



SUPPLEMENTARY REGULATORY CAPITAL DISCLOSURE

THIRD QUARTER 2017

(unaudited)

For more information:

Ghislain Parent, Chief Financial Officer and Executive Vice-President Finance and Treasury, Tel: 514 394-6807

Jean Dagenais, Senior Vice-President Finance, Tel: 514 394-6233

Linda Boulanger, Vice-President Investor Relations, Tel: 514 394-0296

Claude Breton, Vice-President Public Affairs, Tel: 514 394-8644

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 2016 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 2017 and also in the document entitled *Supplementary Financial Information* which is available on the Bank's website at nbc.ca.



Table of Contents

Pillar III and Regulatory Capital Disclosure

Regulatory Capital and Capital Ratios under Basel III	pages 4-5
Leverage Ratio under Basel III	page 6
Reconciliation Between Financial Accounting and Regulatory Capital Balance Sheets	page 7
Capital Adequacy Under Basel III	page 8
Risk-Weighted Assets Movement by Key Drivers	page 9
Reconciliation of Balance Sheet with Credit Risk Exposures	page 10
Standardized Credit Risk Exposure Under the Basel Asset Categories and by Risk Weight	page 11
Maximum Credit Risk Exposure Under the Basel Asset Categories	pages 12
Credit Quality of AIRB Exposure - Retail Portfolios	pages 13-14
AIRB Credit Risk Exposures: Non-retail Portfolios	pages 15-16
AIRB Credit Risk Exposure - Back-Testing	page 17
Distribution of Gross Credit Exposure (Non-Retail Portfolio by Industries)	page 18
Gross Credit Risk Exposure at Default in Europe	page 19
Formation of Gross Impaired Loans and Allowance for Credit Losses	page 20
Gross Credit Exposure by Residual Contractual Maturity	page 21
Credit Risk Mitigation - Guarantees and Credit Derivatives	page 22
Banking Book Equity	page 23
Credit Derivative Positions (notional amounts)	page 24
Derivatives Financial Instruments According to Basel Definition	page 25
Over The Counter Derivatives Financial Instruments Settled by Central Counterparties	page 26
Aggregate Amount of Securitization Exposures	page 27
Capital Requirements for Securitization Exposures Under Securitization Framework	page 28
Asset Securitization - Managed Loans	page 29
Glossary	page 30



Regulatory Capital and Capital Ratios under Basel III⁽¹⁾

		Reference ⁽²⁾	2017			2016			
			Q3	Q2	Q1	Q4	Q3	Q2	Q1
(unaudited) (millions of Canadian dollars)			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'	2,874	2,850	2,820	2,718	2,663	2,689	2,691
2	Retained earnings	b	7,540	7,164	7,065	6,706	6,683	6,530	6,593
3	Accumulated other comprehensive income and other reserves	c	122	221	173	218	217	145	91
5	Common share capital issued by subsidiaries and held by third parties (amount allowed in group CET1)	d	7	7	7	7	7	–	–
6	Common Equity Tier 1 capital before regulatory adjustments		10,543	10,242	10,065	9,649	9,570	9,364	9,375
Regulatory adjustments to Common Equity Tier 1 capital									
8	Goodwill (net of related tax liability)	e	1,660	1,677	1,662	1,669	1,661	1,545	1,557
9	Intangible assets other than mortgage-servicing rights	f - x	1,032	1,016	997	985	977	954	898
11	Accumulated other comprehensive income related to cash flow hedges	h	136	91	131	135	165	160	124
12	Shortfall of total provisions to expected losses	i	–	–	–	–	–	–	12
14	Gains (losses) due to changes in own credit risk on fair valued liabilities	j	(32)	(25)	(17)	(14)	(2)	(1)	28
15	Defined benefit pension plan assets (net of related tax liability)	k - y	14	7	18	7	8	30	13
16	Investments in own shares (if not already netted off contributed surplus on reported balance sheet)		–	6	6	2	3	7	–
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		2,810	2,772	2,797	2,784	2,812	2,695	2,632
29	Common Equity Tier 1 capital (CET1)		7,733	7,470	7,268	6,865	6,758	6,669	6,743
Additional Tier 1 capital: instruments									
30	Directly issued qualifying Additional Tier 1 instruments plus related contributed surplus ⁽³⁾	v	1,850	1,450	1,450	1,450	1,450	1,050	1,050
31	of which: classified as equity under applicable accounting standards	v + z	1,850	1,450	1,450	1,450	1,450	1,050	1,050
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⁾	p' + v'	950	950	950	950	950	1,162	1,161
34	Additional Tier 1 instruments (and CET1 instruments not included in row 5) issued by subsidiaries and held by third parties (amount allowed in group AT1)	q	2	2	1	1	1	–	–
36	Additional Tier 1 capital before regulatory adjustments		2,802	2,402	2,401	2,401	2,401	2,212	2,211
Additional Tier 1 capital: regulatory adjustments									
41	Other deductions from Tier 1 capital as determined by OSFI		1	1	1	1	1	1	–
41a	of which: Reverse mortgages		1	1	1	1	1	1	–
43	Total regulatory adjustments to Additional Tier 1 capital		1	1	1	1	1	1	–
44	Additional Tier 1 capital (AT1)		2,801	2,401	2,400	2,400	2,400	2,211	2,211
45	Tier 1 capital (T1 = CET1 + AT1)		10,534	9,871	9,668	9,265	9,158	8,880	8,954
Tier 2 capital: instruments and provisions									
47	Directly issued capital instruments subject to phase out from Tier 2 ⁽³⁾	r'	9	10	1,009	1,009	1,009	1,009	1,010
48	Tier 2 instruments (and CET1 and AT1 instruments not included in rows 5 or 34) issued by subsidiaries and held by third parties (amount allowed in group Tier 2)	s	2	2	2	2	2	–	–
50	Allowances on loans ⁽⁴⁾	t	210	204	234	230	236	275	33
51	Tier 2 capital before regulatory adjustments		221	216	1,245	1,241	1,247	1,284	1,043
Tier 2 capital: regulatory adjustments									
57	Total regulatory adjustments to Tier 2 capital		–	–	–	–	–	–	–
58	Tier 2 capital (T2)		221	216	1,245	1,241	1,247	1,284	1,043
59	Total capital (TC = T1 + T2)		10,755	10,087	10,913	10,506	10,405	10,164	9,997

(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) 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)

		2017			2016			
		Q3	Q2	Q1	Q4	Q3	Q2	Q1
(unaudited) (millions of Canadian dollars)		All-in basis						
60a	Common Equity Tier 1 Capital RWA (CET1)	69,156	69,383	68,574	68,205	68,530	68,375	69,741
60b	Tier 1 Capital RWA	69,289	69,533	68,715	68,430	68,765	68,604	70,006
60c	Total capital RWA	69,396	69,653	68,828	68,623	68,966	68,800	70,233
Capital ratios								
61	Common Equity Tier 1 (as a percentage of risk weighted assets)	11.2%	10.8%	10.6%	10.1%	9.9%	9.8%	9.7%
62	Tier 1 (as a percentage of risk weighted assets)	15.2%	14.2%	14.1%	13.5%	13.3%	12.9%	12.8%
63	Total capital (as a percentage of risk weighted assets)	15.5%	14.5%	15.9%	15.3%	15.1%	14.8%	14.2%
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%	8.0%	8.0%	8.0%	8.0%	8.0%
67	of which: G-SIB buffer requirement	na	na	na	na	na	na	na
67a	of which: D-SIBs buffer requirement	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
68	Common Equity Tier 1 available to meet buffers (as a percentage of risk weighted assets)	11.2%	10.8%	10.6%	10.1%	9.9%	9.8%	9.7%
OSFI all-in target								
69	Common Equity Tier 1 all-in target ratio	8.0%	8.0%	8.0%	8.0%	8.0%	8.0%	8.0%
70	Tier 1 capital all-in target ratio	9.5%	9.5%	9.5%	9.5%	9.5%	9.5%	9.5%
71	Total capital all-in target ratio	11.5%	11.5%	11.5%	11.5%	11.5%	11.5%	11.5%
Amounts below the thresholds for deduction (before risk weighting)								
72	Non-significant investments in the capital of other financial institutions	459	317	232	238	234	255	198
73	Significant investments in the common stock of financial institutions	237	238	257	245	229	278	321
75	Deferred tax assets arising from temporary differences (net of related tax liabilities)	31	61	22	54	31	24	467
Applicable caps on the inclusion of allowances in Tier 2								
76	Allowance eligible for inclusion in Tier 2 in respect of exposures subject to standardised approach (prior to application of cap)	60	55	58	62	65	51	33
77	Cap on inclusion of allowances in Tier 2 under standardised approach	77	72	72	78	81	58	66
78	Allowance eligible for inclusion in Tier 2 in respect of exposures subject to internal ratings-based approach (prior to application of cap) ⁽²⁾	150	149	175	167	171	224	–
79	Cap on inclusion of allowances in Tier 2 under internal ratings-based approach	304	312	301	305	304	310	317
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	968	968	968	1,162	1,162	1,162	1,162
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	1,191	1,191	1,191	1,429	1,429	1,429	1,429
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)	8,284	8,009	7,809	7,928	7,819	7,710	7,769
45	Tier 1 capital (T1 = CET1 + AT1)	10,741	10,074	9,876	9,660	9,554	9,296	9,355
59	Total capital (TC = T1 + T2)	10,961	10,289	11,120	10,900	10,801	10,580	10,395
60	Total risk weighted assets	71,481	70,428	69,567	70,524	70,132	69,947	71,468
61	Common Equity Tier 1 (as a percentage of risk weighted assets)	11.6%	11.4%	11.2%	11.2%	11.2%	11.0%	10.9%
62	Tier 1 (as a percentage of risk weighted assets)	15.0%	14.3%	14.2%	13.7%	13.6%	13.3%	13.1%
63	Total capital (as a percentage of risk weighted assets)	15.3%	14.6%	16.0%	15.5%	15.4%	15.1%	14.6%

(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) 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)

