			Total		
	Cost	Fair value	Unrealized losses	Cost	Fair value	Unrealized losses	Cost	Fair value	Unrealized losses
Canadian federal government issued or guaranteed debt	\$ 359	\$ 359	\$ –	\$ 80	\$ 80	\$ –	\$ 439	\$ 439	\$ –
Canadian provincial and municipal debt	100	100	–	109	108	1	209	208	1
U.S. treasury and other U.S. agency debt	293	293	–	10	7	3	303	300	3
Other foreign government debt	2,033	2,028	5	338	326	12	2,371	2,354	17
Bond of designated emerging markets	7	7	–	11	10	1	18	17	1
Other debt	1,161	1,160	1	184	178	6	1,345	1,338	7
Preferred shares	1	1	–	392	333	59	393	334	59
Common shares	779	752	27	93	85	8	872	837	35
<b>Total available-for-sale securities</b>	<b>\$ 4,733</b>	<b>\$ 4,700</b>	<b>\$ 33</b>	<b>\$ 1,217</b>	<b>\$ 1,127</b>	<b>\$ 90</b>	<b>\$ 5,950</b>	<b>\$ 5,827</b>	<b>\$ 123</b>

As at October 31, 2015, the cost of 610 (2014 – 409) available-for-sale securities exceeded their fair value by \$291 million (2014 – \$123 million). This unrealized loss is recorded in accumulated other comprehensive income as part of unrealized gains (losses) on available-for-sale securities. Of the 610 (2014 – 409) investment securities, 110 (2014 – 113) have been in an unrealized loss position continuously for more than a year, amounting to an unrealized loss of \$191 million (2014 – \$90 million).

Investment securities are considered to be impaired only if objective evidence indicates one or more loss events have occurred and have affected the estimated future cash flows after considering available collateral.

Collateral is not generally obtained directly from the issuers of debt securities. However, certain debt securities may be collateralized by specifically identified assets that would be obtainable in the event of default.

Investment securities are evaluated for impairment at the end of each reporting date, or more frequently, if events or changes in circumstances indicate the existence of objective evidence of impairment.

## (d) Net gain on sale of investment securities

An analysis of net gain on sale of investment securities is as follows:

For the year ended October 31 (\$ millions)	2015	2014	2013
Net realized gains or losses	\$ 646	\$ 755	\$ 433
Impairment losses <sup>(1)</sup>	7	14	58
<b>Net gain on sale of investment securities</b>	<b>\$ 639</b>	<b>\$ 741</b>	<b>\$ 375</b>

(1) Impairment losses (gains) are comprised of \$8 from equity securities (2014 – \$14; 2013 – \$63) and \$(1) from other debt securities (2014 – nil; 2013 – \$(5)).



### 13 Loans, impaired loans and allowance for credit losses

#### (a) Loans and acceptances outstanding by geography<sup>(1)</sup>

As at October 31 (\$ millions)	2015	2014
<b>Canada:</b>		
Residential mortgages	\$ 190,123	\$ 188,842
Personal and credit cards	70,263	65,542
Business and government	44,808	38,561
	<b>305,194</b>	<b>292,945</b>
<b>United States:</b>		
Personal and credit cards	1,558	1,109
Business and government	28,593	22,389
	<b>30,151</b>	<b>23,498</b>
<b>Mexico:</b>		
Residential mortgages	6,043	5,409
Personal and credit cards	3,076	3,360
Business and government	9,473	7,196
	<b>18,592</b>	<b>15,965</b>
<b>Peru:</b>		
Residential mortgages	2,367	1,896
Personal and credit cards	4,317	3,596
Business and government	10,287	7,794
	<b>16,971</b>	<b>13,286</b>
<b>Chile:</b>		
Residential mortgages	5,068	4,561
Personal and credit cards	3,681	2,434
Business and government	7,710	6,908
	<b>16,459</b>	<b>13,903</b>
<b>Colombia:</b>		
Residential mortgages	1,286	1,240
Personal and credit cards	2,956	3,354
Business and government	4,441	4,498
	<b>8,683</b>	<b>9,092</b>
<b>Other International:</b>		
Residential mortgages	12,611	10,700
Personal and credit cards	5,626	4,809
Business and government	48,538	43,752
	<b>66,775</b>	<b>59,261</b>
Total loans	<b>462,825</b>	<b>427,950</b>
Acceptances <sup>(2)</sup>	<b>10,296</b>	<b>9,876</b>
Total loans and acceptances <sup>(3)</sup>	<b>473,121</b>	<b>437,826</b>
Allowance for credit losses	<b>(4,197)</b>	<b>(3,641)</b>
Total loans and acceptances net of allowances for loan losses	<b>\$ 468,924</b>	<b>\$ 434,185</b>

(1) Geographic segmentation is based on the location of the property for residential mortgages; otherwise, the residence of the borrower.

(2) 1% of borrowers reside outside Canada.

(3) Loans and acceptances denominated in U.S. dollars were \$95,581 (2014 – \$80,597), in Mexican pesos \$14,054 (2014 – \$12,972), Chilean pesos \$12,566 (2014 – \$10,256), and in other foreign currencies \$42,570 (2014 – \$35,721).

(b) Loan maturities

As at October 31, 2015 (\$ millions)	Remaining term to maturity					Total	Rate sensitivity			
	Within one year	One to five years	Five to ten years	Over ten years	No specific maturity		Floating	Fixed rate	Non-rate sensitive	Total
Residential mortgages	\$ 43,659	\$ 151,685	\$ 9,438	\$ 10,928	\$ 1,788	\$ 217,498	\$ 61,553	\$ 153,896	\$ 2,049	\$ 217,498
Personal and credit cards	11,872	29,709	4,595	1,124	44,177	91,477	39,137	51,465	875	91,477
Business and government	70,079	72,195	6,186	501	4,889	153,850	100,492	50,803	2,555	153,850
<b>Total</b>	<b>\$ 125,610</b>	<b>\$ 253,589</b>	<b>\$ 20,219</b>	<b>\$ 12,553</b>	<b>\$ 50,854</b>	<b>\$ 462,825</b>	<b>\$ 201,182</b>	<b>\$ 256,164</b>	<b>\$ 5,479</b>	<b>\$ 462,825</b>
Allowance for credit losses	–	–	–	–	(4,197)	(4,197)	–	–	(4,197)	(4,197)
<b>Total loans net of allowance for credit losses</b>	<b>\$ 125,610</b>	<b>\$ 253,589</b>	<b>\$ 20,219</b>	<b>\$ 12,553</b>	<b>\$ 46,657</b>	<b>\$ 458,628</b>	<b>\$ 201,182</b>	<b>\$ 256,164</b>	<b>\$ 1,282</b>	<b>\$ 458,628</b>

As at October 31, 2014 (\$ millions)	Remaining term to maturity					Total	Rate sensitivity			
	Within one year	One to five years	Five to ten years	Over ten years	No specific maturity		Floating	Fixed rate	Non-rate sensitive	Total
Residential mortgages	\$ 47,008	\$ 145,539	\$ 10,308	\$ 8,087	\$ 1,706	\$ 212,648	\$ 53,747	\$ 156,985	\$ 1,916	\$ 212,648
Personal and credit cards	11,735	25,183	4,144	859	42,283	84,204	38,046	45,091	1,067	84,204
Business and government	64,786	56,487	4,351	363	5,111	131,098	87,162	41,794	2,142	131,098
<b>Total loans</b>	<b>\$ 123,529</b>	<b>\$ 227,209</b>	<b>\$ 18,803</b>	<b>\$ 9,309</b>	<b>\$ 49,100</b>	<b>\$ 427,950</b>	<b>\$ 178,955</b>	<b>\$ 243,870</b>	<b>\$ 5,125</b>	<b>\$ 427,950</b>
Allowance for credit losses	–	–	–	–	(3,641)	(3,641)	–	–	(3,641)	(3,641)
<b>Total loans net of allowance for credit losses</b>	<b>\$ 123,529</b>	<b>\$ 227,209</b>	<b>\$ 18,803</b>	<b>\$ 9,309</b>	<b>\$ 45,459</b>	<b>\$ 424,309</b>	<b>\$ 178,955</b>	<b>\$ 243,870</b>	<b>\$ 1,484</b>	<b>\$ 424,309</b>

(c) Impaired loans<sup>(1)(2)</sup>

As at October 31 (\$ millions)	2015			2014		
	Gross impaired loans <sup>(1)</sup>	Allowance for credit losses	Net	Gross impaired loans <sup>(1)</sup>	Allowance for credit losses	Net
Residential mortgages	\$ 1,668	\$ 529 <sup>(3)</sup>	\$ 1,139	\$ 1,491	\$ 359 <sup>(3)</sup>	\$ 1,132
Personal and credit cards	1,332	1,327 <sup>(3)</sup>	5	1,254	1,225 <sup>(3)</sup>	29
Business and government	1,658	717 <sup>(4)</sup>	941	1,455	614 <sup>(4)</sup>	841
<b>Total</b>	<b>\$ 4,658</b>	<b>\$ 2,573</b>	<b>\$ 2,085</b>	<b>\$ 4,200</b>	<b>\$ 2,198</b>	<b>\$ 2,002</b>
<b>By geography:</b>						
Canada			\$ 450			\$ 378
United States			5			11
Mexico			85			122
Peru			181			119
Chile			230			249
Colombia			121			129
Other International			1,013			994
<b>Total</b>			<b>\$ 2,085</b>			<b>\$ 2,002</b>

(1) Interest income recognized on impaired loans during the year ended October 31, 2015 was \$13 (2014 – \$18).

(2) Excludes loans acquired under FDIC guarantee related to the acquisition of R-G Premier Bank of Puerto Rico. For loans where the guarantee has expired, the total amount of loans considered impaired is \$150.

(3) Allowance for credit losses for residential mortgages and personal and credit card loans is assessed on a collective basis.

(4) Allowance for credit losses for business and government loans is individually assessed.

For the years ended October 31, 2015 and 2014, the Bank would have recorded additional interest income of \$337 million and \$287 million, respectively, on impaired loans, if these impaired loans were classified as performing loans.

## (d) Allowance for credit losses

As at October 31 (\$ millions)	2015					Balance at end of year
	Balance at beginning of year	Write-offs <sup>(1)</sup>	Recoveries	Provision for credit losses	Other, including foreign currency adjustment <sup>(2)</sup>	
Individual	\$ 614	\$ (320)	\$ 52	\$ 255	\$ 116	\$ 717
Collective	2,856	(1,908)	377	1,721	214	3,260
Total before loans acquired under FDIC guarantee	3,470	(2,228)	429	1,976	330	3,977
Loans acquired under FDIC guarantee <sup>(3)</sup>	171	(2)	56	(34)	29	220
	<b>\$ 3,641</b>	<b>\$ (2,230)</b>	<b>\$ 485</b>	<b>\$ 1,942</b>	<b>\$ 359</b>	<b>\$ 4,197</b>

  

As at October 31 (\$ millions)	2014					Balance at end of year
	Balance at beginning of year	Write-offs <sup>(1)</sup>	Recoveries	Provision for credit losses	Other, including foreign currency adjustment	
Individual	\$ 561	\$ (338)	\$ 93	\$ 265	\$ 33	\$ 614
Collective	2,604	(1,559)	399	1,403	9	2,856
Total before loans acquired under FDIC guarantee	3,165	(1,897)	492	1,668	42	3,470
Loans acquired under FDIC guarantee <sup>(3)</sup>	108	–	18	35	10	171
	<b>\$ 3,273</b>	<b>\$ (1,897)</b>	<b>\$ 510</b>	<b>\$ 1,703</b>	<b>\$ 52</b>	<b>\$ 3,641</b>

Represented by:

Allowance against impaired loans

Allowance against performing loans and loans past due but not impaired<sup>(4)</sup>

Total before loans acquired under FDIC guarantee

Loans acquired under FDIC guarantee<sup>(3)</sup>

	2015	2014
Allowance against impaired loans	\$ 2,573	\$ 2,198
Allowance against performing loans and loans past due but not impaired <sup>(4)</sup>	1,404	1,272
Total before loans acquired under FDIC guarantee	3,977	3,470
Loans acquired under FDIC guarantee <sup>(3)</sup>	220	171
	<b>\$ 4,197</b>	<b>\$ 3,641</b>

(1) For the wholesale portfolios, impaired loans restructured during the year amounted to \$81 (2014 – \$373). Write-offs of impaired loans restructured during the year were nil (2014 – \$27). Non-impaired loans restructured during the year amounted to \$93 (2014 – \$113).

(2) Includes rebalancing of reserves between off-balance sheet and on-balance sheet credit exposures; and retrospective adjustments primarily relating to foreign currency translation of prior years.

(3) This represents the gross amount of allowance for credit losses as the receivable from FDIC is separately recorded in other assets.

(4) The allowance for performing loans is attributable to business and government loans \$644 (2014 – \$584) with the remainder allocated to personal and credit card loans \$614 (2014 – \$527) and residential mortgages \$146 (2014 – \$161).

## (e) Loans acquired under FDIC guarantee

As at October 31, 2015 (\$ millions)	Non-single family home loans	Single family home loans	Total
R-G Premier Bank			
Unpaid principal balance	\$ 417	\$ 2,136	\$ 2,553
Fair value adjustments	136	(291)	(155)
Net carrying value	553	1,845	2,398
Allowance for credit losses	(160)	(60)	(220)
	<b>\$ 393</b>	<b>\$ 1,785</b>	<b>\$ 2,178</b>

  

As at October 31, 2014 (\$ millions)	Non-single family home loans	Single family home loans	Total
R-G Premier Bank			
Unpaid principal balance	\$ 645	\$ 2,043	\$ 2,688
Fair value adjustments	(43)	(314)	(357)
Net carrying value	602	1,729	2,331
Allowance for credit losses	(111)	(60)	(171)
	<b>\$ 491</b>	<b>\$ 1,669</b>	<b>\$ 2,160</b>

(1) A net receivable of \$38 has been recorded for claims of losses under the FDIC guarantee that expired during the year.

Loans purchased as part of the acquisition of R-G Premier Bank of Puerto Rico are subject to loss share agreements with the FDIC. Under this agreement, the FDIC guarantees 80% of loan losses. The provision for credit losses in the Consolidated Statement of Income related to these loans is reflected net of the amount expected to be reimbursed by the FDIC. Allowance for credit losses in the Consolidated Statement of Financial Position is reflected on a gross basis. During the year, the FDIC guarantee on non-single family loans expired. The guarantee for single family home loans will expire in April 2020.

As at October 31, 2015, the carrying value of loans acquired under the FDIC guarantee was \$2.2 billion (2014 – \$2.2 billion) and the carrying value of loans for which claims for losses under the guarantee expired during the year was \$393 million. A net receivable of \$218 million (2014 – \$275 million) from the FDIC is included in Other assets in the Consolidated Statement of Financial Position.

**(f) Loans past due but not impaired<sup>(1)</sup>**

A loan is considered past due when a counterparty has not made a payment by the contractual due date. The following table presents the carrying value of loans that are contractually past due but not classified as impaired because they are either less than 90 days past due or fully secured and collection efforts are reasonably expected to result in repayment, or restoring it to a current status in accordance with the Bank's policy.

As at October 31 (\$ millions)	2015 <sup>(2)(3)</sup>				2014 <sup>(2)(3)</sup>			
	31 - 60 days	61 - 90 days	91 days and greater	Total	31 - 60 days	61 - 90 days	91 days and greater	Total
Residential mortgages	\$ 1,256	\$ 453	\$ 127	\$ 1,836	\$ 1,253	\$ 483	\$ 153	\$ 1,889
Personal and credit cards	677	360	56	1,093	591	298	48	937
Business and government	172	73	338	583	140	57	233	430
<b>Total</b>	<b>\$ 2,105</b>	<b>\$ 886</b>	<b>\$ 521</b>	<b>\$ 3,512</b>	<b>\$ 1,984</b>	<b>\$ 838</b>	<b>\$ 434</b>	<b>\$ 3,256</b>

(1) Loans past due 30 days or less are not presented in this analysis as they are not administratively considered past due.

(2) Excludes loans acquired under the FDIC guarantee related to the acquisition of R-G Premier Bank of Puerto Rico.

(3) These loans would be considered in the determination of an appropriate level of collective allowances despite not being individually classified as impaired.

**14 Derecognition of financial assets**
*Securitization of residential mortgage loans*

The Bank securitizes fully insured residential mortgage loans, Bank originated and others, through the creation of mortgage backed securities (MBS) under the National Housing Act (NHA) MBS program, sponsored by Canada Mortgage Housing Corporation (CMHC). MBS created under the program are sold to Canada Housing Trust (the Trust), a government sponsored entity, under the Canada Mortgage Bond (CMB) program and/or third-party investors. The Trust issues securities to third-party investors.

The sale of mortgages under the above programs does not meet the derecognition requirements, as the Bank retains the pre-payment and interest rate risk associated with the mortgages, which represents substantially all the risk and rewards associated with the transferred assets.

The transferred mortgages continue to be recognized on the Consolidated Statement of Financial Position as residential mortgage loans. Cash proceeds from the transfer are treated as secured borrowings and included in Deposits – Business and government on the Consolidated Statement of Financial Position.

The following table provides the carrying amount of transferred assets that do not qualify for derecognition and the associated liabilities:

As at October 31 (\$ millions)	2015 <sup>(1)</sup>	2014 <sup>(1)</sup>
<b>Assets</b>		
Carrying value of residential mortgage loans	\$ 18,313	\$ 17,969
Other related assets <sup>(2)</sup>	3,296	2,425
<b>Liabilities</b>		
Carrying value of associated liabilities	20,816	20,414

(1) The fair value of the transferred assets is \$21,728 (2014 – \$20,430) and the fair value of the associated liabilities is \$21,416 (2014 – \$20,791), for a net position of \$312 (2014 – \$(361)).

(2) These include cash held in trust and trust permitted investment assets acquired as part of principal reinvestment account that the Bank is required to maintain in order to participate in the programs.

*Securitization of personal loans*

The Bank securitizes a portion of its unsecured personal line of credit receivables on a revolving basis through a consolidated structured entity. The receivables continue to be recognized on the Consolidated Statement of Financial Position as personal loans. For further details, see Note 15.

*Securities sold under repurchase agreements and securities lent*

The Bank enters into transactions, such as repurchase agreements and securities lending agreements, where the Bank transfers assets under agreements to repurchase them on a future date and retains all the substantial risks and rewards associated with the assets. The transferred assets remain on the Consolidated Statement of Financial Position.

The following table provides the carrying amount of the transferred assets and the associated liabilities:

As at October 31 (\$ millions)	2015 <sup>(1)</sup>	2014 <sup>(1)</sup>
Carrying value of assets associated with:		
Repurchase agreements <sup>(2)</sup>	\$ 67,052	\$ 80,335
Securities lending agreements	41,190	37,110
<b>Total</b>	<b>108,242</b>	<b>117,445</b>
Carrying value of associated liabilities <sup>(3)</sup>	\$ 77,015	\$ 88,953

(1) The fair value of transferred assets is \$108,242 (2014 – \$117,445) and the fair value of the associated liabilities is \$77,015 (2014 – \$88,953), for a net position of \$31,227 (2014 – \$28,492).

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

(3) Liabilities for securities lending arrangements only include amounts related to cash collateral received. In most cases, securities are received as collateral.

## 15 Structured entities

### (a) Consolidated structured entities

#### *U.S. multi-seller conduit*

The Bank-sponsored U.S. multi-seller conduit purchases high-quality financial assets from independent third parties (the sellers) funded by the issuance of highly rated asset-backed commercial paper. The sellers continue to service the financial assets and provide credit enhancements through overcollateralization protection and cash reserves.

Each asset purchased by the conduit has a deal-specific liquidity facility provided by the Bank in the form of a liquidity asset purchase agreement (LAPA). The primary purpose of the backstop liquidity facility is to provide an alternative source of financing in the event the conduit is unable to access the asset-backed commercial paper market. The administration agent can require the Bank in its capacity as liquidity provider to perform under its asset-specific LAPA agreements, in which case the Bank is obliged to purchase an interest in the related assets owned by the conduit. The Bank is not obligated to perform under the LAPA agreements in the event the conduit itself is insolvent.

The Bank's liquidity agreements with the conduit call for the Bank to fund full par value of the assets, including defaulted assets, if any, of the conduit. This facility is available to absorb the losses on defaulted assets, if any, in excess of losses absorbed by deal-specific seller credit enhancements. Further, the Bank provides a program-wide credit enhancement (PWCE) to the conduit and holds the subordinated note issued by the conduit.

The Bank's exposure from the U.S. conduit through the LAPA, including the obligation to purchase defaulted assets, the Bank's PWCE and investment in the conduit's subordinated note, give the Bank the obligation to absorb losses that could potentially be significant to the conduit, which in conjunction with power to direct the conduit's activities, result in the Bank consolidating the U.S. multi-seller conduit.

The conduit's assets are primarily included in business and government loans on the Bank's Consolidated Statement of Financial Position.

There are contractual restrictions on the ability of the Bank's consolidated U.S. multi-seller conduit to transfer funds to the Bank. The Bank is restricted from accessing the conduit's assets under the relevant arrangements. The Bank has no rights to the assets owned by the conduit. In the normal course of business, the assets of the conduit can only be used to settle the obligations of the conduit.

#### *Bank funding vehicles*

The Bank uses funding vehicles to facilitate cost-efficient financing of its own operations, including the issuance of covered bonds and notes. These vehicles include Scotia Covered Bond Trust, Scotiabank Covered Bond Guarantor Limited Partnership and Hollis Receivables Term Trust II.

Activities of these structured entities are generally limited to holding a pool of assets or receivables generated by the Bank.

These structured entities are consolidated due to the Bank's decision-making power and ability to use the power to affect the Bank's returns.

#### *Covered bond programs*

##### *Scotia Covered Bond Trust*

Under the Bank's global covered bond program, the Bank issues debt to investors that is guaranteed by Scotia Covered Bond Trust (the "Trust").

Under the program, the Trust purchases CMHC insured residential mortgages from the Bank, which it acquires with funding provided by the Bank.

As at October 31, 2015, \$8.5 billion (2014 – \$12.2 billion) covered bonds were outstanding and included in Deposits – Business and government on the Consolidated Statement of Financial Position. The Bank's outstanding covered bonds are denominated in U.S. dollars. As at October 31, 2015, assets pledged in relation to these covered bonds were residential mortgages denominated in Canadian dollars of \$6.8 billion (2014 – \$12.9 billion).

##### *Scotiabank Covered Bond Guarantor Limited Partnership*

The Bank has a registered covered bond program in which it issues debt that is guaranteed by Scotiabank Covered Bond Guarantor Limited Partnership (the "LP"). Under this program, the LP purchases uninsured residential mortgages from the Bank, which it acquires with funding provided by the Bank.

As at October 31, 2015, \$13.7 billion (2014 – \$5.3 billion) covered bonds were outstanding and included in Deposits – Business and government on the Consolidated Statement of Financial Position. The Bank's outstanding covered bonds are denominated in U.S. dollars, Australian dollars, British pounds and Euros. As at October 31, 2015, assets pledged in relation to these covered bonds were residential mortgages denominated in Canadian dollars of \$14.5 billion (2014 – \$5.8 billion).

##### *Personal line of credit securitization trust*

The Bank securitizes a portion of its unsecured personal line of credit receivables (receivables) on a revolving basis through Hollis Receivables Term Trust II (Hollis), a Bank-sponsored structured entity. Hollis issues notes to third-party investors and the Bank, proceeds of which are used to purchase a co-ownership interest in the receivables originated by the Bank. Recourse of the note holders is limited to the purchased interest.

The Bank is responsible for servicing the transferred receivables as well as performing administrative functions for Hollis. The subordinated notes issued by Hollis are held by the Bank.

