



SUPPLEMENTARY REGULATORY CAPITAL DISCLOSURE

SECOND QUARTER 2016

(unaudited)

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This document is available via the Bank's web site: www.nbc.ca



Notes to users

- 1) This Supplementary Regulatory Capital Disclosure document is unaudited and should be read in conjunction with the 2015 Annual Report. All amounts are in millions of Canadian dollars unless otherwise stated.
- 2) Financial information is available through the Report to Shareholders for all quarters of 2016 and also in the document entitled *Supplementary Financial Information* which is available on the Bank's website at nbc.ca.



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Regulatory Capital and Capital Ratios under Basel III⁽¹⁾

		2016		2015				
		Q2	Q1	Q4	Q3	Q2	Q1	
(unaudited) (millions of Canadian dollars)		Reference ⁽²⁾	All-in basis					
	Common Equity Tier 1 capital: instruments and reserves							
1	Directly issued qualifying common share capital plus related contributed surplus ⁽³⁾	a + a'	2 689	2 691	2 681	2 375	2 382	2 365
2	Retained earnings	b	6 530	6 593	6 705	6 500	6 231	5 957
3	Accumulated other comprehensive income and other reserves	c	145	91	145	234	304	362
6	Common Equity Tier 1 capital before regulatory adjustments		9 364	9 375	9 531	9 109	8 917	8 684
	Regulatory adjustments to Common Equity Tier 1 capital							
7	Prudential valuation adjustments		–	–	–	–	–	–
8	Goodwill (net of related tax liability)	e	1 545	1 557	1 536	1 519	1 439	1 495
9	Intangible assets other than mortgage-servicing rights	f - x	954	898	908	905	895	891
11	Accumulated other comprehensive income related to cash flow hedges	h	160	124	123	94	149	116
12	Shortfall of total provisions to expected losses	i	–	12	–	–	3	–
14	Gains (losses) due to changes in own credit risk on fair valued liabilities	j	(1)	28	5	–	(1)	20
15	Defined benefit pension plan assets (net of related tax liability)	k - y	30	13	154	98	78	3
16	Investments in own shares (if not already netted off contributed surplus on reported balance sheet)		7	–	4	5	10	–
22	Amount exceeding the 15% threshold							
23	of which: significant investments in the common stock of financials	n	–	–	–	–	–	–
25	of which: deferred tax assets arising from temporary differences	o	–	–	–	–	–	–
26	Other deductions or regulatory adjustments to CET1 as determined by OSFI (including regulatory adjustments in respect of own use property)		–	–	–	–	–	–
28	Total regulatory adjustments to Common equity Tier 1		2 695	2 632	2 730	2 621	2 573	2 525
29	Common Equity Tier 1 capital (CET1)		6 669	6 743	6 801	6 488	6 344	6 159
	Additional Tier 1 capital: instruments							
30	Directly issued qualifying Additional Tier 1 instruments plus related contributed surplus ⁽³⁾	v	1 050	1 050	650	650	650	650
31	of which: classified as equity under applicable accounting standards	v + z	1 050	1 050	650	650	650	650
32	of which: classified as liabilities under applicable accounting standards	p	–	–	–	–	–	–
33	Directly issued capital instruments subject to phase out from Additional Tier 1 ^{(3) (4)}	p' + v'	1 162	1 161	1 175	1 348	1 348	1 348
36	Additional Tier 1 capital before regulatory adjustments		2 212	2 211	1 825	1 998	1 998	1 998
	Additional Tier 1 capital: regulatory adjustments							
41	Other deductions from Tier 1 capital as determined by OSFI		1	–	–	–	3	–
41a	of which: Reverse mortgages		1	–	–	–	3	–
43	Total regulatory adjustments to Additional Tier 1 capital		1	–	–	–	3	–
44	Additional Tier 1 capital (AT1)		2 211	2 211	1 825	1 998	1 995	1 998
45	Tier 1 capital (T1 = CET1 + AT1)		8 880	8 954	8 626	8 486	8 339	8 157
	Tier 2 capital: instruments and provisions							
47	Directly issued capital instruments subject to phase out from Tier 2 ^{(3) (5)}	r'	1 009	1 010	1 008	1 508	1 508	1 520
50	Collective allowances ⁽⁶⁾	t	275	33	44	33	27	44
51	Tier 2 capital before regulatory adjustments		1 284	1 043	1 052	1 541	1 535	1 564
	Tier 2 capital: regulatory adjustments							
57	Total regulatory adjustments to Tier 2 capital		–	–	–	–	–	–
58	Tier 2 capital (T2)		1 284	1 043	1 052	1 541	1 535	1 564
59	Total capital (TC = T1 + T2)		10 164	9 997	9 678	10 027	9 874	9 721

(1) As requested by the Office of the Superintendent of Financial Institutions (Canada) (OSFI), all the Domestic Systemically Important Banks (D-SIBs) in Canada must fully apply the Basel III deductions and must disclose the all-in-ratios.

(2) Reconciliation with Balance Sheet is presented on page 7.

(3) A complete list of capital instruments and their main features is now available on the Bank's website at nbc.ca under *Investor Relations > Capital & Debt Information > Main Features of Regulatory Capital Instruments*.

(4) Figures as at October 31, 2015 include the redemption of Series 20 preferred shares on November 15, 2015.

(5) Figures as at October 31, 2015 include the November 2, 2015 redemption of \$500 million in notes.

(6) During the second quarter of 2016, a \$250 million (\$183 million net of income taxes) sectoral provision for credit losses was recorded for producers and service companies in the oil and gas sector.



Regulatory Capital and Capital Ratios under Basel III⁽¹⁾ (continued)

(unaudited) (millions of Canadian dollars)		2016		2015		
		Q2	Q1	Q4	Q3	Q2
		All-in basis				
60a	Common Equity Tier 1 Capital RWA (CET1)	68 375	69 741	68 835	68 617	67 071
60b	Tier 1 Capital RWA	68 604	70 006	69 094	68 883	67 333
60c	Total capital RWA	68 800	70 233	69 316	69 111	67 557
Capital ratios						
61	Common Equity Tier 1 (as a percentage of risk weighted assets)	9.8%	9.7%	9.9%	9.5%	9.5%
62	Tier 1 (as a percentage of risk weighted assets) ⁽²⁾	12.9%	12.8%	12.5%	12.3%	12.4%
63	Total capital (as a percentage of risk weighted assets) ^{(2) (3)}	14.8%	14.2%	14.0%	14.5%	14.6%
64	Institution-specific buffer requirement (minimum CET1 requirement plus capital conservation buffer plus G-SIB buffer requirement plus D-SIB buffer requirement expressed as a percentage of risk weighted assets)	8.0%	8.0%	7.0%	7.0%	7.0%
67	of which: G-SIB buffer requirement	na	na	na	na	na
67a	of which: D-SIBs buffer requirement	1.0%	1.0%	na	na	na
68	Common Equity Tier 1 available to meet buffers (as a percentage of risk weighted assets)	9.8%	9.7%	9.9%	9.5%	9.5%
OSFI all-in target						
69	Common Equity Tier 1 all-in target ratio	8.0%	8.0%	7.0%	7.0%	7.0%
70	Tier 1 capital all-in target ratio	9.5%	9.5%	8.5%	8.5%	8.5%
71	Total capital all-in target ratio	11.5%	11.5%	10.5%	10.5%	10.5%
Amounts below the thresholds for deduction (before risk weighting)						
72	Non-significant investments in the capital of other financial institutions	255	198	148	193	200
73	Significant investments in the common stock of financial institutions	278	321	412	410	297
75	Deferred tax assets arising from temporary differences (net of related tax liabilities)	24	467	414	427	428
Applicable caps on the inclusion of allowance in Tier 2						
76	Allowance eligible for inclusion in Tier 2 in respect of exposures subject to standardised approach (prior to application of cap)	51	33	35	31	27
77	Cap on inclusion of allowance in Tier 2 under standardised approach	58	66	68	60	53
78	Allowance eligible for inclusion in Tier 2 in respect of exposures subject to internal ratings-based approach (prior to application of cap) ⁽⁴⁾	224	–	8	2	–
79	Cap on inclusion of allowance in Tier 2 under internal ratings-based approach	310	317	310	318	316
Capital instruments subject to phase-out arrangements (only applicable between Jan 1, 2018 and Jan 1, 2022)						
82	Current cap on AT1 instruments subject to phase out arrangements	1 162	1 162	1 356	1 356	1 356
83	Amount excluded from AT1 due to cap (excess over cap after redemptions and maturities)	–	–	–	–	–
84	Current cap on T2 instruments subject to phase out arrangements	1 429	1 429	1 667	1 667	1 667
85	Amount excluded from T2 due to cap (excess over cap after redemptions and maturities)	–	–	–	–	–
Transitional Capital Disclosure Template		Transitional basis				
29	Common Equity Tier 1 capital (CET1)	7 710	7 769	8 384	8 005	7 808
45	Tier 1 capital (T1 = CET1 + AT1)	9 296	9 355	9 287	9 091	8 930
59	Total capital (TC = T1 + T2)	10 580	10 395	10 339	10 632	10 465
60	Total risk weighted assets	69 947	71 468	70 806	70 591	69 008
61	Common Equity Tier 1 (as a percentage of risk weighted assets)	11.0%	10.9%	11.8%	11.3%	11.3%
62	Tier 1 (as a percentage of risk weighted assets) ⁽²⁾	13.3%	13.1%	13.1%	12.9%	12.9%
63	Total capital (as a percentage of risk weighted assets) ^{(2) (3)}	15.1%	14.6%	14.6%	15.1%	15.2%

(1) As requested by the Office of the Superintendent of Financial Institutions (Canada) (OSFI), all the Domestic Systemically Important Banks (D-SIBs) in Canada must fully apply the Basel III deductions and must disclose the all-in-ratios.

(2) Ratios as at October 31, 2015 include the redemption of Series 20 preferred shares on November 15, 2015.

(3) Ratios as at October 31, 2015 include the November 2, 2015 redemption of \$500 million in notes.

(4) During the second quarter of 2016, a \$250 million (\$183 million net of income taxes) sectoral provision for credit losses was recorded for producers and service companies in the oil and gas sector.



Leverage Ratio under Basel III

(unaudited) (millions of Canadian dollars)

		2016		2015			
		Q2	Q1	Q4	Q3	Q2	Q1
Accounting assets vs. leverage ratio exposure – Transitional basis							
1	Total consolidated assets as per published financial statements	220 734	219 301	216 090	215 560	207 123	214 474
2	Adjustment for investments in banking, financial, insurance or commercial entities that are consolidated for accounting purposes but outside the scope of regulatory consolidation	(89)	(53)	(59)	(70)	(87)	(77)
3	Adjustment for fiduciary assets recognised on the balance sheet pursuant to the operative accounting framework but excluded from the leverage ratio exposure measure	–	–	–	–	–	–
4	Adjustment for derivative financial instruments ⁽¹⁾	1 091	567	1 924	3 516	4 178	318
5	Adjustment for securities financing transactions ⁽¹⁾	1 832	1 826	1 972	1 415	(1 966)	(3 381)
6	Adjustment for off balance-sheet items	19 996	19 599	19 585	18 745	18 472	17 761
7	Other adjustments	(3 767)	(3 968)	(3 915)	(5 160)	(4 003)	(4 030)
8	Leverage Ratio Exposure (transitional basis)	239 797	237 272	235 597	234 006	223 717	225 065
Leverage ratio common disclosure							
On-balance sheet exposures							
1	On-balance sheet items (excluding derivatives, SFTs and grandfathered securitization exposures but including collateral)	193 238	188 359	185 659	180 550	176 215	176 139
2	(Asset amounts deducted in determining Basel III transitional Tier 1 capital)	(2 301)	(2 238)	(2 086)	(2 015)	(1 986)	(1 969)
3	Total on-balance sheet exposures (excluding derivatives and SFTs) (sum of lines 1 and 2)	190 937	186 121	183 573	178 535	174 229	174 170
Derivative exposures							
4	Replacement cost associated with all derivative transactions (i.e., net of eligible cash variation margin)	6 337	7 318	5 527	7 370	6 152	7 764
5	Add-on amounts for PFE associated with all derivative transactions	6 272	6 262	6 881	8 217	8 363	7 274
6	Gross up for derivatives collateral provided where deducted from the balance sheet assets pursuant to the operative accounting framework	–	–	–	–	–	–
7	(Deductions of receivables assets for cash variation margin provided in derivative transactions)	–	–	–	–	–	–
8	(Exempted CCP-leg of client cleared trade exposures)	–	–	–	–	–	–
9	Adjusted effective notional amount of written credit derivatives	663	518	357	311	281	180
10	(Adjusted effective notional offsets and add-on deductions for written credit derivatives)	–	–	–	–	–	–
11	Total derivative exposures (sum of lines 4 to 10)	13 272	14 098	12 765	15 898	14 796	15 218
Securities financing transaction exposures							
12	Gross SFT assets recognised for accounting purposes (with no recognition of netting), after adjusting for sale accounting transactions	13 760	15 628	17 702	19 413	23 887	25 597
13	(Netted amounts of cash payables and cash receivables of gross SFT assets)	(246)	(337)	(199)	(729)	(9 547)	(9 570)
14	Counterparty credit risk (CCR) exposure for SFTs	2 078	2 163	2 171	2 144	1 880	1 889
15	Agent transaction exposures	–	–	–	–	–	–
16	Total securities financing transaction exposures (sum of lines 12 to 15)	15 592	17 454	19 674	20 828	16 220	17 916
Other off-balance sheet exposures							
17	Off-balance sheet exposure at gross notional amount	57 018	55 485	55 438	53 848	52 892	52 948
18	(Adjustments for conversion to credit equivalent amounts)	(37 022)	(35 886)	(35 853)	(35 103)	(34 420)	(35 187)
19	Off-balance sheet items (sum of lines 17 and 18)	19 996	19 599	19 585	18 745	18 472	17 761
Capital and Total Exposures - Transitional Basis							
20	Tier 1 capital⁽²⁾	9 296	9 355	9 287	9 091	8 930	8 705
21	Total Exposures (sum of lines 3, 11, 16 and 19)	239 797	237 272	235 597	234 006	223 717	225 065
Leverage Ratio – Transitional Basis							
22	Basel III leverage ratio	3.9%	3.9%	3.9%	3.9%	4.0%	3.9%
All-in basis (Required by OSFI)							
23	Tier 1 capital – All-in basis⁽²⁾	8 880	8 954	8 626	8 486	8 339	8 157
24	(Regulatory adjustments)	(2 697)	(2 604)	(2 726)	(2 620)	(2 577)	(2 506)
25	Total Exposures	239 401	236 906	234 957	233 401	223 126	224 528
26	Leverage ratio – All-in basis	3.7%	3.8%	3.7%	3.6%	3.7%	3.6%

(1) Adjustments due to differences between accounting and regulatory netting standards.