		2017			2016			
		Q3	Q2	Q1	Q4	Q3	Q2	Q1
Accounting assets vs. leverage ratio exposure – Transitional basis								
1	Total consolidated assets as per published financial statements	240,072	239,020	234,119	232,206	229,896	220,734	219,301
2	Adjustment for investments in banking, financial, insurance or commercial entities that are consolidated for accounting purposes but outside the scope of regulatory consolidation	(68)	(90)	(60)	(72)	(76)	(89)	(53)
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⁾	519	2,280	1,621	725	1,348	1,091	567
5	Adjustment for securities financing transactions ⁽¹⁾	2,086	3,408	3,062	2,587	1,220	1,832	1,826
6	Adjustment for off balance-sheet items	22,407	22,644	22,048	21,937	20,294	19,996	19,599
7	Other adjustments	(4,489)	(4,674)	(3,950)	(3,888)	(4,010)	(3,767)	(3,968)
8	Leverage Ratio Exposure (transitional basis)	260,527	262,588	256,840	253,495	248,672	239,797	237,272
Leverage ratio common disclosure								
On-balance sheet exposures								
1	On-balance sheet items (excluding derivatives, SFTs and grandfathered securitization exposures but including collateral)	211,909	210,621	208,226	206,283	202,407	193,238	188,359
2	(Asset amounts deducted in determining Basel III transitional Tier 1 capital)	(2,634)	(2,592)	(2,304)	(2,402)	(2,421)	(2,301)	(2,238)
3	Total on-balance sheet exposures (excluding derivatives and SFTs) (sum of lines 1 and 2)	209,275	208,029	205,922	203,881	199,986	190,937	186,121
Derivative exposures								
4	Replacement cost associated with all derivative transactions (i.e., net of eligible cash variation margin)	3,551	3,974	4,405	4,755	4,828	6,337	7,318
5	Add-on amounts for PFE associated with all derivative transactions	6,597	7,044	6,624	6,386	6,417	6,272	6,262
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	12	7	-	-	1,046	663	518
10	(Adjusted effective notional offsets and add-on deductions for written credit derivatives)	-	-	-	-	-	-	-
11	Total derivative exposures (sum of lines 4 to 10)	10,160	11,025	11,029	11,141	12,291	13,272	14,098
Securities financing transaction exposures								
12	Gross SFT assets recognised for accounting purposes (with no recognition of netting), after adjusting for sale accounting transactions	16,600	17,481	14,779	13,948	14,880	13,760	15,628
13	(Netted amounts of cash payables and cash receivables of gross SFT assets)	(1,211)	(583)	(815)	(314)	(1,270)	(246)	(337)
14	Counterparty credit risk (CCR) exposure for SFTs	3,296	3,990	3,877	2,901	2,490	2,078	2,163
15	Agent transaction exposures	-	-	-	-	-	-	-
16	Total securities financing transaction exposures (sum of lines 12 to 15)	18,685	20,888	17,841	16,535	16,100	15,592	17,454
Other off-balance sheet exposures								
17	Off-balance sheet exposure at gross notional amount	62,996	63,451	61,284	60,191	57,378	57,018	55,485
18	(Adjustments for conversion to credit equivalent amounts)	(40,589)	(40,807)	(39,236)	(38,253)	(37,084)	(37,022)	(35,886)
19	Off-balance sheet items (sum of lines 17 and 18)	22,407	22,644	22,048	21,938	20,294	19,996	19,599
Capital and Total Exposures - Transitional Basis								
20	Tier 1 capital	10,741	10,074	9,876	9,660	9,554	9,296	9,355
21	Total Exposures (sum of lines 3, 11, 16 and 19)	260,527	262,586	256,840	253,495	248,671	239,797	237,272
Leverage Ratio – Transitional Basis								
22	Basel III leverage ratio	4.1%	3.8%	3.8%	3.8%	3.8%	3.9%	3.9%
All-in basis (Required by OSFI)								
23	Tier 1 capital – All-in basis	10,534	9,871	9,668	9,265	9,158	8,880	8,954
24	(Regulatory adjustments)	(2,843)	(2,798)	(2,814)	(2,800)	(2,816)	(2,697)	(2,604)
25	Total Exposures	260,318	262,382	256,330	253,097	248,276	239,401	236,906
26	Leverage ratio – All-in basis	4.0%	3.8%	3.8%	3.7%	3.7%	3.7%	3.8%

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



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

(unaudited) (millions of Canadian dollars)	Q3 2017				
	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		10,462	-	10,462	
Securities		62,521	10,246	72,767	
Assets purchased under reverse repurchase agreements and securities borrowed		16,600	-	16,600	
Loans					
Residential mortgage		50,276	(25,971)	24,305	
Personal and credit card		36,435	(1,389)	35,046	
Business and government		41,241	-	41,241	
Customers' liability under acceptances		5,982	-	5,982	
Less: Allowances for credit losses		(767)	-	(767)	
Allowances reflected in Tier 2 regulatory capital ⁽⁵⁾	t				(210)
Shortfall of allowances to expected loss	l				-
Allowances not reflected in regulatory capital					(557)
Other assets					
Derivative financial instruments		9,641	-	9,641	
Other		7,681	(64)	7,617	
Goodwill	e				1,660
Intangibles assets	f				1,195
Deferred tax assets					513
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					483
Deferred tax assets - other temporary differences					30
Defined-benefit pension fund net assets	k				19
Significant Investments in other financial institutions					237
Significant investments exceeding regulatory thresholds	m + n				-
Significant investments not exceeding regulatory thresholds					237
Other					3,993
Total assets		240,072	(17,178)	222,894	
Liabilities					
Deposits		152,310	-	152,310	
Derivatives financial instruments		7,880	-	7,880	
Other liabilities		66,501	(17,178)	49,323	
Gains and losses due to changes in own credit risk on fair value liabilities	j				(64)
Deferred tax liabilities					158
Related to goodwill	w				-
Related to intangibles	x				163
Related to pensions	y				5
Other deferred tax liabilities					(10)
Other					49,209
Subordinated debt		9	-	9	
Regulatory capital amortization of maturing debentures					-
Fair value adjustment and unamortized issuance cost					-
Subordinated debentures used for regulatory capital					9
Allowed for inclusion in Tier 2 capital	r				-
Subject to phase out	r'				9
Ineligible additional Tier 2 capital					-
Excluded from Tier 2 capital due to cap					-
Total liabilities		226,700	(17,178)	209,522	
Equity Attributable to Shareholders		12,586	-	12,586	
Common shares	a				2,816
Contributed surplus	a'				58
Retained Earnings	b				7,540
Accumulated Other Comprehensive Income (loss)	c				122
Net gains (losses) on instruments designated as cash flow hedges	h				136
Other					(14)
Preferred shares					2,050
Allowed for inclusion in additional Tier 1 capital	v				1,850
Subject to phase out	v'				200
Ineligible additional Tier 1 capital					-
Excluded from additional Tier 1 capital due to cap					-
Non-controlling interests		786	(20)	766	
Innovative Instruments					755
Allowed for inclusion in additional Tier 1 capital					-
Subject to phase out	p'				750
Excluded from additional Tier 1 capital due to cap					-
Other					5
Portion allowed for inclusion into CET1	d				7
Portion allowed for inclusion into Tier 1 capital	q				2
Portion allowed for inclusion into Tier 2 capital	s				2
Portion not allowed for regulatory capital					-
Total Equity		13,372	(20)	13,352	
Total Liabilities and Equity		240,072	(17,198)	222,874	

(1) The basis of consolidation used for financial accounting purposes, described in note 1 to the 2016 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 \$171 million and \$18 million respectively.

(4) The amount is mainly due to securitization entities. For more information on structured entities, please see pages 178 to 181 of the 2016 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)	2017						2016					
	Exposure at default	Q3				Capital requirement ⁽²⁾	Q2	Q1	Q4	Q3	Q2	Q1
		Standardized	AIRB Approach	Other	Total							
Credit risk												
Retail												
Residential mortgages	47,198	849	4,789	–	5,638	451	5,472	5,392	5,455	5,448	5,027	5,265
Qualifying revolving retail	6,027	–	1,210	–	1,210	97	1,190	1,155	1,178	1,227	1,152	1,011
Other retail	16,556	2,423	5,136	–	7,559	605	7,601	7,280	6,823	6,874	6,705	6,692
Non-retail												
Corporate	62,311	1,821	25,148	–	26,969	2,157	27,810	27,226	27,393	26,001	26,869	27,196
Sovereign	25,737	287	724	–	1,011	81	891	857	875	849	580	658
Financial institutions	5,470	311	1,220	–	1,531	122	1,639	1,473	1,574	1,371	1,315	1,209
Banking book equity ⁽³⁾	932	–	932	–	932	75	872	886	875	866	834	835
Securitization	5,152	–	423	–	423	34	402	304	831	785	781	795
Other assets	25,288	–	–	3,455	3,455	276	3,232	3,137	3,176	3,458	3,256	3,587
Counterparty credit risk												
Corporate	12,574	33	123	–	156	12	238	209	347	119	91	94
Sovereign	33,602	–	50	–	50	4	32	33	34	18	17	14
Financial institutions	47,850	–	508	–	508	41	510	436	402	1,683	1,204	1,415
Trading portfolio	8,168	118	2,033	–	2,151	172	2,183	2,190	2,345	2,496	2,659	2,897
Credit valuation adjustment charge ⁽⁴⁾		1,916	–	–	1,916	153	2,159	2,030	2,055	2,145	2,090	2,423
Regulatory scaling factor		–	2,557	–	2,557	205	2,624	2,540	2,540	2,508	2,570	2,593
Total - Credit risk	296,865	7,758	44,853	3,455	56,066	4,485	56,855	55,148	55,903	55,848	55,150	56,684
Market risk												
VaR		–	972	–	972	78	962	1,340	1,014	1,097	1,319	1,266
Stressed VaR		–	1,630	–	1,630	130	1,086	1,632	1,067	1,512	1,972	1,707
Interest-rate specific risk		661	–	–	661	53	720	843	726	682	680	806
Total - Market risk		661	2,602	–	3,263	261	2,768	3,815	2,807	3,291	3,971	3,779
Operational risk		9,827	–	–	9,827	786	9,760	9,611	9,495	9,391	9,254	9,278
Total	296,865	18,246	47,455	3,455	69,156	5,532	69,383	68,574	68,205	68,530	68,375	69,741
Capital ratio under Basel III												
Common Equity Tier 1 (CET1)					11.2%		10.8%	10.6%	10.1%	9.9%	9.8%	9.7%
Tier 1					15.2%		14.2%	14.1%	13.5%	13.3%	12.9%	12.8%
Total					15.5%		14.5%	15.9%	15.3%	15.1%	14.8%	14.2%
Leverage ratio under Basel III					4.0%		3.8%	3.8%	3.7%	3.7%	3.7%	3.8%

(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.