As at October 31, 2015, \$2.0 billion notes (2014 – \$1.0 billion) were outstanding and included in Deposits – Business and government on the Consolidated Statement of Financial Position. As at October 31, 2015, assets pledged in relation to these notes were \$2.5 billion (2014 – \$1.2 billion).

#### *Other*

Assets of other consolidated structured entities are comprised of securities, deposits with banks and other assets to meet the Bank's and customer needs.

**(b) Unconsolidated structured entities**

The following table provides information about other structured entities in which the Bank has a significant interest but does not control and therefore does not consolidate. A significant interest is generally considered to exist where the Bank is exposed to 10% or more of the unconsolidated structured entities maximum exposure to loss.

As at October 31 (\$ millions)	2015				
	Canadian multi-seller conduits that the Bank administers	Structured finance entities	Capital funding vehicles	Other	Total
<b>Total assets (on structured entity's financial statements)</b>	<b>\$ 2,491</b>	<b>\$ 7,813</b>	<b>\$ 1,520</b>	<b>\$ 950</b>	<b>\$ 12,774</b>
<b>Assets recognized on the Bank's financial statements</b>					
Trading assets	3	470	–	57	530
Investment securities	–	1,144	15	86	1,245
Loans <sup>(1)</sup>	–	716	47	35	798
	<b>3</b>	<b>2,330</b>	<b>62</b>	<b>178</b>	<b>2,573</b>
<b>Liabilities recognized on the Bank's financial statements</b>					
Deposits – Business and government	–	–	1,488	–	1,488
	–	–	1,488	–	1,488
<b>Bank's maximum exposure to loss</b>	<b>\$ 2,491</b>	<b>\$ 2,330</b>	<b>\$ 62</b>	<b>\$ 178</b>	<b>\$ 5,061</b>
	2014				
As at October 31 (\$ millions)	Canadian multi-seller conduits that the Bank administers	Structured finance entities	Capital funding vehicles	Other	Total
<b>Total assets (on structured entity's financial statements)</b>	<b>\$ 2,707</b>	<b>\$ 12,165</b>	<b>\$ 1,520</b>	<b>\$ 945</b>	<b>\$ 17,337</b>
<b>Assets recognized on the Bank's financial statements</b>					
Trading assets	13	422	–	52	487
Investment securities	–	1,487	15	79	1,581
Loans <sup>(1)</sup>	–	924	52	56	1,032
	<b>13</b>	<b>2,833</b>	<b>67</b>	<b>187</b>	<b>3,100</b>
<b>Liabilities recognized on the Bank's financial statements</b>					
Deposits – Business and government	–	–	1,488	–	1,488
	–	–	1,488	–	1,488
<b>Bank's maximum exposure to loss</b>	<b>\$ 2,707</b>	<b>\$ 2,833</b>	<b>\$ 67</b>	<b>\$ 187</b>	<b>\$ 5,794</b>

(1) Loan balances are presented net of allowance for credit losses.

The Bank's maximum exposure to loss represents the notional amounts of guarantees, liquidity facilities, and other credit support relationships with the structured entities, the credit risk amount for certain derivative contracts with the entities and the amount invested where the Bank holds an ownership interest in the structured entities. Of the aggregate amount of maximum exposure to loss as at October 31, 2015, the Bank has recorded \$2.6 billion (2014 – \$3.1 billion), primarily its interest in the structured entities, on its Consolidated Statement of Financial Position.

**Canadian multi-seller conduits that the Bank administers**

The Bank sponsors two Canadian multi-seller conduits. The conduits purchase assets from independent third parties (the sellers) funded by the issuance of asset-backed commercial paper. The sellers continue to service the assets and provide credit enhancements through overcollateralization protection and cash reserves. The Bank has no rights to these assets as they are available to support the obligations of the respective programs, but manages for a fee the commercial paper selling programs. To ensure timely repayment of the commercial paper, each asset pool financed by the multi-seller conduits has a deal-specific liquidity asset purchase agreement (LAPA) with the Bank. Pursuant to the terms of the LAPA, the Bank as the liquidity provider is obligated to purchase non-defaulted assets, transferred by the conduit at the conduit's original cost as reflected in the table above. In most cases, the liquidity agreements do not require the Bank to purchase defaulted assets. Additionally, the Bank has not provided any program-wide credit enhancement to these conduits. The Bank provides additional liquidity facilities to these multi-seller conduits to a maximum amount of \$1.4 billion (2014 – \$1.4 billion) based on future asset purchases by these conduits.

Although the Bank has power over the relevant activities of the conduits, it has limited exposure to variability in returns, which results in the Bank not consolidating the two Canadian conduits.

**Structured finance entities**

The Bank has interests in structured entities used to assist corporate clients in accessing cost-efficient financing through their securitization structures. The Bank may act as an administrator, an investor or a combination of both in these types of structures.

**Capital funding vehicles**

These entities are designed to pass the Bank's credit risk to the holders of the securities. Therefore the Bank does not have exposure or rights to variable returns from these entities.

### Other

Other includes investments in managed funds, collateralized debt obligation entities, and other structured entities. The Bank's maximum exposure to loss is limited to its net investment in these funds.

#### c) Other unconsolidated Bank-sponsored entities

The Bank sponsors unconsolidated structured entities in which it has insignificant or no interest at the reporting date. The Bank is a sponsor when it is significantly involved in the design and formation at inception of the structured entities, and the Bank's name is used by the structured entities to create an awareness of the instruments being backed by the Bank's reputation and obligation. The Bank also considers other factors, such as its continuing involvement and obligations to determine if, in substance, the Bank is a sponsor. The Bank considered mutual funds and managed companies as sponsored entities at October 31, 2015.

The following table provides information on revenue from unconsolidated Bank-sponsored entities.

As at October 31 (\$ millions)	2015			2014		
	Funds <sup>(1)</sup>	Scotia Managed Companies	Total	Funds <sup>(1)</sup>	Scotia Managed Companies	Total
Revenue	\$ 1,964	\$ 13	\$ 1,977	\$ 1,804	\$ 18	\$ 1,822

(1) Includes mutual funds, other funds and trusts.

The Bank earned revenue of \$1,977 million (2014 – \$1,822 million) from its involvement with the unconsolidated Bank sponsored structured entities for the year ended October 31, 2015, which was comprised of interest income of \$3 million (2014 – \$4 million), non-interest income – banking of \$133 million (2014 – \$141 million) and non-interest income – wealth management of \$1,841 million (2014 – \$1,677 million), including mutual fund, brokerage and investment management and trust fees.

## 16 Property and equipment

(\$ millions)	Land	Buildings	Equipment	Leasehold improvements	Total
<b>Cost</b>					
Balance as at October 31, 2013	\$ 284	\$ 1,649	\$ 3,323	\$ 1,146	\$ 6,402
Additions	11	168	177	94	450
Disposals	(40)	(155)	(148)	(41)	(384)
Foreign currency adjustments and other	11	25	26	25	87
Balance as at October 31, 2014	\$ 266	\$ 1,687	\$ 3,378	\$ 1,224	\$ 6,555
Additions	19	135	262	100	516
Disposals	(11)	(243)	(118)	(57)	(429)
Foreign currency adjustments and other	60	70	17	38	185
Balance as at October 31, 2015	\$ 334	\$ 1,649	\$ 3,539	\$ 1,305	\$ 6,827
<b>Accumulated depreciation</b>					
Balance as at October 31, 2013	\$ –	\$ 691	\$ 2,772	\$ 725	\$ 4,188
Depreciation	–	36	184	77	297
Disposals	–	(23)	(152)	(57)	(232)
Foreign currency adjustments and other	–	11	11	8	30
Balance as at October 31, 2014	\$ –	\$ 715	\$ 2,815	\$ 753	\$ 4,283
Depreciation	–	47	178	78	303
Disposals	–	(17)	(46)	(27)	(90)
Foreign currency adjustments and other	–	9	31	5	45
Balance as at October 31, 2015	\$ –	\$ 754	\$ 2,978	\$ 809	\$ 4,541
<b>Net book value</b>					
Balance as at October 31, 2014	\$ 266	\$ 972	\$ 563	\$ 471	\$ 2,272 <sup>(1)</sup>
Balance as at October 31, 2015	\$ 335	\$ 910	\$ 560	\$ 481	\$ 2,286 <sup>(1)</sup>

(1) Includes \$27 (2014 – \$41) of investment property.



## 17 Investments in associates

The Bank had significant investments in the following associates:

As at October 31 (\$ millions)	2015					2014
	Country of incorporation	Nature of business	Ownership percentage	Date of financial statements <sup>(1)</sup>	Carrying value	Carrying value
Thanachart Bank Public Company Limited	<b>Thailand</b>	<b>Banking</b>	<b>49.0%</b>	<b>September 30, 2015</b>	<b>\$ 2,415</b>	\$ 2,134
Canadian Tire's Financial Services business (CTFS) <sup>(2)</sup>	<b>Canada</b>	<b>Financial Services</b>	<b>20.0%</b>	<b>September 30, 2015</b>	<b>538</b>	509
Bank of Xi'an Co. Ltd.	<b>China</b>	<b>Banking</b>	<b>19.9%</b>	<b>September 30, 2015</b>	<b>610</b>	359
Maduro & Curiel's Bank N.V. <sup>(3)</sup>	<b>Curacao</b>	<b>Banking</b>	<b>48.1%</b>	<b>September 30, 2015</b>	<b>264</b>	221
Banco del Caribe <sup>(4)</sup>	<b>Venezuela</b>	<b>Banking</b>	<b>26.6%</b>	<b>September 30, 2015</b>	<b>30</b>	54

- (1) Represents the date of the most recent published financial statements. Where available, financial statements prepared by the associates' management or other published information is used to estimate the change in the Bank's interest since the most recent published financial statements.
- (2) On October 1, 2014, the Bank acquired a 20% equity interest in Canadian Tire's Financial Services business (CTFS). Under the agreement Canadian Tire has an option to sell to the Bank up to an additional 29% equity interest within the next 10 years at the then fair value, that can be settled, at the Bank's discretion, by issuance of common shares or cash. After 10 years, for a period of six months, the Bank has the option to sell its equity interest back to Canadian Tire at the then fair value. As at October 1, 2014 CTFS had total assets of \$5,351 and total liabilities of \$4,387.
- (3) The local regulator requires financial institutions to set aside reserves for general banking risks. These reserves are not required under IFRS, and represent undistributed retained earnings related to a foreign associated corporation, which are subject to local regulatory restrictions. As of October 31, 2015 these reserves amounted to \$61 (2014 – \$52).
- (4) As at October 31, 2015, the Bank's total net investment in Banco del Caribe, along with monetary assets, comprising of cash and dividend receivable was translated at the SIMADI exchange rate of 1 USD to 198 VEF replacing the SICAD II exchange rate (2014 – 1 USD to 50 VEF).

Summarized financial information of the Bank's significant associates are as follows.

(\$ millions)	For the twelve months ended and as at September 30, 2015 <sup>(1)</sup>			
	Revenue	Net income	Total assets	Total liabilities
Thanachart Bank Public Company Limited	<b>\$ 1,601</b>	<b>\$ 389</b>	<b>\$ 35,483</b>	<b>\$ 31,399</b>
Canadian Tire's Financial Services business (CTFS)	<b>1,003</b>	<b>310</b>	<b>5,829</b>	<b>4,782</b>
Bank of Xi'an Co. Ltd.	<b>942</b>	<b>378</b>	<b>29,525</b>	<b>26,688</b>
Maduro & Curiel's Bank N.V.	<b>327</b>	<b>92</b>	<b>4,954</b>	<b>4,391</b>
Banco del Caribe	<b>111</b>	<b>(9)</b>	<b>1,131</b>	<b>1,016</b>

(\$ millions)	For the twelve months ended and as at September 30, 2014 <sup>(1)</sup>			
	Revenue	Net income	Total assets	Total liabilities
Thanachart Bank Public Company Limited	\$ 1,488	\$ 336	\$ 34,124	\$ 30,571
Bank of Xi'an Co. Ltd.	695	299	25,259	23,558
Maduro & Curiel's Bank N.V.	291	86	4,117	3,642
Banco del Caribe	1,160	107	16,728	15,106

(1) Based on the most recent available financial statements.

## 18 Goodwill and other intangible assets

### Goodwill

The changes in the carrying amounts of goodwill by cash-generating unit (CGU) are as follows:

(\$ millions)	Canadian Banking	Global Wealth & Insurance	Global Capital Markets	Global Corporate & Investment Banking	Global Banking and Markets	Latin America	Caribbean and Central America	Asia Pacific	Total
Balance as at October 31, 2013	\$ 1,633	\$ 2,283	\$ 92	\$ 114	\$ –	\$ 2,078	\$ 667	\$ –	\$ 6,867
Foreign currency adjustments and other	–	9	8	9	–	(37)	53	–	42
Balance as at October 31, 2014	1,633	2,292	100	123	–	2,041	720	–	6,909
Transfers November 1, 2014	<b>1,728</b>	<b>(2,292)</b>	<b>(100)</b>	<b>(123)</b>	<b>223</b>	<b>413</b>	<b>151</b>	–	–
Acquisitions	–	–	–	–	–	<b>116</b>	–	–	<b>116</b>
Foreign currency adjustments and other	–	–	–	–	<b>35</b>	<b>(179)</b>	<b>134</b>	–	<b>(10)</b>
Balance as at October 31, 2015	<b>\$ 3,361</b>	<b>\$ –</b>	<b>\$ –</b>	<b>\$ –</b>	<b>\$ 258</b>	<b>\$ 2,391</b>	<b>\$ 1,005</b>	<b>\$ –</b>	<b>\$ 7,015</b>

Effective November 1, 2014, the Canadian and International businesses previously reported in Global Wealth & Insurance are included in Canadian Banking and International Banking's results, respectively. In addition, there was a reallocation of the results of the Global Capital Markets CGU and Global Corporate & Investment Banking CGU into Global Banking and Markets CGU. As well, certain business activity previously reported in the Asia Pacific CGU is now included in Global Banking and Markets CGU. Consequently, the aggregate number of CGUs for the purposes of goodwill impairment assessment as of November 1, 2014 is reduced to 5 (October 31, 2014 – 7 CGUs). Goodwill was assessed for impairment following the reallocation and no impairment was determined to exist.

### Impairment testing of goodwill

Goodwill acquired in business combinations is allocated to each of the Bank's group of CGUs that are expected to benefit from the synergies of the particular acquisition. Goodwill is assessed for impairment annually or more frequently if events or circumstances occur that may result in the recoverable amount of the CGU falling below its carrying value.

The carrying amount of the CGU is determined by management using approved internal economic capital models. These models consider various factors including credit risk, market risk, operational risk and other relevant business risks for each CGU. The recoverable amount is the higher of fair value less costs of disposal and value in use. The recoverable amount for the CGU has been determined using the fair value less costs of disposal method. In arriving at such value for the CGU, the Bank has used price earnings (P/E) multiples applied to normalized net income for the last four quarters as of the test date, a control premium is added based on a five year weighted average acquisition premium paid for comparable companies, and costs of disposal are deducted from the fair value of the CGU. The resulting recoverable amount determined is then compared to its respective carrying amount to identify any impairment. P/E multiples ranging from 10 to 12.5 times (2014 – 10 to 18 times) have been used.

The fair value less costs of disposal of the CGU is sensitive to changes in net income, P/E multiples and control premiums.

Management believes that reasonable negative changes in any one key assumption used to determine the recoverable amount of the CGU would not result in an impairment.

Goodwill was assessed for annual impairment as at July 31, 2015 and July 31, 2014 and no impairment was determined to exist.

### Intangible assets

Intangible assets consist of assets with indefinite and finite useful lives. Indefinite life intangible assets consist substantially of fund management contracts. The fund management contracts are for the management of open-ended funds. Finite life intangible assets include assets such as computer software, customer relationships and core deposit intangibles.

(\$ millions)	Finite life		Indefinite life		Total
	Computer software	Other intangibles	Fund management contracts <sup>(1)</sup>	Other intangibles	
Cost					
Balance as at October 31, 2013	\$ 1,400	\$ 1,218	\$ 2,325	\$ 67	\$ 5,010
Additions	372	1	–	–	373
Disposals	–	–	–	(1)	(1)
Foreign currency adjustments and other	(1)	12	–	1	12
Balance as at October 31, 2014	\$ 1,771	\$ 1,231	\$ 2,325	\$ 67	\$ 5,394
Acquisitions	5	296	–	–	301
Additions	474	–	–	–	474
Disposals	–	–	–	–	(14)
Foreign currency adjustments and other	(57)	(17)	–	1	(59)
Balance as at October 31, 2015	\$ 2,193	\$ 1,510	\$ 2,325	\$ 68	\$ 6,096
Accumulated amortization					
Balance as at October 31, 2013	\$ 479	\$ 694	\$ –	\$ –	\$ 1,173
Amortization Expense	143	86	–	–	229
Foreign currency adjustments and other	7	10	–	–	17
Balance as at October 31, 2014	\$ 629	\$ 790	\$ –	\$ –	\$ 1,419
Amortization Expense	191	90	–	–	281
Disposals	–	–	–	–	(14)
Foreign currency adjustments and other	(42)	4	–	–	(24)
Balance as at October 31, 2015	\$ 778	\$ 884	\$ –	\$ –	\$ 1,662
Net book value					
As at October 31, 2014	\$ 1,142 <sup>(2)</sup>	\$ 441	\$ 2,325	\$ 67	\$ 3,975
As at October 31, 2015	\$ 1,415 <sup>(2)</sup>	\$ 626	\$ 2,325	\$ 68	\$ 4,434

(1) Fund management contracts are attributable to HollisWealth Inc. (formerly DundeeWealth Inc.).

(2) Computer software comprises of purchased software of \$256 (2014 – \$251), internally generated software of \$619 (2014 – \$481), and in process software not subject to amortization of \$540 (2014 – \$410).

### Impairment testing of intangible assets

Indefinite life intangible assets are not amortized and are assessed for impairment annually or more frequently if events or changes in circumstances indicate that the asset may be impaired. Impairment is assessed by comparing the carrying value of the indefinite life intangible asset to its recoverable amount. The recoverable amount of the fund management contracts is based on a value in use approach using the multi-period excess earnings method. This approach uses cash flow projections from management-approved financial budgets which include key assumptions related to market appreciation, net sales of funds, and operating margins taking into consideration past experience and market expectations. The forecast cash flows cover a 5-year period, with a terminal growth rate of 4.5% (2014 – 4.5%) applied thereafter. These cash flows have been discounted at a rate of 10% (2014 – 10%). Management believes that reasonable negative changes in any one key assumption used to determine the recoverable amount would not result in an impairment.

Indefinite life intangible assets were assessed for annual impairment as at July 31, 2015 and July 31, 2014 and no impairment was determined to exist.

## 19 Other assets

As at October 31 (\$ millions)	2015	2014
Accrued interest	\$ 1,742	\$ 1,690
Accounts receivable	1,683	1,172
Current tax assets	649	565
Pension assets (Note 28)	183	117
Receivable from brokers, dealers and clients	504	945
Receivable from the Federal Deposit Insurance Corporation (Note 13)	218	275
Other	7,324	4,995
<b>Total</b>	<b>\$ 12,303</b>	<b>\$ 9,759</b>

## 20 Deposits

As at October 31 (\$ millions)	2015					2014
	Payable on demand <sup>(1)</sup>		Payable after notice <sup>(2)</sup>	Payable on a fixed date <sup>(3)</sup>	Total	
	Interest-bearing	Non-interest bearing				
Personal	\$ 10,364	\$ 5,233	\$ 102,820	\$ 71,627	\$ 190,044	\$ 175,163
Business and government	63,444	20,855	31,060	259,785	375,144	342,367
Financial institutions	2,386	1,945	2,046	29,354	35,731	36,487
<b>Total</b>	<b>\$ 76,194</b>	<b>\$ 28,033</b>	<b>\$ 135,926<sup>(4)</sup></b>	<b>\$ 360,766</b>	<b>\$ 600,919</b>	<b>\$ 554,017</b>
Recorded in:						
Canada	\$ 66,379	\$ 15,499	\$ 103,447	\$ 224,090	\$ 409,415	\$ 373,491
United States	3,558	393	4,408	70,656	79,015	84,710
United Kingdom	–	5	421	14,121	14,547	13,296
Mexico	–	3,326	4,870	7,598	15,794	13,668
Peru	2,321	447	4,446	7,513	14,727	11,701
Chile	52	1,360	67	6,461	7,940	5,785
Colombia	101	702	5,630	392	6,825	7,450
Other International	3,783	6,301	12,637	29,935	52,656	43,916
<b>Total<sup>(5)</sup></b>	<b>\$ 76,194</b>	<b>\$ 28,033</b>	<b>\$ 135,926</b>	<b>\$ 360,766</b>	<b>\$ 600,919</b>	<b>\$ 554,017</b>

(1) Deposits payable on demand include all deposits for which we do not have the right to notice of withdrawal, generally chequing accounts.

(2) Deposits payable after notice include all deposits for which we require notice of withdrawal, generally savings accounts.

(3) All deposits that mature on a specified date, generally term deposits, guaranteed investments certificates and similar instruments.

(4) Includes \$120 (2014 – \$104) of non-interest bearing deposits.

(5) Deposits denominated in U.S. dollars amount to \$227,320 (2014 – \$201,891) deposits denominated in Mexican pesos amount to \$14,034 (2014 – \$12,444) and deposits denominated in other foreign currencies amount to \$66,860 (2014 – \$49,836).

The following table presents the maturity schedule for term deposits in Canada greater than \$100,000<sup>(1)</sup>.

(\$ millions)	Within three months	Three to six months	Six to twelve months	One to five years	Over five years	Total
<b>As at October 31, 2015</b>	<b>\$ 24,170</b>	<b>\$ 18,890</b>	<b>\$ 27,219</b>	<b>\$ 90,927</b>	<b>\$ 17,231</b>	<b>\$ 178,437</b>
As at October 31, 2014	\$ 42,801	\$ 13,907	\$ 23,338	\$ 75,987	\$ 14,110	\$ 170,143

(1) The majority of foreign term deposits are in excess of \$100,000.

## 21 Subordinated debentures

These debentures are direct, unsecured obligations of the Bank and are subordinate to the claims of the Bank's depositors and other creditors. The Bank, where appropriate, enters into interest rate and cross-currency swaps to hedge the related risks.

As at October 31 (\$ millions)			2015	2014	
Maturity date	Interest rate (%)	Terms <sup>(1)</sup>	Par value	Carrying value <sup>(2)</sup>	Carrying value <sup>(2)</sup>
January 2021	6.65	Redeemable at any time. After January 22, 2016, interest will be payable at an annual rate equal to the 90-day bankers' acceptance rate plus 5.85%.	\$ 1,000	\$ 1,000	\$ 1,000
August 2022	2.898	Redeemable on or after August 3, 2017. After August 3, 2017, interest will be payable at an annual rate equal to the 90-day bankers' acceptance rate plus 1.255%.	1,500	1,501	1,501
October 2024	3.036	Redeemable on or after October 18, 2017. After October 18, 2019, interest will be payable at an annual rate equal to the 90-day bankers' acceptance rate plus 1.14%.	1,750	1,806	1,748
June 2025	8.90	Redeemable at any time.	250	263	264
March 2027	2.58	Redeemable on or after March 30, 2022. After March 30, 2022, interest will be payable at an annual rate equal to the 90-day bankers' acceptance rate plus 1.19% <sup>(3)</sup> .	1,250	1,247	–
November 2037	3.015	JPY ¥10 billion. Redeemable on November 20, 2017.	108	100	99
April 2038	3.37	JPY ¥10 billion. Redeemable on April 9, 2018.	108	100	99
August 2085	Floating	US\$126 million bearing interest at a floating rate of the offered rate for six-month Eurodollar deposits plus 0.125%. Redeemable on any interest payment date.	165	165	160
			<b>\$ 6,131</b>	<b>\$ 6,182</b>	<b>\$ 4,871</b>

(1) In accordance with the provisions of the Capital Adequacy Guideline of the Superintendent, all redemptions are subject to regulatory approval and subject to the terms in the relevant prospectus.