(2) Figures as at October 31, 2015 include the redemption of Series 20 preferred shares on November 15, 2015.



Reconciliation between Financial Accounting and Regulatory Capital Balance Sheets⁽¹⁾

(unaudited) (millions of Canadian dollars)	Q2 2016				
	Cross - Reference to Definition of Capital ⁽²⁾	As In Report to Shareholders	Deconsolidation of Insurance ⁽³⁾ and other entities ⁽⁴⁾	Under regulatory scope of consolidation	Of which
Assets					
Cash and deposits with financial institutions		7 452	–	7 452	
Securities		58 088	4 680	62 768	
Assets purchased under reverse repurchase agreements and securities borrowed		13 760	–	13 760	
Loans					
Residential mortgage		45 096	(19 131)	25 965	
Personal and credit card		32 935	(1 388)	31 547	
Business and government		34 956	–	34 956	
Customers' liability under acceptances		8 966	–	8 966	
Less: Allowances for credit losses		(837)	–	(837)	
Collective allowances reflected in Tier 2 regulatory capital ⁽⁵⁾	t				(276)
Shortfall of allowances to expected loss	l				–
Allowances not reflected in regulatory capital					(561)
Other assets					
Derivative financial instruments		12 181	–	12 181	
Other		8 137	(55)	8 082	
Goodwill	e				1 544
Intangibles assets	f				1 113
Deferred tax assets					479
Deferred tax assets excluding those arising from temporary differences	g				–
Deferred tax assets arising from temporary differences exceeding regulatory thresholds	o				–
Deferred tax assets - realize through loss carrybacks					455
Deferred tax assets - other temporary differences					24
Defined-benefit pension fund net assets	k				41
Significant Investments in other financial institutions					278
Significant investments exceeding regulatory thresholds	m + n				–
Significant investments not exceeding regulatory thresholds					278
Other					4 627
Total assets		220 734	(15 894)	204 840	
Liabilities					
Deposits		130 271	(225)	130 046	
Derivatives financial instruments		9 359	–	9 359	
Other liabilities		68 679	(15 894)	52 785	
Gains and losses due to changes in own credit risk on fair value liabilities	j				(1)
Deferred tax liabilities					156
Related to goodwill	w				–
Related to intangibles	x				159
Related to pensions	y				11
Other deferred tax liabilities					(14)
Other					52 630
Subordinated debt		1 015	–	1 015	
Regulatory capital amortization of maturing debentures					–
Fair value adjustment and unamortized issuance cost					6
Subordinated debentures used for regulatory capital					1 009
Allowed for inclusion in Tier 2 capital	r				–
Subject to phase out	r'				1 009
Ineligible additional Tier 2 capital					–
Excluded from Tier 2 capital due to cap					–
Total liabilities		209 324	(16 119)	193 205	
Equity Attributable to Shareholders		10 614	–	10 614	
Common shares	a				2 620
Contributed surplus	a'				69
Retained Earnings	b				6 530
Accumulated Other Comprehensive Income (loss)	c				145
Net gains (losses) on instruments designated as cash flow hedges	h				160
Other					(15)
Preferred shares					1 250
Allowed for inclusion in additional Tier 1 capital	v				1 050
Subject to phase out	v'				187
Ineligible additional Tier 1 capital					–
Excluded from additional Tier 1 capital due to cap					13
Non-controlling interests		796	225	1 021	
Innovative Instruments					1 021
Allowed for inclusion in additional Tier 1 capital					–
Subject to phase out	p'				975
Excluded from additional Tier 1 capital due to cap					–
Other					46
Portion allowed for inclusion into CET1	d				–
Portion allowed for inclusion into Tier 1 capital	q				–
Portion allowed for inclusion into Tier 2 capital	s				–
Portion not allowed for regulatory capital					–
Total Equity		11 410	225	11 635	
Total Liabilities and Equity		220 734	(15 894)	204 840	

(1) The basis of consolidation used for financial accounting purposes, described in note 1 to the 2015 Annual Report audited consolidated financial statements, may differ from regulatory purposes.

The regulatory consolidation does not include structured entities, where significant risk has been transferred to third parties nor subsidiaries and associates engaged in insurance activities.

(2) The references identify balance sheet components which are used in calculation of regulatory capital on page 4.

(3) Total assets related to insurance activities and National Bank Life Insurance Company, and other are \$161 million and \$11 million respectively.

(4) The amount is mainly due to securitization entities. For more information on structured entities, please see pages 185 to 188 of the 2015 Annual Report.

(5) During the second quarter of 2016, a \$250 million (\$183 million net of income taxes) sectoral provision for credit losses was recorded for producers and service companies in the oil and gas sector.



Capital Adequacy under Basel III⁽¹⁾

(unaudited) (millions of Canadian dollars)	2016						2015				
	Q2						Q1	Q4	Q3	Q2	Q1
	Exposure at default	Risk-weighted assets				Capital requirement ⁽²⁾	Risk-weighted assets				
Standardized		AIRB Approach	Other	Total							
Credit risk											
Retail											
Residential mortgages	44 436	216	4 811	–	5 027	402	5 265	4 975	4 823	4 920	4 692
Qualifying revolving retail	5 442	–	1 152	–	1 152	92	1 011	1 036	973	1 017	1 003
Other retail	14 975	1 776	4 929	–	6 705	536	6 692	6 651	6 507	5 589	5 049
Non-retail											
Corporate	56 925	1 822	25 047	–	26 869	2 149	27 196	26 662	26 486	25 683	24 155
Sovereign	22 969	–	580	–	580	46	658	629	578	633	550
Financial institutions	4 770	153	1 162	–	1 315	105	1 209	974	835	746	845
Banking book equity ⁽³⁾	595	–	595	–	595	48	580	593	578	633	589
Securitization	3 078	–	781	–	781	62	795	798	755	1 582	2 291
Other assets	27 726	–	–	3 495	3 495	280	3 842	4 252	4 213	4 754	5 202
<u>Counterparty credit risk</u>											
Corporate	4 595	38	53	–	91	7	94	96	102	69	80
Sovereign	12 495	–	17	–	17	1	14	22	16	13	6
Financial institutions	51 621	–	1 204	–	1 204	96	1 415	1 402	1 756	1 477	1 423
Trading portfolio	10 607	105	2 554	–	2 659	213	2 897	2 774	3 765	3 572	3 743
Credit valuation adjustment charge ⁽⁴⁾		2 090	–	–	2 090	167	2 423	2 367	2 434	2 395	2 475
Regulatory scaling factor		–	2 570	–	2 570	206	2 593	2 512	2 577	2 511	2 430
Total - Credit risk	260 234	6 200	45 455	3 495	55 150	4 410	56 684	55 743	56 398	55 594	54 533
Market risk											
VaR		–	1 319	–	1 319	106	1 266	1 262	976	731	693
Stressed VaR		–	1 972	–	1 972	158	1 707	1 875	1 225	953	1 086
Interest-rate specific risk		680	–	–	680	54	806	828	920	864	1 099
Total - Market risk		680	3 291	–	3 971	318	3 779	3 965	3 121	2 548	2 878
Operational risk		9 254	–	–	9 254	740	9 278	9 127	9 098	8 929	8 853
Total	260 234	16 134	48 746	3 495	68 375	5 468	69 741	68 835	68 617	67 071	66 264
Capital ratio under Basel III											
Common Equity Tier 1 (CET1)					9.8%		9.7%	9.9%	9.5%	9.5%	9.3%
Tier 1 ⁽⁵⁾					12.9%		12.8%	12.5%	12.3%	12.4%	12.3%
Total ^{(5) (6)}					14.8%		14.2%	14.0%	14.5%	14.6%	14.6%
Leverage ratio under Basel III					3.7%		3.8%	3.7%	3.6%	3.7%	3.6%

(1) Figures are presented in an "all-in" basis.

(2) The capital requirement is equal to 8% of risk-weighted assets.

(3) Calculated using the simple risk-weight method.

(4) Calculated based on CET1 risk-weighted assets.

(5) Ratios as at October 31, 2015 include the redemption of Series 20 preferred shares on November 15, 2015.

(6) Ratios as at October 31, 2015 include the November 2, 2015 redemption of \$500 million in notes.



Risk-Weighted Assets Movement by Key Drivers⁽¹⁾

(unaudited) (millions of Canadian dollars)	2016				2015			
	Q2			Q1	Q4	Q3	Q2	Q1
	Non-counterparty credit risk	Counterparty credit risk ⁽²⁾	Total	Total	Total	Total	Total	Total
Credit risk – Risk-weighted assets at beginning	49 841	6 843	56 684	55 743	56 398	55 594	54 533	52 782
Book size	197	(565)	(368)	631	1 038	146	844	757
Book quality	(78)	37	(41)	(411)	(365)	80	563	500
Model updates	12	(4)	8	–	(1 324)	(168)	–	(229)
Methodology and policy	–	–	–	–	–	–	–	–
Acquisitions and disposals	–	–	–	–	–	–	–	–
Foreign exchange movements	(883)	(250)	(1 133)	721	(4)	746	(346)	723
Credit risk – Risk-weighted assets at end	49 089	6 061	55 150	56 684	55 743	56 398	55 594	54 533
Market risk – Risk-weighted assets at beginning			3 779	3 965	3 121	2 548	2 878	3 317
Movement in risk levels ⁽³⁾			192	(186)	217	23	(330)	(439)
Model updates			–	–	627	550	–	–
Methodology and policy			–	–	–	–	–	–
Acquisitions and disposals			–	–	–	–	–	–
Market risk – Risk-weighted assets at end			3 971	3 779	3 965	3 121	2 548	2 878
Operational risk – Risk-weighted assets at beginning			9 278	9 127	9 098	8 929	8 853	8 719
Movement in risk levels			(24)	151	29	169	76	134
Acquisitions and disposals			–	–	–	–	–	–
Operational risk – Risk-weighted assets at end			9 254	9 278	9 127	9 098	8 929	8 853
Risk-weighted assets at end			68 375	69 741	68 835	68 617	67 071	66 264

(1) Figures are presented in an "all-in" basis.

(2) Calculated based on CET1 risk-weighted assets.

(3) Also includes foreign exchange movement that is not considered material.



Reconciliation of Balance Sheet with Credit Risk Exposures

(unaudited) (millions of Canadian dollars)	Q2 2016							
	Exposures subject to credit risk capital					Other exposures		Balance sheet
	Drawn		Other exposures			Subject to market risk capital	All other ⁽¹⁾	
	Non-retail	Retail	Securitization	Repo-style transactions	Derivatives financial instruments			
Assets								
Cash and deposits with financial institutions ⁽²⁾	6 813	–	–	–	–	–	639	7 452
Securities								
At fair value through profit or loss	4 797	–	631	–	–	36 843	–	42 271
Available-for-sale	13 987	–	6	–	–	–	117	14 110
Held-to-maturity	1 707	–	–	–	–	–	–	1 707
	20 491	–	637	–	–	36 843	117	58 088
Securities purchased under reverse repurchase agreements and securities borrowed	–	–	–	13 760	–	–	–	13 760
Loans								
Residential mortgage ⁽³⁾	25 367	19 729	–	–	–	–	–	45 096
Personal and credit card	–	31 547	1 388	–	–	–	–	32 935
Business and government	32 944	2 012	–	–	–	–	–	34 956
	58 311	53 288	1 388	–	–	–	–	112 987
Customers' liability under acceptances	8 966	–	–	–	–	–	–	8 966
Allowance for credit losses ⁽⁴⁾	(170)	(29)	–	–	–	–	(638)	(837)
	67 107	53 259	1 388	–	–	–	(638)	121 116
Other								
Derivative financial instruments ⁽²⁾	–	–	–	–	12 181	–	–	12 181
Due from clients, dealers and brokers	–	–	–	–	–	–	482	482
Purchase receivables	–	605	–	–	–	–	729	1 334
Investments in associates and joint ventures	–	–	–	–	–	–	707	707
Premises and equipment	–	1 081	–	–	–	–	459	1 540
Goodwill	–	–	–	–	–	–	1 276	1 276
Intangible assets	–	–	–	–	–	–	1 113	1 113
Other assets	–	–	–	–	–	–	1 685	1 685
	–	1 686	–	–	12 181	–	6 451	20 318
	94 411	54 945	2 025	13 760	12 181	36 843	6 569	220 734

(1) Includes deconsolidated assets related to insurance activities and all other assets that are neither subject to credit nor market risks.

(2) These exposures may also be subject to market risk.

(3) As per Basel definition, NHA MBS pooled and 5 units or more mortgages are included in the non-retail category.

(4) During the second quarter of 2016, a \$250 million (\$183 million net of income taxes) sectoral provision for credit losses was recorded for producers and service companies in the oil and gas sector.