Risk-Weighted Assets Movement by Key Drivers⁽¹⁾

(unaudited) (millions of Canadian dollars)	2017					2016			
	Q3			Q2	Q1	Q4	Q3	Q2	Q1
	Non-counterparty credit risk	Counterparty credit risk ⁽²⁾	Total	Total	Total	Total	Total	Total	Total
Credit risk – Risk-weighted assets at beginning	51,733	5,122	56,855	55,148	55,903	55,848	55,150	56,684	55,743
Book size	770	(317)	453	889	455	640	(414)	(368)	631
Book quality	(280)	137	(143)	176	(832)	68	(135)	(41)	(411)
Model updates	–	–	–	–	–	(954)	–	8	–
Methodology and policy	–	–	–	–	–	–	–	–	–
Acquisitions and disposals	–	–	–	–	–	–	790	–	–
Foreign exchange movements	(938)	(161)	(1,099)	642	(378)	301	457	(1,133)	721
Credit risk – Risk-weighted assets at end	51,285	4,781	56,066	56,855	55,148	55,903	55,848	55,150	56,684
Market risk – Risk-weighted assets at beginning			2,768	3,815	2,807	3,291	3,971	3,779	3,965
Movement in risk levels ⁽³⁾			353	(1,047)	1,008	(484)	(680)	192	(186)
Model updates			142	–	–	–	–	–	–
Methodology and policy			–	–	–	–	–	–	–
Acquisitions and disposals			–	–	–	–	–	–	–
Market risk – Risk-weighted assets at end			3,263	2,768	3,815	2,807	3,291	3,971	3,779
Operational risk – Risk-weighted assets at beginning			9,760	9,611	9,495	9,391	9,254	9,278	9,127
Movement in risk levels			67	149	116	104	137	(24)	151
Acquisitions and disposals			–	–	–	–	–	–	–
Operational risk – Risk-weighted assets at end			9,827	9,760	9,611	9,495	9,391	9,254	9,278
Risk-weighted assets at end			69,156	69,383	68,574	68,205	68,530	68,375	69,741

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

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

(3) Also includes foreign exchange movements that are not considered material.



Reconciliation of Balance Sheet with Credit Risk Exposures

(unaudited) (millions of Canadian dollars)	Q3 2017							
	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⁾	9,646	-	-	-	-	-	816	10,462
Securities								
At fair value through profit or loss	7,426	-	-	-	-	37,775	-	45,201
Available-for-sale	8,598	-	-	-	-	-	124	8,722
Held-to-maturity	8,598	-	-	-	-	-	-	8,598
	24,622	-	-	-	-	37,775	124	62,521
Securities purchased under reverse repurchase agreements and securities borrowed	-	-	-	16,600	-	-	-	16,600
Loans								
Residential mortgage ⁽³⁾	29,376	20,900	-	-	-	-	-	50,276
Personal and credit card	-	35,046	1,389	-	-	-	-	36,435
Business and government	39,439	1,802	-	-	-	-	-	41,241
	68,815	57,748	1,389	-	-	-	-	127,952
Customers' liability under acceptances	5,982	-	-	-	-	-	-	5,982
Allowance for credit losses ⁽⁴⁾	(155)	(35)	-	-	-	-	(577)	(767)
	74,642	57,713	1,389	-	-	-	(577)	133,167
Other								
Derivative financial instruments ⁽²⁾	-	-	-	-	9,641	-	-	9,641
Purchase receivables	-	835	-	-	-	-	843	1,678
Investments in associates and joint ventures	-	-	-	-	-	-	640	640
Premises and equipment	-	191	-	-	-	-	483	674
Goodwill	-	-	-	-	-	-	1,403	1,403
Intangible assets	-	-	-	-	-	-	1,195	1,195
Other assets	-	-	-	-	-	-	2,091	2,091
	-	1,026	-	-	9,641	-	6,655	17,322
	108,910	58,739	1,389	16,600	9,641	37,775	7,018	240,072

(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)		2017																							
		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	-	-	1,788	21	519	73	-	2,401	-	-	1,673	25	460	83	-	2,241	-	-	1,511	27	470	83	-	2,091	
Other retail	-	-	-	-	5,872	-	-	5,872	-	-	-	-	5,948	-	-	5,948	-	-	-	-	5,748	-	-	-	5,748
	-	-	1,788	21	6,391	73	-	8,273	-	-	1,673	25	6,408	83	-	8,189	-	-	1,511	27	6,218	83	-	7,839	
Non-Retail																									
Corporate	-	-	-	-	-	4,395	-	4,395	-	-	-	-	-	4,555	-	4,555	-	-	-	-	-	4,897	-	4,897	
Sovereign	300	-	-	33	-	272	-	605	362	-	-	33	-	249	-	644	312	-	-	-	26	-	212	-	550
Financial Institutions	-	331	-	-	-	228	11	570	-	349	-	-	-	150	13	512	-	310	-	-	-	122	15	447	
	300	331	-	33	-	4,895	11	5,570	362	349	-	33	-	4,954	13	5,711	312	310	-	26	-	5,231	15	5,894	
Trading	4	-	-	-	-	121	-	125	11	-	-	-	-	202	-	213	11	-	-	-	-	106	-	117	
Total	304	331	1,788	54	6,391	5,089	11	13,968	373	349	1,673	58	6,408	5,239	13	14,113	323	310	1,511	53	6,218	5,420	15	13,850	

(unaudited) (millions of Canadian dollars)		2016																							
		Q4								Q3								Q2							
		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	47	-	1,598	27	311	87	-	2,070	-	-	2,148	14	268	92	-	2,522	-	-	959	14	278	89	-	1,340	
Other retail	-	-	-	-	5,189	-	-	5,189	-	-	-	-	5,200	-	-	5,200	-	-	-	-	5,061	-	-	5,061	
	47	-	1,598	27	5,500	87	-	7,259	-	-	2,148	14	5,468	92	-	7,722	-	-	959	14	5,339	89	-	6,401	
Non-Retail																									
Corporate	-	50	-	-	-	5,105	-	5,155	-	-	-	-	-	4,911	-	4,911	-	-	-	-	-	4,557	1	4,558	
Sovereign	396	-	-	-	-	223	-	619	255	-	-	-	-	193	-	448	358	-	-	-	-	-	-	358	
Financial Institutions	-	266	-	-	-	228	16	510	-	499	-	-	-	215	30	744	-	555	-	-	-	42	-	597	
	396	316	-	-	-	5,556	16	6,284	255	499	-	-	-	5,319	30	6,103	358	555	-	-	-	4,599	1	5,513	
Trading	10	-	-	-	-	249	-	259	9	-	-	-	-	221	-	230	6	-	-	-	-	506	-	512	
Total	453	316	1,598	27	5,500	5,892	16	13,802	264	499	2,148	14	5,468	5,632	30	14,055	364	555	959	14	5,339	5,194	1	12,426	

(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)	2017																	
	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	40,891	6,307	–	–	–	47,198	38,588	6,146	–	–	–	44,734	38,696	6,124	–	–	–	44,820
Qualifying revolving retail	2,797	3,230	–	–	–	6,027	2,772	3,072	–	–	–	5,844	2,719	2,914	–	–	–	5,633
Other retail	15,086	1,412	–	–	58	16,556	14,990	1,370	–	–	88	16,448	14,585	1,334	–	–	88	16,007
	58,774	10,949	–	–	58	69,781	56,350	10,588	–	–	88	67,026	56,000	10,372	–	–	88	66,460
Non-retail																		
Corporate	44,022	15,368	12,559	15	2,921	74,885	42,130	16,610	13,583	20	2,845	75,188	41,001	15,607	14,313	15	2,833	73,769
Sovereign	21,834	3,773	33,267	335	130	59,339	22,962	3,712	35,058	316	139	62,187	23,401	3,945	35,413	305	131	63,195
Financial Institutions	4,624	221	47,414	437	624	53,320	4,214	227	52,107	426	723	57,697	4,214	199	43,963	456	688	49,520
	70,480	19,362	93,240	787	3,675	187,544	69,306	20,549	100,748	762	3,707	195,072	68,616	19,751	93,689	776	3,652	186,484
Trading book	–	–	–	8,168	–	8,168	–	–	–	9,129	–	9,129	–	–	–	9,174	–	9,174
Securitization	–	–	–	–	5,152	5,152	–	–	–	–	4,836	4,836	–	–	–	–	3,732	3,732
Total - Gross Credit Risk	129,254	30,311	93,240	8,955	8,885	270,645	125,656	31,137	100,748	9,891	8,631	276,063	124,616	30,123	93,689	9,950	7,472	265,850
Standardized Approach	11,268	244	1,904	134	418	13,968	10,968	76	2,354	230	485	14,113	10,799	71	2,378	126	476	13,850
AIRB Approach⁽²⁾	117,986	30,067	91,336	8,821	8,467	256,677	114,688	31,061	98,394	9,661	8,146	261,950	113,817	30,052	91,311	9,824	6,996	252,000
Total - Gross Credit Risk	129,254	30,311	93,240	8,955	8,885	270,645	125,656	31,137	100,748	9,891	8,631	276,063	124,616	30,123	93,689	9,950	7,472	265,850
Adjustment to exposure for collateral																		
Standardized Approach	–	–	(1,879)	(3)	–	(1,882)	–	–	(2,309)	(10)	–	(2,319)	–	–	(2,320)	(5)	–	(2,325)
AIRB Approach⁽²⁾	–	–	(86,034)	–	–	(86,034)	–	–	(92,119)	–	–	(92,119)	–	–	(85,152)	–	–	(85,152)
Total - Net Credit Risk	129,254	30,311	5,327	8,952	8,885	182,729	125,656	31,137	6,320	9,881	8,631	181,625	124,616	30,123	6,217	9,945	7,472	178,373
(unaudited) (millions of Canadian dollars)	2016																	
	Q4						Q3						Q2					
	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	40,600	5,978	–	–	–	46,578	41,590	5,977	–	–	–	47,567	38,577	5,859	–	–	–	44,436
Qualifying revolving retail	2,795	2,921	–	–	–	5,716	2,763	2,929	–	–	–	5,692	2,688	2,754	–	–	–	5,442
Other retail	13,980	1,301	–	–	93	15,374	14,014	1,279	–	–	13	15,306	13,709	1,253	–	–	13	14,975
	57,375	10,200	–	–	93	67,668	58,367	10,185	–	–	13	68,565	54,974	9,866	–	–	13	64,853
Non-retail																		
Corporate	40,956	14,416	14,418	27	2,890	72,707	41,348	13,376	6,842	11	2,824	64,401	40,855	13,360	4,588	7	2,710	61,520
Sovereign	23,068	3,623	30,559	328	135	57,113	24,345	3,592	14,956	301	108	43,302	19,032	3,829	12,175	321	107	35,464
Financial Institutions	4,074	252	36,835	324	609	42,094	3,398	347	58,296	463	558	63,062	3,793	344	50,981	640	633	56,391
	68,098	18,291	81,812	679	3,634	172,514	69,091	17,315	80,094	775	3,490	170,765	63,680	17,533	67,744	968	3,450	153,375
Trading book	–	–	–	9,623	–	9,623	–	–	–	9,683	–	9,683	–	–	–	10,607	–	10,607
Securitization	616	–	–	–	3,452	4,068	636	–	–	–	2,541	3,177	634	–	–	–	2,444	3,078
Total - Gross Credit Risk	126,089	28,491	81,812	10,302	7,179	253,873	128,094	27,500	80,094	10,458	6,044	252,190	119,288	27,399	67,744	11,575	5,907	231,913
Standardized Approach	10,458	277	2,294	282	491	13,802	10,851	455	2,058	238	453	14,055	9,295	407	1,796	518	410	12,426
AIRB Approach⁽²⁾	115,631	28,214	79,518	10,020	6,688	240,071	117,243	27,045	78,036	10,220	5,591	238,135	109,993	26,992	65,948	11,057	5,497	219,487
Total - Gross Credit Risk	126,089	28,491	81,812	10,302	7,179	253,873	128,094	27,500	80,094	10,458	6,044	252,190	119,288	27,399	67,744	11,575	5,907	231,913
Adjustment to exposure for collateral																		
Standardized Approach	–	–	(2,152)	(36)	–	(2,188)	–	–	(2,000)	(32)	–	(2,032)	–	–	(1,764)	(400)	–	(2,164)
AIRB Approach⁽²⁾	–	–	(74,517)	–	–	(74,517)	–	–	(66,866)	–	–	(66,866)	–	–	(56,595)	–	–	(56,595)
Total - Net Credit Risk	126,089	28,491	5,143	10,266	7,179	177,168	128,094	27,500	11,228	10,426	6,044	183,292	119,288	27,399	9,385	11,175	5,907	173,154