(2) The carrying value of subordinated debentures may differ from par value due to adjustments related to hedge accounting.

(3) The debentures contain non-viability contingent capital (NVCC) provisions. Under such NVCC provisions, the debentures are convertible into a variable number of common shares if OSFI announces that the Bank has ceased, or is about to cease, to be viable, or if a federal or provincial government in Canada publicly announces that the Bank has accepted or agreed to accept a capital injection, or equivalent support, from the federal government or any provincial government or political subdivision or agent thereof without which the Bank would have been determined by OSFI to be non-viable. If such a conversion were to occur, the debentures would be converted into common shares pursuant to an automatic conversion formula defined as 150% of the par value plus accrued and unpaid interest divided by the conversion price. The conversion price is based on the greater of: (i) a floor price of \$5.00 (subject to adjustments in certain events as set out in the prospectus supplement March 23, 2015), and (ii) the current market price of the Bank's common shares at the time of the trigger event (10-day weighted average). Based on the floor price of \$5.00 and excluding the impact of accrued and unpaid interest (if any) and declared but unpaid dividends (if any), the maximum number of common shares issuable on conversion of the debentures would be 375 million shares, which would represent an increase to common shares outstanding of 31% based on the common shares outstanding as at October 31, 2015.

## 22 Other liabilities

As at October 31 (\$ millions)	2015	2014
Accrued interest	\$ 1,888	\$ 1,920
Accounts payable and accrued expenses	5,225	5,265
Current tax liabilities	584	1,009
Deferred tax liabilities (Note 27)	599	454
Gold and silver certificates and bullion	7,812	4,571
Margin and collateral accounts	8,848	5,078
Payables to brokers, dealers and clients	226	293
Provisions (Note 23)	315	518
Pension liabilities (Note 28)	722	817
Other liabilities of subsidiaries and structured entities	10,835	10,020
Other	4,584	4,840
<b>Total</b>	<b>\$ 41,638</b>	<b>\$ 34,785</b>

## 23 Provisions

(\$ millions)	Off-balance sheet credit risks	Restructuring	Other	Total
As at November 1, 2013	\$ 184	\$ 22	\$ 141	\$ 347
Provisions made during the year	–	148	116	264
Provisions used or no longer required during the year	–	(34)	(59)	(93)
Balance as at October 31, 2014	\$ 184	\$ 136	\$ 198	\$ 518
Provisions made during the year	–	–	66	66
Provisions used or no longer required during the year	(72)	(87)	(110)	(269)
<b>Balance as at October 31, 2015</b>	<b>\$ 112</b>	<b>\$ 49</b>	<b>\$ 154</b>	<b>\$ 315</b>

**Off-balance sheet credit risks**

The provision for off-balance sheet credit risks relates primarily to off-balance sheet credit risks such as undrawn lending commitments, letters of credit and letters of guarantee. These are collectively assessed in a manner consistent with the collective allowance for performing on-balance sheet credit risks.

**Restructuring**

During fiscal 2014, the Bank initiated certain restructuring initiatives in order to improve the Bank's customers' experience, reduce costs in a sustainable manner, and to achieve greater operational efficiencies. As a result, in order to implement these initiatives, in the fourth quarter of 2014, a charge of \$148 million was recorded in non-interest expenses, primarily relating to employee severance costs. As at October 31, 2015, \$49 million of the restructuring provision remains and is expected to be utilized in fiscal 2016.

**Other**

Other primarily includes provisions related to litigation reserves. In the ordinary course of business, the Bank and its subsidiaries are routinely defendants in or parties to a number of pending and threatened legal actions and proceedings, including actions brought on behalf of various classes of claimants. In view of the inherent difficulty of predicting the outcome of such matters, the Bank cannot state what the eventual outcome of such matters will be. However, based on current knowledge, management does not believe that liabilities, if any arising from pending litigation will have a material adverse effect on the Consolidated Statement of Financial Position or results of operations of the Bank.

**24 Common and preferred shares**

**a) Common shares**

Authorized:

An unlimited number of common shares without nominal or par value.

Issued and fully paid:

As at October 31 (\$ millions)	2015		2014	
	Number of shares	Amount	Number of shares	Amount
<b>Outstanding at beginning of year</b>	<b>1,216,582,245</b>	<b>\$ 15,231</b>	1,208,588,989	\$ 14,516
Issued under Shareholder Dividend and Share Purchase Plan <sup>(1)</sup>	27,220	2	8,849,647	574
Issued in relation to share-based payments, net (Note 26)	1,827,730	102	3,493,491	187
Issued in relation to the acquisition of a subsidiary or associated corporation	–	–	150,118	10
Repurchased for cancellation under the Normal Course Issuer Bid	(15,499,990)	(194)	(4,500,000)	(56)
<b>Outstanding at end of year</b>	<b>1,202,937,205<sup>(2)</sup></b>	<b>\$ 15,141</b>	1,216,582,245 <sup>(2)</sup>	\$ 15,231

(1) For fiscal 2015, the Bank discontinued issuing shares from Treasury for the Dividend Reinvestment and Stock Dividend options of the Plan and purchased these shares on the market. Effective March 31, 2015, the Bank also discontinued issuing shares from Treasury for the Share Purchase option of the Plan and purchased these shares on the market. As at October 31, 2015, there were 10,020,821 common shares held in reserve for issuance under the Plan.

(2) In the normal course of business, the Bank's regulated Dealer subsidiary purchases and sells the Bank's common shares to facilitate trading/institutional client activity. During fiscal 2015, the number of such shares bought and sold was 12,466,541 (2014 – 13,033,821).

**Dividend**

The dividends paid on common shares in 2015 and 2014 were \$3,289 million (\$2.72 per share) and \$3,110 million (\$2.56 per share), respectively. The Board of Directors approved a quarterly dividend of 70 cents per common share at its meeting on November 30, 2015. This quarterly dividend applies to shareholders of record as of January 5, 2016, and is payable January 27, 2016.

**Normal Course Issuer Bid**

On May 27, 2014, the Bank announced that OSFI and the Toronto Stock Exchange (TSX) approved a normal course issuer bid pursuant to which it may repurchase for cancellation up to 12 million of the Bank's common shares. On March 3, 2015, the Bank announced that OSFI and the TSX approved an increase in the bid up to 16 million shares. Under this bid, the Bank repurchased and cancelled approximately 7.5 million common shares during the year at an average price of \$63.18 per share for a total amount of approximately \$474 million. The bid ended on May 29, 2015.

On May 29, 2015, the Bank announced that OSFI and the TSX approved a normal course issuer bid pursuant to which it may repurchase for cancellation up to 24 million of the Bank's common shares. The bid will end on the earlier of June 1, 2016, or the date on which the Bank completes its purchases. Under this bid, as at October 31, 2015, the Bank has repurchased and cancelled 8.0 million common shares at an average price of \$60.20 per share, for a total amount of approximately \$481 million.

During the year ended October 31, 2015, under these two bids the Bank repurchased and cancelled approximately 15.5 million common shares (2014 – 4.5 million) at an average price of \$61.64 per share (2014 - \$71.04) for a total amount of approximately \$955 million (2014 - \$320 million).

## b) Preferred shares

Authorized:

An unlimited number of preferred shares without nominal or par value.

Issued and fully paid:

As at October 31 (\$ millions)	2015		2014	
	Number of shares	Amount	Number of shares	Amount
<b>Preferred shares:</b>				
Series 14 <sup>(a)(b)</sup>	13,800,000	\$ 345	13,800,000	\$ 345
Series 15 <sup>(a)(c)</sup>	13,800,000	345	13,800,000	345
Series 16 <sup>(a)(d)</sup>	13,800,000	345	13,800,000	345
Series 17 <sup>(a)(e)</sup>	9,200,000	230	9,200,000	230
Series 18 <sup>(a)(f)(g)</sup>	7,497,663	187	7,497,663	187
Series 19 <sup>(a)(f)(g)</sup>	6,302,337	158	6,302,337	158
Series 20 <sup>(a)(f)(h)</sup>	8,039,268	201	8,039,268	201
Series 21 <sup>(a)(f)(h)</sup>	5,960,732	149	5,960,732	149
Series 22 <sup>(a)(f)(i)</sup>	9,376,944	234	9,376,944	234
Series 23 <sup>(a)(f)(i)</sup>	2,623,056	66	2,623,056	66
Series 30 <sup>(a)(f)(j)</sup>	6,142,738	154	10,600,000	265
Series 31 <sup>(a)(f)(j)</sup>	4,457,262	111	–	–
Series 32 <sup>(a)(f)(k)</sup>	16,345,767	409	16,345,767	409
<b>Total preferred shares</b>	<b>117,345,767</b>	<b>\$ 2,934</b>	<b>117,345,767</b>	<b>\$ 2,934</b>

## Terms of preferred shares

	Dividends per share	Issue date	Issue price	Initial dividend	Initial dividend payment date	Rate reset spread	Redemption date	Redemption price
<b>Preferred shares:</b>								
Series 14 <sup>(b)</sup>	0.281250	January 24, 2007	25.00	0.283560	April 26, 2007	–	April 28, 2015 to April 26, 2016	25.25
Series 15 <sup>(c)</sup>	0.281250	April 5, 2007 April 17, 2007	25.00	0.348290	July 27, 2007	–	July 29, 2015 to July 26, 2016	25.25
Series 16 <sup>(d)</sup>	0.328125	October 12, 2007	25.00	0.391950	January 29, 2008	–	January 28, 2015 to January 26, 2016	25.50
Series 17 <sup>(e)</sup>	0.350000	January 31, 2008	25.00	0.337530	April 28, 2008	–	April 28, 2015 to April 26, 2016	25.50
Series 18 <sup>(g)</sup>	0.209375	March 25, 2008 March 27, 2008	25.00	0.431500	July 29, 2008	2.05%	April 26, 2018	25.00
Series 19 <sup>(g)</sup>	0.153938	April 26, 2013	25.00	0.189250	July 29, 2013	2.05%	April 26, 2013 to April 26, 2018	25.50
Series 20 <sup>(h)</sup>	0.225625	June 10, 2008	25.00	0.167800	July 29, 2008	1.70%	October 26, 2018	25.00
Series 21 <sup>(h)</sup>	0.132063	October 26, 2013	25.00	0.167875	January 29, 2014	1.70%	October 26, 2013 to October 26, 2018	25.50
Series 22 <sup>(i)</sup>	0.239375	September 9, 2008	25.00	0.482900	January 28, 2009	1.88%	January 26, 2019	25.00
Series 23 <sup>(i)</sup>	0.143313	January 26, 2014	25.00	0.173875	April 28, 2014	1.88%	January 26, 2014 to January 26, 2019	25.50
Series 30 <sup>(j)</sup>	0.113750	April 12, 2010	25.00	0.282200	July 28, 2010	1.00%	April 26, 2020	25.00
Series 31 <sup>(j)</sup>	0.088313	April 26, 2015	25.00	0.095500	July 29, 2015	1.00%	April 26, 2015 to April 26, 2020	25.50
Series 32 <sup>(k)</sup>	0.231250	February 1, 2011 February 28, 2011	25.00	0.215410	April 27, 2011	1.34%	February 2, 2016	25.00

(a) Non-cumulative preferential cash dividends on Series 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 30, 31 and 32 are payable quarterly, as and when declared by the Board. Dividends on the Non-cumulative 5-Year Rate Reset Preferred Shares (Series 18, 20, 22, 30 and 32) are payable at the applicable rate for the initial five-year fixed rate period ending one day prior to the redemption date. Subsequent to the initial five-year fixed rate period, and resetting every five years thereafter, the dividend on all Rate Reset Preferred Shares will be determined by the sum of the 5-year Government of Canada Yield plus the indicated rate reset spread, multiplied by \$25.00. If outstanding, non-cumulative preferential cash dividends on the Series 19, 21, 23, 31 and 33 are payable quarterly, as and when declared by the Board. Dividends on the Non-cumulative 5-year Rate Reset Preferred Shares (Series 19, 21, 23, 31 and 33) are payable, in an amount per share equal to the sum of the T-Bill Rate plus the rate reset spread of the converted preferred shares, multiplied by \$25.00. For each of the years presented, the Bank paid all of the non-cumulative preferred share dividends.

(b) With regulatory approval, the Series 14 Non-cumulative Preferred Shares may be redeemed by the Bank during the period commencing April 28, 2015 and ending April 26, 2016, at \$25.25 per share, together with declared and unpaid dividends to the date then fixed for redemption and \$25.00 per share commencing April 27, 2016.

- (c) With regulatory approval, the Series 15 Non-cumulative Preferred Shares may be redeemed by the Bank during the period commencing July 29, 2015 and ending July 26, 2016, at \$25.25 per share, together with declared and unpaid dividends to the date then fixed for redemption and \$25.00 per share commencing July 27, 2016.
- (d) With regulatory approval, the Series 16 Non-cumulative Preferred Shares may be redeemed by the Bank during the period commencing January 28, 2015 and ending January 26, 2016 at \$25.50 per share, together with declared and unpaid dividends to the date then fixed for redemption, at \$25.25 per share if redeemed during the period commencing January 27, 2016 and ending January 26, 2017, and \$25.00 per share commencing January 27, 2017.
- (e) With regulatory approval, the Series 17 Non-cumulative Preferred Shares may be redeemed by the Bank during the period commencing April 28, 2015 and ending April 26, 2016 at \$25.50 per share, together with declared and unpaid dividends to the date then fixed for redemption, at \$25.25 per share if redeemed during the period commencing April 27, 2016 and ending April 25, 2017, and \$25.00 per share commencing April 26, 2017.
- (f) Holders of Fixed Rate Reset Preferred Shares will have the option to convert shares into an equal number of the relevant series of Floating Rate Preferred Shares on the applicable Rate Reset Series conversion date and every five years thereafter. Holders of Floating Rate Reset Preferred Shares have reciprocal conversion options into the relevant series of Fixed Rate Reset Preferred Shares. With respect to Series 18 and 19, 20 and 21, 22 and 23, 30 and 31, and 32 and 33, if the Bank determines that, after giving effect to any Election Notices received, there would be less than 1,000,000 Fixed Rate or Floating Rate Preferred Shares of such Series issued and outstanding on an applicable conversion date, then all of the issued and outstanding preferred shares of such Series will automatically be converted into an equal number of the preferred shares of the other relevant Series.
- (g) Holders of Series 18 Non-cumulative 5-Year Rate Reset Preferred Shares will have the option to convert shares into an equal number of Series 19 non-cumulative floating rate preferred shares on April 26, 2018 and on April 26 every five years thereafter. With regulatory approval, the Series 18 preferred shares may be redeemed by the Bank on April 26, 2018 and every five years thereafter, respectively, at \$25.00 per share, together with declared and unpaid dividends. With regulatory approval, the Series 19 Non-cumulative Preferred Shares may be redeemed by the Bank at (i) \$25.00 together with all declared and unpaid dividends to the date fixed for redemption in the case of redemptions on April 26, 2018 and on April 26 every five years thereafter, or (ii) \$25.50 together with all declared and unpaid dividends to the date on any other date fixed for redemption on any other date on or after April 26, 2013.
- (h) Holders of Series 20 Non-cumulative 5-Year Rate Reset Preferred Shares will have the option to convert shares into an equal number of Series 21 non-cumulative floating rate preferred shares on October 26, 2018, and on October 26 every five years thereafter. With regulatory approval, the Series 20 preferred shares may be redeemed by the Bank on October 26, 2018, and every five years thereafter, respectively, at \$25.00 per share, together with declared and unpaid dividends. With regulatory approval, the Series 21 Non-cumulative Preferred Shares may be redeemed by the Bank at (i) \$25.00 together with all declared and unpaid dividends to the date fixed for redemption in the case of redemptions on October 26, 2018 and on October 26 every five years thereafter, or (ii) \$25.50 together with all declared and unpaid dividends to the date on any other date fixed for redemption on any other date on or after October 26, 2013.
- (i) Holders of Series 22 Non-cumulative 5-Year Rate Reset Preferred Shares will have the option to convert shares into an equal number of Series 23 non-cumulative floating rate preferred shares on January 26, 2019, and on January 26 every five years thereafter. With regulatory approval, the Series 22 preferred shares may be redeemed by the Bank on January 26, 2019, and every five years thereafter, respectively, at \$25.00 per share, together with declared and unpaid dividends. With regulatory approval, the Series 23 Non-cumulative Preferred Shares may be redeemed by the Bank at (i) \$25.00 together with all declared and unpaid dividends to the date fixed for redemption in the case of redemptions on January 26, 2019 and on January 26 every five years thereafter, or (ii) \$25.50 together with all declared and unpaid dividends to the date on any other date fixed for redemption on any other date after January 26, 2014.
- (j) Holders of Series 30 Non-cumulative 5-Year Rate Reset Preferred Shares will have the option to convert shares into an equal number of Series 31 non-cumulative floating rate preferred shares on April 26, 2020 and on April 26 every five years thereafter. With regulatory approval, the Series 30 preferred shares may be redeemed by the Bank on April 26, 2020, and every five years thereafter, respectively, at \$25.00 per share, together with declared and unpaid dividends. With regulatory approval, the Series 31 Non-cumulative Preferred Shares may be redeemed by the Bank at (i) \$25.00 together with all declared and unpaid dividends to the date fixed for redemption in the case of redemptions on April 26, 2020 and on April 26 every five years thereafter, or (ii) \$25.50 together with all declared and unpaid dividends to the date fixed for redemption on any other date after April 26, 2015.
- (k) Holders of Series 32 Non-cumulative 5-Year Rate Reset Preferred Shares will have the option to convert shares into an equal number of Series 33 non-cumulative floating rate preferred shares on February 2, 2016, and on February 2 every five years thereafter. With regulatory approval, Series 32 preferred shares may be redeemed by the Bank on February 2, 2016, and for Series 33 preferred shares, if applicable, on February 2, 2021 and every five years thereafter, respectively, at \$25.00 per share, together with declared and unpaid dividends.

**(c) Restrictions on dividend payments**

Under the Bank Act, the Bank is prohibited from declaring any dividends on its common or preferred shares when the Bank is, or would be placed by such a declaration, in contravention of the capital adequacy, liquidity or any other regulatory directives issued under the Bank Act. In addition, common share dividends cannot be paid unless all dividends to which preferred shareholders are then entitled have been paid or sufficient funds have been set aside to do so.

In the event that applicable cash distributions on any of the Scotiabank Trust Securities are not paid on a regular distribution date, the Bank has undertaken not to declare dividends of any kind on its preferred or common shares. Similarly, should the Bank fail to declare regular dividends on any of its directly issued outstanding preferred or common shares, cash distributions will also not be made on any of the Scotiabank Trust Securities. Currently, these limitations do not restrict the payment of dividends on preferred or common shares.



## 25 Capital management

The Bank has a capital management process in place to measure, deploy and monitor its available capital and assess its adequacy. This capital management process aims to achieve four major objectives: exceed regulatory thresholds and meet longer-term internal capital targets, maintain strong credit ratings, manage capital levels commensurate with the risk profile of the Bank and provide the Bank's shareholders with acceptable returns.

Capital is managed in accordance with the Board-approved Capital Management Policy. Senior executive management develop the capital strategy and oversee the capital management processes of the Bank. The Bank's Finance, Group Treasury and Global Risk Management (GRM) groups are key in implementing the Bank's capital strategy and managing capital. Capital is managed using both regulatory capital measures and internal metrics.

Although the Bank is subject to several capital regulations in the different business lines and countries in which the Bank operates, capital adequacy is managed on a consolidated Bank basis. The Bank also takes measures to ensure its subsidiaries meet or exceed local regulatory capital requirements. The primary regulator of its consolidated capital adequacy is the Office of the Superintendent of Financial Institutions Canada (OSFI). The capital adequacy regulations in Canada are largely consistent with international standards set by the Basel Committee on Banking Supervision (BCBS).

Effective November 1, 2012, Canadian banks are subject to the revised capital adequacy requirements as published by the BCBS and commonly referred to as Basel III. Basel III builds on the "International Convergence of Capital Measurement and Capital Standards: A Revised Framework" (Basel II). OSFI has issued guidelines, reporting requirements and disclosure guidance which are consistent with the Basel III reforms, except for its deferral of the Basel III credit valuation adjustment (CVA) related capital charges, requiring they be phased-in over a 5 year period, beginning January 2014.

Under Basel III, there are three primary risk-based regulatory capital ratios used to assess capital adequacy, CET1, Tier 1 and Total Capital ratios, which are determined by dividing those capital components by risk-weighted assets. Basel III also provides guidance on non-viability contingent capital (NVCC). The guidance stipulates that in order to qualify as regulatory capital, non-common share capital instruments must be convertible into common equity upon a trigger event as defined within the guidance. All non-common instruments issued after December 31, 2012, were required to meet these NVCC requirements to qualify as regulatory capital.

To enable banks to meet the new standards, Basel III contains transitional arrangements commencing January 1, 2013, through January 1, 2019. Transitional requirements result in a 5 year phase-in of new deductions and additional capital components to common equity. Non-qualifying capital instruments will be phased out over 10 years and the capital conservation buffer will be phased in over 4 years.

OSFI requires Canadian deposit-taking institutions to fully implement the 2019 Basel III reforms, without the transitional phase-in provisions for capital deductions (referred to as 'all-in'), and achieve minimums of 7%, 8.5% and 10.5% for CET1, Tier 1 and Total Capital, respectively. OSFI has also designated the bank as a domestic systemically important bank (D-SIB), increasing its minimum capital ratio requirements by 1% effective January 1, 2016, in line with the requirements for global systemically important banks.

Risk-weighted assets represent the Bank's exposure to credit, market and operational risk and are computed by applying a combination of the Bank's internal credit risk parameters and OSFI prescribed risk weights to on-and off-balance sheet exposures. Under the Basel framework there are two main methods for computing credit risk: the standardized approach, which uses prescribed risk weights; and internal ratings-based approaches, which allow the use of a bank's internal models to calculate some, or all, of the key inputs into the regulatory capital calculation. Users of the Advanced Internal Ratings Based Approach (AIRB) are required to have sophisticated risk management systems for the calculations of credit risk regulatory capital. Once banks demonstrate full compliance with the AIRB requirements, and OSFI has approved its use, they may proceed to apply the AIRB approach in computing capital requirements. The Bank uses the AIRB to compute credit risk for material Canadian, U.S., European portfolios and for a significant portion of international corporate and commercial portfolios. The Bank continues to assess the remaining portfolios for the application of AIRB in the future. In 2012, the Bank implemented the Basel Committee's revised market risk framework. The Bank uses the Standardized Approach to calculate the operational risk capital requirements.

In addition to risk-based capital requirements, the Basel III reforms introduced a simpler, non risk-based Leverage ratio requirement to act as a supplementary measure to its risk-based capital requirements. The Leverage ratio is defined as a ratio of Basel III Tier 1 capital to a leverage exposure measure which includes on-balance sheet assets and off-balance sheet commitments, derivatives and securities financing transactions, as defined within the requirements.

In January 2014, the BCBS issued revisions to the Basel III Leverage Ratio framework. Revisions to the framework related primarily to the exposure measure, i.e. the denominator of the ratio, and consist mainly of: lower credit conversion factors for certain off-balance sheet commitments; further clarification on the treatment for derivatives, related collateral, and securities financing transactions; additional requirements for written credit derivatives; and, minimum public disclosure requirements commencing January 2015. The final calibration will be completed by 2017, with a view to migrating to a Pillar 1 (minimum capital requirement) treatment by January 2018.