Standardized Credit Risk Exposure Under the Basel Asset Categories and by Risk Weight ⁽¹⁾

(unaudited) (millions of Canadian dollars)	2016																2015							
	Q2								Q1								Q4							
	0%	20%	35%	50%	75%	100%	150%	Total	0%	20%	35%	50%	75%	100%	150%	Total	0%	20%	35%	50%	75%	100%	150%	Total
Risk Weight																								
Retail																								
Residential mortgage	–	–	959	14	278	89	–	1 340	–	–	815	15	279	75	–	1 184	–	–	857	10	235	67	–	1 169
Other retail	–	–	–	–	5 061	–	–	5 061	–	–	–	–	5 385	–	–	5 385	–	–	–	–	5 264	–	–	5 264
	–	–	959	14	5 339	89	–	6 401	–	–	815	15	5 664	75	–	6 569	–	–	857	10	5 499	67	–	6 433
Non-Retail																								
Corporate	–	–	–	–	–	4 557	1	4 558	–	–	–	–	–	4 408	1	4 409	–	–	–	–	–	3 200	1	3 201
Sovereign	358	–	–	–	–	–	–	358	187	–	–	–	–	–	–	187	248	–	–	–	–	–	–	248
Financial Institutions	–	555	–	–	–	42	–	597	–	608	–	–	–	47	–	655	–	447	–	–	–	17	–	464
	358	555	–	–	–	4 599	1	5 513	187	608	–	–	–	4 455	1	5 251	248	447	–	–	–	3 217	1	3 913
Trading	6	–	–	–	–	506	–	512	–	–	–	–	–	579	–	579	–	–	–	–	–	519	–	519
Total	364	555	959	14	5 339	5 194	1	12 426	187	608	815	15	5 664	5 109	1	12 399	248	447	857	10	5 499	3 803	1	10 865

(unaudited) (millions of Canadian dollars)	2015																							
	Q3								Q2								Q1							
	0%	20%	35%	50%	75%	100%	150%	Total	0%	20%	35%	50%	75%	100%	150%	Total	0%	20%	35%	50%	75%	100%	150%	Total
Risk Weight																								
Retail																								
Residential mortgage	–	–	1 209	10	247	67	–	1 533	–	–	674	17	181	50	–	922	–	–	550	–	20	–	–	570
Other retail	–	–	–	–	5 083	–	–	5 083	–	–	–	–	3 489	–	–	3 489	–	–	–	–	2 853	–	–	2 853
	–	–	1 209	10	5 330	67	–	6 616	–	–	674	17	3 670	50	–	4 411	–	–	550	–	2 873	–	–	3 423
Non-Retail																								
Corporate	–	–	–	–	–	3 904	2	3 906	–	–	–	–	–	4 446	1	4 447	–	–	–	–	–	6 465	1	6 466
Sovereign	223	–	–	–	–	–	–	223	229	–	–	–	–	–	–	229	162	–	–	–	–	–	–	162
Financial Institutions	–	553	–	–	–	17	–	570	–	441	–	–	–	16	–	457	–	477	–	–	–	–	–	477
	223	553	–	–	–	3 921	2	4 699	229	441	–	–	–	4 462	1	5 133	162	477	–	–	–	6 465	1	7 105
Trading	–	–	–	–	–	621	–	621	–	–	–	–	–	374	–	374	–	–	–	–	–	1 097	–	1 097
Total	223	553	1 209	10	5 330	4 609	2	11 936	229	441	674	17	3 670	4 886	1	9 918	162	477	550	–	2 873	7 562	1	11 625

(1) Exposure amounts are the expected gross exposure upon the default of an obligor. These amounts are net of specific allowance but do not reflect the impact of credit risk mitigation and collateral held.



Maximum Credit Risk Exposure Under the Basel Asset Categories⁽¹⁾

(unaudited) (millions of Canadian dollars)	2016												2015					
	Q2						Q1						Q4					
	Drawn	Undrawn commitments	Repo-style transactions	OTC derivatives	Other off-balance sheet items	Total	Drawn	Undrawn commitments	Repo-style transactions	OTC derivatives	Other off-balance sheet items	Total	Drawn	Undrawn commitments	Repo-style transactions	OTC derivatives	Other off-balance sheet items	Total
Retail																		
Residential mortgage	38 577	5 859	–	–	–	44 436	39 234	5 785	–	–	–	45 019	38 784	5 647	–	–	–	44 431
Qualifying revolving retail	2 688	2 754	–	–	–	5 442	2 660	2 445	–	–	–	5 105	2 708	2 490	–	–	–	5 198
Other retail	13 709	1 253	–	–	13	14 975	13 892	1 304	–	–	13	15 209	13 736	1 302	–	–	14	15 052
	54 974	9 866	–	–	13	64 853	55 786	9 534	–	–	13	65 333	55 228	9 439	–	–	14	64 681
Non-retail																		
Corporate	40 855	13 360	4 588	7	2 710	61 520	40 053	13 283	5 142	6	2 592	61 076	38 859	13 344	3 604	6	2 616	58 429
Sovereign	19 032	3 829	12 175	321	107	35 464	21 927	3 923	9 779	306	132	36 067	21 026	3 985	9 833	616	124	35 584
Financial Institutions	3 793	344	50 981	640	633	56 391	3 468	301	52 256	541	662	57 228	2 139	277	59 420	505	692	63 033
	63 680	17 533	67 744	968	3 450	153 375	65 448	17 507	67 177	853	3 386	154 371	62 024	17 606	72 857	1 127	3 432	157 046
Trading book	–	–	–	10 607	–	10 607	–	–	–	11 428	–	11 428	–	–	–	10 318	–	10 318
Securitization	634	–	–	–	2 444	3 078	647	–	–	–	2 311	2 958	646	–	–	–	2 336	2 982
Total - Gross Credit Risk	119 288	27 399	67 744	11 575	5 907	231 913	121 881	27 041	67 177	12 281	5 710	234 090	117 898	27 045	72 857	11 445	5 782	235 027
Standardized Approach	9 295	407	1 796	518	410	12 426	9 588	419	1 406	585	401	12 399	9 074	339	496	525	431	10 865
AIRB Approach⁽²⁾	109 993	26 992	65 948	11 057	5 497	219 487	112 293	26 622	65 771	11 696	5 309	221 691	108 824	26 706	72 361	10 920	5 351	224 162
Total - Gross Credit Risk	119 288	27 399	67 744	11 575	5 907	231 913	121 881	27 041	67 177	12 281	5 710	234 090	117 898	27 045	72 857	11 445	5 782	235 027
Adjustment to exposure for collateral																		
Standardized Approach	–	–	(1 764)	(400)	–	(2 164)	–	–	(1 379)	(369)	–	(1 748)	–	–	(487)	(282)	–	(769)
AIRB Approach⁽²⁾	–	–	(56 595)	–	–	(56 595)	–	–	(55 798)	–	–	(55 798)	–	–	(63 535)	–	–	(63 535)
Total - Net Credit Risk	119 288	27 399	9 385	11 175	5 907	173 154	121 881	27 041	10 000	11 912	5 710	176 544	117 898	27 045	8 835	11 163	5 782	170 723
(unaudited) (millions of Canadian dollars)	2015												2014					
	Q3						Q2						Q1					
	Drawn	Undrawn commitments	Repo-style transactions	OTC derivatives	Other off-balance sheet items	Total	Drawn	Undrawn commitments	Repo-style transactions	OTC derivatives	Other off-balance sheet items	Total	Drawn	Undrawn commitments	Repo-style transactions	OTC derivatives	Other off-balance sheet items	Total
Retail																		
Residential mortgage	38 682	5 739	–	–	–	44 421	36 865	5 615	–	–	–	42 480	36 044	5 499	–	–	–	41 543
Qualifying revolving retail	2 608	2 408	–	–	–	5 016	2 648	2 442	–	–	–	5 090	2 639	2 345	–	–	–	4 984
Other retail	13 508	1 313	–	–	14	14 835	11 826	1 267	–	–	13	13 106	11 085	1 225	–	–	13	12 323
	54 798	9 460	–	–	14	64 272	51 339	9 324	–	–	13	60 676	49 768	9 069	–	–	13	58 850
Non-retail																		
Corporate	37 554	13 050	3 552	2	2 659	56 817	36 426	13 179	4 546	4	2 562	56 717	34 919	13 361	5 410	10	2 726	56 426
Sovereign	19 704	3 438	10 504	304	111	34 061	18 341	3 479	8 464	321	96	30 701	19 673	3 229	11 655	187	101	34 845
Financial Institutions	1 888	228	61 376	421	645	64 558	1 861	277	61 896	717	657	65 408	2 186	241	56 181	414	737	59 759
	59 146	16 716	75 432	727	3 415	155 436	56 628	16 935	74 906	1 042	3 315	152 826	56 778	16 831	73 246	611	3 564	151 030
Trading book	–	–	–	12 003	–	12 003	–	–	–	11 394	–	11 394	–	–	–	11 476	–	11 476
Securitization	610	–	–	–	2 235	2 845	1 131	–	–	–	2 956	4 087	1 156	–	–	–	3 011	4 167
Total - Gross Credit Risk	114 554	26 176	75 432	12 730	5 664	234 556	109 098	26 259	74 906	12 436	6 284	228 983	107 702	25 900	73 246	12 087	6 588	225 523
Standardized Approach	9 249	338	1 291	622	436	11 936	6 839	304	1 890	372	513	9 918	5 947	275	3 728	1 106	569	11 625
AIRB Approach⁽²⁾	105 305	25 838	74 141	12 108	5 228	222 620	102 259	25 955	73 016	12 064	5 771	219 065	101 755	25 625	69 518	10 981	6 019	213 898
Total - Gross Credit Risk	114 554	26 176	75 432	12 730	5 664	234 556	109 098	26 259	74 906	12 436	6 284	228 983	107 702	25 900	73 246	12 087	6 588	225 523
Adjustment to exposure for collateral																		
Standardized Approach	–	–	(1 240)	(285)	–	(1 525)	–	–	(1 859)	(165)	–	(2 024)	–	–	(3 680)	(717)	–	(4 397)
AIRB Approach⁽²⁾	–	–	(64 634)	–	–	(64 634)	–	–	(64 520)	–	–	(64 520)	–	–	(61 477)	–	–	(61 477)
Total - Net Credit Risk	114 554	26 176	9 558	12 445	5 664	168 397	109 098	26 259	8 527	12 271	6 284	162 439	107 702	25 900	8 089	11 370	6 588	159 649

(1) These amounts do not take into account allowances for credit losses nor amounts pledged as collateral. The tables also exclude equity securities.

(2) For drawn, undrawn and Other off-balance sheet exposures, eligible financial collateral is taken into account in the Bank's Loss Given Default (LGD) models.



Credit Quality of AIRB Exposure - Retail Portfolios⁽¹⁾

(unaudited) (millions of Canadian dollars)

			2016								
			Q2								
			EAD	Notional of undrawn commitments	Exposure weighted-average (EAD %)	Exposure weighted-average (PD %)	Exposure weighted-average (LGD %)	Exposure weighted-average risk weight asset (RWA %)	RWA	Expected Losses (EL)	EL adjusted average risk weight % ⁽²⁾
Canadian residential mortgage and HELOCs	Risk Grade	PD bands									
Insured Drawn and Undrawn⁽³⁾	Exceptionally low	0.000% - 0.144%	1 690	–	100%	0.07%	17.8%	3.2%	54	0.2	3%
	Very low	0.145% - 0.506%	1 831	–	100%	0.29%	10.2%	5.0%	91	0.5	5%
	Low	0.507% - 1.116%	751	–	100%	0.77%	5.0%	5.1%	39	0.3	6%
	Low	1.117% - 2.681%	443	–	100%	1.72%	3.3%	5.8%	26	0.2	6%
	Medium	2.682% - 9.348%	564	–	100%	5.28%	2.7%	8.9%	50	0.8	11%
	High	9.349% - 99.99%	149	–	100%	27.72%	2.6%	13.9%	21	1.1	23%
	Default	100.00%	77	–	100%	100.00%	2.7%	23.1%	18	1.1	40%
			5 505	–	100%	3.05%	10.2%	5.4%	299	4.2	6%
Uninsured Undrawn⁽⁴⁾	Exceptionally low	0.000% - 0.144%	3 961	9 256	56%	0.05%	22.6%	3.1%	124	0.5	3%
	Very low	0.145% - 0.506%	1 643	3 688	72%	0.26%	23.4%	11.3%	186	1.0	12%
	Low	0.507% - 1.116%	172	211	87%	0.71%	23.8%	23.7%	41	0.3	26%
	Low	1.117% - 2.681%	37	50	83%	1.63%	23.6%	40.5%	15	0.1	45%
	Medium	2.682% - 9.348%	12	15	82%	4.38%	24.3%	73.4%	9	0.1	87%
	High	9.349% - 99.99%	2	2	82%	16.61%	24.1%	126.1%	2	0.1	178%
	Default	100.00%	3	2	81%	100.00%	22.9%	286.6%	7	–	287%
			5 830	13 224	62%	0.20%	22.8%	6.6%	384	2.1	7%
Uninsured Drawn⁽⁵⁾	Exceptionally low	0.000% - 0.144%	15 211			0.07%	23.0%	4.2%	633	2.5	4%
	Very low	0.145% - 0.506%	11 786			0.27%	25.3%	12.6%	1 486	8.1	13%
	Low	0.507% - 1.116%	3 029			0.72%	25.5%	25.4%	769	5.5	28%
	Low	1.117% - 2.681%	1 055			1.60%	26.1%	44.0%	464	4.4	49%
	Medium	2.682% - 9.348%	426			4.76%	26.1%	82.2%	350	5.3	98%
	High	9.349% - 99.99%	190			26.57%	27.8%	148.0%	281	14.4	242%
	Default	100.00%	64			100.00%	27.5%	227.8%	145	8.9	403%
			31 761			0.68%	24.3%	13.0%	4 128	49.1	15%
Qualifying revolving credit	Exceptionally low	0.000% - 0.144%	2 732	4 786	58%	0.05%	70.9%	2.3%	63	1.0	3%
	Very low	0.145% - 0.506%	928	635	82%	0.29%	70.3%	10.1%	94	1.9	13%
	Low	0.507% - 1.116%	592	232	90%	0.78%	71.5%	22.6%	134	3.3	30%
	Low	1.117% - 2.681%	735	333	98%	1.77%	81.5%	47.8%	351	10.6	66%
	Medium	2.682% - 9.348%	362	45	101%	4.51%	77.9%	86.5%	313	12.6	130%
	High	9.349% - 99.99%	72	4	102%	21.71%	73.9%	186.6%	134	12.3	400%
	Default	100.00%	21	–	105%	100.00%	59.8%	294.7%	63	10.2	889%
			5 442	6 035	74%	1.38%	72.7%	21.2%	1 152	51.9	33%
Other retail⁽⁶⁾	Exceptionally low	0.000% - 0.144%	2 226	1 412	84%	0.07%	39.7%	6.8%	152	0.6	7%
	Very low	0.145% - 0.506%	2 585	389	97%	0.30%	50.3%	26.3%	680	3.9	28%
	Low	0.507% - 1.116%	2 131	283	97%	0.78%	59.4%	53.8%	1 147	10.0	60%
	Low	1.117% - 2.681%	1 552	123	98%	1.72%	64.0%	78.7%	1 222	17.3	93%
	Medium	2.682% - 9.348%	1 136	61	99%	4.05%	67.4%	96.8%	1 100	30.6	130%
	High	9.349% - 99.99%	186	7	100%	20.46%	63.1%	135.6%	252	25.1	304%
	Default	100.00%	98	4	99%	100.00%	60.7%	382.7%	376	34.2	818%
			9 914	2 279	95%	2.37%	54.3%	49.7%	4 929	121.7	65%
			58 452	21 538	87%	1.21%	32.4%	18.6%	10 892	229.0	24%

(1) Represents retail exposures under the AIRB approach. Amounts are before allowance for credit losses and after credit risk mitigation.