(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⁾

			2017								
			Q3								
			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%	851	–	100%	0.07%	17.0%	3.0%	27	0.1	3%
	Very low	0.145% - 0.506%	1,051	–	100%	0.31%	11.0%	6.0%	58	0.3	6%
	Low	0.507% - 1.116%	825	–	100%	0.78%	6.0%	6.0%	53	0.4	7%
	Low	1.117% - 2.681%	565	–	100%	1.72%	4.0%	7.0%	39	0.4	8%
	Medium	2.682% - 9.348%	323	–	100%	4.64%	3.0%	9.0%	28	0.4	10%
	High	9.349% - 99.99%	91	–	100%	27.23%	3.0%	14.0%	13	0.6	23%
	Default	100.00%	61	–	100%	100.00%	3.0%	25.0%	15	1.0	44%
				3,767	–	100%	3.20%	9.0%	6.0%	233	3.2
Uninsured Undrawn ⁽⁴⁾	Exceptionally low	0.000% - 0.144%	4,287	9,951	57%	0.05%	23.0%	3.0%	135	0.5	3%
	Very low	0.145% - 0.506%	1,780	4,034	72%	0.26%	23.0%	11.0%	202	1.2	12%
	Low	0.507% - 1.116%	170	200	88%	0.71%	24.0%	24.0%	41	0.3	26%
	Low	1.117% - 2.681%	36	43	89%	1.67%	24.0%	41.0%	15	0.1	46%
	Medium	2.682% - 9.348%	11	13	83%	4.32%	24.0%	72.0%	8	0.1	85%
	High	9.349% - 99.99%	1	1	85%	18.59%	24.0%	132.0%	1	–	192%
	Default	100.00%	1	2	61%	100.00%	23.0%	283.0%	3	–	283%
				6,286	14,244	62%	0.16%	23.0%	6.0%	405	2.2
Uninsured Drawn ⁽⁵⁾	Exceptionally low	0.000% - 0.144%	17,179			0.07%	23.0%	4.0%	695	2.8	4%
	Very low	0.145% - 0.506%	12,880			0.27%	25.0%	12.0%	1,606	8.8	13%
	Low	0.507% - 1.116%	3,187			0.71%	26.0%	25.0%	809	5.8	28%
	Low	1.117% - 2.681%	867			1.68%	26.0%	44.0%	385	3.7	50%
	Medium	2.682% - 9.348%	412			4.65%	25.0%	78.0%	320	4.8	92%
	High	9.349% - 99.99%	164			26.54%	25.0%	136.0%	223	11.1	222%
	Default	100.00%	54			100.00%	26.0%	207.0%	113	8.6	405%
				34,743			0.58%	24.0%	12.0%	4,151	45.6
Qualifying revolving credit	Exceptionally low	0.000% - 0.144%	3,139	5,431	60%	0.05%	73.0%	2.0%	76	1.2	3%
	Very low	0.145% - 0.506%	1,137	916	81%	0.29%	75.0%	11.0%	121	2.5	13%
	Low	0.507% - 1.116%	653	298	90%	0.78%	73.0%	23.0%	150	3.7	30%
	Low	1.117% - 2.681%	587	185	96%	1.79%	80.0%	47.0%	278	8.5	65%
	Medium	2.682% - 9.348%	407	56	102%	4.54%	81.0%	90.0%	366	14.6	135%
	High	9.349% - 99.99%	82	4	103%	21.55%	76.0%	190.0%	155	14.1	406%
	Default	100.00%	22	–	103%	100.00%	59.0%	294.0%	64	10.2	875%
				6,027	6,890	74%	1.30%	75.0%	20.0%	1,210	54.8
Other retail ⁽⁶⁾	Exceptionally low	0.000% - 0.144%	2,387	1,626	83%	0.07%	43.0%	7.0%	176	0.7	8%
	Very low	0.145% - 0.506%	2,963	429	97%	0.30%	54.0%	28.0%	831	4.8	30%
	Low	0.507% - 1.116%	2,553	338	98%	0.78%	61.0%	55.0%	1,405	12.2	61%
	Low	1.117% - 2.681%	1,702	123	98%	1.72%	65.0%	80.0%	1,354	19.1	94%
	Medium	2.682% - 9.348%	776	60	98%	4.42%	65.0%	95.0%	736	22.2	131%
	High	9.349% - 99.99%	199	6	99%	20.57%	63.0%	135.0%	269	26.1	299%
	Default	100.00%	105	3	99%	100.00%	57.0%	349.0%	365	36.1	781%
				10,685	2,585	94%	2.24%	56.0%	48.0%	5,136	121.2
			61,508	23,719	86%	1.06%	33.0%	18.0%	11,135	227.0	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.

Credit Quality of AIRB Exposure - Retail Portfolios⁽¹⁾

			2017								
			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⁾
(unaudited) (millions of Canadian dollars)	Risk Grade	PD bands									
Canadian residential mortgage and HELOCs											
Insured Drawn and Undrawn⁽³⁾	Exceptionally low	0.000% - 0.144%	841	-	100%	0.07%	17.5%	3.1%	26	0.1	3%
	Very low	0.145% - 0.506%	864	-	100%	0.30%	10.1%	5.0%	43	0.2	5%
	Low	0.507% - 1.116%	498	-	100%	0.77%	5.4%	5.5%	27	0.2	6%
	Low	1.117% - 2.681%	331	-	100%	1.74%	3.4%	5.9%	20	0.2	7%
	Medium	2.682% - 9.348%	201	-	100%	4.60%	2.7%	8.3%	17	0.2	10%
	High	9.349% - 99.99%	96	-	100%	28.06%	2.6%	13.8%	13	0.8	23%
	Default	100.00%	68	-	100%	100.00%	2.7%	24.5%	17	1.0	43%
			2,899	-	100%	4.04%	9.7%	5.6%	163	2.7	7%
Uninsured Undrawn⁽⁴⁾	Exceptionally low	0.000% - 0.144%	4,257	9,902	56%	0.05%	22.5%	3.1%	133	0.5	3%
	Very low	0.145% - 0.506%	1,667	3,877	71%	0.26%	23.5%	11.4%	190	1.0	12%
	Low	0.507% - 1.116%	150	181	86%	0.71%	24.1%	23.9%	36	0.3	26%
	Low	1.117% - 2.681%	35	42	85%	1.63%	24.1%	41.2%	14	0.1	46%
	Medium	2.682% - 9.348%	11	13	84%	4.03%	23.9%	69.4%	7	0.1	81%
	High	9.349% - 99.99%	1	1	91%	16.70%	25.0%	131.2%	2	0.1	186%
	Default	100.00%	1	2	76%	100.00%	23.9%	298.1%	4	-	298%
			6,122	14,018	61%	0.17%	22.8%	6.3%	386	2.1	7%
Uninsured Drawn⁽⁵⁾	Exceptionally low	0.000% - 0.144%	16,729			0.07%	22.7%	4.1%	680	2.7	4%
	Very low	0.145% - 0.506%	12,186			0.27%	25.4%	12.5%	1,527	8.3	13%
	Low	0.507% - 1.116%	3,022			0.72%	25.5%	25.5%	770	5.5	28%
	Low	1.117% - 2.681%	889			1.69%	25.7%	44.9%	400	3.9	50%
	Medium	2.682% - 9.348%	432			4.63%	25.5%	79.1%	342	5.1	94%
	High	9.349% - 99.99%	158			25.89%	26.6%	141.8%	224	11.1	229%
	Default	100.00%	56			100.00%	25.9%	200.9%	112	8.6	393%
			33,472			0.59%	24.1%	12.1%	4,055	45.2	14%
Qualifying revolving credit	Exceptionally low	0.000% - 0.144%	3,015	5,270	59%	0.05%	72.3%	2.4%	72	1.1	3%
	Very low	0.145% - 0.506%	1,087	868	80%	0.29%	74.4%	10.6%	115	2.3	13%
	Low	0.507% - 1.116%	646	292	90%	0.78%	73.1%	23.0%	149	3.7	30%
	Low	1.117% - 2.681%	591	183	96%	1.79%	79.5%	47.0%	278	8.4	65%
	Medium	2.682% - 9.348%	404	53	102%	4.53%	80.0%	89.1%	361	14.5	134%
	High	9.349% - 99.99%	79	4	103%	21.90%	75.8%	190.0%	151	14.1	410%
	Default	100.00%	22	-	105%	100.00%	59.6%	299.1%	64	10.0	881%
			5,844	6,670	74%	1.33%	74.1%	20.4%	1,190	54.1	32%
Other retail⁽⁶⁾	Exceptionally low	0.000% - 0.144%	2,344	1,584	83%	0.07%	42.1%	7.3%	171	0.6	8%
	Very low	0.145% - 0.506%	2,916	425	97%	0.30%	53.3%	27.8%	812	4.7	30%
	Low	0.507% - 1.116%	2,443	309	98%	0.78%	61.4%	55.5%	1,356	11.8	62%
	Low	1.117% - 2.681%	1,691	122	98%	1.73%	65.3%	80.2%	1,357	19.2	94%
	Medium	2.682% - 9.348%	810	57	98%	4.38%	64.0%	92.9%	752	22.6	128%
	High	9.349% - 99.99%	190	6	99%	20.66%	63.6%	137.5%	261	25.5	305%
	Default	100.00%	106	4	99%	100.00%	58.4%	382.0%	406	35.0	794%
			10,500	2,507	94%	2.28%	55.7%	48.7%	5,115	119.4	63%
			58,837	23,195	86%	1.09%	33.9%	18.5%	10,909	223.5	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)