In October 2014, OSFI released its Leverage Requirements Guideline which outlines the application of the Basel III Leverage ratio in Canada and the replacement of the former Assets-to-Capital Multiple (ACM), effective the first quarter of 2015. Institutions are expected to maintain a material operating buffer above the 3% minimum. Leverage ratio disclosures are in accordance with OSFI's September 2014 Public disclosure Requirements. The Bank meets OSFI's authorized Leverage ratio.

The Bank's regulatory capital and leverage position were as follows:

As at October 31 (\$ millions)	2015		2014	
	All-in	Transitional	All-in	Transitional
<b>Capital</b>				
Common Equity Tier 1 Capital <sup>(1)</sup>	\$ 36,965	\$ 44,811	\$ 33,742	\$ 41,712
Net Tier 1 Capital <sup>(2)</sup>	\$ 41,366	\$ 44,811	\$ 38,073	\$ 41,712
Total regulatory capital <sup>(2)(3)</sup>	\$ 48,230	\$ 51,501	\$ 43,592	\$ 47,100
<b>Risk-weighted assets used in calculation of capital ratios<sup>(4)</sup></b>				
CET1 risk-weighted assets <sup>(4)</sup>	\$ 357,995	\$ 364,824	\$ 312,473	\$ 319,936
Tier 1 risk-weighted assets <sup>(4)</sup>	\$ 358,780	\$ 364,824	\$ 313,263	\$ 319,936
Total risk-weighted assets <sup>(4)</sup>	\$ 359,453	\$ 364,824	\$ 314,449	\$ 319,936
<b>Capital ratios</b>				
Common Equity Tier 1 Capital ratio	10.3%	12.3%	10.8%	13.0%
Tier 1 capital ratio	11.5%	12.3%	12.2%	13.0%
Total capital ratio	13.4%	14.1%	13.9%	14.7%
<b>Leverage:</b>				
Leverage exposures <sup>(5)</sup>	\$ 980,212	\$ 983,318	N/A	N/A
Leverage ratio <sup>(5)</sup>	4.2%	4.6%	N/A	N/A

(1) Other Common Equity Tier 1 capital adjustments under the all-in approach include defined pension plan assets and other items. For the transitional approach, deductions include: Common Equity Tier 1 all-in deductions multiplied by an annual transitional factor (40% in 2015; 20% in 2014) and an adjustment for Additional Tier 1 deductions for which there is insufficient Additional Tier 1 capital.

(2) Non-qualifying Tier 1 and Tier 2 capital instruments are subject to a phase-out period of 10 years. Amounts reported for regulatory capital may be less than as reported on the Consolidated Statement of Financial Position.

(3) Other Tier 1/Tier 2 capital adjustments under the all-in approach include eligible non-controlling interests in subsidiaries; in addition, Tier 2 includes eligible collective allowance and excess allowance. For the transitional approach, other Tier 1/Tier 2 capital adjustments include the amount of the Common Equity Tier 1 regulatory adjustment not deducted that were Tier 1/Tier 2 deductions under Basel II (such as 50% of significant investments in financial institutions).

(4) In accordance with OSFI's requirements, scalars for CVA risk-weighted assets of 0.64, 0.71 and 0.77 (0.57, 0.65 and 0.77 in 2014) were used to compute the CET1 capital ratio, Tier 1 capital ratio and Total capital ratio, respectively.

(5) Effective 2015, the leverage ratio replaced the Assets-to-capital multiple.

The Bank substantially exceeded the OSFI capital targets as at October 31, 2015. OSFI has also prescribed an authorized leverage ratio and the Bank was above the regulatory minimum as at October 31, 2015.

## 26 Share-based payments

### (a) Stock option plans

The Bank grants stock options and stand-alone stock appreciation rights (SARs) as part of the Employee Stock Option Plan. Options to purchase common shares and/or to receive an equivalent cash payment, as applicable, may be granted to selected employees at an exercise price of the higher of the closing price of the Bank's common shares on the Toronto Stock Exchange (TSX) on the trading day prior to the grant date or the volume weighted average trading price for the five trading days immediately preceding the grant date.

Stock Options granted since December 2014 vest 50% at the end of the third year and 50% at the end of the fourth year. This change is prospective and does not impact prior period grants. Stock Options are exercisable no later than 10 years after the grant date. In the event that the expiry date falls within an insider trading blackout period, the expiry date will be extended for 10 business days after the end of the blackout period. As approved by the shareholders, a total of 129 million common shares have been reserved for issuance under the Bank's Employee Stock Option Plan of which 95.2 million common shares have been issued as a result of the exercise of options and 22.7 million common shares are committed under outstanding options, leaving 11.1 million common shares available for issuance as options. Outstanding options expire on dates ranging from December 2, 2015 to December 8, 2024.

The cost of these options is recognized on a graded vesting basis except where the employee is eligible to retire prior to a tranche's vesting date, in which case the cost is recognized between the grant date and the date the employee is eligible to retire.

The stock option plans include:

- **Tandem stock appreciation rights**

Employee stock options granted between December 2, 2005 to November 1, 2009 have Tandem SARs, which provide the employee the choice to either exercise the stock option for shares, or to exercise the Tandem SARs and thereby receive the intrinsic value of the stock option in cash. As at October 31, 2015, 175,876 Tandem SARs were outstanding (2014 – 363,775).

The share-based payment liability recognized for vested Tandem SARs as at October 31, 2015 was \$3 million (2014 – \$7 million). The corresponding intrinsic value of this liability as at October 31, 2015 was \$3 million (2014 – \$8 million).

In 2015, a benefit of \$0.3 million (2014 – \$1 million) was recorded in salaries and employee benefits in the Consolidated Statement of Income. This benefit included losses arising from derivatives used to manage the volatility of share-based payments of \$1 million (2014 – \$5 million gains).

### Stock options

Employee stock options granted beginning December 2009, are equity-classified stock options which call for settlement in shares and do not have Tandem SARs features.

The amount recorded in equity – other reserves for vested stock options as at October 31, 2015 was \$182 million (2014 – \$184 million).

In 2015, an expense of \$13 million (2014 – \$30 million) was recorded in salaries and employee benefits in the Consolidated Statement of Income. As at October 31, 2015, future unrecognized compensation cost for non-vested stock options was \$5 million (2014 – \$8 million) which is to be recognized over a weighted-average period of 1.90 years (2014 – 1.71 years).

### Stock appreciation rights

Stand-alone SARs are granted instead of stock options to selected employees in countries where local laws may restrict the Bank from issuing shares. When a SAR is exercised, the Bank pays the appreciation amount in cash equal to the rise in the market price of the Bank's common shares since the grant date.

During fiscal 2015, 88,768 SARs were granted (2014 – 233,120) and as at October 31, 2015, 1,791,458 SARs were outstanding (2014 – 1,852,484), of which 1,726,644 SARs were vested (2014 – 1,744,867).

The share-based payment liability recognized for vested SARs as at October 31, 2015 was \$17 million (2014 – \$27 million). The corresponding intrinsic value of this liability as at October 31, 2015 was \$17 million (2014 – \$31 million).

In 2015, a benefit of \$3 million (2014 – benefit of \$1 million) was recorded in salaries and employee benefits in the Consolidated Statement of Income. This benefit included losses arising from derivatives used to manage the volatility of share-based payment of \$6 million (2014 – \$14 million gains).

### Determination of fair values

The share-based payment liability and corresponding expense for SARs and options with Tandem SAR features were quantified using the Black-Scholes option pricing model with the following assumptions and resulting fair value per award:

As at October 31	2015	2014
Assumptions		
Risk-free interest rate%	0.57% – 0.82%	0.98% – 1.40%
Expected dividend yield	4.33%	3.70%
Expected price volatility	16.34% – 28.12%	15.12% – 22.82%
Expected life of option	0.05 – 4.43 years	0.05 – 4.35 years
Fair value		
Weighted-average fair value	\$ 10.23	\$ 16.45

The share-based payment expense for stock options, i.e., without Tandem SAR features, was quantified using the Black-Scholes option pricing model on the date of grant. The fiscal 2015 and 2014 stock option grants were fair valued using the following weighted-average assumptions and resulting fair value per award:

	2015 Grant	2014 Grant
Assumptions		
Risk-free interest rate %	1.60%	2.02%
Expected dividend yield	3.86%	3.65%
Expected price volatility	21.90%	21.45%
Expected life of option	6.69 years	6.07 years
Fair value		
Weighted-average fair value	\$ 7.63	\$ 8.85

The risk-free rate is based on Canadian treasury bond rates interpolated for the maturity equal to the expected life until exercise of the options. Expected dividend yield is based on historical dividend payout. Expected price volatility is determined based on the historical volatility for compensation. For accounting purposes, an average of the market consensus implied volatility for traded options on our common shares and the historical volatility is used.

Details of the Bank's Employee Stock Option Plan are as follows<sup>(1)</sup>:

As at October 31	2015		2014	
	Number of stock options (000's)	Weighted average exercise price	Number of stock options (000's)	Weighted average exercise price
Outstanding at beginning of year	23,355	\$ 51.68	23,609	\$ 49.09
Granted	1,514	68.32	3,242	63.98
Exercised as options	(1,811)	46.10	(3,342)	45.31
Exercised as Tandem SARs	(2)	47.92	(50)	44.35
Forfeited	(99)	58.06	(104)	54.78
Expired	–	–	–	–
Outstanding at end of year <sup>(2)</sup>	22,957	\$ 53.19	23,355	\$ 51.68
Exercisable at end of year <sup>(3)</sup>	16,192	\$ 50.09	14,344	\$ 48.08
Available for grant	11,317		12,731	

As at October 31, 2015	Options Outstanding			Options Exercisable	
	Number of stock options ('000's)	Weighted average remaining contractual life (years)	Weighted average exercise price	Number of stock options ('000's)	Weighted average exercise price
Range of exercise prices					
\$33.89 to \$46.02	<b>2,676</b>	<b>2.54</b>	<b>\$ 36.13</b>	<b>2,676</b>	<b>\$ 36.13</b>
\$47.39 to \$52.00	<b>7,186</b>	<b>4.59</b>	<b>\$ 49.39</b>	<b>6,266</b>	<b>\$ 49.31</b>
\$52.57 to \$55.63	<b>8,413</b>	<b>5.48</b>	<b>\$ 55.09</b>	<b>6,458</b>	<b>\$ 54.93</b>
\$63.98 to \$68.32	<b>4,682</b>	<b>8.42</b>	<b>\$ 65.37</b>	<b>792</b>	<b>\$ 63.98</b>
	<b>22,957</b>	<b>5.46</b>	<b>\$ 53.19</b>	<b>16,192</b>	<b>\$ 50.09</b>

(1) Excludes SARs.

(2) Includes outstanding options of 175,876 Tandem SARs (2014 – 363,775) and 301,950 options originally issued under HollisWealth plans (2014 – 578,672).

(3) Includes exercisable options of 175,876 Tandem SARs (2014 – 363,775) and 301,950 options originally issued under HollisWealth plans (2014 – 416,517).

### (b) Employee share ownership plans

Eligible employees can contribute up to a specified percentage of salary towards the purchase of common shares of the Bank. In general, the Bank matches 50% of eligible contributions, up to a maximum dollar amount, which is expensed in salaries and employee benefits. During 2015, the Bank's contributions totalled \$31 million (2014 – \$30 million). Contributions, which are used to purchase common shares in the open market, do not result in a subsequent expense to the Bank from share price appreciation.

As at October 31, 2015, an aggregate of 19 million common shares were held under the employee share ownership plans (2014 – 19 million). The shares in the employee share ownership plans are considered outstanding for computing the Bank's basic and diluted earnings per share.

### (c) Other share-based payment plans

Other share-based payment plans use notional units that are valued based on the Bank's common share price on the TSX. These units accumulate dividend equivalents in the form of additional units based on the dividends paid on the Bank's common shares. These plans are settled in cash and, as a result, are liability-classified. Fluctuations in the Bank's share price change the value of the units, which affects the Bank's share-based payment expense. As described below, the value of a portion of the Performance Share Unit notional units also varies based on Bank performance. Upon exercise or redemption, payments are made to the employees with a corresponding reduction in the accrued liability.

In 2015, an aggregate expense of \$209 million (2014 – \$242 million) was recorded in salaries and employee benefits in the Consolidated Statement of Income for these plans. This expense includes losses from derivatives used to manage the volatility of share-based payment of \$72 million (2014 – \$92 million gains).

As at October 31, 2015, the share-based payment liability recognized for vested awards under these plans was \$754 million (2014 – \$901 million).

Details of these other share-based payment plans are as follows:

#### Deferred Stock Unit Plan (DSU)

Under the DSU Plan, senior executives may elect to receive all or a portion of their cash bonus under the Annual Incentive Plan (which is expensed for the year awarded in salaries and employee benefits in the Consolidated Statement of Income) in the form of deferred stock units which vest immediately. In addition the DSU plan allows for eligible executives of the Bank to participate in grants that are not allocated from the Annual Incentive Plan election. These grants are subject to specific vesting schedules. Units are redeemable in cash only when an executive ceases to be a Bank employee, and must be redeemed by December 31 of the year following that event. As at October 31, 2015, there were 1,325,679 units (2014 – 1,600,374) awarded and outstanding of which 1,325,679 units were vested (2014 – 1,600,374).

#### Directors' Deferred Stock Unit Plan (DDSU)

Under the DDSU Plan, non-officer directors of the Bank may elect to receive all or a portion of their fee for that fiscal year (which is expensed by the Bank in other expenses in the Consolidated Statement of Income) in the form of deferred stock units which vest immediately. Units are redeemable in cash, only following resignation or retirement, and must be redeemed by December 31 of the year following that event. As at October 31, 2015, there were 337,413 units outstanding (2014 – 333,315).

#### Restricted Share Unit Plan (RSU)

Under the RSU Plan, selected employees receive an award of restricted share units which, for the majority of grants, vest at the end of three years. There are certain grants that provide for a graduated vesting schedule. Upon vesting all RSU units are paid in cash to the employee. The share-based payment expense is recognized evenly over the vesting period except where the employee is eligible to retire prior to the vesting date in which case, the expense is recognized between the grant date and the date the employee is eligible to retire. As at October 31, 2015, there were 2,147,971 units (2014 – 2,346,330) awarded and outstanding of which 1,566,333 were vested (2014 – 1,659,401).

#### Performance Share Unit Plan (PSU)

Eligible executives receive an award of performance share units that vest at the end of three years. One grant provides for a graduated vesting schedule which includes a specific performance factor calculation. A portion of the PSU awards are subject to performance criteria measured over a three-year period whereby a multiplier factor is applied which impacts the incremental number of outstanding shares due to employees. The three-year performance measures include return on equity compared to target and total shareholder return relative to a comparator group selected prior to the granting of the award. The Bank uses a probability-weighted-average of potential outcomes to estimate the multiplier impact. The share-based payment expense is recognized over the vesting period except where the employee is eligible to retire prior to the vesting date; in which case, the expense is recognized between the grant date and the date the employee is eligible to retire. This expense varies based on changes in the Bank's share price and the Bank's performance compared to the performance measures. Upon vesting, the units are paid in cash to the employee. As at October 31, 2015, there were 9,025,306 units (2014 – 9,409,639) outstanding subject to performance criteria, of which 7,686,580 units were vested (2014 – 8,011,356).

### Deferred Performance Plan

Under the Deferred Performance Plan, a portion of the bonus received by Global Banking and Markets employees (which is accrued and expensed in the year to which it relates) is allocated to qualifying employees in the form of units. These units are subsequently paid in cash to the employees over each of the following three years. Changes in the value of the units, which arise from fluctuations in the market price of the Bank's common shares, are expensed in the same manner as the Bank's other liability-classified share-based payment plans in the salaries and employee benefits expense in the Consolidated Statement of Income. As at October 31, 2015, there were 1,940,375 units outstanding (2014 – 1,943,917).

### (d) Share Bonus Plans

Prior to the acquisition of HollisWealth and related entities (formerly DundeeWealth) on February 1, 2011, HollisWealth had established share bonus plans for eligible participants. The share bonus plans permitted common shares of HollisWealth to be issued from treasury or purchased in the market. At the time of the acquisition of HollisWealth, the share bonus awards that were granted but not yet vested were converted into 377,516 Bank of Nova Scotia common shares to be issued from treasury. As at October 31, 2015, there were 3,766 (2014 – 21,739) share bonus awards outstanding from the HollisWealth share bonus plans. During 2015, 16,961 common shares were issued from treasury for these plans (2014 – 17,615) and 1,012 awards were forfeited (2014 – 1,596). Share bonus awards have not been granted under these plans since February 1, 2011.

The share bonus plans are considered to be equity-classified awards. As at October 31, 2015, the amount recorded in equity-other reserves for vested awards for these plans was \$5 million (2014 – \$5 million).

## 27 Corporate income taxes

Corporate income taxes recorded in the Bank's consolidated financial statements for the years ended October 31 are as follows:

### (a) Components of income tax provision

For the year ended October 31 (\$ millions)	2015	2014	2013 <sup>(1)</sup>
<b>Provision for income taxes in the Consolidated Statement of Income:</b>			
<b>Current income taxes:</b>			
Domestic:			
Federal	\$ 528	\$ 565	\$ 460
Provincial	459	423	376
Adjustments related to prior periods	23	(70)	(8)
Foreign	897	865	856
Adjustments related to prior periods	2	(3)	(13)
	<b>1,909</b>	<b>1,780</b>	<b>1,671</b>
<b>Deferred income taxes:</b>			
Domestic:			
Federal	(16)	141	38
Provincial	(20)	66	27
Foreign	(20)	15	1
	<b>(56)</b>	<b>222</b>	<b>66</b>
Total provision for income taxes in the Consolidated Statement of Income	<b>\$ 1,853</b>	<b>\$ 2,002</b>	<b>\$ 1,737</b>
<b>Provision for income taxes in the Consolidated Statement of Changes in Equity:</b>			
Current income taxes	\$ (496)	\$ (248)	\$ (99)
Deferred income taxes	(8)	(174)	207
	<b>(504)</b>	<b>(422)</b>	<b>108</b>
<b>Reported in:</b>			
Other Comprehensive Income	(464)	(432)	94
Retained earnings	(43)	4	(3)
Common shares	1	1	5
Other reserves	2	5	12
Total provision for income taxes in the Consolidated Statement of Changes in Equity	<b>(504)</b>	<b>(422)</b>	<b>108</b>
Total provision for income taxes	<b>\$ 1,349</b>	<b>\$ 1,580</b>	<b>\$ 1,845</b>
<b>Provision for income taxes in the Consolidated Statement of Income includes:</b>			
Deferred tax expense (benefit) relating to origination/reversal of temporary differences	\$ 118	\$ 163	\$ 118
Deferred tax expense (benefit) of tax rate changes	(2)	–	(5)
Deferred tax benefit of previously unrecognized tax losses, tax credits and temporary differences	(172)	59	(47)
	<b>\$ (56)</b>	<b>\$ 222</b>	<b>\$ 66</b>

(1) Certain prior period amounts are retrospectively adjusted to reflect the adoption of new and amended IFRS standards (IFRS 10 and IAS 19) in 2014.

**(b) Reconciliation to statutory rate**

Income taxes in the Consolidated Statement of Income vary from the amounts that would be computed by applying the composite federal and provincial statutory income tax rate for the following reasons:

For the year ended October 31 (\$ millions)	2015		2014		2013	
	Amount	Percent of pre-tax income	Amount	Percent of pre-tax income	Amount	Percent of pre-tax income
Income taxes at statutory rate	\$ 2,386	26.3%	\$ 2,439	26.2%	\$ 2,185	26.2%
Increase (decrease) in income taxes resulting from:						
Lower average tax rate applicable to subsidiaries and foreign branches	(233)	(2.6)	(177)	(1.9)	(250)	(3.0)
Tax-exempt income from securities	(281)	(3.1)	(212)	(2.3)	(214)	(2.6)
Deferred income tax effect of substantively enacted tax rate changes	(2)	–	–	–	(5)	(0.1)
Other, net	(17)	(0.2)	(48)	(0.5)	21	0.3
<b>Total income taxes and effective tax rate</b>	<b>\$ 1,853</b>	<b>20.4%</b>	<b>\$ 2,002</b>	<b>21.5%</b>	<b>\$ 1,737</b>	<b>20.8%</b>

The change in the statutory tax rate between 2015 and 2014 was primarily due to an increase in a provincial tax rate.

**(c) Deferred taxes**

Significant components of the Bank's deferred tax assets and liabilities are as follows:

October 31 (\$ millions)	Statement of Income		Statement of Financial Position	
	For the year ended		As at	
	2015	2014	2015	2014
Deferred tax assets:				
Loss carryforwards	\$ 80	\$ 138	\$ 539	\$ 620
Allowance for credit losses	(93)	(63)	812	669
Deferred compensation	50	(45)	215	254
Deferred income	46	(6)	301	282
Property and equipment	(72)	92	186	91
Pension and other post-retirement benefits	54	(2)	676	683
Securities	8	144	138	145
Other	(10)	46	408	290
<b>Total deferred tax assets</b>	<b>\$ 63</b>	<b>\$ 304</b>	<b>\$3,275</b>	<b>\$ 3,034</b>
Deferred tax liabilities:				
Deferred income	\$ 39	\$ 6	\$ 114	\$ 75
Property and equipment	1	13	65	64
Pension and other post-retirement benefits	22	38	153	132
Securities	(26)	9	68	60
Intangible assets	38	33	914	881
Other	45	(17)	526	513
<b>Total deferred tax liabilities</b>	<b>\$119</b>	<b>\$ 82</b>	<b>\$1,840</b>	<b>\$ 1,725</b>
<b>Net deferred tax assets (liabilities)<sup>(1)</sup></b>	<b>\$ (56)</b>	<b>\$ 222</b>	<b>\$1,435</b>	<b>\$ 1,309</b>

(1) For Consolidated Statement of Financial Position presentation, deferred tax assets and liabilities are assessed by legal entity. As a result, the net deferred tax assets of \$1,435 (2014 – \$1,309) are represented by deferred tax assets of \$2,034 (2014 – \$1,763), and deferred tax liabilities of \$599 (2014 – \$454) on the Consolidated Statement of Financial Position.

The major changes to net deferred taxes were as follows:

For the year ended October 31 (\$ millions)	2015	2014
Balance at beginning of year	\$1,309	\$ 1,347
Deferred tax benefit (expense) for the year recorded in income	56	(222)
Deferred tax benefit (expense) for the year recorded in equity	8	174
Acquired in business combinations	27	–
Other	35	10
<b>Balance at end of year</b>	<b>\$1,435</b>	<b>\$ 1,309</b>

The tax related to temporary differences, unused tax losses and unused tax credits for which no deferred tax asset is recognized in the Consolidated Statement of Financial Position amounts to \$166 million (2014 – \$338 million). The amount related to unrecognized tax losses is \$24, which will expire as follows: \$20 million in 2018 and beyond and \$4 million have no fixed expiry date.

Included in the net deferred tax asset are tax benefits of \$41 million (2014 – \$1 million) that have been recognized in certain Canadian and foreign subsidiaries that have incurred losses in either the current or the preceding year. In determining if it is appropriate to recognize these tax benefits, the Bank relied on projections of future taxable profits.

Deferred tax liabilities are not required to be recognized for taxable temporary differences arising on investments in subsidiaries, associates and interests in joint ventures if the Bank controls the timing of the reversal of the temporary difference and it is probable that the temporary difference



will not reverse in the foreseeable future. At the end of the year taxable temporary differences of \$46.0 billion (2014 – \$38.7 billion) related to the Bank's investment in subsidiaries were not recognized as deferred tax liabilities in line with these requirements.

## 28 Employee benefits

The Bank sponsors a number of employee benefit plans, including pensions (defined benefit and defined contribution) and other benefit plans (post-retirement benefits and other long-term employee benefits) for most of its employees globally. The information presented below relates to the Bank's principal plans; other plans operated by certain subsidiaries of the Bank are not considered material and are not included in these disclosures.