(2) EL adjusted average risk weight is calculated as (RWA + 12.5 x EL) / EAD.

(3) Includes insured drawn and undrawn retail mortgages and home equity lines of credit.

(4) Includes only uninsured undrawn retail mortgages and home equity lines of credit.

(5) Includes only uninsured drawn retail mortgages and home equity lines of credit.

(6) Includes all other drawn and undrawn retail exposures.



Credit Quality of AIRB Exposure - Retail Portfolios⁽¹⁾

(unaudited) (millions of Canadian dollars)

			2016								
			Q1								
			EAD	Notional of undrawn commitments	Exposure weighted-average (EAD %)	Exposure weighted-average (PD %)	Exposure weighted-average (LGD %)	Exposure weighted-average risk weight asset (RWA %)	RWA	Expected Losses (EL)	EL adjusted average risk weight % ⁽²⁾
Canadian residential mortgage and HELOCs	Risk Grade	PD bands									
Insured Drawn and Undrawn⁽³⁾	Exceptionally low	0.000% - 0.144%	1 880	–	100%	0.07%	17.6%	3.2%	60	0.2	3%
	Very low	0.145% - 0.506%	2 241	–	100%	0.30%	10.2%	5.2%	116	0.6	6%
	Low	0.507% - 1.116%	904	–	100%	0.76%	5.2%	5.3%	48	0.3	6%
	Low	1.117% - 2.681%	517	–	100%	1.74%	3.3%	5.8%	30	0.3	7%
	Medium	2.682% - 9.348%	615	–	100%	4.76%	2.7%	8.5%	52	0.8	10%
	High	9.349% - 99.99%	159	–	100%	25.63%	2.6%	14.0%	22	1.2	22%
	Default	100.00%	74	–	100%	100.00%	2.8%	23.0%	17	0.9	39%
			6 390	–	100%	2.63%	10.1%	5.4%	345	4.3	6%
Uninsured Undrawn⁽⁴⁾	Exceptionally low	0.000% - 0.144%	3 900	9 146	56%	0.05%	22.6%	3.1%	122	0.5	3%
	Very low	0.145% - 0.506%	1 626	3 583	73%	0.26%	23.4%	11.2%	182	0.9	12%
	Low	0.507% - 1.116%	171	210	87%	0.70%	23.8%	23.6%	40	0.3	26%
	Low	1.117% - 2.681%	39	52	83%	1.67%	23.4%	40.7%	16	0.2	46%
	Medium	2.682% - 9.348%	12	14	84%	4.20%	23.9%	69.9%	8	0.1	82%
	High	9.349% - 99.99%	2	2	82%	14.84%	23.7%	120.3%	2	0.1	166%
	Default	100.00%	3	4	74%	100.00%	23.3%	291.4%	8	–	291%
			5 753	13 011	62%	0.20%	22.9%	6.6%	378	2.1	7%
Uninsured Drawn⁽⁵⁾	Exceptionally low	0.000% - 0.144%	14 950			0.07%	23.0%	4.2%	625	2.5	4%
	Very low	0.145% - 0.506%	12 222			0.27%	25.5%	12.7%	1 550	8.5	14%
	Low	0.507% - 1.116%	2 914			0.71%	25.6%	25.4%	741	5.3	28%
	Low	1.117% - 2.681%	926			1.64%	25.8%	44.2%	409	3.9	49%
	Medium	2.682% - 9.348%	351			4.65%	25.1%	77.9%	274	4.1	92%
	High	9.349% - 99.99%	259			28.97%	28.9%	159.9%	414	22.4	268%
	Default	100.00%	70			100.00%	27.3%	245.9%	173	8.2	392%
			31 692			0.76%	24.3%	13.2%	4 186	54.9	15%
Qualifying revolving credit	Exceptionally low	0.000% - 0.144%	2 660	4 679	57%	0.05%	70.6%	2.3%	61	0.9	3%
	Very low	0.145% - 0.506%	907	601	82%	0.29%	69.7%	10.0%	91	1.8	13%
	Low	0.507% - 1.116%	572	214	90%	0.78%	70.9%	22.4%	128	3.2	29%
	Low	1.117% - 2.681%	513	126	96%	1.79%	76.5%	45.3%	232	7.1	63%
	Medium	2.682% - 9.348%	359	40	101%	4.51%	76.7%	85.2%	306	12.3	128%
	High	9.349% - 99.99%	72	4	102%	20.69%	74.2%	184.5%	134	11.8	388%
	Default	100.00%	22	–	104%	100.00%	59.4%	265.4%	59	11.3	897%
			5 105	5 664	73%	1.39%	71.5%	19.8%	1 011	48.4	32%
Other retail⁽⁶⁾	Exceptionally low	0.000% - 0.144%	2 272	1 475	85%	0.07%	40.7%	7.2%	164	0.6	8%
	Very low	0.145% - 0.506%	2 649	366	98%	0.30%	49.6%	26.0%	690	4.0	28%
	Low	0.507% - 1.116%	2 318	276	98%	0.80%	60.3%	55.2%	1 279	11.3	61%
	Low	1.117% - 2.681%	1 486	83	99%	1.75%	64.5%	79.4%	1 181	16.8	94%
	Medium	2.682% - 9.348%	802	28	99%	4.21%	67.2%	96.8%	776	22.3	132%
	High	9.349% - 99.99%	193	5	97%	20.33%	62.5%	133.5%	258	25.2	296%
	Default	100.00%	104	6	99%	100.00%	60.8%	397.5%	412	34.3	812%
			9 824	2 239	95%	2.35%	54.1%	48.4%	4 760	114.5	63%
			58 764	20 914	87%	1.23%	31.7%	18.2%	10 680	224.2	23%

(1) Represents retail exposures under the AIRB approach. Amounts are before allowance for credit losses and after credit risk mitigation.

(2) EL adjusted average risk weight is calculated as $(RWA + 12.5 \times EL) / EAD$.

(3) Includes insured drawn and undrawn retail mortgages and home equity lines of credit.

(4) Includes only uninsured undrawn retail mortgages and home equity lines of credit.

(5) Includes only uninsured drawn retail mortgages and home equity lines of credit.

(6) Includes all other drawn and undrawn retail exposures.



AIRB Credit Risk Exposure: Non-retail Portfolios⁽¹⁾

(unaudited) (millions of Canadian dollars)			Q2 2016								Q1 2016							
			Corporate AIRB exposures by Internal PD grade															
Internal Ratings grades	PD Range 0.000%	S&P rating equivalent				EAD Amount	Average PD	Average LGD	Percentage					EAD Amount	Average PD	Average LGD	Percentage	
			Drawn	Undrawn	Other	Total	(%)	(%)	RWA	RWA (%)	Drawn	Undrawn	Other	Total	(%)	(%)	RWA	RWA (%)
1	0.000 - 0.035	AAA... AA-	31	14	—	45	0.03%	27.1%	2	4%	27	5	—	32	0.03%	20.5%	1	3%
1.5	0.035 - 0.044	A+	42	11	75	128	0.04%	39.7%	7	5%	32	7	50	89	0.04%	40.4%	5	6%
2	0.044 - 0.063	A	274	350	424	1 048	0.05%	48.1%	188	18%	361	508	325	1 194	0.05%	48.1%	222	19%
2.5	0.063 - 0.103	A-	1 800	1 171	59	3 030	0.08%	47.3%	637	21%	1 997	1 175	60	3 232	0.08%	46.3%	659	20%
3	0.103 - 0.170	BBB+	4 268	2 889	154	7 311	0.13%	41.6%	2 114	29%	4 399	2 574	152	7 125	0.13%	40.4%	2 002	28%
3.5	0.170 - 0.280	BBB	5 400	2 641	790	8 831	0.22%	38.1%	2 912	33%	5 199	2 727	798	8 724	0.22%	37.2%	2 821	32%
4	0.280 - 0.462	BBB-	6 633	2 256	386	9 275	0.36%	35.0%	3 618	39%	5 961	2 031	357	8 349	0.36%	37.5%	3 511	42%
4.5	0.462 - 0.762	BB+	5 727	1 184	190	7 101	0.59%	36.3%	3 279	46%	5 532	1 172	184	6 888	0.59%	36.2%	3 182	46%
5	0.762 - 1.256	BB	6 695	1 481	306	8 482	0.98%	35.3%	4 930	58%	6 437	1 491	307	8 235	0.98%	35.8%	4 889	59%
5.5	1.256 - 2.070	BB-	2 770	507	119	3 396	1.61%	33.2%	2 114	62%	2 962	650	142	3 754	1.61%	35.7%	2 563	68%
6	2.070 - 3.412	B+	2 086	324	88	2 498	2.66%	33.9%	1 850	74%	1 892	421	175	2 488	2.66%	35.5%	1 926	77%
6.5	3.412 - 5.625	B	1 029	191	141	1 361	4.38%	33.7%	1 153	85%	1 108	147	74	1 329	4.38%	35.2%	1 153	87%
7	5.625 - 9.272	B-	896	93	27	1 016	7.22%	35.0%	1 068	105%	894	120	35	1 049	7.22%	40.4%	1 287	123%
7.5	9.272 - 15.284	CCC+	218	26	2	246	11.90%	28.4%	263	107%	209	27	1	237	11.90%	43.9%	369	156%
8	15.284 - 25.195	CCC	147	1	—	148	19.62%	12.0%	74	50%	29	2	—	31	19.62%	43.1%	53	171%
8.5	25.195 - 100	CCC-	60	1	5	66	32.35%	11.7%	36	55%	65	2	—	67	32.35%	59.3%	188	281%
9	100	CC	348	1	1	350	100.00%	40.0%	855	244%	268	1	1	270	100.00%	39.5%	540	200%
9.5	100	C	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
10	100	D	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total			38 424	13 141	2 767	54 332	1.56%	37.3%	25 100	46%	37 372	13 060	2 661	53 093	1.40%	38.0%	25 371	48%

			Q2 2016								Q1 2016							
			Sovereign AIRB exposures by Internal PD grade															
Internal Ratings grades	PD Range 0.000%	S&P rating equivalent	Drawn	Undrawn	Other	EAD Amount Total	Average PD (%)	Average LGD (%)	RWA	Percentage RWA (%)	Drawn	Undrawn	Other	EAD Amount Total	Average PD (%)	Average LGD (%)	RWA	Percentage RWA (%)
1	0.000 - 0.010	AAA... AA-	12 220	80	353	12 653	0.01%	5.0%	123	1%	16 301	122	355	16 778	0.01%	10.5%	342	2%
1.5	0.010 - 0.019	A+	4 733	2 771	528	8 032	0.01%	12.8%	233	3%	4 088	2 946	1 110	8 144	0.01%	13.3%	209	3%
2	0.019 - 0.033	A	1 495	955	507	2 957	0.03%	18.4%	136	5%	1 323	826	12	2 161	0.03%	18.2%	104	5%
2.5	0.033 - 0.060	A-	7	1	—	8	0.05%	14.6%	—	—	7	1	—	8	0.05%	14.6%	1	13%
3	0.060 - 0.107	BBB+	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
3.5	0.107 - 0.191	BBB	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
4	0.191 - 0.342	BBB-	19	—	—	19	0.26%	14.5%	2	11%	21	—	—	21	0.26%	14.5%	2	10%
4.5	0.342 - 0.612	BB+	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
5	0.612 - 1.095	BB	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
5.5	1.095 - 1.960	BB-	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
6	1.960 - 3.507	B+	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
6.5	3.507 - 6.276	B	200	22	10	232	4.69%	14.4%	103	44%	—	28	8	36	4.69%	14.1%	14	39%
7	6.276 - 11.231	B-	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
7.5	11.231 - 20.099	CCC+	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
8	20.099 - 35.967	CCC	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
8.5	35.967 - 100	CCC-	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
9	100	CC	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
9.5	100	C	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
10	100	D	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total			18 674	3 829	1 398	23 901	0.04%	9.4%	597	2%	21 740	3 923	1 485	27 148	0.02%	11.9%	672	2%