		Q3 2017											Q2 2017						
		Corporate AIRB exposures by Internal PD grade																	
Internal Ratings grades	PD Range 0.000%	S&P rating equivalent	EAD Amount			Average PD (%)	Average LGD (%)	RWA	Percentage RWA (%)	EAD Amount			Average PD (%)	Average LGD (%)	RWA	Percentage RWA (%)			
			Drawn	Undrawn	Other	Total					Drawn	Undrawn	Other	Total					
1	0.000 - 0.035	AAA... AA-	66	42	38	146	0.03%	49.3%	7	5%	36	19	40	95	0.03%	39.3%	6	6%	
1.5	0.035 - 0.044	A+	55	11	229	295	0.04%	41.2%	17	6%	63	6	387	456	0.04%	42.4%	26	6%	
2	0.044 - 0.063	A	153	571	592	1,316	0.05%	52.5%	253	19%	146	577	618	1,341	0.05%	52.9%	257	19%	
2.5	0.063 - 0.103	A-	1,070	1,121	305	2,496	0.08%	46.0%	524	21%	1,269	1,281	266	2,816	0.08%	48.5%	647	23%	
3	0.103 - 0.170	BBB+	4,826	3,078	473	8,377	0.13%	37.4%	2,046	24%	3,897	2,834	480	7,211	0.13%	39.5%	1,883	26%	
3.5	0.170 - 0.280	BBB	6,993	3,137	437	10,567	0.22%	40.0%	3,586	34%	6,841	4,133	426	11,400	0.22%	40.8%	3,918	34%	
4	0.280 - 0.462	BBB-	7,250	3,180	683	11,113	0.36%	35.5%	4,352	39%	6,774	3,469	566	10,809	0.36%	34.2%	4,125	38%	
4.5	0.462 - 0.762	BB+	6,256	1,666	172	8,094	0.59%	35.4%	3,524	44%	6,212	1,545	194	7,951	0.59%	35.8%	3,394	43%	
5	0.762 - 1.256	BB	6,719	1,250	301	8,270	0.98%	34.8%	4,349	53%	6,637	1,253	390	8,280	0.98%	34.8%	4,236	51%	
5.5	1.256 - 2.070	BB-	3,220	438	87	3,745	1.61%	35.2%	2,278	61%	3,148	622	93	3,863	1.61%	36.2%	2,536	66%	
6	2.070 - 3.412	B+	2,117	297	109	2,523	2.66%	32.2%	1,819	72%	2,257	391	59	2,707	2.66%	33.7%	1,926	71%	
6.5	3.412 - 5.625	B	1,633	172	86	1,891	4.38%	20.6%	1,037	55%	1,478	187	151	1,816	4.38%	34.8%	1,877	103%	
7	5.625 - 9.272	B-	783	149	26	958	7.22%	30.1%	883	92%	694	205	8	907	7.22%	31.2%	882	97%	
7.5	9.272 - 15.284	CCC+	234	24	6	264	11.90%	22.0%	201	76%	268	29	6	303	11.90%	23.4%	248	82%	
8	15.284 - 25.195	CCC	47	9	—	56	19.62%	37.9%	90	161%	37	5	—	42	19.62%	30.4%	51	121%	
8.5	25.195 - 100	CCC-	38	1	—	40	32.35%	31.9%	56	140%	35	1	—	37	32.35%	43.0%	70	189%	
9	100	CC	390	—	—	390	100.00%	24.9%	249	64%	309	1	—	310	100.00%	26.9%	236	76%	
9.5	100	C	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
10	100	D	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Total			41,850	15,146	3,545	60,541	1.37%	36.5%	25,271	42%	40,101	16,558	3,685	60,344	1.25%	37.5%	26,318	44%	

		Q3 2017											Q2 2017						
		Sovereign AIRB exposures by Internal PD grade																	
Internal Ratings grades	PD Range 0.000%	S&P rating equivalent	EAD Amount			Average PD (%)	Average LGD (%)	RWA	Percentage RWA (%)	EAD Amount			Average PD (%)	Average LGD (%)	RWA	Percentage RWA (%)			
			Drawn	Undrawn	Other	Total					Drawn	Undrawn	Other	Total					
1	0.000 - 0.010	AAA... AA-	14,578	274	1,023	15,875	0.01%	5.6%	118	1%	15,759	295	940	16,994	0.01%	5.9%	149	1%	
1.5	0.010 - 0.019	A+	4,755	2,482	1,007	8,244	0.03%	12.9%	321	4%	4,605	2,646	848	8,099	0.01%	13.0%	229	3%	
2	0.019 - 0.033	A	1,579	961	73	2,613	0.04%	18.2%	168	6%	1,685	712	150	2,547	0.03%	17.8%	121	5%	
2.5	0.033 - 0.060	A-	84	1	231	316	0.07%	10.7%	11	3%	8	1	287	296	0.05%	10.8%	4	1%	
3	0.060 - 0.107	BBB+	—	—	740	740	0.12%	11.3%	28	4%	—	—	623	623	0.08%	0.1%	17	3%	
3.5	0.107 - 0.191	BBB	—	—	10	10	0.21%	11.6%	1	—	—	—	7	7	0.14%	11.6%	—	—	
4	0.191 - 0.342	BBB-	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
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	216	54	5	275	5.07%	14.1%	115	42%	245	57	12	314	4.69%	14.1%	127	40%	
7	6.276 - 11.231	B-	17	—	—	17	8.62%	18.5%	12	71%	17	—	—	17	8.40%	18.5%	12	71%	
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			21,229	3,772	3,089	28,090	0.06%	9.2%	774	3%	22,319	3,711	2,867	28,897	0.05%	9.2%	659	2%	

		Q3 2017											Q2 2017						
		Financial Institutions AIRB exposures by Internal PD grade																	
Internal Ratings grades	PD Range 0.000%	S&P rating equivalent	EAD Amount			Average PD (%)	Average LGD (%)	RWA	Percentage RWA (%)	EAD Amount			Average PD (%)	Average LGD (%)	RWA	Percentage RWA (%)			
			Drawn	Undrawn	Other	Total					Drawn	Undrawn	Other	Total					
1	0.000 - 0.035	AAA... AA-	569	—	252	821	0.03%	45.5%	95	12%	706	—	303	1,009	0.03%	39.6%	111	11%	
1.5	0.035 - 0.044	A+	452	—	1,610	2,062	0.04%	40.1%	172	8%	433	—	1,515	1,948	0.04%	44.0%	159	8%	
2	0.044 - 0.063	A	441	—	130	571	0.05%	38.5%	76	13%	371	—	330	701	0.05%	42.7%	109	16%	
2.5	0.063 - 0.103	A-	308	30	158	496	0.08%	49.8%	104	21%	244	30	1,043	1,317	0.08%	36.4%	164	12%	
3	0.103 - 0.170	BBB+	78	—	152	230	0.13%	49.9%	65	28%	115	—	201	316	0.13%	48.8%	88	28%	
3.5	0.170 - 0.280	BBB	1,739	—	29	1,768	0.22%	12.3%	237	13%	1,092	—	11	1,103	0.22%	13.7%	133	12%	
4	0.280 - 0.462	BBB-	225	154	164	543	0.36%	39.4%	240	44%	222	153	217	592	0.36%	39.8%	259	44%	
4.5	0.462 - 0.762	BB+	249	35	56	340	0.59%	46.2%	207	61%	427	37	65	529	0.59%	49.7%	346	65%	
5	0.762 - 1.256	BB	228	2	48	278	0.98%	54.3%	298	107%	353	7	54	414	0.98%	55.6%	433	105%	
5.5	1.256 - 2.070	BB-	20	—	150	170	1.61%	49.4%	180	106%	—	—	24	24	1.61%	50.8%	24	100%	
6	2.070 - 3.412	B+	—	—	—	—	—	—	—	—	19	—	—	19	2.66%	49.6%	27	142%	
6.5	3.412 - 5.625	B	28	—	1	29	4.38%	56.7%	54	186%	28	—	2	30	4.38%	56.7%	55	183%	
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			4,337	221	2,750	7,308			1,728	24%	4,010	227	3,765	8,002	0.19%	38.8%	1,908	24%	

Credit commitments - AIRB Non-retail portfolios	Q3 2017		Q2 2017	
	Notional undrawn commitments	EAD on undrawn commitments ⁽²⁾	Notional undrawn commitments	EAD on undrawn commitments ⁽²⁾
Corporate	38,926	15,145	41,730	16,558
Sovereign	8,941	3,773	8,980	3,711
Financial Institutions	442	221	454	227
Total	48,309	19,139	51,164	20,496

(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: Non-retail Portfolios⁽¹⁾ (continued)