### Global pension plans

The principal pension plans include plans in Canada, the US, Mexico, the UK, Ireland, Jamaica, Trinidad & Tobago and other countries in the Caribbean in which the Bank operates. The Bank has a strong and well defined governance structure to manage these global obligations. The investment policy for each principal plan is reviewed periodically and all plans are in good standing with respect to legislation and local regulations.

Actuarial valuations for funding purposes for the Bank's funded pension plans are conducted as required by applicable legislation. The purpose of the actuarial valuation is to determine the funded status of the plans on a going-concern and statutory basis and to determine the required contributions. The plans are funded in accordance with applicable pension legislation and the Bank's funding policies such that future benefit promises based on plan provisions are well secured. The assumptions used for the funding valuations are set by independent plan actuaries on the basis of the requirements of the local actuarial standards of practice and statute.

### Scotiabank Pension Plan (Canada)

The most significant pension plan is the Scotiabank Pension Plan (SPP) in Canada, a defined benefit pension plan, which was recently amended to include an optional defined contribution (DC) component for employees in Canada hired on or after January 1, 2016. As the administrator of the SPP, the Bank has established a well-defined governance structure and policies to ensure compliance with legislative and regulatory requirements under OSFI and the Canada Revenue Agency. The Bank appoints a number of committees to oversee and make decisions related to the administration of the SPP. Certain committees are also responsible for the investment of the assets of the SPP Fund and for monitoring the investment managers and performance.

- The Human Resources Committee (HRC) of the Board approves the charter of the Pension Administration and Investment Committee (PAIC), reviews reports, and approves the investment policy. The HRC also reviews and recommends any amendments to the SPP to the Board of Directors.
- PAIC is responsible for recommending the investment policy to the HRC, for appointing and monitoring investment managers, and for reviewing auditor and actuary reports. PAIC also monitors the administration of member pension benefits.
- The Scotiabank Master Trust Committee (MTC) invests assets in accordance with the investment policy and all applicable legislation. The MTC assigns specific mandates to investment management firms. PAIC and the MTC both have representation from independent members on the committees.
- The Capital Accumulation Plans (CAP) Committee is responsible for the administration and investment of the DC component of the SPP including the selection and monitoring of investment options available to DC participants.

Actuarial valuations for funding purposes for the SPP are conducted on an annual basis. The most recent funding valuation was conducted as of November 1, 2014. Contributions are being made to the SPP in accordance with this valuation and are shown in the table in b) below. The assumptions used for the funding valuation are set by independent plan actuaries on the basis of the requirements of the Canadian Institute of Actuaries and applicable regulation.

### Pension Plan Changes

As communicated to employees in the fourth quarter of 2015, the current Canadian pension arrangements will be closed to new employees hired on or after January 1, 2016. In addition, effective November 1, 2018, additional retirement optional forms of pension will be introduced while the commuted value at retirement option will be removed. Benefits earned for service after November 1, 2018, will no longer be eligible for early retirement subsidies. New hires on or after January 1, 2016, will be enrolled in a new hybrid (non-contributory defined benefit with an optional defined contribution) pension arrangement, within the SPP.

The past service cost outlined in the table d) below includes the impact of various plan changes including the removal of the commuted value at retirement option from the Canadian plans and the impact of settling liabilities in the US Scotiabank Pension Plan through a one-time optional lump sum window for former employees who have not yet retired.

### Other benefit plans

The principal other benefit plans include plans in Canada, the US, Mexico, Uruguay, the UK, Jamaica, Trinidad & Tobago and other countries in the Caribbean in which the Bank operates. The most significant other benefit plans provided by the Bank are in Canada.

### Key assumptions

The financial information reported below in respect of pension and other benefit plans are based on a number of assumptions. The most significant assumption is the discount rate, which is set by reference to the yields on high quality corporate bonds with durations that match the defined benefit obligations. This discount rate must also be used to determine the annual benefit expense. Other assumptions set by management are determined in reference to market conditions, plan-level experience, best practices and future expectations. The key weighted-average assumptions used by the Bank for the measurement of the benefit obligation and benefit expense for all of the Bank's principal plans are summarized in the table in f) below.



**Risk management**

The Bank's defined benefit pension plans and other benefit plans expose the Bank to a number of risks. Some of the more significant risks include interest rate risk, investment risk, longevity risk and health care cost increases, among others. These risks could result in higher defined benefit expense and a higher defined benefit obligation to the extent that:

- there is a decline in discount rates; and/or
- plan assets returns are less than expected; and/or
- plan members live longer than expected; and/or
- health care costs are higher than assumed.

In addition to the governance structure and policies in place, the Bank manages risks by regularly monitoring market developments and asset investment performance. The Bank also monitors regulatory and legislative changes along with demographic trends and revisits the investment strategy and/or plan design as warranted.

**a) Relative size of plan obligations and assets**

For the year ended October 31, 2015	Pension plans			Other benefit plans	
	Canada			Canada	International
	SPP	Other	International		
Percentage of total benefit obligations	<b>72%</b>	<b>11%</b>	<b>17%</b>	<b>62%</b>	<b>38%</b>
Percentage of total plan assets	<b>76%</b>	<b>6%</b>	<b>18%</b>	<b>20%</b>	<b>80%</b>
Percentage of total benefit expense	<b>64%</b>	<b>18%</b>	<b>18%</b>	<b>62%</b>	<b>38%</b>

For the year ended October 31, 2014	Pension plans			Other benefit plans	
	Canada			Canada	International
	SPP	Other	International		
Percentage of total benefit obligations	73%	10%	17%	64%	36%
Percentage of total plan assets	77%	5%	18%	21%	79%
Percentage of total benefit expense	78%	18%	4%	60%	40%

**b) Cash contributions and payments**

The table below shows the cash contributions and payments made by the Bank to its principal plans in 2015, and the two prior years.

Contributions to the principal plans for the year ended October 31 (\$ millions)	2015	2014	2013
Defined benefit pension plans (cash contributions to fund the plans, including paying beneficiaries under the unfunded pension arrangements)			
SPP	<b>\$236</b>	\$ 268	\$ 331
All other plans	<b>60</b>	75	72
Other benefit plans (cash contributions mainly in the form of benefit payments to beneficiaries)	<b>42</b>	46	59
Defined contribution pension plans (cash contributions)	<b>29</b>	21	19
<b>Total contributions<sup>(1)</sup></b>	<b>\$367</b>	<b>\$ 410</b>	<b>\$ 481</b>

(1) Based on preliminary estimates, the Bank expects to make contributions of \$237 to the SPP, \$62 to all other defined benefit pension plans, \$49 to other benefit plans and \$31 to all other defined contribution plans for the year ending October 31, 2016.

**c) Funded and unfunded plans**

The excess (deficit) of the fair value of assets over the benefit obligation at the end of the year includes the following amounts for plans that are wholly unfunded and plans that are wholly or partly funded.

As at October 31 (\$ millions)	Pension plans			Other benefit plans		
	2015	2014	2013	2015	2014	2013
<b>Benefit obligation</b>						
Benefit obligation of plans that are wholly unfunded	<b>\$ 373</b>	\$ 376	\$ 342	<b>\$ 1,231</b>	\$ 1,201	\$ 1,121
Benefit obligation of plans that are wholly or partly funded	<b>7,740</b>	7,571	6,598	<b>408</b>	418	389
<b>Funded Status</b>						
Benefit obligation of plans that are wholly or partly funded	<b>\$ 7,740</b>	\$ 7,571	\$ 6,598	<b>\$ 408</b>	\$ 418	\$ 389
Fair value of assets	<b>7,615</b>	7,323	6,647	<b>307</b>	341	332
Excess (deficit) of fair value of assets over benefit obligation of wholly or partly funded plans	<b>\$ (125)</b>	\$ (248)	\$ 49	<b>\$ (101)</b>	\$ (77)	\$ (57)
Benefit obligation of plans that are wholly unfunded	<b>\$ 373</b>	\$ 376	\$ 342	<b>\$ 1,231</b>	\$ 1,201	\$ 1,121
Excess (deficit) of fair value of assets over total benefit obligation	<b>\$ (498)</b>	\$ (624)	\$ (293)	<b>\$ (1,332)</b>	\$ (1,278)	\$ (1,178)
Effect of asset limitation and minimum funding requirement	<b>(41)</b>	(76)	(77)	<b>-</b>	-	-
<b>Net asset (liability) at end of year</b>	<b>\$ (539)</b>	\$ (700)	\$ (370)	<b>\$ (1,332)</b>	\$ (1,278)	\$ (1,178)

## d) Financial information

The following tables present financial information related to the Bank's principal plans.

For the year ended October 31 (\$ millions)	Pension plans			Other benefit plans		
	2015	2014	2013	2015	2014	2013
<b>Change in benefit obligation</b>						
Benefit obligation at beginning of year	\$ 7,947	\$ 6,940	\$ 6,678	\$ 1,619	\$ 1,510	\$ 1,501
Current service cost	304	262	247	43	41	45
Interest cost on benefit obligation	350	342	314	84	84	75
Employee contributions	23	21	18	–	–	–
Benefits paid	(498)	(393)	(397)	(73)	(66)	(61)
Actuarial loss (gain)	152	731	62	(52)	35	(68)
Past service cost	(241)	(19)	–	3	7	3
Settlements	(48)	–	–	(2)	(23)	–
Foreign exchange	124	63	18	17	31	15
Benefit obligation at end of year	\$ 8,113	\$ 7,947	\$ 6,940	\$ 1,639	\$ 1,619	\$ 1,510
<b>Change in fair value of assets</b>						
Fair value of assets at beginning of year	\$ 7,323	\$ 6,647	\$ 5,607	\$ 341	\$ 332	\$ 311
Interest income on fair value of assets	343	343	285	23	25	21
Return on plan assets in excess of interest income on fair value of assets	55	310	747	(12)	11	(8)
Employer contributions	296	343	403	42	46	59
Employee contributions	23	21	18	–	–	–
Benefits paid	(498)	(393)	(397)	(73)	(66)	(61)
Administrative expenses	(12)	(9)	(9)	–	–	–
Settlements	(39)	–	–	–	(18)	–
Foreign exchange	124	61	(7)	(14)	11	10
Fair value of assets at end of year	\$ 7,615	\$ 7,323	\$ 6,647	\$ 307	\$ 341	\$ 332
<b>Funded status</b>						
Excess (deficit) of fair value of assets over benefit obligation at end of year	\$ (498)	\$ (624)	\$ (293)	\$ (1,332)	\$ (1,278)	\$ (1,178)
Effect of asset limitation and minimum funding requirement <sup>(1)</sup>	(41)	(76)	(77)	–	–	–
Net asset (liability) at end of year	\$ (539)	\$ (700)	\$ (370)	\$ (1,332)	\$ (1,278)	\$ (1,178)
Recorded in:						
Other assets in the Bank's Consolidated Statement of Financial Position	183	\$ 117	\$ 132	\$ –	\$ –	\$ –
Other liabilities in the Bank's Consolidated Statement of Financial Position	(722)	(817)	(502)	(1,332)	(1,278)	(1,178)
Net asset (liability) at end of year	\$ (539)	\$ (700)	\$ (370)	\$ (1,332)	\$ (1,278)	\$ (1,178)
<b>Annual benefit expense</b>						
Current service cost	\$ 304	\$ 262	\$ 247	\$ 43	\$ 41	\$ 45
Net interest expense (income)	15	6	41	60	59	54
Administrative expenses	10	9	9	–	–	–
Past service costs	(241)	(19)	–	4	7	3
Amount of settlement (gain) loss recognized	(9)	–	–	(2)	(5)	–
Remeasurement of other long-term benefits	–	–	–	4	5	(24)
Benefit expense (income) recorded in the Consolidated Statement of Income	\$ 79	\$ 258	\$ 297	\$ 109	\$ 107	\$ 78
Defined contribution benefit expense	\$ 29	\$ 21	\$ 19	\$ –	\$ –	\$ –
<b>Remeasurements</b>						
(Return) on plan assets in excess of interest income on fair value of assets	\$ (55)	\$ (310)	\$ (747)	\$ 13	\$ (8)	\$ 10
Actuarial loss (gain) on benefit obligation	152	731	62	(58)	27	(46)
Change in the asset limitation	(49)	(8)	(53)	–	–	–
Remeasurements recorded in OCI	\$ 48	\$ 413	\$ (738)	\$ (45)	\$ 19	\$ (36)
<b>Total benefit cost</b>	\$ 156	\$ 692	\$ (422)	\$ 64	\$ 126	\$ 42
<b>Additional details on actual return on assets and actuarial (gains) and losses</b>						
Actual return on assets (net of administrative expenses)	\$ 386	\$ 644	\$ 1,023	\$ 11	\$ 36	\$ 13
Actuarial (gains) and losses from changes in demographic assumptions	91	54	174	(22)	(26)	32
Actuarial (gains) and losses from changes in financial assumptions	22	645	(201)	(28)	102	(87)
Actuarial (gains) and losses from changes in experience	39	32	89	(2)	(41)	(13)
<b>Additional details on fair value of pension plan assets invested</b>						
In Scotiabank securities (stock, bonds)	\$ 404	\$ 556	\$ 509	\$ –	\$ –	\$ –
In property occupied by Scotiabank	5	4	4	–	–	–
<b>Change in asset ceiling/onerous liability</b>						
Asset ceiling /onerous liability at end of prior year	\$ 77	\$ 77	\$ 130	\$ –	\$ –	\$ –
Interest expense	8	7	12	–	–	–
Remeasurements	(49)	(8)	(53)	–	–	–
Foreign exchange	5	–	(12)	–	–	–
Asset ceiling /onerous liability at end of year	41	76	77	–	–	–

(1) The recognized asset is limited by the present value of economic benefits available from a reduction in future contributions to a plan and from the ability to pay plan expenses from the fund.

**e) Maturity profile of the defined benefit obligation**

The weighted average duration of the total benefit obligation at October 31, 2015 is 15.3 years (2014 – 14.7 years, 2013 – 14.5 years).

For the year ended October 31	Pension plans			Other benefit plans		
	2015	2014	2013	2015	2014	2013
Disaggregation of the benefit obligation (%)						
Canada						
Active members	58%	58%	57%	35%	36%	40%
Inactive and retired members	42%	42%	43%	65%	64%	60%
Total	100%	100%	100%	100%	100%	100%
Mexico						
Active members	30%	35%	38%	58%	59%	59%
Inactive and retired members	70%	65%	62%	42%	41%	41%
Total	100%	100%	100%	100%	100%	100%
United States						
Active members	39%	40%	43%	37%	36%	41%
Inactive and retired members	61%	60%	57%	63%	64%	59%
Total	100%	100%	100%	100%	100%	100%

**f) Key assumptions (%)**

The key weighted-average assumptions used by the Bank for the measurement of the benefit obligation and benefit expense for all of the Bank's principal plans are summarized as follows:

For the year ended October 31	Pension plans			Other benefit plans		
	2015	2014	2013	2015	2014	2013
Benefit obligation at end of year						
Discount rate – all plans	4.64%	4.46%	5.04%	5.33%	5.24%	5.56%
Discount rate – Canadian plans only	4.40%	4.20%	4.80%	4.27%	4.12%	4.80%
Rate of increase in future compensation <sup>(1)</sup>	2.75%	2.77%	2.84%	4.41%	4.51%	4.49%
Benefit expense (income) for the year						
Discount rate – all plans	4.46%	5.04%	4.80%	5.24%	5.56%	5.00%
Discount rate – Canadian plans only	4.20%	4.80%	4.60%	4.12%	4.80%	4.50%
Rate of increase in future compensation <sup>(1)</sup>	2.77%	2.84%	2.80%	4.51%	4.49%	4.40%
Health care cost trend rates at end of year						
Initial rate	n/a	n/a	n/a	6.29%	6.37%	6.51%
Ultimate rate	n/a	n/a	n/a	4.97%	5.02%	4.98%
Year ultimate rate reached	n/a	n/a	n/a	2030	2029	2029
Assumed life expectancy in Canada (years)						
Life expectancy at 65 for current pensioners – male	23.1	23.0	22.4	23.1	23.0	22.4
Life expectancy at 65 for current pensioners – female	24.3	24.2	23.8	24.3	24.2	23.8
Life expectancy at 65, for future pensioners currently aged 45 – male	24.1	24.0	23.3	24.1	24.0	23.3
Life expectancy at 65, for future pensioners currently aged 45 – female	25.2	25.1	24.6	25.2	25.1	24.6
Assumed life expectancy in Mexico (years)						
Life expectancy at 65 for current pensioners – male	21.3	21.3	21.3	21.3	21.3	21.3
Life expectancy at 65 for current pensioners – female	23.8	23.8	23.8	23.8	23.8	23.8
Life expectancy at 65, for future pensioners currently aged 45 – male	21.7	21.7	21.7	21.7	21.7	21.7
Life expectancy at 65, for future pensioners currently aged 45 – female	24.0	24.0	24.0	24.0	24.0	24.0
Assumed life expectancy in United States (years)						
Life expectancy at 65 for current pensioners – male	22.3	20.5	19.5	22.3	20.5	19.5
Life expectancy at 65 for current pensioners – female	23.5	22.6	21.4	23.5	22.6	21.4
Life expectancy at 65, for future pensioners currently aged 45 – male	23.0	19.9	19.1	23.0	19.9	19.1
Life expectancy at 65, for future pensioners currently aged 45 – female	25.4	22.0	20.9	25.4	22.0	20.9

(1) The weighted-average rates of increase in future compensation shown for other benefit plans do not include Canadian flexible post-retirement benefits plans established in fiscal 2005, as they are not impacted by future compensation increases.

### g) Sensitivity analysis

The sensitivity analysis presented below may not represent the actual change in obligation as changes in assumptions may be somewhat correlated. For purposes of the sensitivity analysis, the present value of the defined benefit obligation has been calculated using the projected unit credit method at the end of the reporting period, which is the same as that applied in calculating the defined benefit obligation recognized in the statement of financial position.

For the year ended October 31, 2015 (\$ millions)	Pension plans		Other benefit plans	
	Benefit obligation	Benefit expense	Benefit obligation	Benefit expense
Impact of the following changes:				
1% decrease in discount rate	\$ 1,364	\$ 189	\$ 268	\$ 19
0.25% increase in rate of increase in future compensation	86	4	1	–
1% increase in health care cost trend rate	n/a	n/a	148	17
1% decrease in health care cost trend rate	n/a	n/a	(127)	(14)
1 year increase in Canadian life expectancy	133	21	22	1
1 year increase in Mexican life expectancy	1	–	4	–
1 year increase in the United States life expectancy	8	–	5	–

### h) Assets

The Bank's principal pension plans' assets are generally invested with the long-term objective of maximizing overall expected returns, at an acceptable level of risk relative to the benefit obligation. A key factor in managing long-term investment risk is asset mix. Investing the pension assets in different asset classes and geographic regions helps to mitigate risk and to minimize the impact of declines in any single asset class, particular region or type of investment. Investment management firms – including related-party managers – are typically hired and assigned specific mandates within each asset class.

Pension plan asset mix guidelines are set for the long term, and are documented in each plan's investment policy. Asset mix policy typically also reflects the nature of the plan's benefit obligations. Legislation places certain restrictions on asset mix – for example, there are usually limits on concentration in any one investment. Other concentration and quality limits are also set forth in the investment policies. The use of derivatives is generally prohibited without specific authorization; currently, the main use of derivatives is for currency hedging. Asset mix guidelines are reviewed at least once each year, and adjusted, where appropriate, based on market conditions and opportunities. However, large asset class shifts are rare, and typically reflect a change in the pension plan's situation (e.g. a plan termination). Actual asset mix is reviewed regularly, and rebalancing back to target asset mix is considered – as needed – generally on a semi-annual basis. The Bank's other benefit plans are generally not funded; the assets reflected for these other benefit plans are related to programs in Canada and Mexico.

The tables below shows the weighted-average actual and target asset allocations for the Bank's principal plans at October 31, by asset category.

Asset category %	Pension plans			Other benefit plans		
	Actual 2015	Actual 2014	Actual 2013	Actual 2015	Actual 2014	Actual 2013
Cash and cash equivalents	2%	4%	1%	2%	2%	2%
Equity investments						
Quoted in an active market	44%	42%	48%	45%	46%	44%
Non quoted	19%	22%	20%	–%	–%	–%
	63%	64%	68%	45%	46%	44%
Fixed income investments						
Quoted in an active market	5%	6%	4%	28%	28%	29%
Non quoted	25%	23%	24%	25%	24%	25%
	30%	29%	28%	53%	52%	54%
Other – Non quoted	5%	3%	3%	–%	–%	–%
Total	100%	100%	100%	100%	100%	100%

Target asset allocation at October 31, 2015

Asset category %	Pension plans	Other benefit plans
Cash and cash equivalents	–%	2%
Equity investments	62%	46%
Fixed income investments	32%	52%
Other	6%	–%
Total	100%	100%

## 29 Operating segments

Scotiabank is a diversified financial services institution that provides a wide range of financial products and services to retail, commercial and corporate customers around the world. The Bank's businesses are grouped into three business lines: Canadian Banking, International Banking and Global Banking and Markets. Other smaller business segments are included in the Other segment. The results of these business segments are based upon the internal financial reporting systems of the Bank. The accounting policies used in these segments are generally consistent with those followed in the preparation of the consolidated financial statements as disclosed in Note 3 of the consolidated financial statements. Notable accounting measurement differences are:

- tax normalization adjustments related to the gross-up of income from associated corporations. This adjustment normalizes the effective tax rate in the divisions to better present the contribution of the associated companies to the divisional results.
- the grossing up of tax-exempt net interest income and non-interest income to an equivalent before-tax basis for those affected segments.

These differences in measurement enable comparison of net interest income and non-interest income arising from taxable and tax-exempt sources.

### Changes to operating segments effective November 1, 2014

Effective November 1, 2014, the Canadian and International businesses previously reported in Global Wealth & Insurance are included in Canadian Banking and International Banking's results, respectively. As well, certain Asia business activity previously reported in International Banking is now included in Global Banking and Markets. Prior period comparative results have been restated.

Scotiabank's results, and average assets and liabilities, allocated by these operating segments, are as follows:

For the year ended October 31, 2015

Taxable equivalent basis (\$ millions)	Canadian Banking	International Banking	Global Banking and Markets	Other <sup>(1)</sup>	Total
Net interest income <sup>(2)</sup>	\$ 6,415	\$ 5,706	\$ 1,071	\$ (100)	\$ 13,092
Non-interest income <sup>(3)</sup>	4,832	3,137	2,953	35	10,957
Total revenues	11,247	8,843	4,024	(65)	24,049
Provision for credit losses	687	1,128	67	60	1,942
Depreciation and amortization	272	242	57	13	584
Non-interest expenses	5,742	4,853	1,789	73	12,457
Provision for income taxes	1,202	568	558	(475)	1,853
Net income	\$ 3,344	\$ 2,052	\$ 1,553	\$ 264	\$ 7,213
Net income attributable to non-controlling interests in subsidiaries	–	199	–	–	199
Net income attributable to equity holders of the Bank	3,344	1,853	1,553	264	7,014
Average assets (\$ billions)	300	128	342	91	861
Average liabilities (\$ billions)	218	94	240	257	809

(1) Includes all other smaller operating segments and corporate adjustments, such as the elimination of the tax-exempt income gross-up reported in net interest income and non-interest income and provision for income taxes for the year ended October 31, 2015 (\$390) to arrive at the amounts reported in the Consolidated Statement of Income, differences in the actual amount of costs incurred and charged to the operating segments.

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

(3) Includes net income from investments in associated corporations for Canadian Banking - \$66; International Banking - \$476 and Other - \$(137).