			Q2 2016								Q1 2016									
			Financial institutions AIRB exposures by internal PD grade																	
Internal Ratings grades	PD Range 0.000%	S&P rating equivalent	Drawn	Undrawn	Other	EAD Amount Total	Average PD (%)	Average LGD (%)	RWA	Percentage RWA (%)	Drawn	Undrawn	Other	EAD Amount Total	Average PD (%)	Average LGD (%)	RWA	Percentage RWA (%)		
1	0.000 - 0.035	AAA... AA-	401	—	2 605	3 006	0.03%	60.4%	232	8%	126	—	2 504	2 630	0.03%	64.0%	214	8%		
1.5	0.035 - 0.044	A+	541	—	492	1 033	0.04%	46.2%	180	17%	327	—	416	743	0.04%	50.1%	93	13%		
2	0.044 - 0.063	A	148	30	2 455	2 633	0.05%	35.6%	176	7%	269	30	2 425	2 724	0.05%	37.1%	179	7%		
2.5	0.063 - 0.103	A-	474	—	1 459	1 933	0.08%	23.0%	189	10%	251	—	1 611	1 862	0.08%	19.0%	141	8%		
3	0.103 - 0.170	BBB+	145	—	366	511	0.13%	42.1%	124	24%	259	—	434	693	0.13%	39.5%	161	23%		
3.5	0.170 - 0.280	BBB	1 335	48	746	2 129	0.22%	29.6%	536	25%	1 391	—	434	1 825	0.22%	22.7%	374	20%		
4	0.280 - 0.462	BBB-	181	100	940	1 221	0.36%	37.3%	443	36%	1 361	100	1 361	1 729	0.36%	35.8%	588	34%		
4.5	0.462 - 0.762	BB+	288	5	91	384	0.59%	50.0%	281	73%	324	5	268	597	0.59%	50.7%	415	70%		
5	0.762 - 1.256	BB	98	2	27	127	0.98%	41.0%	90	71%	11	2	200	213	0.98%	42.1%	157	74%		
5.5	1.256 - 2.070	BB-	—	—	5	5	1.61%	45.1%	5	100%	—	—	5	5	1.61%	47.8%	4	80%		
6	2.070 - 3.412	B+	—	—	4	4	2.66%	36.2%	3	75%	—	—	1	1	2.66%	30.6%	1	100%		
6.5	3.412 - 5.625	B	48	—	—	48	4.38%	58.2%	107	223%	59	—	—	59	4.38%	57.7%	129	219%		
7	5.625 - 9.272	B-	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
7.5	9.272 - 15.284	CCC+	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
8	15.284 - 25.195	CCC	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
8.5	25.195 - 100	CCC-	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
9	100	CC	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
9.5	100	C	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
10	100	D	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
Total			3 659	185	9 190	13 034	0.13%	40.3%	2 366	18%	3 285	137	9 659	13 081	0.17%	39.4%	2 456	19%		

			Q2 2016		Q1 2016	
Credit commitments - AIRB Non-retail portfolios			Notional undrawn commitments	EAD on undrawn commitments ⁽²⁾	Notional undrawn commitments	EAD on undrawn commitments ⁽²⁾
Corporate			34 105	13 141	33 797	13 060
Sovereign			9 393	3 829	9 074	3 923
Financial Institutions			370	185	273	137
Total			43 868	17 155	43 144	17 120

(1) The data presented above take into account permissible netting and exclude SME-Retail Portfolio, trading related portfolio and Equity.

(2) EAD undrawn commitments are the undrawn commitments (notional amount) that is currently undrawn but expected to be drawn in the event of a default.

(1) The data presented above take into account permissible netting and exclude SME-Retail Portfolio, trading related portfolio and Equity.
(2) EAD undrawn commitments are the undrawn commitments (notional amount) that is currently undrawn but expected to be drawn in the event of a default.



AIRB Credit Risk Exposure - Back-Testing⁽¹⁾

2016												
Q2							Q1					
(unaudited) (millions of Canadian dollars)	Average estimated (PD %)	Actual default rate (%)	Average estimated (LGD %) ⁽²⁾	Actual (LGD %) ⁽³⁾	Estimated (EAD %) ⁽⁴⁾	Actual (EAD %) ⁽⁴⁾	Average estimated (PD %)	Actual default rate (%)	Average estimated (LGD %) ⁽²⁾	Actual (LGD %) ⁽³⁾	Estimated (EAD %) ⁽⁴⁾	Actual (EAD %) ⁽⁴⁾
Retail portfolio⁽⁵⁾												
Uninsured residential mortgages incl. Home equity line of credit ⁽⁶⁾	0.41%	0.17%	28.40%	9.43%	97.09%	76.12%	0.43%	0.20%	28.06%	6.92%	96.89%	78.91%
Insured residential mortgages ⁽⁷⁾	1.37%	0.90%	2.86%	na	na	na	1.39%	0.93%	2.80%	na	na	na
Qualifying revolving retail	1.37%	1.27%	72.62%	78.60%	99.95%	97.69%	1.43%	1.21%	72.43%	78.68%	99.69%	97.48%
Other retail	1.78%	1.71%	70.63%	60.15%	93.01%	94.07%	1.81%	1.77%	70.02%	61.30%	92.86%	93.31%
Wholesale & Sovereign portfolio⁽⁸⁾												
Corporate	1.71%	0.55%	42.08%	30.77%	82.90%	75.78%	1.69%	0.56%	41.99%	28.98%	82.85%	79.03%
Sovereign ⁽⁹⁾	0.04%	0.00%	11.54%	na	81.00%	na	0.04%	0.00%	11.54%	na	81.00%	na
Financial Institutions ⁽⁹⁾	0.61%	0.00%	39.00%	na	100.00%	na	0.62%	0.00%	39.00%	na	100.00%	na

2015												
Q4							Q3					
(unaudited) (millions of Canadian dollars)	Average estimated (PD %)	Actual default rate (%)	Average estimated (LGD %) ⁽²⁾	Actual (LGD %) ⁽³⁾	Estimated (EAD %) ⁽⁴⁾	Actual (EAD %) ⁽⁴⁾	Average estimated (PD %)	Actual default rate (%)	Average estimated (LGD %) ⁽²⁾	Actual (LGD %) ⁽³⁾	Estimated (EAD %) ⁽⁴⁾	Actual (EAD %) ⁽⁴⁾
Retail portfolio⁽⁵⁾												
Uninsured residential mortgages incl. Home equity line of credit ⁽⁶⁾	0.43%	0.20%	29.45%	7.05%	97.42%	75.74%	0.46%	0.20%	27.44%	6.86%	98.11%	78.38%
Insured residential mortgages ⁽⁷⁾	1.36%	0.94%	2.83%	na	na	na	1.48%	0.95%	2.78%	na	na	na
Qualifying revolving retail	1.40%	1.22%	73.94%	78.31%	99.64%	97.45%	1.41%	1.18%	74.22%	80.23%	95.94%	96.82%
Other retail	1.81%	1.90%	68.32%	60.07%	92.46%	92.32%	1.82%	1.88%	69.26%	62.61%	92.44%	89.46%
Wholesale & Sovereign portfolio⁽⁸⁾												
Corporate	1.67%	0.77%	42.26%	33.16%	83.12%	73.91%	1.63%	0.74%	40.57%	24.93%	82.75%	67.85%
Sovereign ⁽⁹⁾	0.04%	0.00%	11.54%	na	81.00%	na	0.03%	0.00%	11.54%	na	81.00%	na
Financial Institutions ⁽⁹⁾	0.62%	0.00%	39.00%	na	100.00%	na	0.64%	0.00%	39.00%	na	100.00%	na

(1) Actual and estimated parameters are reported on a three-month lag. For example, for Q2 2016, estimated percentages are as of January 31, 2015 and actual percentages reflect experience in the following 12 months .

(2) Estimated LGD reflects loss estimates under a downturn economic scenario and is based on defaulted accounts.

(3) Actual LGD includes indirect costs and discount rate and is based on defaulted accounts on which recovery process is completed.

(4) Estimated and actual EAD are computed for revolving products only and are based on defaulted accounts.

(5) Retail PD and EAD are based on account weighted average whilst retail LGD is based on exposure weighted average.

(6) Actual and estimated EAD for residential mortgage is computed only for Home equity lines of credit since the conventional residential mortgages are non-revolving.

(7) Actual LGD for insured residential mortgages is n/a to reflect the credit risk mitigation from government backed entities.

(8) Wholesale and Sovereign's PD is based on borrower weighted average whilst the LGD and EAD are based on facility weighted average.

(9) Actual LGD for the Financial Institutions and Sovereign are na because no defaulted facilities recovery were completed during the period. Actual EAD are na because no default was observed during the period.



Distribution of Gross Credit Risk Exposure (Non-Retail Portfolio by Industries)

(unaudited) (millions of Canadian dollars)	2016												2015					
	Q2						Q1						Q4					
	EAD - Gross Exposure ⁽¹⁾																	
Non-Retail Portfolio	Drawn	Undrawn commitments	Other	Repo-style transactions	OTC Derivatives	Total	Drawn	Undrawn commitments	Other	Repo-style transactions	OTC Derivatives	Total	Drawn	Undrawn commitments	Other	Repo-style transactions	OTC Derivatives	Total
Agriculture	3 604	238	6	–	–	3 848	3 586	190	6	–	–	3 782	3 509	190	6	–	–	3 705
Oil and Gas	2 911	1 572	64	–	–	4 547	3 204	1 661	62	–	–	4 927	3 175	1 921	66	–	–	5 162
Mining	357	493	30	–	–	880	494	397	34	–	–	925	391	380	124	–	–	895
Utilities	2 071	1 901	380	–	–	4 352	1 979	1 944	374	–	–	4 297	1 758	2 023	367	–	–	4 148
Construction ⁽²⁾	2 226	1 186	207	–	–	3 619	2 179	1 191	210	–	–	3 580	2 185	1 263	207	–	–	3 655
Manufacturing	3 615	1 968	250	–	–	5 833	3 641	2 125	266	–	–	6 032	3 573	1 978	268	–	–	5 819
Wholesale Trade	1 819	628	53	–	–	2 500	1 735	634	55	–	–	2 424	1 814	533	50	–	–	2 397
Retail Trade	3 159	785	46	–	–	3 990	3 094	851	51	–	–	3 996	2 830	1 002	49	–	–	3 881
Transportation	1 886	1 596	75	–	–	3 557	2 062	1 573	79	–	–	3 714	1 932	1 562	80	–	–	3 574
Communications	1 416	631	279	–	–	2 326	1 321	522	288	–	–	2 131	1 212	545	283	–	–	2 040
Finance and Insurance	18 142	1 328	767	64 283	968	85 488	19 801	1 568	671	66 444	852	89 336	18 847	1 670	660	72 179	1 127	94 483
Real Estate ⁽³⁾	7 595	675	30	70	–	8 370	7 914	587	32	59	–	8 592	7 508	554	32	63	–	8 157
Professional Services	1 069	662	348	–	–	2 079	943	715	352	–	–	2 010	980	685	348	–	–	2 013
Education & Health Care	2 526	1 506	6	–	–	4 038	2 758	1 073	7	–	–	3 838	2 453	1 069	6	–	–	3 528
Other Services	4 102	1 094	295	1 175	–	6 666	4 049	1 077	286	–	–	5 412	3 988	988	250	–	–	5 226
Government	4 939	1 153	14	2 216	–	8 322	4 314	1 238	11	674	1	6 238	3 974	1 243	11	615	–	5 843
Other	2 243	117	600	–	–	2 960	2 374	161	602	–	–	3 137	1 895	–	625	–	–	2 520
Total – Non-retail ⁽⁴⁾	63 680	17 533	3 450	67 744	968	153 375	65 448	17 507	3 386	67 177	853	154 371	62 024	17 606	3 432	72 857	1 127	157 046

	2015																	
	Q3						Q2						Q1					
	EAD - Gross Exposure ⁽¹⁾																	
	Drawn	Undrawn commitments	Other	Repo-style transactions	OTC Derivatives	Total	Drawn	Undrawn commitments	Other	Repo-style transactions	OTC Derivatives	Total	Drawn	Undrawn commitments	Other	Repo-style transactions	OTC Derivatives	Total
Non-Retail Portfolio																		
Agriculture	3 314	178	6	–	–	3 498	3 124	180	4	–	–	3 308	3 064	188	4	–	–	3 256
Oil and Gas	3 244	2 154	57	–	–	5 455	3 652	2 007	40	–	–	5 699	3 350	2 149	31	–	–	5 530
Mining	381	449	110	–	–	940	320	365	104	–	–	789	371	306	116	–	–	793
Utilities	1 646	1 642	240	–	–	3 528	1 544	1 766	230	–	1	3 541	1 490	1 582	220	–	–	3 292
Construction ⁽²⁾	2 273	1 312	215	–	–	3 800	2 036	1 068	193	–	–	3 297	1 751	1 108	195	–	–	3 054
Manufacturing	3 656	1 826	283	–	–	5 765	3 462	1 836	268	–	–	5 566	3 374	1 972	283	–	–	5 629
Wholesale Trade	1 760	552	66	–	–	2 378	1 762	547	66	–	–	2 375	1 782	655	57	–	–	2 494
Retail Trade	2 917	921	58	–	–	3 896	3 198	793	62	–	–	4 053	3 074	972	40	–	–	4 086
Transportation	1 840	1 667	77	–	–	3 584	1 679	1 881	66	–	–	3 626	1 680	1 612	73	–	–	3 365
Communications	1 185	534	279	–	–	1 998	1 166	653	283	–	–	2 102	1 213	611	348	–	–	2 172
Finance and Insurance	16 182	1 379	817	74 218	727	93 323	14 931	1 300	740	73 666	1 041	91 678	16 294	1 359	1 257	71 450	611	90 971
Real Estate ⁽³⁾	7 119	623	46	70	–	7 858	6 847	704	27	78	–	7 656	6 521	725	22	78	–	7 346
Professional Services	1 051	639	351	–	–	2 041	1 010	712	327	–	–	2 049	1 106	767	336	–	–	2 209
Education & Health Care	2 566	738	5	–	–	3 309	2 341	708	5	–	–	3 054	2 494	729	5	–	–	3 228
Other Services	4 521	868	199	112	–	5 700	4 207	1 005	210	1	–	5 423	4 145	998	206	12	–	5 361
Government	3 706	1 233	7	1 032	–	5 978	3 689	1 410	7	1 161	–	6 267	4 091	1 098	5	1 698	–	6 892
Other	1 785	1	599	–	–	2 385	1 660	–	683	–	–	2 343	978	–	366	8	–	1 352
Total – Non-retail ⁽³⁾	59 146	16 716	3 415	75 432	727	155 436	56 628	16 935	3 315	74 906	1 042	152 826	56 778	16 831	3 564	73 246	611	151 030

(1) EAD amounts are after securitization and exclude trading related portfolio.