Q1 2017													Q4 2016													Q3 2016												
Corporate AIRB exposures by Internal PD grade													Corporate AIRB exposures by Internal PD grade													Corporate 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 (%)	Drawn	Undrawn	Other	EAD Amount Total	Average PD (%)	Average LGD (%)	RWA	Percentage RWA (%)												
1	0.000 - 0.035	AAA... AA-	43	20	65	128	0.03%	36.2%	6	5%	39	19	71	129	0.03%	35.3%	5	4%	46	18	4	68	0.03%	30.1%	3	4%												
1.5	0.035 - 0.044	A+	55	11	369	435	0.04%	40.0%	24	6%	43	14	350	407	0.04%	39.5%	22	5%	45	15	141	201	0.04%	44.3%	12	6%												
2	0.044 - 0.063	A	167	583	661	1,411	0.05%	51.5%	262	19%	163	511	540	1,214	0.05%	51.3%	233	19%	150	317	443	910	0.05%	53.8%	178	20%												
2.5	0.063 - 0.103	A-	1,381	1,151	268	2,800	0.08%	50.0%	626	22%	1,603	1,001	223	2,827	0.08%	52.4%	624	22%	1,635	999	50	2,684	0.08%	52.4%	594	22%												
3	0.103 - 0.170	BBB+	3,730	2,427	403	6,560	0.13%	39.6%	1,722	27%	4,052	2,445	402	6,899	0.13%	40.5%	1,900	28%	4,288	3,014	261	7,563	0.13%	42.1%	2,223	29%												
3.5	0.170 - 0.280	BBB	6,003	4,070	611	10,684	0.22%	34.9%	3,722	35%	5,914	3,405	608	9,927	0.22%	38.3%	3,264	33%	5,679	2,790	775	9,244	0.22%	37.7%	2,871	31%												
4	0.280 - 0.462	BBB-	7,048	2,789	518	10,345	0.36%	34.5%	3,949	38%	6,662	2,370	550	9,582	0.36%	36.5%	3,752	39%	7,226	2,120	371	9,717	0.36%	33.3%	3,411	35%												
4.5	0.462 - 0.762	BB+	5,376	1,423	196	6,995	0.59%	35.9%	2,976	43%	5,660	1,551	135	7,346	0.59%	35.7%	3,297	45%	5,486	1,241	173	6,900	0.59%	35.9%	3,024	44%												
5	0.762 - 1.256	BB	6,894	1,528	292	8,714	0.98%	36.2%	4,673	54%	6,255	1,494	414	8,163	0.98%	35.1%	4,478	55%	6,722	1,299	285	8,306	0.98%	34.3%	4,327	52%												
5.5	1.256 - 2.070	BB-	3,195	664	58	3,917	1.61%	34.9%	2,478	63%	3,326	646	121	4,093	1.61%	35.3%	2,643	65%	3,015	610	67	3,692	1.61%	34.8%	2,375	64%												
6	2.070 - 3.412	B+	2,285	519	63	2,867	2.66%	33.8%	2,073	72%	2,047	333	45	2,425	2.66%	32.4%	1,681	69%	2,023	316	84	2,423	2.66%	34.0%	1,757	73%												
6.5	3.412 - 5.625	B	1,122	247	169	1,538	4.38%	28.8%	1,161	75%	1,142	298	205	1,645	4.38%	30.7%	1,354	82%	1,142	235	204	1,581	4.38%	31.2%	1,267	80%												
7	5.625 - 9.272	B-	710	83	9	802	7.22%	28.2%	668	83%	840	82	11	933	7.22%	30.3%	831	89%	778	78	11	867	7.22%	30.1%	745	86%												
7.5	9.272 - 15.284	CCC+	241	33	3	277	11.90%	27.2%	178	100%	290	51	15	356	11.90%	24.4%	328	92%	224	36	14	274	11.90%	26.3%	269	98%												
8	15.284 - 25.195	CCC	68	11	--	79	19.62%	41.1%	130	165%	78	6	--	84	19.62%	34.2%	116	138%	151	2	--	153	19.62%	15.1%	99	65%												
8.5	25.195 - 100	CCC-	22	1	1	24	32.35%	39.5%	42	175%	16	1	1	18	32.35%	29.0%	22	122%	62	2	5	70	32.35%	11.7%	37	53%												
9	100	CC	326	3	3	332	100.00%	25.6%	698	210%	337	3	5	345	100.00%	44.1%	1,033	299%	292	20	5	317	100.00%	35.9%	613	193%												
9.5	100	C	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--												
10	100	D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--												
Total			38,666	15,563	3,679	57,908	1.27%	37.6%	25,558	44%	38,467	14,230	3,696	56,393	1.33%	37.6%	25,583	45%	38,965	13,112	2,893	54,970	1.45%	37.0%	23,805	43%												

Q1 2017													Q4 2016													Q3 2016												
Sovereign AIRB exposures by Internal PD grade													Sovereign AIRB exposures by Internal PD grade													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 (%)	Drawn	Undrawn	Other	EAD Amount Total	Average PD (%)	Average LGD (%)	RWA	Percentage RWA (%)												
1	0.000 - 0.010	AAA... AA-	16,215	78	1,165	17,458	0.01%	6.2%	149	1%	16,302	80	763	17,145	0.01%	7.4%	210	1%	17,679	78	331	18,088	0.01%	7.7%	212	1%												
1.5	0.010 - 0.019	A+	4,664	3,076	1,169	8,909	0.01%	12.9%	239	3%	4,426	2,874	566	7,866	0.01%	12.9%	231	3%	4,483	2,530	663	7,676	0.01%	12.7%	225	3%												
2	0.019 - 0.033	A	1,690	763	72	2,525	0.02%	17.8%	122	5%	1,479	642	328	2,449	0.03%	18.0%	110	4%	1,509	957	503	2,969	0.03%	18.5%	132	4%												
2.5	0.033 - 0.060	A-	8	1	7	16	0.04%	16.6%	21	6%	9	1	1	11	0.05%	16.4%	1	9%	9	1	--	10	0.05%	16.3%	--	--												
3	0.060 - 0.107	BBB+	--	--	885	885	0.08%	11.3%	21	2%	--	--	742	742	0.08%	11.3%	20	3%	--	--	--	--	--	--	--	--												
3.5	0.107 - 0.191	BBB	--	--	1	1	0.14%	11.6%	--	--	--	--	8	8	0.14%	11.6%	--	--	--	--	--	--	--	--	--	--												
4	0.191 - 0.342	BBB-	--	--	--	--	--	--	--	--	10	--	5	15	0.26%	21.0%	2	13%	10	--	--	10	0.26%	21.0%	2	20%												
4.5	0.342 - 0.612	BB-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--												
5	0.612 - 1.095	BB	--	--	--	--	--	--	--	--	6	--	--	6	0.82%	18.5%	2	33%	6	--	--	6	0.82%	18.5%	2	33%												
5.5	1.095 - 1.960	BB-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--												
6	1.960 - 3.507	B+	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--												
6.5	3.507 - 6.276	B	257	27	12	296	4.69%	14.1%	120	41%	200	25	12	237	4.69%	14.1%	99	42%	200	26	12	238	4.69%	14.1%	101	42%												
7	6.276 - 11.231	B-	18	--	--	18	8.40%	18.5%	12	67%	18	--	--	18	8.40%	18.5%	12	67%	--	--	--	--	--	--	--	--												
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			22,852	3,945	3,311	30,108	0.04%	9.4%	664	2%	22,450	3,622	2,425	28,497	0.04%	10.0%	687	2%	23,896	3,592	1,509	28,997	0.04%	10.2%	674	2%												

Q1 2017													Q4 2016													Q3 2016												
Financial Institutions AIRB exposures by Internal PD grade													Financial Institutions AIRB exposures by Internal PD grade													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 (%)	Drawn	Undrawn	Other	EAD Amount Total	Average PD (%)	Average LGD (%)	RWA	Percentage RWA (%)												
1	0.000 - 0.035	AAA... AA-	1,079	--	332	1,411	0.03%	43.9%	164	12%	637	--	195	832	0.03%	42.2%	105	13%	214	--	185	399	0.03%	22.9%	41	10%												
1.5	0.035 - 0.044	A+	334	--	1,756	2,090	0.04%	43.9%	166	8%	687	--	1,626	2,313	0.04%	48.0%	234	10%	483	--	2,853	3,336	0.04%	48.2%	283	8%												
2	0.044 - 0.063	A	286	30	287	603	0.05%	39.4%	96	16%	203	30	186	419	0.05%	32.3%	45	11%	208	30	3,065	3,303	0.05%	35.7%	221	7%												
2.5	0.063 - 0.103	A-	190	--	293	483	0.08%	41.0%	81	17%	26	--	263	289	0.08%	37.9%	41	14%	89	--	2,004	2,093	0.08%	34.5%	226	11%												
3	0.103 - 0.170	BBB+	31	--	145	176	0.13%	49.9%	47	27%	64	--	118	182	0.13%	50.6%	53	29%	18	--	210	228	0.13%	43.1%	62	27%												
3.5	0.170 - 0.280	BBB	1,272	--	83	1,355	0.22%	19.5%	226	17%	1,456	--	81	1,537	0.22%	23.0%	318	21%	1,367	50																		

AIRB Credit Risk Exposure - Back-Testing⁽¹⁾

	2017											
	Q3						Q2					
	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⁾
(unaudited) (millions of Canadian dollars)												
Retail portfolio⁽⁵⁾												
Uninsured residential mortgages incl. Home equity line of credit ⁽⁶⁾	0.37%	0.18%	26.17%	11.18%	97.75%	83.92%	0.43%	0.19%	26.10%	11.12%	99.39%	82.34%
Insured residential mortgages ⁽⁷⁾	1.33%	0.76%	3.24%	na	na	na	1.33%	0.82%	3.30%	na	na	na
Qualifying revolving retail	1.35%	1.21%	72.18%	81.79%	98.41%	97.51%	1.36%	1.25%	72.91%	81.85%	98.49%	97.02%
Other retail	1.76%	1.49%	70.38%	59.72%	97.11%	90.12%	1.79%	1.55%	70.74%	58.88%	97.47%	91.15%
Wholesale & Sovereign portfolio⁽⁸⁾												
Corporate	2.11%	0.39%	39.21%	22.16%	86.87%	82.46%	2.13%	0.45%	40.11%	18.41%	85.63%	76.01%
Sovereign ⁽⁹⁾	0.04%	0.00%	11.54%	na	88.30%	na	0.04%	0.00%	11.54%	na	81.00%	na
Financial Institutions ⁽⁹⁾	0.57%	0.00%	40.75%	na	100.00%	na	0.55%	0.00%	39.00%	na	100.00%	na