For the year ended October 31, 2014

Taxable equivalent basis (\$ millions)	Canadian Banking	International Banking	Global Banking and Markets	Other <sup>(1)</sup>	Total
Net interest income <sup>(2)</sup>	\$ 5,996	\$ 5,155	\$ 1,064	\$ 90	\$ 12,305
Non-interest income <sup>(3)</sup>	5,263	2,945	3,167	(76)	11,299
Total revenues	11,259	8,100	4,231	14	23,604
Provision for credit losses	663	1,024	16	–	1,703
Depreciation and amortization <sup>(4)</sup>	235	224	56	11	526
Non-interest expenses <sup>(4)</sup>	5,564	4,466	1,824	221	12,075
Provision for income taxes	1,113	544	665	(320)	2,002
Net income	\$ 3,684	\$ 1,842	\$ 1,670	\$ 102	\$ 7,298
Net income attributable to non-controlling interests in subsidiaries	1	226	–	–	227
Net income attributable to equity holders of the Bank	3,683	1,616	1,670	102	7,071
Average assets (\$ billions)	292	115	311	78	796
Average liabilities (\$ billions)	208	85	217	238	748

(1) Includes all other smaller operating segments and corporate adjustments, such as the elimination of the tax-exempt income gross-up reported in net interest income and non-interest income and provision for income taxes for the year ended October 31, 2014 (\$354), to arrive at the amounts reported in the Consolidated Statement of Income, differences in the actual amount of costs incurred and charged to the operating segments.

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

(3) Includes net income from investments in associated corporations for Canadian Banking - \$157; International Banking - \$411 and Other - \$(140).

(4) Prior period amounts were restated to conform with current period presentation.

For the year ended October 31, 2013

Taxable equivalent basis (\$ millions)	Canadian Banking	International Banking	Global Banking and Markets	Other <sup>(1)</sup>	Total
Net interest income <sup>(2)</sup>	\$ 5,691	\$ 4,756	\$ 1,090	\$ (187)	\$ 11,350
Non-interest income <sup>(3)</sup>	4,230	3,140	2,882	(303)	9,949
Total revenues	9,921	7,896	3,972	(490)	21,299
Provision for credit losses	480	774	34	–	1,288
Depreciation and amortization	242	215	56	7	520
Non-interest expenses	5,120	4,233	1,675	116	11,144
Provision for income taxes	1,015	621	554	(453)	1,737
Net income	\$ 3,064	\$ 2,053	\$ 1,653	\$ (160)	\$ 6,610
Net income attributable to non-controlling interests in subsidiaries	2	229	–	–	231
Net income attributable to equity holders of the Bank	3,062	1,824	1,653	(160)	6,379
Average assets (\$ billions)	284	100	274	91	749
Average liabilities (\$ billions)	200	74	197	235	706

(1) Includes all other smaller operating segments and corporate adjustments, such as the elimination of the tax-exempt income gross-up reported in net interest income and non-interest income and provision for income taxes for the year ended October 31, 2013 (\$312), to arrive at the amounts reported in the Consolidated Statement of Income, differences in the actual amount of costs incurred and charged to the operating segments.

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

(3) Includes net income from investments in associated corporations for Canadian Banking – \$239; International Banking – \$668 and Other – \$(226).

### Geographical segmentation<sup>(1)</sup>

The following table summarizes the Bank's financial results by geographic region. Revenues and expenses which have not been allocated back to specific operating business lines are reflected in corporate adjustments.

For the year ended October 31, 2015 (\$ millions)	Canada	United States	Mexico	Peru	Chile	Colombia	Other International	Total
Net interest income	\$ 6,458	\$ 472	\$ 1,246	\$ 1,077	\$ 554	\$ 677	\$ 2,631	\$ 13,115
Non-interest income <sup>(1)</sup>	6,272	882	561	601	231	372	2,163	11,082
Total revenues <sup>(2)</sup>	12,730	1,354	1,807	1,678	785	1,049	4,794	24,197
Provision for credit losses	728	6	260	266	108	246	268	1,882
Non-interest expenses	6,936	507	1,160	744	431	541	2,745	13,064
Provision for income taxes	1,038	267	27	195	24	84	401	2,036
	\$ 4,028	\$ 574	\$ 360	\$ 473	\$ 222	\$ 178	\$ 1,380	\$ 7,215
Corporate adjustments								(2)
Net income								\$ 7,213
Net income attributable to non-controlling interests in subsidiaries								199
Net income attributable to equity holders of the Bank								\$ 7,014
Total average assets (\$ billions)	\$ 502	\$ 125	\$ 26	\$ 21	\$ 17	\$ 10	\$ 148	\$ 849
Corporate adjustments								12
Total average assets, including corporate adjustments								\$ 861

(1) Includes net income from investments in associated corporations for Canada - \$66; Peru - \$4 and Other International - \$472.

(2) Revenues are attributed to countries based on where services are performed or assets are recorded.

For the year ended October 31, 2014 (\$ millions)	Canada	United States	Mexico	Peru	Chile	Colombia	Other International	Total
Net interest income	\$ 6,219	\$ 440	\$ 1,180	\$ 935	\$ 407	\$ 726	\$ 2,443	\$ 12,350
Non-interest income <sup>(1)</sup>	7,071	810	599	534	226	391	2,049	11,680
Total revenues <sup>(2)</sup>	13,290	1,250	1,779	1,469	633	1,117	4,492	24,030
Provision for credit losses	662	6	240	267	74	145	309	1,703
Non-interest expenses	6,986	513	1,154	645	348	556	2,495	12,697
Provision for income taxes	1,156	237	35	175	16	141	340	2,100
	\$ 4,486	\$ 494	\$ 350	\$ 382	\$ 195	\$ 275	\$ 1,348	\$ 7,530
Corporate adjustments								(232)
Net income								\$ 7,298
Net income attributable to non-controlling interests in subsidiaries								227
Net income attributable to equity holders of the Bank								\$ 7,071
Total average assets (\$ billions)	\$ 470	\$ 117	\$ 24	\$ 17	\$ 15	\$ 10	\$ 130	\$ 783
Corporate adjustments								13
Total average assets, including corporate adjustments								\$ 796

(1) Includes net income from investments in associated corporations for Canada – \$156; Peru – \$6 and Other International – \$405.

(2) Revenues are attributed to countries based on where services are performed or assets are recorded.

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For the year ended October 31, 2013 (\$ millions)	Canada	United States	Mexico	Peru	Chile	Colombia	Other International	Total
Net interest income	\$ 5,706	\$ 461	\$ 1,048	\$ 895	\$ 357	\$ 657	\$ 2,311	\$ 11,435
Non-interest income <sup>(1)</sup>	5,731	746	578	493	236	336	2,239	10,359
Total revenues <sup>(2)</sup>	11,437	1,207	1,626	1,388	593	993	4,550	21,794
Provision for credit losses	472	38	130	246	101	102	199	1,288
Non-interest expenses	6,441	464	1,050	628	332	484	2,414	11,813
Provision for income taxes	956	190	61	166	16	132	362	1,883
	\$ 3,568	\$ 515	\$ 385	\$ 348	\$ 144	\$ 275	\$ 1,575	\$ 6,810
Corporate adjustments								(200)
<b>Net income</b>								<b>\$ 6,610</b>
Net income attributable to non-controlling interests in subsidiaries								231
Net income attributable to equity holders of the Bank								\$ 6,379
<b>Total average assets (\$ billions)</b>	<b>\$ 434</b>	<b>\$ 110</b>	<b>\$ 21</b>	<b>\$ 15</b>	<b>\$ 15</b>	<b>\$ 9</b>	<b>\$ 119</b>	<b>\$ 723</b>
Corporate adjustments								26
<b>Total average assets, including corporate adjustments</b>								<b>\$ 749</b>

(1) Includes net income from investments in associated corporations for Canada - \$239; Mexico - \$4; Peru - \$5 and Other International - \$659.

(2) Revenues are attributed to countries based on where services are performed or assets are recorded.

### 30 Related party transactions

#### Compensation of key management personnel of the Bank

Key management personnel are those persons having authority and responsibility for planning, directing and controlling the activities of the Bank, directly or indirectly, and comprise the directors of the Bank, the President and Chief Executive Officer, certain direct reports of the President and Chief Executive Officer, including Group Heads, and the Chief Financial Officer.

For the year ended October 31 (\$ millions)	2015	2014
Salaries and cash incentives <sup>(1)</sup>	\$ 13	\$ 17
Equity-based payment <sup>(2)</sup>	20	25
Pension and other benefits <sup>(1)</sup>	3	3
Total	\$ 36	\$ 45

(1) Expensed during the year.

(2) Awarded during the year.

Directors can use some or all of their director fees earned to buy common shares of the Bank at market rates through the Directors' Share Purchase Plan. Non-officer directors may elect to receive all or a portion of their fees in the form of deferred stock units which vest immediately. Refer to Note 26 for further details of these plans.

#### Loans and deposits of key management personnel

As at October 31 (\$ millions)	2015	2014
Loans	\$ 5	\$ 4
Deposits	\$ 3	\$ 5

In Canada, loans are currently granted to key management personnel at market terms and conditions. Effective March 1, 2001, the Bank discontinued the practice of granting loans to key management personnel in Canada at reduced rates. Any of these loans granted prior to March 1, 2001, are grandfathered until maturity.

The Bank's committed credit exposure to companies controlled by directors totaled \$182.9 million as at October 31, 2015 (2014 - \$9.4 million), while actual utilized amounts were \$6.7 million (2014 - \$3.4 million).

#### Transactions with associates and joint ventures

In the ordinary course of business, the Bank provides normal banking services and enters into transactions with its associated and other related corporations on terms similar to those offered to non-related parties. If these transactions are eliminated on consolidation, they are not disclosed as related party transactions. Transactions between the Bank and its associated companies and joint ventures also qualify as related party transactions and were recorded as follows:

As at and for the year ended October 31 (\$ millions)	2015	2014	2013
Net income / (loss)	\$ (27)	\$ 11	\$ 20
Loans	747	553	511
Deposits	187	223	287
Guarantees and commitments	84	75	58

The Bank manages assets of \$2.0 billion (2014 - \$1.8 billion) which is a portion of the Scotiabank principal pension plan assets and earned \$4 million (2014 - \$4 million) in fees.



### 31 Principal subsidiaries and non-controlling interests in subsidiaries

#### (a) Principal subsidiaries<sup>(1)</sup>

The following table presents the principal subsidiaries the Bank owns, directly or indirectly. All of these subsidiaries are included in the Bank's consolidated financial statements.

As at October 31 (\$ millions)	Principal office	Carrying value of shares	
		2015	2014
<b>Canadian</b>			
1832 Asset Management L.P.	Toronto, Ontario	\$ 1,241	\$ 810
BNS Investments Inc.	Toronto, Ontario	12,746	11,824
Montreal Trust Company of Canada	Montreal, Quebec		
Hollis Canadian Bank	Toronto, Ontario	392	858
HollisWealth Inc.	Toronto, Ontario	3,632	3,728
National Trustco Inc.	Toronto, Ontario	608	538
The Bank of Nova Scotia Trust Company	Toronto, Ontario		
National Trust Company	Stratford, Ontario		
RoyNat Inc.	Toronto, Ontario	58	49
Scotia Capital Inc.	Toronto, Ontario	1,598	1,327
Scotia Dealer Advantage Inc.	Burnaby, British Columbia	445	357
Scotia Life Insurance Company	Toronto, Ontario	206	174
Scotia Mortgage Corporation	Toronto, Ontario	797	695
Scotia Securities Inc.	Toronto, Ontario	53	16
Tangerine Bank	Toronto, Ontario	3,443	3,329
<b>International</b>			
Banco Colpatria Multibanca Colpatria S.A. (51%)	Bogota, Colombia	1,259	1,271
The Bank of Nova Scotia Berhad	Kuala Lumpur, Malaysia	288	306
The Bank of Nova Scotia International Limited	Nassau, Bahamas	16,310	12,731
The Bank of Nova Scotia Asia Limited	Singapore		
The Bank of Nova Scotia Trust Company (Bahamas) Limited	Nassau, Bahamas		
Grupo BNS de Costa Rica, S.A.	San Jose, Costa Rica		
Scotiabank & Trust (Cayman) Ltd.	Grand Cayman, Cayman Islands		
Scotiabank (Bahamas) Limited	Nassau, Bahamas		
Scotiabank (British Virgin Islands) Limited	Road Town, Tortola, B.V.I.		
Scotiabank (Hong Kong) Limited	Hong Kong, China		
Scotiabank (Ireland) Limited	Dublin, Ireland		
Scotiabank (Turks and Caicos) Ltd.	Providenciales, Turks and Caicos Islands		
Grupo Financiero Scotiabank Inverlat, S.A. de C.V. (97.4%)	Mexico, D.F., Mexico	2,986	3,022
Nova Scotia Inversiones Limitada	Santiago, Chile	2,585	2,491
Scotiabank Chile (99.6%)	Santiago, Chile		
Scotia Capital (USA) Inc. <sup>(2)</sup>	New York, New York		
Scotia Holdings (US) Inc. <sup>(3)</sup>	Houston, Texas		
Scotiabanc Inc.	Houston, Texas		
Scotia International Limited	Nassau, Bahamas	899	820
Scotiabank Anguilla Limited	The Valley, Anguilla		
Scotiabank Brasil S.A. Banco Multiplo	Sao Paulo, Brazil	145	181
Scotiabank Caribbean Holdings Ltd.	Bridgetown, Barbados	1,311	884
Scotia Group Jamaica Limited (71.8%)	Kingston, Jamaica		
The Bank of Nova Scotia Jamaica Limited	Kingston, Jamaica		
Scotia Investments Jamaica Limited (77.0%)	Kingston, Jamaica		
Scotiabank (Belize) Ltd.	Belize City, Belize		
Scotiabank Trinidad and Tobago Limited (50.9%)	Port of Spain, Trinidad and Tobago		
Scotiabank de Puerto Rico	San Juan, Puerto Rico	1,316	1,069
Scotiabank El Salvador, S.A. (99.4%)	San Salvador, El Salvador	597	488
Scotiabank Europe plc	London, United Kingdom	2,472	2,110
Scotiabank Peru S.A.A. (97.8%)	Lima, Peru	3,418	2,784

(1) The Bank (or immediate parent of an entity) owns 100% of the outstanding voting shares of each subsidiary unless otherwise noted. The listing includes major operating subsidiaries only.

(2) The carrying value of this subsidiary is included with that of its parent, Scotia Capital Inc.

(3) The carrying value of this subsidiary is included with that of its parent, BNS Investments Inc.

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Subsidiaries may have a different reporting date from that of the Bank of October 31. Dates may differ for a variety of reasons including local reporting requirements or tax laws. In accordance with our accounting policies, for the purpose of inclusion in the consolidated financial statements of the Bank, adjustments are made where significant for subsidiaries with different reporting dates.

### (b) Non-controlling interests in subsidiaries

The Bank's significant non-controlling interests in subsidiaries are comprised of the following entities:

	As at			For the year ended			
	2015		2014	2015		2014	
October 31 (\$ millions)	Non-controlling interest %	Non-controlling interests in subsidiaries	Non-controlling interests in subsidiaries	Net income attributable to non-controlling interests in subsidiaries	Dividends paid to non-controlling interest	Net income attributable to non-controlling interests in subsidiaries	Dividends paid to non-controlling interest
Banco Colpatría Multibanca Colpatría S.A. <sup>(1)</sup>	49.0%	\$ 417	\$ 518	\$ 75	\$ 27	\$ 125	\$ 21
Scotia Group Jamaica Limited	28.2%	307	245	37	17	31	16
Scotiabank Trinidad and Tobago Limited	49.1%	353	294	54	33	45	30
Cencosud Administradora de Tarjetas S.A.	49.0%	111	–	–	–	–	–
Other	0.1% - 49.0% <sup>(2)</sup>	272	255	33	9	26	9
<b>Total</b>		<b>\$ 1,460</b>	<b>\$ 1,312</b>	<b>\$ 199</b>	<b>\$ 86</b>	<b>\$ 227</b>	<b>\$ 76</b>

(1) Non-controlling interest holders for Banco Colpatría Multibanca Colpatría S.A. have a right to sell their holding to the Bank after the end of 7th anniversary (January 17, 2019) and at subsequent pre-agreed intervals, into the future, at fair market value that can be settled at the Bank's discretion, by issuance of common shares or cash.

(2) Range of non-controlling interest % for other subsidiaries.

Summarized financial information of the Bank's subsidiaries with significant non-controlling interests are as follows:

(\$ millions)	As at and for the year ended October 31, 2015			
	Revenue	Total comprehensive income	Total assets	Total liabilities
Banco Colpatría Multibanca Colpatría S.A.	\$ 942	\$ (165)	\$ 10,969	\$ 10,207
Scotia Group Jamaica Limited	383	263	4,877	3,667
Scotiabank Trinidad and Tobago Limited	283	214	4,670	3,731
Cencosud Administradora de Tarjetas S.A.	125	(1)	1,772	1,265

(\$ millions)	As at and for the year ended October 31, 2014			
	Revenue	Total comprehensive income	Total assets	Total liabilities
Banco Colpatría Multibanca Colpatría S.A.	\$ 1,009	\$ 237	\$ 11,259	\$ 10,203
Scotia Group Jamaica Limited	340	119	4,157	3,215
Scotiabank Trinidad and Tobago Limited	228	146	3,756	3,015

## 32 Non-interest income

The following table presents details of banking revenues and wealth management revenues in non-interest income.

For the year ended October 31 (\$ millions)	2015	2014 <sup>(1)</sup>	2013 <sup>(1)</sup>
<b>Banking</b>			
Card revenues	\$ 1,089	\$ 933	\$ 816
Deposit and payment services	1,235	1,183	1,122
Credit fees	1,053	1,014	943
Other	406	379	416
	<b>3,783</b>	3,509	3,297
Banking fee related expenses	423	339	297
<b>Total banking revenues</b>	<b>\$ 3,360</b>	<b>\$ 3,170</b>	<b>\$ 3,000</b>
<b>Wealth Management</b>			
Mutual funds	\$ 1,619	\$ 1,468	\$ 1,280
Brokerage fees	1,006	942	847
Investment management and trust	644	613	538
<b>Total wealth management revenues</b>	<b>\$ 3,269</b>	<b>\$ 3,023</b>	<b>\$ 2,665</b>

(1) Certain prior period amounts have been restated to conform with current period presentation.

### 33 Trading revenues

The following table presents details of trading revenues.

For the year ended October 31 (\$ millions)	2015	2014	2013
Interest rate and credit	\$ 400	\$ 415	\$ 596
Equities	177	92	120
Commodities	345	359	338
Foreign exchange	201	208	198
Other	62	40	48
<b>Total</b>	<b>\$ 1,185</b>	<b>\$ 1,114</b>	<b>\$ 1,300</b>

### 34 Earnings per share

For the year ended October 31 (\$ millions)	2015	2014	2013 <sup>(1)</sup>
<b>Basic earnings per common share</b>			
Net income attributable to common shareholders	\$ 6,897	\$ 6,916	\$ 6,162
Weighted average number of common shares outstanding (millions)	1,210	1,214	1,195
Basic earnings per common share <sup>(2)</sup> (in dollars)	\$ 5.70	\$ 5.69	\$ 5.15
<b>Diluted earnings per common share</b>			
Net income attributable to common shareholders	\$ 6,897	\$ 6,916	\$ 6,162
Adjustments to net income due to: <sup>(3)</sup>			
Capital instruments	–	–	18
Share-based payment options and others	86	8	3
Adjusted income attributable to common shareholders	\$ 6,983	\$ 6,924	\$ 6,183
Weighted average number of common shares outstanding (millions)	1,210	1,214	1,195
Adjustments to average shares due to: <sup>(3)</sup> (millions)			
Capital instruments	–	–	8
Share-based payment options and others	22	8	6
Weighted average number of diluted common shares outstanding (millions)	1,232	1,222	1,209
Diluted earnings per common share <sup>(2)</sup> (in dollars)	\$ 5.67	\$ 5.66	\$ 5.11

(1) Certain prior period amounts are retrospectively adjusted to reflect the adoption of new and amended IFRS standards (IFRS 10 and IAS 19) in 2014.

(2) Earnings per share calculations are based on full dollar and share amounts.

(3) Certain grants of tandem stock appreciation rights or options that the Bank may settle at its own discretion by issuing common shares in relation to non-controlling interest and additional interest in an associated company are not included in the calculation of diluted earnings per share as they were anti-dilutive.

### 35 Guarantees, commitments and pledged assets

#### (a) Guarantees

The Bank enters into various types of guarantees and indemnifications in the normal course of business. Guarantees represent an undertaking to another party to make a payment to that party when certain specified events occur. The various guarantees and indemnifications that the Bank provides with respect to its customers and other third parties are presented below:

As at October 31 (\$ millions)	2015	2014
	Maximum potential amount of future payments <sup>(1)</sup>	Maximum potential amount of future payments <sup>(1)</sup>
Standby letters of credit and letters of guarantee	\$ 30,944	\$ 26,024
Liquidity facilities	3,874	4,125
Derivative instruments	5,206	6,303
Indemnifications	568	578

(1) The maximum potential amount of future payments represents those guarantees that can be quantified and excludes other guarantees that cannot be quantified. As many of these guarantees will not be drawn upon and the maximum potential amount of future payments listed above does not consider the possibility of recovery under recourse or collateral provisions, the above amounts are not indicative of future cash requirements, credit risk, or the Bank's expected losses from these arrangements.

#### (i) Standby letters of credit and letters of guarantee

Standby letters of credit and letters of guarantee are irrevocable undertakings by the Bank on behalf of a customer, to make payments to a third party in the event that the customer is unable to meet its obligations to the third party. Generally, the term of these guarantees does not exceed four years. The types and amounts of collateral security held by the Bank for these guarantees is generally the same as for loans. As at October 31, 2015, \$4 million (2014 – \$4 million) was included in other liabilities in the Consolidated Statement of Financial Position with respect to these guarantees.

**(ii) Liquidity facilities**

The Bank provides backstop liquidity facilities to asset-backed commercial paper conduits, administered by the Bank. These facilities generally provide an alternative source of financing in the event market disruption prevents the conduit from issuing commercial paper or, in some cases, when certain specified conditions or performance measures are not met. These facilities generally have a term of up to three years. Of the \$3,874 million (2014 – \$4,125 million) in backstop liquidity facilities provided to asset-backed commercial paper conduits, 100% (2014 – 100%) is committed liquidity for the Bank’s sponsored conduits.

**(iii) Derivative instruments**

The Bank enters into written credit derivative contracts under which a counterparty is compensated for losses on a specified referenced asset, typically a loan or bond, if certain events occur. The Bank also enters into written option contracts under which a counterparty is granted the right, but not the obligation, to sell a specified quantity of a financial instrument at a pre-determined price on or before a set date. These written option contracts are normally referenced to interest rates, foreign exchange rates, commodity prices or equity prices. Typically, a corporate or government entity is the counterparty to the written credit derivative and option contracts that meet the characteristics of guarantees described above. The maximum potential amount of future payments disclosed in the table above relates to written credit derivatives, puts and floors. However, these amounts exclude certain derivatives contracts, such as written caps, as the nature of these contracts prevents quantification of the maximum potential amount of future payments. As at October 31, 2015, \$891 million (2014 – \$515 million) was included in derivative instrument liabilities in the Consolidated Statement of Financial Position with respect to these derivative instruments.

**(iv) Indemnifications**

In the ordinary course of business, the Bank enters into many contracts which contain indemnification provisions, such as purchase contracts, service agreements, trademark licensing agreements, director/officer contracts, escrow arrangements, sales of assets or businesses, outsourcing agreements, leasing arrangements, clearing system arrangements, securities lending agency agreements and structured transactions. The Bank cannot estimate the maximum potential future amount that may be payable. The Bank has not made any significant payments under such indemnifications. Historically, the Bank has not made any significant payments under these indemnities. As at October 31, 2015, \$3 million (2014 – \$3 million) was included in other liabilities in the Consolidated Statement of Financial Position with respect to indemnifications.