(2) Includes some public private partnership and project finance loans.

(3) Includes residential mortgages 5 units and more.

(4) This total excludes SME retail exposure.



Gross Credit Risk Exposure at Default in Europe⁽¹⁾

(unaudited) (millions of Canadian dollars)	2016											2015						
	Q2					Q1						Q4						
	Drawn	Undrawn commitments	Repo-style transactions ⁽²⁾	OTC derivatives	Other off-balance sheet items ⁽³⁾	Total	Drawn	Undrawn commitments	Repo-style transactions ⁽²⁾	OTC derivatives	Other off-balance sheet items ⁽³⁾	Total	Drawn	Undrawn commitments	Repo-style transactions ⁽²⁾	OTC derivatives	Other off-balance sheet items ⁽³⁾	Total
Greece	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Ireland	–	–	1 503	1	–	1 504	1	–	865	1	–	867	–	–	784	–	–	784
Italy	–	–	–	–	1	1	–	–	–	–	1	1	–	–	–	–	–	–
Portugal	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Spain	25	–	–	–	132	157	25	–	–	–	134	159	30	–	–	1	102	133
Total GIIPS	25	–	1 503	1	133	1 662	26	–	865	1	135	1 027	30	–	784	1	102	917
France	21	–	154	91	285	551	98	–	1 254	250	285	1 887	47	4	1 794	502	220	2 567
Germany	–	–	–	38	51	89	4	–	–	27	57	88	6	103	–	23	44	176
United Kingdom	71	5	3 660	744	5	4 485	135	5	4 452	1 058	13	5 663	269	5	3 831	786	10	4 901
Other Europe	139	–	852	253	18	1 262	165	–	1 076	286	21	1 548	195	12	847	308	16	1 378
Total - Credit Risk	256	5	6 169	1 127	492	8 049	428	5	7 647	1 622	511	10 213	547	124	7 256	1 620	392	9 939

Adjustment to exposure for collateral	Drawn	Undrawn commitments	Net Repo-Style transactions and OTC derivatives	Other off-balance sheet items ⁽³⁾	Total	Drawn	Undrawn commitments	Net Repo-Style transactions and OTC derivatives	Other off-balance sheet items ⁽³⁾	Total	Drawn	Undrawn commitments	Net Repo-Style transactions and OTC derivatives	Other off-balance sheet items ⁽³⁾	Total
Total - Net Credit Risk⁽⁴⁾	256	5	1 538	492	2 291	428	5	1 838	511	2 782	547	124	1 969	392	3 032

(unaudited) (millions of Canadian dollars)	2015																	
	Q3						Q2						Q1					
	Drawn	Undrawn commitments	Repo-style transactions ⁽²⁾	OTC derivatives	Other off-balance sheet items ⁽³⁾	Total	Drawn	Undrawn commitments	Repo-style transactions ⁽²⁾	OTC derivatives	Other off-balance sheet items ⁽³⁾	Total	Drawn	Undrawn commitments	Repo-style transactions ⁽²⁾	OTC derivatives	Other off-balance sheet items ⁽³⁾	Total
Greece	–	–	–	–	–	–	–	–	–	–	1	1	–	–	–	–	–	–
Ireland	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Italy	–	–	–	–	1	1	–	–	–	–	–	–	–	–	–	–	1	1
Portugal	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Spain	25	–	–	2	133	160	24	–	–	1	134	159	26	–	–	–	134	160
Total GIIPS	25	–	–	2	134	161	24	–	–	1	135	160	26	–	–	–	135	161
France	89	2	2 419	505	286	3 301	63	2	1 468	570	291	2 394	20	4	31	586	295	936
Germany	1	108	254	23	42	428	131	122	239	16	41	549	–	–	1	15	39	55
United Kingdom	661	2	4 946	876	1	6 486	622	3	4 541	852	1	6 019	1 062	6	3 129	773	1	4 971
Other Europe	71	5	951	377	20	1 424	148	7	518	448	20	1 141	30	16	85	383	31	545
Total - Credit Risk	847	117	8 570	1 783	483	11 800	988	134	6 766	1 887	488	10 263	1 138	26	3 246	1 757	501	6 668

Adjustment to exposure for collateral	Drawn	Undrawn commitments	Net Repo-Style transactions and OTC derivatives	Other off-balance sheet items ⁽³⁾	Total	Drawn	Undrawn commitments	Net Repo-Style transactions and OTC derivatives	Other off-balance sheet items ⁽³⁾	Total	Drawn	Undrawn commitments	Net Repo-Style transactions and OTC derivatives	Other off-balance sheet items ⁽³⁾	Total
Total - Net Credit Risk⁽⁴⁾	847	117	1 802	483	3 249	988	134	2 019	488	3 629	1 138	26	1 792	501	3 457

(1) Exposure at default is the expected gross exposure upon the default of an obligor. This amount is before any specific allowance or partial write-offs and does not reflect the impact of credit risk mitigation and collateral held. This table excludes Equity exposures.

(2) Represents securities purchased under reverse repurchase agreements and sold under repurchase agreements, and securities borrowed and loaned.

(3) Letters of guarantee and credit that represent the Bank's commitment to make payments in the event that a client cannot meet its financial obligations to third parties.

(4) For drawn, undrawn and Other off-balance sheet exposures, eligible financial collateral is taken into account in the Bank's Loss Given Default (LGD) models.



Formation of Gross Impaired Loans and Allowance for Credit Losses

(unaudited) (millions of Canadian dollars)

	2016		2015				2014				YTD		Full Year	
Formation of Gross Impaired Loans ⁽¹⁾ (by sector)	Q2	Q1	Q4	Q3	Q2	Q1	Q4	Q3	Q2	Q1	2016	2015	2015	2014
Opening balance	434	457	449	446	389	486	411	417	417	395	457	486	486	395
Write-offs														
Personal and Commercial														
Retail	(20)	(23)	(23)	(18)	(21)	(21)	(19)	(18)	(19)	(20)	(43)	(42)	(83)	(76)
Commercial	(5)	(20)	(11)	(16)	(15)	(62)	(14)	(10)	(10)	(3)	(25)	(77)	(104)	(37)
Wealth Management	(1)	(2)	(1)	(1)	(1)	(1)	(2)	(1)	(1)	(1)	(3)	(2)	(4)	(5)
Financial Markets														
Corporate	–	–	–	(6)	–	–	–	–	–	–	–	–	(6)	–
Other	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Total write-offs	(26)	(45)	(35)	(41)	(37)	(84)	(35)	(29)	(30)	(24)	(71)	(121)	(197)	(118)
Formation														
Personal and Commercial														
Retail	21	23	23	16	28	22	29	20	15	36	44	50	89	100
Commercial	89	(5)	19	24	65	(37)	79	2	15	9	84	28	71	105
Wealth Management	3	4	1	4	1	2	2	1	–	1	7	3	8	4
Financial Markets														
Corporate	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Other	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Total formation	113	22	43	44	94	(13)	110	23	30	46	135	81	168	209
Closing balance	521	434	457	449	446	389	486	411	417	417	521	446	457	486

	2016		2015				2014				YTD		Full Year	
Formation of Gross Impaired Loans (by activity)	Q2	Q1	Q4	Q3	Q2	Q1	Q4	Q3	Q2	Q1	2016	2015	2015	2014
Opening balance	434	457	449	446	389	486	411	417	417	395	457	486	486	395
Classified as impaired during the period	211	145	135	149	187	107	196	142	139	127	356	294	578	604
Transferred to not impaired during the period	(6)	(3)	(5)	(7)	(8)	(3)	(4)	(6)	(7)	(2)	(9)	(11)	(23)	(19)
Net repayments	(66)	(91)	(64)	(78)	(62)	(100)	(63)	(88)	(77)	(57)	(157)	(162)	(304)	(285)
Write-offs	(45)	(64)	(53)	(60)	(54)	(97)	(50)	(48)	(48)	(40)	(109)	(151)	(264)	(186)
Recoveries of loans previously written off	(5)	(4)	(5)	(5)	(7)	(5)	(3)	(4)	(5)	(5)	(9)	(12)	(22)	(17)
Disposals of loans	–	–	–	–	–	(1)	(1)	(2)	(2)	(1)	–	(1)	(1)	(6)
Exchange and other movements	(2)	(6)	–	4	1	2	–	–	–	–	(8)	3	7	–
Closing balance	521	434	457	449	446	389	486	411	417	417	521	446	457	486

	2016		2015				2014				YTD		Full Year	
Allowance for Credit Losses	Q2	Q1	Q4	Q3	Q2	Q1	Q4	Q3	Q2	Q1	2016	2015	2015	2014
Allowances at beginning	566	569	561	563	561	604	593	592	589	578	569	604	604	578
Write-offs	(50)	(68)	(58)	(65)	(61)	(103)	(54)	(54)	(54)	(47)	(118)	(164)	(287)	(209)
Recoveries of amounts written off in previous years	5	5	5	6	5	5	7	4	4	6	10	10	21	21
Charge to income statement (provision for credit losses) ⁽²⁾	317	63	61	56	57	54	57	49	51	51	380	111	228	208
Disposal of loans	–	–	–	–	–	1	1	2	2	1	–	1	1	6
Exchange and other movements	(1)	(3)	–	1	1	–	–	–	–	–	(4)	1	2	–
Allowances at end	837	566	569	561	563	561	604	593	592	589	837	563	569	604

(1) Credit card receivables are not included.

(2) During the second quarter of 2016, a \$250 million sectoral provision for credit losses was recorded for producers and service companies in the oil and gas sector.



Gross Credit Exposure by Residual Contractual Maturity⁽¹⁾

(unaudited) (millions of Canadian dollars)	2016								2015			
	Q2				Q1				Q4			
	Within 1 year	1 to 5 years	Over 5 years	Total	Within 1 year	1 to 5 years	Over 5 years	Total	Within 1 year	1 to 5 years	Over 5 years	Total
Retail												
Residential mortgages	27 803	15 024	269	43 096	28 416	15 175	244	43 835	28 320	14 630	313	43 263
Qualifying revolving retail	5 442	–	–	5 442	5 105	–	–	5 105	5 198	–	–	5 198
Other retail	5 165	2 841	1 908	9 914	5 193	2 768	1 863	9 824	5 265	2 736	1 786	9 787
	38 410	17 865	2 177	58 452	38 714	17 943	2 107	58 764	38 783	17 366	2 099	58 248
Non-retail												
Corporate	37 654	16 231	3 077	56 962	34 930	18 286	3 451	56 667	33 479	18 609	3 140	55 228
Sovereign	18 659	10 441	6 006	35 106	19 110	10 778	5 992	35 880	19 200	10 345	5 791	35 336
Financial Institutions	53 799	1 979	16	55 794	54 571	1 984	18	56 573	57 338	2 749	2 482	62 569
	110 112	28 651	9 099	147 862	108 611	31 048	9 461	149 120	110 017	31 703	11 413	153 133
Trading book	2 201	5 344	2 550	10 095	1 973	5 376	3 500	10 849	1 050	5 714	3 035	9 799
Total	150 723	51 860	13 826	216 409	149 298	54 367	15 068	218 733	149 850	54 783	16 547	221 180

(unaudited) (millions of Canadian dollars)	2015											
	Q3				Q2				Q1			
	Within 1 year	1 to 5 years	Over 5 years	Total	Within 1 year	1 to 5 years	Over 5 years	Total	Within 1 year	1 to 5 years	Over 5 years	Total
Retail												
Residential mortgages	28 107	14 392	390	42 889	27 971	13 292	295	41 558	27 260	13 465	249	40 974
Qualifying revolving retail	5 016	–	–	5 016	5 089	1	–	5 090	4 984	–	–	4 984
Other retail	5 278	2 741	1 732	9 751	5 223	2 790	1 604	9 617	5 292	2 632	1 545	9 469
	38 401	17 133	2 122	57 656	38 283	16 083	1 899	56 265	37 536	16 097	1 794	55 427
Non-retail												
Corporate	30 851	19 572	2 488	52 911	31 884	17 981	2 405	52 270	34 091	14 366	1 503	49 960
Sovereign	19 632	8 397	5 809	33 838	17 871	6 767	5 834	30 472	22 855	6 217	5 611	34 683
Financial Institutions	57 807	3 836	2 345	63 988	55 630	6 903	2 418	64 951	52 071	6 901	310	59 282
	108 290	31 805	10 642	150 737	105 385	31 651	10 657	147 693	109 017	27 484	7 424	143 925
Trading book	2 139	6 177	3 066	11 382	1 538	6 713	2 769	11 020	1 942	5 597	2 840	10 379
Total	148 830	55 115	15 830	219 775	145 206	54 447	15 325	214 978	148 495	49 178	12 058	209 731

(1) Gross credit exposure is the expected exposure upon the default of an obligor before any specific allowances or credit risk mitigation.