	2017						2016					
	Q1						Q4					
	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⁾
(unaudited) (millions of Canadian dollars)												
Retail portfolio⁽⁵⁾												
Uninsured residential mortgages incl. Home equity line of credit ⁽⁶⁾	0.38%	0.19%	26.61%	12.02%	98.12%	81.17%	0.38%	0.18%	26.58%	9.13%	97.44%	79.62%
Insured residential mortgages ⁽⁷⁾	1.36%	0.82%	2.93%	na	na	na	1.34%	0.88%	2.91%	na	na	na
Qualifying revolving retail	1.34%	1.27%	71.13%	78.11%	98.63%	96.83%	1.28%	1.29%	73.72%	77.14%	98.43%	96.71%
Other retail	1.79%	1.57%	71.36%	59.02%	97.22%	91.55%	1.70%	1.63%	71.01%	66.61%	97.50%	92.43%
Wholesale & Sovereign portfolio⁽⁸⁾												
Corporate	1.47%	0.44%	41.68%	21.97%	83.75%	75.54%	1.66%	0.44%	43.26%	19.08%	81.65%	76.47%
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⁾	0.58%	0.00%	39.00%	na	100.00%	na	0.60%	0.00%	39.00%	na	100.00%	na

- (1) Actual and estimated parameters are reported on a three-month lag. For example, for Q3 2017, estimated percentages are as of April 30th, 2016 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)

Non-Retail Portfolio	2017																	
	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
Agriculture	3,895	314	8	-	-	4,217	3,741	299	8	-	-	4,048	3,772	285	8	-	-	4,065
Oil and Gas	2,079	2,013	51	-	-	4,143	1,880	1,830	45	-	-	3,755	2,019	1,623	54	-	-	3,696
Mining	439	723	46	-	-	1,208	414	680	47	-	-	1,141	424	690	42	-	-	1,156
Utilities	3,036	1,579	479	-	-	5,094	2,543	1,656	465	-	-	4,664	2,302	1,711	471	-	-	4,484
Construction ⁽²⁾	2,506	1,129	203	-	-	3,838	2,424	1,133	214	-	-	3,771	2,281	1,025	214	-	-	3,520
Manufacturing	4,097	2,005	251	-	-	6,353	4,022	2,218	231	-	-	6,471	3,730	2,221	214	-	-	6,165
Wholesale Trade	2,063	700	39	-	-	2,802	2,032	729	43	-	-	2,804	1,903	743	39	-	-	2,685
Retail Trade	2,821	1,220	42	-	-	4,083	2,744	1,687	42	-	-	4,473	2,765	1,615	43	-	-	4,423
Transportation	2,331	2,076	108	11	-	4,526	2,414	2,024	109	7	-	4,554	2,376	1,792	105	51	-	4,324
Communications	1,629	699	260	-	-	2,588	1,497	811	259	-	-	2,567	1,511	681	259	-	-	2,451
Finance and Insurance	21,690	2,023	794	75,819	783	101,109	21,698	2,014	886	82,368	748	107,714	22,259	1,829	919	76,261	774	102,042
Real Estate ⁽³⁾	8,443	908	31	53	-	9,435	8,296	992	32	58	-	9,378	7,942	898	34	59	-	8,933
Professional Services	1,193	566	389	-	-	2,148	1,385	902	312	-	2	2,601	1,220	771	303	-	2	2,296
Education & Health Care	2,672	826	7	7	-	3,512	2,635	893	6	15	-	3,549	2,545	1,290	7	5	-	3,847
Other Services	4,559	1,114	291	-	-	5,964	4,277	1,242	281	189	-	5,989	4,511	1,106	275	7	-	5,899
Government	4,724	1,431	10	17,247	-	23,412	4,957	1,439	18	17,351	-	23,765	5,024	1,471	17	16,587	-	23,099
Other	2,303	36	666	103	4	3,112	2,347	-	709	760	12	3,828	2,032	-	648	719	-	3,399
Total - Non-retail⁽⁴⁾	70,480	19,362	3,675	93,240	787	187,544	69,306	20,549	3,707	100,748	762	195,072	68,616	19,751	3,652	93,689	776	186,484

Non-Retail Portfolio	2016																	
	Q4						Q3						Q2					
	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
Agriculture	3,572	349	6	-	-	3,927	3,688	227	6	-	-	3,921	3,604	238	6	-	-	3,848
Oil and Gas	2,126	1,510	62	-	-	3,698	2,559	1,269	58	-	-	3,886	2,911	1,572	64	-	-	4,547
Mining	527	704	33	-	-	1,264	317	738	34	-	-	1,089	357	493	30	-	-	880
Utilities	2,093	1,638	465	-	-	4,196	2,240	1,660	452	-	-	4,352	2,071	1,901	380	-	-	4,352
Construction ⁽²⁾	2,200	1,151	212	-	-	3,563	2,249	1,122	210	-	-	3,581	2,226	1,186	207	-	-	3,619
Manufacturing	3,516	2,065	231	-	-	5,812	3,765	1,921	258	-	-	5,944	3,615	1,968	250	-	-	5,833
Wholesale Trade	1,918	723	39	-	-	2,680	1,832	652	46	-	-	2,530	1,819	628	53	-	-	2,500
Retail Trade	2,790	913	45	-	-	3,748	2,695	1,106	45	-	-	3,846	3,159	785	46	-	-	3,990
Transportation	2,812	1,753	97	17	-	4,679	2,426	1,631	94	-	-	4,151	1,886	1,596	75	-	-	3,557
Communications	1,511	686	285	-	-	2,482	1,467	652	283	-	-	2,402	1,416	631	279	-	-	2,326
Finance and Insurance	22,090	1,440	865	66,450	679	91,524	23,136	1,311	751	75,497	775	101,470	18,142	1,328	767	64,283	968	85,488
Real Estate ⁽³⁾	7,746	814	29	61	-	8,650	7,669	697	27	72	-	8,465	7,595	675	30	70	-	8,370
Professional Services	1,174	721	320	-	-	2,215	1,137	730	330	-	-	2,197	1,069	662	348	-	-	2,079
Education & Health Care	2,473	1,325	7	8	-	3,813	2,524	1,224	7	-	-	3,755	2,526	1,506	6	-	-	4,038
Other Services	4,485	1,193	294	3	-	5,975	4,336	1,056	220	-	-	5,612	4,102	1,094	295	1,175	-	6,666
Government	4,715	1,287	23	14,716	-	20,741	4,657	1,170	17	4,525	-	10,369	4,939	1,153	14	2,216	-	8,322
Other	2,350	19	621	557	-	3,547	2,394	149	652	-	-	3,195	2,243	117	600	-	-	2,960
Total - Non-retail⁽⁴⁾	68,098	18,291	3,634	81,812	679	172,514	69,091	17,315	3,490	80,094	775	170,765	63,680	17,533	3,450	67,744	968	153,375

(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⁾

		2017																	
		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
(unaudited) (millions of Canadian dollars)																			
Greece																			
Ireland			1,130	6		1,136			854	2		856	13		1,102	3		1,118	
Italy											1	1						1	
Portugal																			
Spain				2	63	65	6			2	66	74	23				81	104	
Total GIIPS			1,130	8	63	1,201	6		854	4	67	931	36		1,102	3		82	1,223
France	13	32	784	115	340	1,284	42	40	1,230	202	365	1,879	15	39	1,379	220	264	1,917	
Germany				4	56	60	1				61	62			8		38	46	
United Kingdom	257	5	13,415	1,109	5	14,791	216	6	14,228	1,122	4	15,576	235	5	4,647	918	5	5,810	
Other Europe	36		1,502	116	7	1,661	42		2,403	130	16	2,591	34		1,702	151	16	1,903	
Total - Credit Risk	306	37	16,831	1,352	471	18,997	307	46	18,715	1,458	513	21,039	320	44	8,830	1,300	405	10,899	

	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
	Adjustment to exposure for collateral														
Total - Net Credit Risk⁽⁴⁾	306	37	1,674	471	2,488	307	46	1,699	513	2,565	320	44	2,126	405	2,895

		2016																	
		Q4						Q3						Q2					
		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
(unaudited) (millions of Canadian dollars)																			
Greece																			
Ireland			1,183	2		1,185			1,675	3		1,678			1,503	1		1,504	
Italy					1	1					1	1					1	1	
Portugal																			
Spain	25				91	116	20			90	110	25				132	157		
Total GIIPS	25		1,183	2	92	1,302	20		1,675	3	91	1,789	25		1,503	1	133	1,662	
France	157	41	1,208	175	296	1,877	54	33	1,210	261	292	1,850	21		154	91	285	551	
Germany	11			7	41	59	1			16	51	68			38		51	89	
United Kingdom	57	5	2,377	961	4	3,404	70	5	3,915	834	5	4,829	71	5	3,660	744	5	4,485	
Other Europe	45		1,661	155	19	1,880	68		1,237	193	19	1,517	139		852	253	18	1,262	
Total - Credit Risk	295	46	6,429	1,300	452	8,522	213	38	8,037	1,307	458	10,053	256	5	6,169	1,127	492	8,049	

	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
	Adjustment to exposure for collateral														
Total - Net Credit Risk⁽⁴⁾	295	46	1,684	452	2,477	213	38	1,700	458	2,409	256	5	1,538	492	2,291

(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)	2017				2016				2015				YTD		Full Year	
Formation of Gross Impaired Loans ⁽¹⁾ (by sector)	Q3	Q2	Q1	Q4	Q3	Q2	Q1	Q4	Q3	Q2	Q1	2017	2016	2016	2015	
Opening balance	422	442	492	452	521	434	457	449	446	389	486	492	457	457	486	
Write-offs																
Personal and Commercial																
Retail	(19)	(21)	(18)	(20)	(18)	(20)	(23)	(23)	(18)	(21)	(21)	(58)	(61)	(81)	(83)	
Commercial	(2)	(33)	(10)	(19)	(66)	(5)	(20)	(11)	(16)	(15)	(62)	(45)	(91)	(110)	(104)	
Wealth Management	(1)	(1)	(3)	(1)	(2)	(1)	(2)	(1)	(1)	(1)	(1)	(5)	(5)	(6)	(4)	
Financial Markets	-	-	-	-	-	-	-	-	(6)	-	-	-	-	-	(6)	
U.S. Specialty Finance and International																
ABA Bank ⁽²⁾	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Other	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Total write-offs	(22)	(55)	(31)	(40)	(86)	(26)	(45)	(35)	(41)	(37)	(84)	(108)	(157)	(197)	(197)	
Formation																
Personal and Commercial																
Retail	13	18	23	17	11	21	23	23	16	28	22	54	55	72	89	
Commercial	36	14	(43)	60	6	89	(5)	19	24	65	(37)	7	90	150	71	
Wealth Management	1	1	-	2	(1)	3	4	1	4	1	2	2	6	8	8	
Financial Markets	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
U.S. Specialty Finance and International																
ABA Bank ⁽²⁾	10	2	1	1	1	-	-	-	-	-	-	13	1	2	-	
Other	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Total formation	60	35	(19)	80	17	113	22	43	44	94	(13)	76	152	232	168	
Closing balance	460	422	442	492	452	521	434	457	449	446	389	460	452	492	457	