**(b) Other indirect commitments**

In the normal course of business, various other indirect commitments are outstanding which are not reflected on the Consolidated Statement of Financial Position. These may include:

- Commercial letters of credit which require the Bank to honour drafts presented by a third-party when specific activities are completed;
- Commitments to extend credit which represent undertakings to make credit available in the form of loans or other financings for specific amounts and maturities, subject to specific conditions;
- Securities lending transactions under which the Bank, acting as principal or agent, agrees to lend securities to a borrower. The borrower must fully collateralize the security loan at all times. The market value of the collateral is monitored relative to the amounts due under the agreements, and where necessary, additional collateral is obtained; and
- Security purchase commitments which require the Bank to fund future investments.

These financial instruments are subject to normal credit standards, financial controls and monitoring procedures.

The table below provides a detailed breakdown of the Bank’s other indirect commitments expressed in terms of the contractual amounts of the related commitment or contract which are not reflected on the Consolidated Statement of Financial Position.

As at October 31 (\$ millions)	2015	2014
Commercial letters of credit	\$ 921	\$ 1,113
Commitments to extend credit <sup>(1)</sup>		
Original term to maturity of one year or less	64,522	53,236
Original term to maturity of more than one year	101,874	83,981
Securities lending	41,190	37,110
Securities purchase and other commitments	682	720
<b>Total</b>	<b>\$ 209,189</b>	<b>\$ 176,160</b>

(1) Includes liquidity facilities.

### (c) Lease commitments

#### Operating lease commitments

The Bank leases various offices, branches and other premises under non-cancellable operating lease arrangements. The leases have various terms, escalation and renewal rights. There are no contingent rents payable. The Bank also leases equipment under non-cancellable lease arrangements. Where the Bank is the lessee, the future minimum lease payment under non-cancellable operating leases are as follows:

As at October 31 (\$ millions)	2015	2014
Within one year	\$ 328	\$ 310
After one year but not more than five years	880	811
More than five years	546	577
Total	\$ 1,754	\$ 1,698

Building rent expense, included in premises and technology expense in the Consolidated Statement of Income, was \$433 million (2014 – \$392 million).

### (d) Assets pledged and repurchase agreements

In the ordinary course of business, securities and other assets are pledged against liabilities. As well, securities are sold under repurchase agreements. The carrying value of pledged assets and details of related activities are shown below.

As at October 31 (\$ millions)	2015	2014
<b>Assets pledged to:</b>		
Bank of Canada <sup>(1)</sup>	\$ 25	\$ 25
Foreign governments and central banks <sup>(1)</sup>	2,933	1,340
Clearing systems, payment systems and depositories <sup>(1)</sup>	1,557	1,207
Assets pledged in relation to exchange-traded derivative transactions	1,512	1,925
Assets pledged as collateral related to securities borrowed, and securities lent	88,839	82,888
Assets pledged in relation to over-the-counter derivative transactions	12,447	6,895
Assets pledged in relation to covered bond program (Note 15)	21,293	18,764
Assets pledged under CMHC programs (Note 14)	21,609	20,394
Other	3,036	4,029
Total assets pledged	\$ 153,251	\$ 137,467
Obligations related to securities sold under repurchase agreements	67,052	80,335
Total <sup>(2)</sup>	\$ 220,303	\$ 217,802

(1) Includes assets pledged in order to participate in clearing and payment systems and depositories, or pledged to have access to the facilities of central banks in foreign jurisdictions.

(2) Includes assets that have been received from counterparties through normal course of business in securities financing and derivative transactions.

### (e) Other executory contracts

The Bank and its subsidiaries have entered into certain long-term executory contracts, relating to outsourced services. The significant outsourcing arrangements have variable pricing based on utilization and are cancellable with notice.

## 36 Financial instruments – risk management

The Bank's principal business activities result in a balance sheet that consists primarily of financial instruments. In addition, the Bank uses derivative financial instruments for both trading and hedging purposes. The principal financial risks that arise from transacting financial instruments include credit risk, liquidity risk and market risk. The Bank's framework to monitor, evaluate and manage these risks is consistent with that in place as at October 31, 2014:

- extensive risk management policies define the Bank's risk appetite, set the limits and controls within which the Bank and its subsidiaries can operate, and reflect the requirements of regulatory authorities. These policies are approved by the Bank's Board of Directors, either directly or through the Risk Committee of the Board, (the Board);
- guidelines are developed to clarify risk limits and conditions under which the Bank's risk policies are implemented;
- processes are implemented to identify, evaluate, document, report and control risk. Standards define the breadth and quality of information required to make a decision; and
- compliance with risk policies, limits and guidelines is measured, monitored and reported to ensure consistency against defined goals.

Further details on the fair value of financial instruments and how these amounts were determined are provided in Note 7. Note 10 provides details on the terms and conditions of the Bank's derivative financial instruments including notional amounts, remaining term to maturity, credit risk, and fair values of derivatives used in trading and hedging activities.

### (a) Credit risk

Credit risk is the risk of loss resulting from the failure of a borrower or counterparty to honour its financial or contractual obligations to the Bank. The Bank's credit risk appetite and credit risk policy are developed by its Global Risk Management (GRM) department and are reviewed and approved by the Board on an annual and biennial basis, respectively. The credit risk appetite defines target markets and risk tolerances that are developed at an all-Bank level, and then further refined at the business line level. The objectives of the credit risk appetite are to ensure that, for the Bank, including the individual business lines:

- target markets and product offerings are well defined;
- the risk parameters for new underwritings and for the portfolios as a whole are clearly specified; and
- transactions, including origination, syndication, loan sales and hedging, are managed in a manner to ensure the goals for the overall portfolio are met.

The credit risk policy sets out, among other things, the credit risk rating systems and associated parameter estimates, the delegation of authority for granting credit, the provisions for credit losses and the collective allowance on performing loans. It forms an integral part of enterprise-wide policies and procedures that encompass governance, risk management and control structure.

The Bank's credit risk rating systems are designed to support the determination of key credit risk parameter estimates which measure credit and transaction risk. For non-retail exposures, parameters are associated with each credit facility through the assignment of borrower and transaction ratings. Borrower risk is evaluated using methodologies that are specific to particular industry sectors and/or business lines. The risk associated with facilities of a given borrower is assessed by considering the facilities' structural and collateral-related elements. For retail portfolios, each exposure has been assigned to a particular pool (real estate secured, other retail – term lending, unsecured revolving) and within each pool to a risk grade. This process provides for a meaningful differentiation of risk, and allows for appropriate and consistent estimation of loss characteristics at the pool and risk grade level. Further details on credit risk relating to derivatives are provided in Note 10(c).

#### (i) Credit risk exposures

Credit risk exposures disclosed below are presented based on the Basel framework utilized by the Bank i.e. exposures subject to credit risk capital. The Bank uses the Advanced Internal Ratings Based approach (AIRB) for all material Canadian, U.S., European portfolios, and effective 2011 for a significant portion of all international corporate and commercial portfolios. The remaining portfolios, including other individual portfolios, are treated under the standardized approach. Under the AIRB approach, the Bank uses internal risk parameter estimates, based on historical experience, for probability of default (PD), loss given default (LGD) and exposure at default (EAD), as defined below:

- EAD: Generally represents the expected gross exposure – outstanding amount for on-balance sheet exposure and loan equivalent amount for off-balance sheet exposure.
- PD: Measures the likelihood that a borrower will default within a 1-year time horizon, expressed as a percentage.
- LGD: Measures the severity of loss on a facility in the event of a borrower's default, expressed as a percentage of exposure at default.

Under the standardized approach, credit risk is estimated using the risk weights as prescribed by the Basel framework either based on credit assessments by external rating agencies or based on the counterparty type for non-retail exposures and product type for retail exposures. Standardized risk weights also takes into account other factors such as specific provisions for defaulted exposures, eligible collateral, and loan-to-value for real estate secured retail exposures.

As at October 31 (\$ millions)	2015				2014
	Exposure at default <sup>(1)</sup>				Total
	Drawn <sup>(2)</sup>	Undrawn commitments	Other exposures <sup>(3)</sup>	Total	
<b>Category</b>					
<b>By counterparty type</b>					
Non-retail					
AIRB portfolio					
Corporate	\$ 110,558	\$ 53,939	\$ 68,466	\$ 232,963	\$ 191,450
Bank	24,298	11,330	19,294	54,922	53,853
Sovereign	177,591	2,129	14,725	194,445	160,535
	<b>312,447</b>	<b>67,398</b>	<b>102,485</b>	<b>482,330</b>	<b>405,838</b>
Standardized portfolio					
Corporate	46,956	4,976	2,938	54,870	47,660
Bank	2,867	56	158	3,081	2,681
Sovereign	5,504	4	–	5,508	5,175
	<b>55,327</b>	<b>5,036</b>	<b>3,096</b>	<b>63,459</b>	<b>55,516</b>
<b>Total non-retail</b>	<b>\$ 367,774</b>	<b>\$ 72,434</b>	<b>\$ 105,581</b>	<b>\$ 545,789</b>	<b>\$ 461,354</b>
Retail <sup>(4)</sup>					
AIRB portfolio					
Real estate secured	\$ 119,628	\$ 12,631	\$ –	\$ 132,259	\$ 135,242
Qualifying revolving	16,910	17,705	–	34,615	32,207
Other retail	26,847	712	–	27,559	24,984
	<b>163,385</b>	<b>31,048</b>	<b>–</b>	<b>194,433</b>	<b>192,433</b>
Standardized portfolio					
Real estate secured	27,934	–	–	27,934	23,977
Other retail	26,466	–	–	26,466	22,755
	<b>54,400</b>	<b>–</b>	<b>–</b>	<b>54,400</b>	<b>46,732</b>
<b>Total retail</b>	<b>\$ 217,785</b>	<b>\$ 31,048</b>	<b>\$ –</b>	<b>\$ 248,833</b>	<b>\$ 239,165</b>
<b>Total</b>	<b>\$ 585,559</b>	<b>\$ 103,482</b>	<b>\$ 105,581</b>	<b>\$ 794,622</b>	<b>\$ 700,519</b>
<b>By geography<sup>(5)</sup></b>					
Canada	\$ 333,278	\$ 61,909	\$ 40,766	\$ 435,953	\$ 405,718
United States	89,288	25,930	38,067	153,285	116,969
Mexico	21,592	713	1,503	23,808	20,775
Peru	22,543	1,228	3,236	27,007	21,391
Chile	17,954	390	1,433	19,777	16,940
Columbia	9,333	86	480	9,899	10,507
Other International					
Europe	19,128	6,306	14,614	40,048	29,271
Caribbean	35,856	2,137	1,838	39,831	34,567
Latin America (other)	7,776	672	514	8,962	7,111
All other	28,811	4,111	3,130	36,052	37,270
<b>Total</b>	<b>\$ 585,559</b>	<b>\$ 103,482</b>	<b>\$ 105,581</b>	<b>\$ 794,622</b>	<b>\$ 700,519</b>

(1) Exposure at default is presented after credit risk mitigation. Exposures exclude available-for-sale equity securities and other assets.

(2) Non-retail drawn includes loans, acceptances, deposits with financial institutions and available-for-sale debt securities. Retail drawn includes residential mortgages, credit cards, lines of credit, and other personal loans.

(3) Non-retail other exposures include off-balance sheet lending instruments such as letters of credit, letters of guarantees, securitizations including first loss protection of \$48 (2014 - \$154), derivatives and repo-style transactions (reverse repurchase agreements, repurchase agreements, securities lending and securities borrowing), net of related collateral. Not applicable for retail exposures.

(4) During the year, the Bank implemented new retail probability of default (PD), exposure at default (EAD) and loss given default (LGD) models for mortgages and term loans.

(5) Geographic segmentation is based upon the location of the ultimate risk of the credit exposure.

### Consolidated Statement of Financial Position asset categories cross-referenced to credit risk exposures

The table below provides mapping of on-balance sheet asset categories that are included in the various Basel III exposure categories as presented in the credit risk exposure summary table on page 200 of these consolidated financial statements. In addition, it also provides other exposures which are subject to market risk and/or other assets which are not subject to market and credit risk with a reconciliation to the balance sheet. The credit risk exposures on certain assets such as cash, precious metals, investment securities (equities) and other assets are not included on the credit risk exposure summary table. Also excluded from the credit risk exposures are certain trading assets and all assets of the Bank's insurance subsidiaries.

As at October 31, 2015 (\$ millions)	Credit Risk Exposures						Other Exposures			Total
	Drawn <sup>(1)</sup>		Other Exposures				Market Risk Exposures		All Other <sup>(1)</sup>	
	Non-retail	Retail	Securitization	Repo-style Transactions	OTC Derivatives	Equity	Also subject to Credit Risk			
Cash and deposits with financial institutions	\$ 71,631	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,296	\$ 73,927
Precious metals	-	-	-	-	-	-	-	10,550	-	10,550
Trading assets	-	-	-	-	-	-	-	-	-	-
Securities	-	-	-	-	-	-	-	78,380	-	78,380
Loans	11,213	-	-	-	-	-	11,213	7,128	-	18,341
Other	-	-	-	-	-	-	-	2,419	-	2,419
Financial assets designated at fair value through profit or loss	295	-	-	-	-	25	-	-	-	320
Securities purchased under resale agreements and securities borrowed	-	-	-	87,312	-	-	-	-	-	87,312
Derivative financial instruments	-	-	-	-	41,003	-	-	35,862	-	41,003
Investment securities	39,187	-	-	-	-	2,960	-	-	1,069	43,216
Loans:										
Residential mortgages <sup>(2)</sup>	88,945	128,398	-	-	-	-	-	-	155	217,498
Personal and credit cards	-	89,220	2,240	-	-	-	-	-	17	91,477
Business & government	147,210	-	6,599	-	-	-	-	-	41	153,850
Allowances for credit losses <sup>(3)</sup>	(1,045)	-	-	-	-	-	-	-	(3,152)	(4,197)
Customers' liability under acceptances	10,296	-	-	-	-	-	-	-	-	10,296
Property and equipment	-	-	-	-	-	-	-	-	2,286	2,286
Investment in associates	-	-	-	-	-	-	-	-	4,033	4,033
Goodwill and other intangibles assets	-	-	-	-	-	-	-	-	11,449	11,449
Other (including Deferred tax assets)	41	168	-	-	-	-	-	-	14,128	14,337
<b>Total</b>	<b>\$ 367,773</b>	<b>\$ 217,786</b>	<b>\$ 8,839</b>	<b>\$ 87,312</b>	<b>\$ 41,003</b>	<b>\$ 2,985</b>	<b>\$ 47,075</b>	<b>\$ 98,477</b>	<b>\$ 32,322</b>	<b>\$ 856,497</b>

(1) Includes the Bank's insurance subsidiaries' assets and all other assets which are not subject to credit and market risks.

(2) Includes \$86.8 billion in mortgages guaranteed by Canada Mortgage Housing Corporation including 90% of privately insured mortgages.

(3) Gross of allowances against impaired loans for AIRB exposures and net of allowances against impaired loans for standardized exposures.

As at October 31, 2014 (\$ millions)	Credit Risk Exposures						Other Exposures			Total
	Drawn <sup>(1)</sup>		Other Exposures				Market Risk Exposures		All Other <sup>(1)</sup>	
	Non-retail	Retail	Securitization	Repo-style Transactions	OTC Derivatives	Equity	Also subject to Credit Risk			
Cash and deposits with financial institutions	\$ 54,774	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,956	\$ 56,730
Precious metals	-	-	-	-	-	-	-	7,286	-	7,286
Trading assets	-	-	-	-	-	-	-	-	-	-
Securities	-	-	-	-	-	-	-	95,363	-	95,363
Loans	8,465	-	-	-	-	-	8,465	6,043	-	14,508
Other	-	-	-	-	-	-	-	3,377	-	3,377
Financial assets designated at fair value through profit or loss	72	-	-	-	-	39	-	-	-	111
Securities purchased under resale agreements and securities borrowed	-	-	-	93,866	-	-	-	-	-	93,866
Derivative financial instruments	-	-	-	-	33,439	-	-	31,405	-	33,439
Investment securities	33,417	-	-	-	-	4,230	-	-	1,015	38,662
Loans:										
Residential mortgages <sup>(2)</sup>	84,973	127,543	-	-	-	-	-	-	132	212,648
Personal and credit cards	-	82,417	1,776	-	-	-	-	-	11	84,204
Business & government	124,800	-	6,277	-	-	-	-	-	21	131,098
Allowances for credit losses <sup>(3)</sup>	(861)	-	-	-	-	-	-	-	(2,780)	(3,641)
Customers' liability under acceptances	9,876	-	-	-	-	-	-	-	-	9,876
Property and equipment	-	-	-	-	-	-	-	-	2,272	2,272
Investment in associates	-	-	-	-	-	-	-	-	3,461	3,461
Goodwill and other intangibles assets	-	-	-	-	-	-	-	-	10,884	10,884
Other (including Deferred tax assets)	539	142	-	-	-	-	-	-	10,841	11,522
<b>Total</b>	<b>\$316,055</b>	<b>\$210,102</b>	<b>\$8,053</b>	<b>\$93,866</b>	<b>\$33,439</b>	<b>\$4,269</b>	<b>\$39,870</b>	<b>\$112,069</b>	<b>\$27,813</b>	<b>\$805,666</b>

(1) Includes the Bank's insurance subsidiaries' assets and all other assets which are not subject to credit and market risks.

(2) Includes \$83.4 billion in mortgages guaranteed by Canada Mortgage Housing Corporation including 90% of privately insured mortgages.

(3) Gross of allowances against impaired loans for AIRB exposures and net of allowances against impaired loans for standardized exposures.



(ii) Credit quality of non-retail exposures

Credit decisions are made based upon an assessment of the credit risk of the individual borrower or counterparty. Key factors considered in the assessment include: the borrower's management; the borrower's current and projected financial results and credit statistics; the industry in which the borrower operates; economic trends; and geopolitical risk. Banking units and Global Risk Management also review the credit quality of the credit portfolio across the organization on a regular basis to assess whether economic trends or specific events may affect the performance of the portfolio.

The Bank's non-retail portfolio is well diversified by industry. As at October 31, 2015, and October 31, 2014, a significant portion of the authorized corporate and commercial lending portfolio was internally assessed at a grade that would generally equate to an investment grade rating by external rating agencies. There has not been a significant change in concentrations of credit risk since October 31, 2014.

Internal grades (IG) are used to differentiate the risk of default of a borrower. The following table cross references the Bank's internal borrower grades with equivalent ratings categories utilized by external rating agencies:

Cross referencing of internal ratings to external ratings<sup>(1)</sup>

Equivalent External Rating			Internal Grade	Internal Grade Code	PD Range <sup>(2)</sup>
S&P	Moody's	DBRS	Internal Grade		
AAA to AA+	Aaa to Aa1	AAA to AA (high)		99 – 98	0.0000% – 0.0578%
AA to A+	Aa2 to A1	AA to A (high)		95	0.0578% – 0.1488%
A to A-	A2 to A3	A to A (low)	Investment grade	90	0.0648% – 0.1657%
BBB+	Baa1	BBB (high)		87	0.0997% – 0.2593%
BBB	Baa2	BBB		85	0.1448% – 0.3643%
BBB-	Baa3	BBB (low)		83	0.2103% – 0.5116%
BB+	Ba1	BB (high)		80	0.3277% – 0.5674%
BB	Ba2	BB		77	0.5108% – 0.6293%
BB-	Ba3	BB (low)	Non-Investment grade	75	0.6293% – 0.7962%
B+	B1	B (high)		73	0.7962% – 1.5389%
B to B-	B2 to B3	B to B (low)		70	1.5389% – 2.9747%
CCC+	Caa1	–		65	2.9747% – 10.5529%
CCC	Caa2	–	Watch list	60	10.5529% – 19.5817%
CCC- to CC	Caa3 to Ca	–		40	19.5817% – 36.1350%
–	–	–		30	36.1350% – 60.1124%
Default			Default	27 – 21	100%

(1) Applies to non-retail portfolio.

(2) PD ranges overlap across IG codes as the Bank utilizes two risk rating systems for its AIRB portfolios, and each risk rating system has its own separate IG to PD mapping.

Non-retail AIRB portfolio

The credit quality of the non-retail AIRB portfolio, expressed in terms of risk categories of borrower internal grades is shown in the table below:

As at October 31 (\$ millions) Category of internal grades	2015					2014
	Exposure at Default <sup>(1)</sup>					
	IG Code	Drawn	Undrawn commitments	Other exposures <sup>(2)</sup>	Total	Total
Investment grade	99 – 98	\$ 73,418	\$ 1,774	\$ 14,472	\$ 89,664	\$ 69,922
	95	16,623	8,221	22,370	47,214	\$ 39,970
	90	16,239	13,187	22,850	52,276	\$ 44,094
	87	20,653	10,754	11,649	43,056	\$ 33,212
	85	15,808	9,618	8,019	33,445	\$ 30,571
Non-Investment grade	83	20,408	9,484	8,754	38,646	\$ 31,433
	80	22,076	7,133	3,827	33,036	\$ 27,175
	77	15,761	2,897	1,682	20,340	\$ 16,318
	75	10,743	2,259	6,587	19,589	\$ 16,578
	73	6,256	944	1,537	8,737	\$ 5,223
Watch list	70	3,841	691	272	4,804	\$ 4,556
	65	737	132	122	991	\$ 815
	60	797	185	119	1,101	\$ 500
	40	1,248	59	147	1,454	\$ 816
Default	30	3	–	–	3	\$ 37
	27 – 21	1,004	60	29	1,093	\$ 1,018
Total, excluding residential mortgages		\$ 225,615	\$ 67,398	\$ 102,436	\$ 395,449	\$ 322,238
Government guaranteed residential mortgages <sup>(3)</sup>		86,832	–	–	86,832	\$ 83,446
Total		\$ 312,447	\$ 67,398	\$ 102,436	\$ 482,281	\$ 405,684

(1) After credit risk mitigation.

(2) Includes off-balance sheet lending instruments such as letters of credit, letters of guarantee, securitizations, excluding first loss protection of \$48 (2014 – \$154), derivatives and repo-style transactions (reverse repurchase agreements, repurchase agreements and securities lending and borrowing), net of related collateral.

(3) These exposures are classified as sovereign exposures and are included in the non-retail category.

### Non-retail standardized portfolio

Non-retail standardized portfolio as at October 31, 2015 comprised of drawn, undrawn and other exposures to corporate, bank and sovereign counterparties amounted to \$63 billion (October 31, 2014 – \$56 billion). Exposures to most Corporate/Commercial counterparties mainly in the Caribbean and Latin American region, are to non-investment grade counterparties based on the Bank's internal grading systems.

### (iii) Credit quality of retail exposures

The Bank's retail portfolios consist of a number of relatively small loans to a large number of borrowers. The portfolios are distributed across Canada and a wide range of countries. As such, the portfolios inherently have a high degree of diversification. In addition, as of October 31, 2015, 49% of the Canadian banking residential mortgage portfolio is insured and the average loan-to-value ratio of the uninsured portion of the portfolio is 53%.

### Retail AIRB portfolio

The data in the table below provides a distribution of the retail AIRB exposure within each PD range by asset class:

Category of (PD) grades	PD range	2015					2014	
		Exposure at default <sup>(1)</sup>					Total	Total
		Real estate secured		Qualifying revolving	Other retail	Total		
Mortgages	HELOC							
Exceptionally Low	0.0000% – 0.0499%	\$ 42,022	\$ –	\$ 6,982	\$ 410	\$ 49,414	\$ 26,232	
Very Low	0.0500% – 0.1999%	33,034	14,197	6,231	6,022	59,484	70,129	
Low	0.2000% – 0.9999%	18,926	11,070	9,563	13,535	53,094	66,984	
Medium Low	1.0000% – 2.9999%	4,502	5,546	7,108	4,389	21,545	16,215	
Medium	3.0000% – 9.9999%	1,067	–	2,338	2,146	5,551	7,953	
High	10.0000% – 19.9999%	510	290	1,384	29	2,213	2,307	
Extremely High	20.0000% – 99.9999%	561	274	827	859	2,521	1,969	
Default	100%	202	58	182	169	611	644	
<b>Total</b>		<b>\$ 100,824</b>	<b>\$ 31,435</b>	<b>\$ 34,615</b>	<b>\$ 27,559</b>	<b>\$ 194,433</b>	<b>\$ 192,433</b>	

(1) After credit risk mitigation.