Credit Risk Mitigation - Guarantees and Credit Derivatives

(unaudited) (millions of Canadian dollars)	2016				2015	
	Q2		Q1		Q4	
Total exposure covered by:	Standardized ⁽¹⁾	AIRB ⁽²⁾	Standardized ⁽¹⁾	AIRB ⁽²⁾	Standardized ⁽¹⁾	AIRB ⁽²⁾
Retail						
Residential mortgage	963	4 737	541	5 534	593	5 615
Qualifying revolving retail	–	–	–	–	–	–
Other retail	2 694	203	2 809	299	2 646	299
	3 657	4 940	3 350	5 833	3 239	5 914
Non-retail						
Corporate	1 016	2 178	1 107	2 489	636	2 529
Sovereign	–	–	–	–	–	–
Financial Institutions	–	–	–	–	–	–
	1 016	2 178	1 107	2 489	636	2 529
Trading book	–	17	–	34	–	19
Total	4 673	7 135	4 457	8 356	3 875	8 462

(unaudited) (millions of Canadian dollars)	2015					
	Q3		Q2		Q1	
Total exposure covered by:	Standardized ⁽¹⁾	AIRB ⁽²⁾	Standardized ⁽¹⁾	AIRB ⁽²⁾	Standardized ⁽¹⁾	AIRB ⁽²⁾
Retail						
Residential mortgage	948	6 106	403	5 822	373	5 823
Qualifying revolving retail	–	–	–	–	–	–
Other retail	2 622	301	2 177	303	2 139	306
	3 570	6 407	2 580	6 125	2 512	6 129
Non-retail						
Corporate	1 135	2 448	546	2 284	733	2 255
Sovereign	–	–	–	–	–	–
Financial Institutions	–	–	–	–	–	–
	1 135	2 448	546	2 284	733	2 255
Trading book	–	9	–	3	–	4
Total	4 705	8 864	3 126	8 412	3 245	8 388

(1) No eligible financial collateral.

(2) For exposures under the AIRB approach, eligible financial collateral is taken into account in the Bank's Loss Given Default (LGD) models.
Separate disclosure of eligible financial collateral is, therefore, not required.



Banking Book Equity

(unaudited)
(millions of Canadian dollars)

	2016								2015			
	Q2				Q1				Q4			
	Total exposures	Unfunded commitments	On balance sheet exposures at carrying value	Gross unrealized gains (losses)	Total exposures	Unfunded commitments	On balance sheet exposures at carrying value	Gross unrealized gains (losses)	Total exposures	Unfunded commitments	On balance sheet exposures at carrying value	Gross unrealized gains (losses)
Public	288	–	288	(24)	282	–	282	(56)	312	–	312	(20)
Private	307	35	272	66	298	35	263	56	281	35	246	51
	595	35	560	42	580	35	545	–	593	35	558	31

(unaudited)
(millions of Canadian dollars)

	2015											
	Q3				Q2				Q1			
	Total exposures	Unfunded commitments	On balance sheet exposures at carrying value	Gross unrealized gains (losses)	Total exposures	Unfunded commitments	On balance sheet exposures at carrying value	Gross unrealized gains (losses)	Total exposures	Unfunded commitments	On balance sheet exposures at carrying value	Gross unrealized gains (losses)
Public	309	–	309	(10)	359	–	359	45	313	–	313	23
Private	269	34	235	39	274	30	244	21	276	30	246	20
	578	34	544	29	633	30	603	66	589	30	559	43



Credit Derivative Positions (notional amounts)

	2016								2015			
	Q2				Q1				Q4			
	Credit portfolio ⁽¹⁾		Trading		Credit portfolio ⁽¹⁾		Trading		Credit portfolio ⁽¹⁾		Trading	
	Protection purchased	Protection sold	Protection purchased	Protection sold	Protection purchased	Protection sold	Protection purchased	Protection sold	Protection purchased	Protection sold	Protection purchased	Protection sold
(unaudited) (millions of Canadian dollars)												
Credit default swaps												
Indices, singles names and other	88	19	1 411	677	63	21	1 319	533	59	20	991	364
Tranches on indices	–	–	–	–	–	–	–	–	–	–	–	21
Total return swaps	–	–	177	–	–	–	186	–	–	–	157	–
Credit options	–	–	38	38	–	–	63	63	–	–	26	26

	2015											
	Q3				Q2				Q1			
	Credit portfolio ⁽¹⁾		Trading		Credit portfolio ⁽¹⁾		Trading		Credit portfolio ⁽¹⁾		Trading	
	Protection purchased	Protection sold	Protection purchased	Protection sold	Protection purchased	Protection sold	Protection purchased	Protection sold	Protection purchased	Protection sold	Protection purchased	Protection sold
(unaudited) (millions of Canadian dollars)												
Credit default swaps												
Indices, singles names and other	39	–	901	348	36	–	809	316	51	–	847	219
Tranches on indices	–	–	–	–	–	–	–	–	–	–	–	1
Total return swaps	–	–	183	–	–	–	72	–	–	–	30	–
Credit options	–	–	13	–	–	–	12	12	–	–	–	–

(1) Protection sold solely for the purpose of reducing protection purchased.



Derivatives Financial Instruments According to Basel Definition

	2016		2015			
	Q2	Q1	Q4	Q3	Q2	Q1
(unaudited) (millions of Canadian dollars)	Under Basel III					
Foreign Exchange Related Contracts						
Swaps	205 355	205 049	187 833	162 669	157 410	150 030
Options						
- purchased	9 565	10 381	9 943	7 946	6 932	5 780
- sold	9 439	11 660	10 507	8 441	7 299	6 663
Exchange traded and OTC futures contracts	28 677	30 470	24 491	25 699	21 758	22 398
Total notional amount	253 036	257 560	232 774	204 755	193 399	184 871
Replacement cost						
- gross	6 054	6 551	4 246	5 553	4 283	7 195
- net ⁽¹⁾	3 154	3 962	2 715	3 045	2 145	3 037
Future credit risk	2 086	2 035	1 869	1 653	1 927	1 455
Credit equivalent ⁽²⁾	5 240	5 997	4 584	4 697	4 072	4 492
Risk-weighted equivalent ⁽³⁾	1 375	1 810	1 337	1 390	1 174	1 407
Interest Rate Related Contracts						
Swaps	378 617	437 908	418 765	444 988	440 470	429 950
Options						
- purchased	13 150	19 424	8 019	42 558	61 582	54 989
- sold	7 831	12 293	5 101	39 293	37 712	61 376
Exchange traded and OTC futures contracts	6 480	7 506	12 142	12 315	4 819	7 093
Total notional amount	406 078	477 131	444 027	539 154	544 583	553 408
Replacement cost						
- gross	5 966	7 190	5 746	6 073	5 538	7 261
- net ⁽¹⁾	1 663	1 648	1 509	1 491	1 837	1 795
Future credit risk	1 548	1 606	1 581	1 753	1 804	1 683
Credit equivalent ⁽²⁾	3 211	3 254	3 090	3 244	3 641	3 478
Risk-weighted equivalent ⁽³⁾	911	875	955	981	948	1 052
Financial Futures						
Total notional amount	101 956	108 307	78 345	152 997	131 541	117 475
Equity and Commodity Contracts						
Total notional amount	41 417	42 108	41 373	43 574	39 527	40 224
Replacement cost						
- gross	2 990	3 416	2 877	3 101	2 557	3 342
- net ⁽¹⁾	2 640	3 084	2 572	2 803	2 189	2 939
Future credit risk	1 638	1 693	1 693	3 967	3 766	3 723
Credit equivalent ⁽²⁾	4 278	4 777	4 265	6 770	5 956	6 662
Risk-weighted equivalent ⁽³⁾	515	537	520	1 465	1 543	1 464
Credit Derivatives						
Total notional amount (trading only) ⁽⁵⁾	2 341	2 164	1 585	1 445	1 221	1 097
Total Return Swap Notional Amount ^{(4) (5)}	27 064	25 101	25 122	23 497	22 149	20 896
Replacement cost ⁽⁵⁾						
- gross	81	90	92	81	78	65
- net ⁽¹⁾	42	40	37	30	31	40
Future credit risk	1 001	929	1 020	837	804	358
Credit equivalent ⁽²⁾	1 043	969	1 057	867	835	398
Risk-weighted equivalent ⁽³⁾	88	81	135	71	90	72
Total Derivatives						
Total notional amount	831 892	912 371	823 226	965 422	932 420	917 971
Replacement cost						
- gross	15 091	17 247	12 961	14 808	12 456	17 863
- net ⁽¹⁾	7 499	8 734	6 833	7 369	6 202	7 811
Future credit risk	6 273	6 263	6 163	8 210	8 301	7 219
Credit equivalent ⁽²⁾	13 772	14 997	12 996	15 578	14 504	15 030
Risk-weighted equivalent ⁽³⁾	2 889	3 303	2 947	3 907	3 755	3 995

(1) Net replacement cost is gross positive replacement cost with consideration of master netting agreements without consideration of collateral.

(2) Includes the impact of master netting agreements but excludes collateral.

(3) Risk weighted amounts reported are net of impact of collaterals and master netting agreements.

(4) Securitised exposure recognized for capital ratio but not for consolidated balance sheet purposes due to IFRS standards.

(5) Trading Credit Derivatives only.



Over The Counter Derivatives Financial Instruments Settled by Central Counterparties⁽¹⁾

	2016						2015		
	Q2			Q1			Q4		
	Exchange-traded contracts	OTC-Traded		Exchange-traded contracts	OTC-Traded		Exchange-traded contracts	OTC-Traded	
		Settled by central counterparties	Not settled by central counterparties		Settled by central counterparties	Not settled by central counterparties		Settled by central counterparties	Not settled by central counterparties
(unaudited) (millions of Canadian dollars)									
Interest rate contracts	115 717	267 983	124 333	132 266	318 318	134 854	80 417	295 829	146 126
Foreign exchange contracts	129	–	252 907	179	–	257 381	220	–	232 554
Equity, commodity and credit derivative contracts ⁽²⁾	13 263	1 880	55 679	14 122	1 513	53 738	12 936	1 319	53 825

	2015								
	Q3			Q2			Q1		
	Exchange-traded contracts	OTC-Traded		Exchange-traded contracts	OTC-Traded		Exchange-traded contracts	OTC-Traded	
		Settled by central counterparties	Not settled by central counterparties		Settled by central counterparties	Not settled by central counterparties		Settled by central counterparties	Not settled by central counterparties
(unaudited) (millions of Canadian dollars)									
Interest rate contracts	225 609	317 422	149 120	221 512	303 423	151 189	224 179	274 351	172 353
Foreign exchange contracts	198	–	204 557	200	–	193 199	200	–	184 671
Equity, commodity and credit derivative contracts ⁽²⁾	14 848	1 065	52 603	11 180	1 003	50 714	11 964	744	49 509

(1) Notional amounts.

(2) Credit derivative contracts in non-trading book are excluded.



Aggregate Amount of Securitization Exposures

(unaudited) (millions of Canadian dollars)	2016						2015											
	Q2			Q1			Q4			Q3			Q2			Q1		
	Banking Book		Trading book	Banking Book		Trading book	Banking Book		Trading book	Banking Book		Trading book	Banking Book		Trading book	Banking Book		Trading book
	On balance sheet	Off balance sheet	On balance sheet	On balance sheet	Off balance sheet	On balance sheet	On balance sheet	Off balance sheet	On balance sheet	On balance sheet	Off balance sheet	On balance sheet	On balance sheet	Off balance sheet	On balance sheet	On balance sheet	Off balance sheet	On balance sheet
Bank's own assets																		
Traditional exposures																		
Insured Mortgage loans																		
Retained ⁽¹⁾	4 341	–	–	3 420	–	–	2 584	–	–	1 989	–	–	1 841	–	–	1 976	–	–
Credit Cards																		
Retained ⁽¹⁾																		
Seller's interest	193	391	–	164	340	–	206	404	–	156	312	–	193	385	–	192	359	–
Purchased ⁽²⁾	89	–	–	89	–	–	89	–	–	80	–	–	86	–	–	85	–	–
Total - Bank's own assets	4 623	391	–	3 673	340	–	2 879	404	–	2 225	312	–	2 120	385	–	2 253	359	–
Third party assets																		
Sponsored																		
Traditional exposures ⁽³⁾																		
Residential Mortgages - Insured	–	1 440	19	–	1 204	7	–	1 368	14	–	1 360	27	–	1 237	27	–	1 405	21
Residential Mortgages - conventional	–	562	7	–	483	3	–	480	5	–	354	7	–	276	6	–	244	4
Fleet Lease Receivables	–	259	3	–	263	1	–	242	2	–	242	5	–	242	5	–	99	1
Auto Floorplans	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Auto Loans	–	136	2	–	141	1	–	144	1	–	207	4	–	233	5	–	264	4
Purchased																		
Traditional exposures																		
Insured Mortgage loans - MBS	4 715	–	1 388	5 240	–	1 390	4 878	–	1 356	4 500	–	1 153	4 446	–	1 038	3 971	–	834
Credit Cards - ABS	89	–	49	89	–	68	89	–	49	86	–	107	86	–	81	–	–	78
Home Equity - ABS	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Commercial mortgage back securities (CMBS)	13	–	–	13	–	–	13	–	–	14	–	–	61	–	3	61	–	3
Collateralized debt obligation (CDO)	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Collateralized mortgage obligation (CMO)	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Synthetic exposures																		
CDX tranches	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	1
Resecuritized exposures																		
Master Asset Vehicles ⁽⁴⁾	543	–	–	545	–	–	545	–	–	531	–	–	1 028	821	–	1 056	825	–
Commercial paper not included in the Pan-Canadian restructuring plan	91	–	–	102	–	–	102	–	–	105	–	–	103	–	–	101	–	–
Collateralized mortgage obligation (CMO)	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Total - Third party assets	5 451	2 397	1 468	5 989	2 091	1 470	5 627	2 234	1 427	5 236	2 163	1 303	5 724	2 809	1 165	5 189	2 837	946
Total - Bank	10 074	2 788	1 468	9 662	2 431	1 470	8 506	2 638	1 427	7 461	2 475	1 303	7 844	3 194	1 165	7 442	3 196	946

(1) The Retained exposures for insured mortgage loans and credit card receivables are treated under the AIRB Framework as if they remained on the Bank's balance sheet.

(2) The credit card receivable purchased held from Bank's own assets securitization represent the Bank's interest in investment grade subordinated notes issued.

(3) Sponsored Traditional exposures comprise Bank's committed amount to the Fusion Trust and Clarity Trust liquidity facility lines as well as the Bank's purchased note of Fusion Trust and Clarity Trust.

(4) Resecuritized exposures comprise the carrying value of the restructured notes held by the Bank and the Bank's committed amount to the margin funding facility related to the MAV.