### Retail standardized portfolio

The retail standardized portfolio of \$54 billion as at October 31, 2015 (2014 – \$47 billion) was comprised of residential mortgages, personal loans, credit cards and lines of credit to individuals, mainly in the Caribbean and Latin American region. Of the total retail standardized exposures, \$28 billion (2014 – \$24 billion) was represented by mortgages and loans secured by residential real estate, mostly with a loan-to-value ratio of below 80%.

### (iv) Collateral

#### Collateral held

In the normal course of business, to reduce its exposure to counterparty credit risk, the Bank receives collateral on derivative, securities lending, and other transactions related to the capital markets. The following are examples of the terms and conditions customary to collateral for these types of transactions:

- The risks and rewards of the pledged assets reside with the pledgor.
- Additional collateral is required when the market value of the transaction exceeds thresholds agreed upon with the pledgor.
- The Bank is normally permitted to sell or repledge the collateral it receives, although this right is specific to each agreement under which the collateral is pledged.
- Upon satisfaction of the obligation, the Bank must return the pledged assets, unless the Bank has the right to sell or repledge the collateral it receives, in which case the Bank must return comparable collateral to the pledgor.

As at October 31, 2015, the approximate market value of collateral accepted that may be sold or repledged by the Bank was \$117 billion (2014 – \$114 billion). This collateral is held primarily in connection with reverse repurchase agreements, securities lending and derivative transactions.

#### Collateral pledged

In the normal course of business, securities and other assets are pledged to secure an obligation, participate in clearing or settlement systems, or operate in a foreign jurisdiction. Note 35(d) details the nature and extent of the Bank's asset pledging activities. Asset pledging transactions are conducted under terms that are common and customary to standard derivative, securities financing, and other borrowing activities. Standard risk management controls are applied with respect to asset pledging.

#### Assets acquired in exchange for loans

The carrying value of non-financial assets acquired in exchange for loans as at October 31, 2015 was \$310 million (2014 – \$353 million) mainly comprised of real estate and were classified as either held for sale or held for use as appropriate.

**(b) Liquidity risk**

Liquidity risk is the risk that the Bank is unable to meet its financial obligations in a timely manner at reasonable prices. The Bank's liquidity risk is subject to extensive risk management controls and is managed within the framework of policies and limits approved by the Board. The Board receives reports on risk exposures and performance against approved limits. The Asset-Liability Committee (ALCO) provides senior management oversight of liquidity risk.

The key elements of the Bank's liquidity risk management framework include:

- liquidity risk measurement and management limits, including limits on maximum net cash outflow by currency over specified short-term horizons;
- prudent diversification of its wholesale funding activities by using a number of different funding programs to access the global financial markets and manage its maturity profile, as appropriate;
- large holdings of liquid assets to support its operations, which can generally be sold or pledged to meet the Bank's obligations;
- liquidity stress testing, including Bank-specific, global-systemic, and combination systemic/specific scenarios; and
- liquidity contingency planning.

The Bank's foreign operations have liquidity management frameworks that are similar to the Bank's framework. Local deposits are managed from a liquidity risk perspective based on the local management frameworks and regulatory requirements.

**(i) Commitments to extend credit**

In the normal course of business, the Bank enters into commitments to extend credit in the form of loans or other financings for specific amounts and maturities, subject to specific conditions. These commitments, which are not reflected on the Consolidated Statement of Financial Position, are subject to normal credit standards, financial controls and monitoring procedures.

**(ii) Derivative instruments**

The Bank is subject to liquidity risk relating to its use of derivatives to meet customer needs, generate revenues from trading activities, manage market and credit risks arising from its lending, funding and investment activities, and lower its cost of capital. The maturity profile of the notional amounts of the Bank's derivative instruments is summarized in Note10(b).

**(c) Market risk**

Market risk arises from changes in market prices and rates (including interest rates, credit spreads, equity prices, foreign exchange rates and commodity prices), the correlations between them, and their levels of volatility. Market risk is subject to extensive risk management controls, and is managed within the framework of market risk policies and limits approved by the Board. The ALCO and Market Risk Management and Policy Committee oversee the application of the framework set by the Board, and monitor the Bank's market risk exposures and the activities that give rise to these exposures.

The Bank uses a variety of metrics and models to measure and control market risk exposures. The measurements used are selected based on an assessment of the nature of risks in a particular activity. The principal measurement techniques are Value at Risk (VaR), stress testing, sensitivity analysis and simulation modeling, and gap analysis. The Board reviews results from these metrics quarterly. Models are independently validated internally prior to implementation and are subject to formal periodic review.

VaR is a statistical measure that estimates the potential loss in value of the Bank's trading positions due to adverse market movements over a defined time horizon with a specified confidence level. The quality of the Bank's VaR is validated by regular back testing analysis, in which the VaR is compared to theoretical and actual profit and loss results. To complement VaR, the Bank also uses stress testing to examine the impact that abnormally large swings in market factors and periods of prolonged inactivity might have on trading portfolios. The stress testing program is designed to identify key risks and ensure that the Bank's capital can absorb potential losses from abnormal events. The Bank subjects its trading portfolios to a series of stress tests on a daily, weekly and monthly basis.

In trading portfolios, sensitivity analysis is used to measure the effect of changes in risk factors, including prices and volatility, on financial products and portfolios. In non-trading portfolios, sensitivity analysis assesses the effect of changes in interest rates on current earnings and on the economic value of shareholders' equity. Simulation modeling under various scenarios is particularly important for managing risk in the deposit, lending and investment products the Bank offers to its retail customers. Gap analysis is used to assess the interest rate sensitivity of the Bank's retail, wholesale banking and international operations. Under gap analysis, interest rate-sensitive assets, liabilities and derivative instruments are assigned to defined time periods, on the earlier of contractual repricing or maturity dates on the basis of expected repricing dates.

**(i) Non-trading interest rate risk**

Interest rate risk, inclusive of credit spread risk, is the risk of loss due to the following: changes in the level, slope and curvature of the yield curve; the volatility of interest rates; mortgage prepayment rates; changes in the market price of credit; and the creditworthiness of a particular issuer. The Bank actively manages its interest rate exposures with the objective of enhancing net interest income within established risk tolerances. Interest rate risk arising from the Bank's funding and investment activities is managed in accordance with Board-approved policies and global limits, which are designed to control the risk to net interest income and economic value of shareholders' equity. The income limit measures the effect of a specified shift in interest rates on the Bank's annual net income over the next twelve months, while the economic value limit measures the impact of a specified change in interest rates on the present value of the Bank's net assets. Interest rate exposures in individual currencies are also controlled by gap limits.

### Interest rate sensitivity gap

The following table summarizes carrying amounts of assets, liabilities and equity, and derivative instrument notional amounts in order to arrive at the Bank's interest rate gap based on the earlier of contractual repricing or maturity dates. To arrive at the Bank's view of its effective interest rate gap, adjustments are made to factor in expected mortgage and loan repayments based on historical patterns and reclassify the Bank's trading instruments to the immediately rate sensitive and within 3 months categories. Consumer behaviour assumptions are used to reclassify certain non-maturity assets and liabilities.

As at October 31, 2015 (\$ millions)	Immediately rate sensitive	Within 3 months	Three to 12 months	One to 5 years	Over 5 years	Non-rate sensitive	Total
Cash and deposits with financial institutions	\$ 50,051	\$ 16,417	\$ 967	\$ 344	\$ –	\$ 6,148	\$ 73,927
Precious metals	–	–	–	–	–	10,550	10,550
Trading assets	–	21,897	9,469	14,609	15,300	37,865	99,140
Financial instruments designated at fair value through profit or loss	–	–	66	16	–	238	320
Securities purchased under resale agreements and securities borrowed	14,352	37,539	11,008	–	–	24,413	87,312
Investment securities	–	12,412	6,337	18,460	3,455	2,552 <sup>(1)</sup>	43,216
Loans	21,989	217,419	44,036	156,272	17,630	1,282 <sup>(2)</sup>	458,628
Other assets	–	–	–	–	–	83,404	83,404
<b>Total assets</b>	<b>\$ 86,392</b>	<b>\$ 305,684</b>	<b>\$ 71,883</b>	<b>\$ 189,701</b>	<b>\$ 36,385</b>	<b>\$ 166,452</b>	<b>\$ 856,497</b>
Deposits	\$ 97,822	\$ 296,112	\$ 69,012	\$ 93,797	\$ 14,894	\$ 29,282	\$ 600,919
Financial instruments designated at fair value through profit or loss	–	1,349	96	41	–	–	1,486
Obligations related to securities sold short	17	306	513	7,820	7,845	3,711	20,212
Obligations related to securities sold under repurchase agreements and securities lent	32,956	28,728	7,798	–	–	7,533	77,015
Subordinated debentures	–	1,000	165	3,507	1,510	–	6,182
Other liabilities	904	2,850	1,162	2,650	3,220	86,418	97,204
Equity	–	484	1,099	1,351	–	50,545	53,479
<b>Total liabilities and equity</b>	<b>\$ 131,699</b>	<b>\$ 330,829</b>	<b>\$ 79,845</b>	<b>\$ 109,166</b>	<b>\$ 27,469</b>	<b>\$ 177,489</b>	<b>\$ 856,497</b>
On-balance sheet gap	\$ (45,307)	\$ (25,145)	\$ (7,962)	\$ 80,535	\$ 8,916	\$ (11,037)	\$ –
Off-balance sheet gap	–	(4,533)	(13,034)	7,327	9,278	962	–
Interest rate sensitivity gap based on contractual repricing	\$ (45,307)	\$ (29,678)	\$ (20,996)	\$ 87,862	\$ 18,194	\$ (10,075)	\$ –
Adjustment to expected repricing	107,042	(7,667)	(8,095)	(57,155)	(11,182)	(22,943)	–
<b>Total interest rate sensitivity gap</b>	<b>\$ 61,735</b>	<b>\$ (37,345)</b>	<b>\$ (29,091)</b>	<b>\$ 30,707</b>	<b>\$ 7,012</b>	<b>\$ (33,018)</b>	<b>\$ –</b>

As at October 31, 2014 (\$ millions)

<b>Total interest rate sensitivity gap</b>	\$ 46,206	\$ (15,571)	\$ (20,885)	\$ 9,338	\$ 8,709	\$ (27,797)	\$ –
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(1) Represents common shares, preferred shares, and equity accounted investments.

(2) Includes net impaired loans, less the collective allowance on performing loans.

CONSOLIDATED FINANCIAL STATEMENTS

Average effective yields by the earlier of the contractual repricing or maturity dates

The following tables summarize average effective yields, by the earlier of the contractual repricing or maturity dates, for the following interest rate-sensitive financial instruments:

As at October 31, 2015 (%)	Immediately rate sensitive	Within 3 months	Three to 12 months	One to 5 years	Over 5 years	Non-rate sensitive	Total
Cash and deposits with financial institutions	0.3%	0.8%	0.3%	0.2%	–%	–%	0.4%
Precious metals	–	–	–	–	–	–	–
Trading assets	–	2.7	2.8	3.9	3.9	–	3.3
Financial instruments designated at fair value through profit or loss	–	–	8.4	8.9	–	–	8.5
Securities purchased under resale agreements and securities borrowed	0.5	0.6	0.7	–	–	–	0.6
Investment securities <sup>(1)</sup>	–	2.2	1.8	2.0	3.1	–	2.1
Loans <sup>(2)</sup>	4.5	3.6	4.6	4.0	5.9	–	4.0
Deposits <sup>(3)</sup>	0.6	0.7	1.6	2.0	2.7	–	1.1
Financial instruments designated at fair value through profit or loss	–	1.0	2.7	–	–	–	1.0
Obligations related to securities sold short	1.2	1.5	1.9	1.8	3.0	–	2.4
Obligations related to securities sold under repurchase agreements and securities lent <sup>(3)</sup>	0.2	1.2	0.3	–	–	–	0.6
Subordinated debentures <sup>(3)</sup>	–	6.7	0.7	3.0	3.7	–	3.7 <sup>(4)</sup>
Other liabilities	2.7	3.4	4.6	6.2	5.0	–	4.6

As at October 31, 2014 (%)	Immediately rate sensitive	Within 3 months	Three to 12 months	One to 5 years	Over 5 years	Non-rate sensitive	Total
Cash and deposits with financial institutions	0.3%	1.0%	1.0%	–%	–%	–%	0.4%
Precious metals	–	–	–	–	–	–	–
Trading assets	–	1.9	2.1	2.8	3.1	–	2.6
Financial instruments designated at fair value through profit or loss	–	–	5.6	8.4	–	–	7.9
Securities purchased under resale agreements and securities borrowed	0.4	0.7	0.6	0.8	–	–	0.6
Investment securities <sup>(1)</sup>	–	3.0	2.2	1.9	3.4	–	2.5
Loans <sup>(2)</sup>	4.8	3.9	4.3	4.3	5.9	–	4.2
Deposits <sup>(3)</sup>	0.9	0.9	1.5	2.3	2.9	–	1.3
Financial instruments designated at fair value through profit or loss	–	1.7	3.3	–	1.1	–	1.5
Obligations related to securities sold short	0.2	1.3	0.4	1.6	2.9	–	2.1
Obligations related to securities sold under repurchase agreements and securities lent <sup>(3)</sup>	0.3	1.1	0.3	–	–	–	0.6
Subordinated debentures <sup>(3)</sup>	–	–	0.5	3.8	8.9	–	4.0 <sup>(4)</sup>
Other liabilities	2.5	4.1	3.0	4.3	4.4	–	4.1

(1) Yields are based on cost or amortized cost and contractual interest or stated dividend rates adjusted for amortization of premiums and discounts. Yields on tax-exempt securities have not been computed on a taxable equivalent basis.

(2) Yields are based on book values, net of allowance for credit losses, and contractual interest rates, adjusted for the amortization of any unearned income.

(3) Yields are based on book values and contractual rates.

(4) After adjusting for the impact of related derivatives, the yield was 3.3% (2014 – 3.7%).

Interest rate sensitivity

Based on the Bank's interest rate positions, the following table shows the pro-forma after-tax impact on the Bank's net income over the next twelve months and economic value of shareholders' equity of an immediate and sustained 100 and 200 basis point increase and decrease in interest rates across major currencies as defined by the Bank.

As at October 31 (\$ millions)	2015						2014	
	Net income			Economic value of equity			Net income	Economic value of equity
	Canadian dollar	Other currencies	Total	Canadian dollar	Other currencies	Total		
100 bp increase	\$ 68	\$ 174	\$ 242	\$ (287)	\$ (201)	\$ (488)	\$ 179	\$ (498)
100 bp decrease <sup>(1)</sup>	\$ (17)	\$ (56)	\$ (73)	\$ 135	\$ 283	\$ 418	\$ (52)	\$ 474
200 bp increase	\$ 137	\$ 351	\$ 488	\$ (652)	\$ (383)	\$ (1,035)	\$ 360	\$ (1,059)
200 bp decrease <sup>(1)</sup>	\$ (17)	\$ (72)	\$ (89)	\$ (255)	\$ 667	\$ 412	\$ (62)	\$ 908

(1) Corresponding with the current low interest rate environment, the annual income sensitivity for CAD, U.S., EUR and GBP exposures is measured using a 25 bp decline. Prior period amounts have been restated to reflect this change.

(ii) Non-trading foreign currency risk

Foreign currency risk is the risk of loss due to changes in spot and forward rates, and the volatility of currency exchange rates. Non-trading foreign currency risk, also referred to as structural foreign exchange risk, arises primarily from Bank's net investments in self-sustaining foreign operations and is controlled by a Board-approved limit. This limit considers potential volatility to shareholders' equity as well as the potential impact on capital ratios from foreign exchange fluctuations. On a quarterly basis, the Asset-Liability Committee (ALCO) reviews the Bank's exposures to these net investments. The Bank may fully or partially hedge this exposure by funding the investments in the same currency, or by using other financial instruments, including derivatives.

The Bank is subject to foreign currency risk on the earnings of its foreign operations. To manage this risk, foreign currency revenues and expenses, which are primarily denominated in U.S. dollars, are projected over a number of future fiscal quarters. The ALCO assesses economic data and forecasts to decide on the portion of the estimated future foreign currency revenues and expenses to hedge. Hedging instruments normally include foreign currency spot and forward contracts, as well as foreign currency options and swaps.

As at October 31, 2015, a one percent increase (decrease) in the Canadian dollar against all currencies in which the Bank operates decreases (increases) the Bank's before-tax annual earnings by approximately \$60 million (2014 – \$49 million) in the absence of hedging activity, primarily from exposure to U.S. dollars. A similar change in the Canadian dollar as at October 31, 2015 would increase (decrease) the unrealized foreign currency translation losses in the accumulated other comprehensive income section of equity by approximately \$315 million (2014 – \$260 million), net of hedging.

### (iii) Non-trading equity risk

Equity risk is the risk of loss due to adverse movements in equity prices. Equity price risk is often classified into two categories: general equity risk, which refers to the sensitivity of an instrument or portfolio's value to changes in the overall level of equity prices, and specific equity risk, which refers to that portion of an individual equity instrument's price volatility that is determined by entity-specific characteristics.

The Bank is exposed to equity risk through its equity investment portfolios, which are controlled by Board-approved portfolio, VaR, and stress-test limits. Equity investments include common and preferred shares, as well as a diversified portfolio of third-party managed funds.

The majority of the Bank's equity investment portfolios are managed by Group Treasury under the strategic direction of the ALCO. Group Treasury delegates the management of a portion of equity and equity-related portfolios to other external fund managers to take advantage of these fund managers' expertise in particular market niches and products.

The fair value of available-for-sale equity securities is shown in Note 12.

### (iv) Trading portfolio risk management

The Bank's policies, processes and controls for trading activities are designed to achieve a balance between pursuing profitable trading opportunities and managing earnings volatility within a framework of sound and prudent practices. Trading activities are primarily customer focused.

Market risk arising from the Bank's trading activities is managed in accordance with Board-approved policies and limits, including aggregate VaR and stress testing limits.

Trading portfolios are marked-to-market in accordance with the Bank's valuation policies. Positions are marked-to-market daily and valuations are independently reviewed by back office, GRM or finance units on a regular basis. These units also provide profit and loss reporting, as well as VaR and limit compliance reporting to business unit management and executive management for evaluation and action as appropriate. VaR is calculated daily using a 99% confidence level, and a one-day holding period. This means that, once in every 100 days, the trading positions are expected to lose more than the VaR estimate. The Bank calculates general market risk VaR using historical simulation based on 300 days of market data. For debt specific risk VaR, the Bank uses a Monte Carlo simulation. The table below shows the Bank's VaR by risk factor:

(\$ millions)	As at October 31, 2015	For the year ended October 31, 2015			As at October 31, 2014
		Average	High	Low	
Credit spread plus interest rate	\$ 10.6	\$ 9.0	\$ 15.2	\$ 6.3	\$ 8.6
Credit spread	8.1	7.8	10.1	5.8	8.1
Interest rate	4.3	4.4	7.9	2.7	4.2
Equities	4.1	2.5	10.7	1.1	2.2
Foreign exchange	0.8	1.1	3.2	0.4	0.9
Commodities	2.0	4.0	5.6	1.9	3.2
Debt specific	7.4	5.5	20.7	3.9	20.4
Diversification effect	(12.9)	(10.8)	N/A	N/A	(12.8)
All-Bank VaR	\$ 11.9	\$ 11.3	\$ 23.0	\$ 8.2	\$ 22.5
All-Bank stressed VaR	\$ 22.3	\$ 24.4	\$ 36.9	\$ 17.4	\$ 38.7

Below are the market risk capital requirements as at October 31, 2015.

(\$ millions)	
All-Bank VaR	\$ 141
All-Bank stressed VaR	246
Incremental risk charge	488
Comprehensive risk measure (CRM)	201
CRM surcharge	–
Standardized approach	72
Total market risk capital	\$ 1,148 <sup>(1)</sup>

(1) Equates to \$14,350 of risk-weighted assets (2014 – \$17,251).

**(d) Operational risk**

Operational risk is the risk of loss, whether direct or indirect, to which the Bank is exposed due to inadequate or failed internal processes or systems, human error, or external events. Operational risk includes legal and regulatory risk, business process and change risk, fiduciary or disclosure breaches, technology failure, financial crime and environmental risk. Operational risk, in some form, exists in each of the Bank's business and support activities, and can result in financial loss, regulatory sanctions and damage to the Bank's reputation. The Bank has developed policies, processes and assessment methodologies to ensure that operational risk is appropriately identified and managed with effective controls with a view to safeguarding client assets and preserving shareholder value.

**37 Business combinations, other acquisitions and divestitures**

**Current Year:**

**Cencosud Administradora de Tarjetas S.A., Chile**

On May 1, 2015, the Bank acquired a 51% controlling interest in Cencosud Administradora de Tarjetas S.A. and certain other smaller entities (collectively, CAT) from Cencosud S.A. (Cencosud), for a consideration of US \$280 million. Simultaneously, the Bank entered into a 15 year exclusivity contract with Cencosud to manage the business.

The acquisition was accounted for as a business combination resulting in consolidation of 100% of its assets and liabilities with the recording of non-controlling interest for the 49% held by another shareholder. Assets recognized mainly include credit card and consumer loans. The non-controlling interest was measured as the proportionate share of CAT's identifiable net assets. A finite life intangible of \$296 million relating to the exclusivity contract was recorded.

**Citibank Peru Operations**

On May 1, 2015, the Bank's subsidiary in Peru acquired 100% of the retail and commercial banking operations of Citibank in Peru for cash consideration of \$380 million. The acquisition was accounted for as a business combination and resulted in the recognition of mainly personal and credit card loans of \$480 million and personal deposits of \$210 million.

**Announced in 2015:**

**Citibank Panama and Costa Rica Operations**

On July 14, 2015, the Bank announced an agreement to acquire Citigroup's retail and commercial banking businesses in Panama and Costa Rica, subject to regulatory approval, and will be accounted for as a business combination.

**Acquisition of JPMorgan Canadian Credit Card Portfolio**

On October 15, 2015, the Bank announced that it has reached an agreement to acquire a MasterCard and private label credit card portfolio of approximately \$1.7 billion in receivables and the related Canadian credit card operations from JPMorgan Chase Bank N.A. The transaction closed on November 16, 2015.

**Prior year:**

**Canadian Tire Financial Services**

On October 1, 2014, the Bank acquired a 20% equity interest in Canadian Tire's Financial Services business (CTFS), for \$500 million in cash. Acquisition-related expenses of \$5 million were capitalized as part of the carrying value of the investment. Under the agreement Canadian Tire has an option to sell to the Bank up to an additional 29% equity interest within the next 10 years at the then fair value, that can be settled, at the Bank's discretion, by issuance of common shares or cash. After 10 years, for a period of six months, the Bank has the option to sell its equity interest back to Canadian Tire at the then fair value. The Bank has also provided a funding commitment to CTFS of \$2.25 billion for financing credit card receivables. This investment was accounted for under the equity method of accounting.

**Sale of investment in CI Financial Corp.**

On June 17, 2014 the Bank sold 82.8 million shares of its investment in CI Financial Corp. (representing 29.1% ownership) at a price of \$31.60 per share. On that date, the remaining holdings of 21.8 million shares, representing 7.7% ownership, were reclassified to available-for-sale securities at market value. The total pre-tax gain of \$643 million, was included in non-interest income – other.