Capital Requirements for Securitization Exposures Under Securitization Framework

(unaudited) (millions of Canadian dollars)	2016												2015							
	Q2						Q1						Q4							
	Banking Book			Trading book			Banking Book			Trading book			Banking Book			Trading book				
	On balance sheet		Off balance sheet		On balance sheet		On balance sheet		Off balance sheet		On balance sheet		On balance sheet		Off balance sheet		On balance sheet			
	RBA/Inferred Ratings Exposure Amount	Risk-Weighted Assets	RBA/Inferred Ratings Exposure Amount	Risk-Weighted Assets	RBA/Inferred Ratings Exposure Amount	Risk-Weighted Assets	RBA/Inferred Ratings Exposure Amount	Risk-Weighted Assets	RBA/Inferred Ratings Exposure Amount	Risk-Weighted Assets	RBA/Inferred Ratings Exposure Amount	Risk-Weighted Assets	RBA/Inferred Ratings Exposure Amount	Risk-Weighted Assets	RBA/Inferred Ratings Exposure Amount	Risk-Weighted Assets	RBA/Inferred Ratings Exposure Amount	Risk-Weighted Assets	RBA/Inferred Ratings Exposure Amount	Risk-Weighted Assets
Bank's own assets⁽¹⁾																				
Credit Cards																				
Seller's interest exposure ⁽²⁾	193	123	391	56	–	–	164	109	340	49	–	–	206	133	404	60	–	–	–	–
Purchased	89	41	–	–	–	–	89	41	–	–	–	–	89	41	–	–	–	–	–	–
Total - Bank's own assets	282	164	391	56	–	–	253	150	340	49	–	–	295	174	404	60	–	–	–	–
Third party assets																				
Securitized																				
7% - 30%	59	11	2 397	165	49	34	60	11	2 091	156	68	47	60	11	2 234	158	49	29	–	–
35% - 100%	43	32	–	–	–	–	43	32	–	–	–	–	43	32	–	–	–	–	–	–
150% - 850%	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
1250 %	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Home Equity - ABS	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Collateralized mortgage obligation (CMO)	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Others	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Resecuritized																				
7% - 30%	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
35% - 100%	516	217	–	–	–	–	529	238	–	–	–	–	529	238	–	–	–	–	–	–
150% - 850%	114	307	–	–	–	–	113	303	–	–	–	–	112	300	–	–	–	–	–	–
1250 %	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Master Asset Vehicles	4	49	–	–	–	–	4	55	–	–	–	–	5	59	–	–	–	–	–	–
Commercial paper not included in the Pan-Canadian restructuring plan	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Collateralized mortgage obligation (CMO)	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Total - Third party assets	736	616	2 397	165	49	34	749	639	2 091	156	68	47	749	640	2 234	158	49	29	–	–
Total	1 018	780	2 788	221	49	34	1 002	789	2 431	205	68	47	1 044	814	2 638	218	49	29	–	–

(unaudited) (millions of Canadian dollars)	2015												2015							
	Q3						Q2						Q1							
	Banking Book			Trading book			Banking Book			Trading book			Banking Book			Trading book				
	On balance sheet		Off balance sheet		On balance sheet		On balance sheet		Off balance sheet		On balance sheet		On balance sheet		Off balance sheet		On balance sheet			
	RBA/Inferred Ratings Exposure Amount	Risk-Weighted Assets	Inferred Ratings Exposure Amount	Risk-Weighted Assets	RBA/Inferred Ratings Exposure Amount	Risk-Weighted Assets	RBA/Inferred Ratings Exposure Amount	Risk-Weighted Assets	Inferred Ratings Exposure Amount	Risk-Weighted Assets	RBA/Inferred Ratings Exposure Amount	Risk-Weighted Assets	RBA/Inferred Ratings Exposure Amount	Risk-Weighted Assets	Inferred Ratings Exposure Amount	Risk-Weighted Assets	RBA/Inferred Ratings Exposure Amount	Risk-Weighted Assets	RBA/Inferred Ratings Exposure Amount	Risk-Weighted Assets
Bank's own assets⁽¹⁾																				
Credit Cards																				
Seller's interest exposure ⁽²⁾	156	100	312	46	–	–	193	126	385	57	–	–	192	130	359	49	–	–	–	–
Purchased	86	38	–	–	–	–	86	38	–	–	–	–	85	38	–	–	–	–	–	–
Total - Bank's own assets	242	138	312	46	–	–	279	164	385	57	–	–	277	168	359	49	–	–	–	–
Third party assets																				
Securitized																				
7% - 30%	61	11	2 163	151	107	66	109	15	1 989	141	81	154	61	5	2 012	144	78	60	–	–
35% - 100%	39	29	–	–	–	–	38	28	–	–	–	–	–	–	–	–	–	–	–	–
150% - 850%	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
1250 %	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Home Equity - ABS	–	–	–	–	–	–	–	–	–	–	3	41	–	–	–	–	–	–	–	–
Collateralized mortgage obligation (CMO)	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Others	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	3	41	–	–
Resecuritized																				
7% - 30%	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
35% - 100%	501	226	–	–	–	–	1 010	430	820	328	–	–	924	505	825	330	–	–	–	–
150% - 850%	104	274	–	–	–	–	84	178	–	–	–	–	170	486	–	–	–	–	–	–
1250 %	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Master Asset Vehicles	5	64	–	–	–	–	37	462	–	–	–	–	63	784	–	–	–	–	–	–
Commercial paper not included in the Pan-Canadian restructuring plan	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Collateralized mortgage obligation (CMO)	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Total - Third party assets	710	604	2 163	151	107	66	1 278	1 113	2 809	469	84	195	1 218	1 780	2 837	474	81	101	–	–
Total	952	742	2 475	197	107	66	1 557	1 277	3 194	526	84	195	1 495	1 948	3 196	523	81	101	–	–

(1) Since inception, no capital has been assessed for the Bank's early amortization provisions associated with the securitized credit cards portfolio because the excess spread of the underlying portfolio has remained above the threshold for which capital charge would be incurred.

(2) Seller's interest exposure are treated under AIRB Approach.



Asset Securitization - Managed Loans

	2016										2015				
	Q2					Q1					Q4				
	Total gross loans ⁽¹⁾	Gross impaired loans and other past due loans ⁽²⁾	Net write-offs	Securitization activities for the quarter ended	Exposure amount intended to be securitized	Total gross loans ⁽¹⁾	Gross impaired loans and other past due loans ⁽²⁾	Net write-offs	Securitization activities for the quarter ended	Exposure amount intended to be securitized	Total gross loans ⁽¹⁾	Gross impaired loans and other past due loans ⁽²⁾	Net write-offs	Securitization activities for the quarter ended	Exposure amount intended to be securitized
(unaudited) (millions of Canadian dollars)															
Banking Book															
Insured mortgage loans	17 903	–	–	2 623	–	16 535	–	–	1 650	–	16 151	–	–	2 022	–
Credit card receivables	1 389	9	14	–	–	1 389	8	13	–	–	1 389	8	13	461	–
Total	19 292	9	14	2 623	–	17 924	8	13	1 650	–	17 540	8	13	2 483	–
Trading Book															
Insured mortgage loans	4 051	–	–	360	570	3 814	–	–	359	407	3 562	–	–	845	684

	2015										2015				
	Q3					Q2					Q1				
	Total gross loans ⁽¹⁾	Gross impaired loans and other past due loans ⁽²⁾	Net write-offs	Securitization activities for the quarter ended	Exposure amount intended to be securitized	Total gross loans ⁽¹⁾	Gross impaired loans and other past due loans ⁽²⁾	Net write-offs	Securitization activities for the quarter ended	Exposure amount intended to be securitized	Total gross loans ⁽¹⁾	Gross impaired loans and other past due loans ⁽²⁾	Net write-offs	Securitization activities for the quarter ended	Exposure amount intended to be securitized
(unaudited) (millions of Canadian dollars)															
Banking Book															
Insured mortgage loans	15 467	–	–	1 733	–	15 527	–	–	1 351	–	15 347	–	–	1 082	–
Credit card receivables	1 355	8	13	530	–	1 411	9	15	398	–	1 365	9	10	–	–
Total	16 822	8	13	2 263	–	16 938	9	15	1 749	–	16 712	9	10	1 082	–
Trading Book															
Insured mortgage loans	3 038	–	–	279	810	2 815	–	–	185	318	2 680	–	–	330	282

(1) Notional amount.

(2) Comprises impaired loans and fully secured loans that are 90 days or more past due and for which, in the opinion of management, there is reasonable assurance that principal and interest will ultimately be collected.

Credit card receivables are not classified as impaired loans but, instead, are written off when payments are 180 days in arrears.



Glossary

Advanced Internal Ratings-Based (AIRB) approach	See risk-weighted assets below.
Banking Book Equities	Banking book equities comprise mainly exposures held for strategic and other reasons.
Capital Ratio	The Bank's capital divided by risk-weighted assets. The Bank's capital can be either CET1 Capital, Tier 1 capital or Total capital, producing three different capital ratios.
Common Equity Tier 1 (CET1) capital	Common Equity Tier 1 capital consists of common shareholders' equity less goodwill, intangible assets and other capital deductions. Common Equity Tier 1 capital ratio is calculated by dividing Common Equity Tier 1 capital by risk-weighted assets.
Corporate	All direct credit risk exposures to corporations, partnerships and proprietorships, exposures guaranteed by those entities.
Credit Risk	Credit risk is the risk of a financial loss if an obligor does not fully honour its contractual commitments to the Bank. Obligors may be borrowers, issuers, counterparties or guarantors. Credit risk is the most significant risk facing the Bank in the normal course of business. The Bank is exposed to credit risk not only through its direct lending activities and transactions but also through commitments to extend credit, letters of guarantee, letters of credit, over-the-counter derivatives trading, available-for-sale debt securities, securities purchased under reverse repurchase agreements, deposits with financial institutions, brokerage activities and transactions carrying a settlement risk for the Bank such as irrevocable fund transfers to third parties via electronic payment systems.
Drawn exposure	The amount of credit risk exposure resulting from loans already advanced to the customer.
Exposure at default (EAD)	An estimate of the amount of exposure to a customer at the event of, and at the time of, default.
Financial institutions	All direct credit risk exposures to deposit-taking institutions and regulated securities firms, and exposures guaranteed by those entities.
Leverage ratio	The leverage ratio is calculated by dividing the amount of Tier 1 capital by the total exposure. Total exposure is defined as the sum of on-balance-sheet assets (including derivative exposures and securities financing transaction exposures) and off-balance-sheet items. Assets deducted from Tier 1 capital are also deducted from the total exposure.
Loss given default (LGD)	An estimate of the amount of exposure to a customer that will not be recovered following a default by that customer, expressed as a percentage of the exposure at default.
Market risk	Market risk is the risk of financial loss resulting from adverse movements in underlying market factors. Market risk at the Bank arises from its participation in market-making, trading, investment and asset/liability management activities.
Operational risk	Operational risk is the risk of loss resulting from an inadequacy or a failure ascribable to people, processes, technology or external events. Operational risks are present in every activity of the Bank. Theft, fraud, unauthorized transactions, system errors, human error, amendments to or misinterpretation of acts and regulations, litigation or disputes with clients or property damage are just a few examples of events likely to cause financial loss, harm the Bank's reputation or result in regulatory penalties or sanctions.
Other off-balance sheet	Letters of guarantee, documentary letters of credit and securitized assets that represent the Bank's commitment to make payments in the event that a client cannot meet its financial obligations to third parties.
Other retail	This exposure class includes consumer loans, SME credit card receivables, SME loans (excluding mortgages of five units or more), and other personal loans.
Over-the-counter derivatives (OTC)	The amount of credit risk exposure resulting from derivatives that trade directly between two counterparties, rather than through exchanges.
Probability of default (PD)	An estimate of the likelihood of default for any particular customer which occurs when that customer is not able to repay its obligations as they become contractually due.
Qualifying revolving retail (QRR)	This exposure class includes lines of credit and credit card receivables.
Repo-style transactions	Financial obligations related to securities sold (repos) or repurchased (reverse repos) pursuant to an agreement under which the securities will be repurchased (repos) or resold (reverse repos) on a specified date and at a specified price. Such an agreement is a form of short-term funding (repos) or collateralized lending (reverse repos). Repo-style transactions also include loaned and borrowed securities that are off-balance sheet.
Retail Residential Mortgage	This exposure class includes loans to individuals against residential property (four units or less) and lines of credit secured by equity in residential property (HELOC).
Risk-weighted assets (RWA)	Assets are risk weighted according to the guidelines established by the Office of the Superintendent of Financial Institutions. In the standardized calculation approach, factors are applied to the face value of certain assets in order to reflect comparable risk levels. In the advanced approach, risk-weighted assets are derived from the Bank's internal models which represents the Bank's own assessment of the risks it incurs. Off-balance sheet instruments are converted to balance sheet (or credit) equivalents by adjusting the notional values before applying the appropriate risk-weighting factors.
Scaling Factor	An add-on of 6% is applied as a calibration adjustment to the risk weighted assets amount for credit risk assessed under the AIRB approach.
Sovereign	All direct credit risk exposures to governments, central banks and certain public sector entities, and exposures guaranteed by those entities.
Standardized approach	See risk-weighted assets.
Tier 1 capital	Tier 1 capital ratio consists of Common Equity Tier 1 capital and Additional Tier 1 instruments, namely, eligible non-cumulative preferred shares and the eligible amount of innovative instruments. Tier 1 capital ratio is calculated by dividing Tier 1 capital by risk-weighted assets.
Tier 2 capital	Tier 2 capital is mainly comprised of subordinated debentures and the collective allowance.
Total capital	Total capital is the sum of Tier 1 and Tier 2 capital. Total capital ratio is calculated by dividing total capital, less adjustments or regulatory deductions, by risk-weighted assets.
Undrawn commitments	The amount of credit risk exposure resulting from loans that have not been advanced to a customer, but which a customer may be entitled to draw in the future.