Formation of Gross Impaired Loans (by activity)	2017				2016				2015				YTD		Full Year	
	Q3	Q2	Q1	Q4	Q3	Q2	Q1	Q4	Q3	Q2	Q1	2017	2016	2016	2015	
Opening balance	422	442	492	452	521	434	457	449	446	389	486	492	457	457	486	
Classified as impaired during the period	159	192	79	190	204	211	145	135	149	187	107	430	560	750	578	
Transferred to not impaired during the period	(4)	(5)	(5)	(4)	(6)	(6)	(3)	(5)	(7)	(8)	(3)	(14)	(15)	(19)	(23)	
Net repayments	(60)	(121)	(60)	(80)	(158)	(66)	(91)	(64)	(78)	(62)	(100)	(241)	(315)	(395)	(304)	
Write-offs	(52)	(82)	(54)	(59)	(104)	(45)	(64)	(53)	(60)	(54)	(97)	(188)	(213)	(272)	(264)	
Recoveries of loans previously written off	(5)	(5)	(7)	(7)	(6)	(5)	(4)	(5)	(5)	(7)	(5)	(17)	(15)	(22)	(22)	
Disposals of loans	-	-	-	-	-	-	-	-	-	-	(1)	-	-	-	(1)	
Exchange and other movements	-	1	(3)	-	1	(2)	(6)	-	4	1	2	(2)	(7)	(7)	7	
Closing balance	460	422	442	492	452	521	434	457	449	446	389	460	452	492	457	

Allowance for Credit Losses	2017				2016				2015				YTD		Full Year	
	Q3	Q2	Q1	Q4	Q3	Q2	Q1	Q4	Q3	Q2	Q1	2017	2016	2016	2015	
Allowances at beginning	762	786	781	780	837	566	569	561	563	561	604	781	569	569	604	
Write-offs	(57)	(87)	(61)	(66)	(110)	(50)	(68)	(58)	(65)	(61)	(103)	(205)	(228)	(294)	(287)	
Recoveries of amounts written off in previous years	5	7	6	7	8	5	5	5	6	5	5	18	18	25	21	
Charge to income statement (provision for credit losses) ⁽³⁾	58	56	60	59	45	317	63	61	56	57	54	174	425	484	228	
Disposal of loans	-	-	-	-	-	-	-	-	-	-	1	-	-	-	1	
Exchange and other movements	(1)	-	-	1	-	(1)	(3)	-	1	1	-	(1)	(4)	(3)	2	
Allowances at end	767	762	786	781	780	837	566	569	561	563	561	767	780	781	569	

(1) Credit card receivables are not included.

(2) The Bank completed the acquisition of Advanced Bank of Asia Limited (ABA Bank) during the third quarter of 2016.

(3) During the second quarter of 2017, the Bank reversed the sectoral provision on non-impaired loans for the oil and gas producer and service company loan portfolio by \$40 million.

The sectoral provision on non-impaired loans of \$250 million was recorded during the second quarter of 2016.

Moreover, during the second quarter of 2017, the Bank increased the collective allowance on non-impaired loans for credit risk by \$40 million related to growth in the Bank's overall credit portfolio.



Gross Credit Exposure by Residual Contractual Maturity⁽¹⁾

(unaudited) (millions of Canadian dollars)	2017											
	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	27,830	16,658	308	44,796	26,504	15,725	264	42,493	26,437	16,037	255	42,729
Qualifying revolving retail	6,027	-	-	6,027	5,844	-	-	5,844	5,633	-	-	5,633
Other retail	5,334	2,932	2,419	10,685	5,279	2,941	2,280	10,500	5,232	2,844	2,183	10,259
	39,191	19,590	2,727	61,508	37,627	18,666	2,544	58,837	37,302	18,881	2,438	58,621
Non-retail												
Corporate	48,987	19,784	1,719	70,490	48,010	20,811	1,812	70,633	48,276	18,534	2,062	68,872
Sovereign	41,397	13,067	4,270	58,734	43,626	13,043	4,874	61,543	45,614	11,990	5,041	62,645
Financial Institutions	50,184	2,535	31	52,750	56,265	881	39	57,185	48,068	990	15	49,073
	140,568	35,386	6,020	181,974	147,901	34,735	6,725	189,361	141,958	31,514	7,118	180,590
Trading book	1,439	4,793	1,811	8,043	1,589	4,439	2,888	8,916	1,410	4,736	2,911	9,057
Total	181,198	59,769	10,558	251,525	187,117	57,840	12,157	257,114	180,670	55,131	12,467	248,268

(unaudited) (millions of Canadian dollars)	2016											
	Q4				Q3				Q2			
	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	27,348	16,855	305	44,508	27,940	16,793	312	45,045	27,803	15,024	269	43,096
Qualifying revolving retail	5,716	-	-	5,716	5,692	-	-	5,692	5,442	-	-	5,442
Other retail	5,181	2,837	2,167	10,185	5,197	2,832	2,077	10,106	5,165	2,841	1,908	9,914
	38,245	19,692	2,472	60,409	38,829	19,625	2,389	60,843	38,410	17,865	2,177	58,452
Non-retail												
Corporate	47,848	17,643	2,061	67,552	40,456	17,015	2,019	59,490	37,654	16,231	3,077	56,962
Sovereign	40,121	11,829	5,144	57,094	26,525	10,899	5,430	42,854	18,659	10,441	6,006	35,106
Financial Institutions	39,702	1,880	2	41,584	60,350	1,925	43	62,318	53,799	1,979	16	55,794
	127,671	31,352	7,207	166,230	127,331	29,839	7,492	164,662	110,112	28,651	9,099	147,862
Trading book	1,322	4,847	3,195	9,364	1,069	4,958	3,426	9,453	2,201	5,344	2,550	10,095
Total	167,238	55,891	12,874	236,003	167,229	54,422	13,307	234,958	150,723	51,860	13,826	216,409

(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)	2017					
	Q3		Q2		Q1	
	Standardized ⁽¹⁾	AIRB ⁽²⁾	Standardized ⁽¹⁾	AIRB ⁽²⁾	Standardized ⁽¹⁾	AIRB ⁽²⁾
Total exposure covered by:						
Retail						
Residential mortgage	462	3,387	295	2,497	426	3,302
Qualifying revolving retail	-	-	-	-	-	-
Other retail	2,640	186	2,633	189	2,705	188
	3,102	3,573	2,928	2,686	3,131	3,490
Non-retail						
Corporate	986	1,984	1,162	2,042	1,056	2,012
Sovereign	-	-	-	-	-	-
Financial Institutions	-	115	-	6	-	-
	986	2,099	1,162	2,048	1,056	2,012
Trading book	-	93	-	7	-	23
Total	4,088	5,765	4,090	4,741	4,187	5,525

(unaudited) (millions of Canadian dollars)	2016					
	Q4		Q3		Q2	
	Standardized ⁽¹⁾	AIRB ⁽²⁾	Standardized ⁽¹⁾	AIRB ⁽²⁾	Standardized ⁽¹⁾	AIRB ⁽²⁾
Total exposure covered by:						
Retail						
Residential mortgage	427	5,364	1,146	6,259	963	4,737
Qualifying revolving retail	-	-	-	-	-	-
Other retail	2,650	195	2,578	195	2,694	203
	3,077	5,559	3,724	6,454	3,657	4,940
Non-retail						
Corporate	797	2,096	712	2,099	1,016	2,178
Sovereign	-	-	-	-	-	-
Financial Institutions	-	-	-	-	-	-
	797	2,096	712	2,099	1,016	2,178
Trading book	-	10	-	16	-	17
Total	3,874	7,665	4,436	8,569	4,673	7,135

(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)

	2017											
	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	524	–	524	77	522	–	522	139	563	–	563	99
Private	408	38	370	66	350	37	313	79	323	40	283	70
	932	38	894	143	872	37	835	218	886	40	846	169

(unaudited)
(millions of Canadian dollars)

	2016											
	Q4				Q3				Q2			
	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	529	–	529	36	525	–	525	9	527	–	527	(17)
Private	346	40	306	69	341	40	301	62	307	35	272	66
	875	40	835	105	866	40	826	71	834	35	799	49



Credit Derivative Positions (notional amounts)

	2017											
	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	77	19	3,089	2,076	132	20	2,419	2,127	125	20	1,402	966
Tranches on indices	-	-	-	-	-	-	-	-	-	-	-	-
Total return swaps	-	-	208	-	-	-	217	-	-	-	216	-
Credit options	-	-	-	-	-	-	-	-	-	-	-	-

	2016											
	Q4				Q3				Q2			
	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	60	20	1,188	627	59	20	1,728	1,059	88	19	1,411	677
Tranches on indices	-	-	-	-	-	-	-	-	-	-	-	-
Total return swaps	-	-	217	-	-	-	239	-	-	-	177	-
Credit options	-	-	27	27	-	-	41	15	-	-	38	38

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



Derivatives Financial Instruments According to Basel Definition

	2017			2016			
	Q3	Q2	Q1	Q4	Q3	Q2	Q1
(unaudited) (millions of Canadian dollars)							
Under Basel III							
Foreign Exchange Related Contracts							
Swaps	180,440	182,943	182,895	195,181	185,738	205,355	205,049
Options							
- purchased	7,385	7,105	6,883	7,302	8,387	9,564	10,381
- sold	7,689	7,809	6,698	6,990	7,861	9,439	11,660
Exchange traded and OTC futures contracts	28,518	29,554	31,777	34,832	62,710	28,677	30,470
Total notional amount	224,032	227,411	228,253	244,305	264,696	253,035	257,560
Replacement cost							
- gross	5,831	4,211	4,248	4,188	3,752	6,054	6,551
- net ⁽¹⁾	2,659	2,710	2,347	2,649	2,366	3,154	3,962
Future credit risk	1,817	1,933	2,009	1,959	2,033	2,086	2,035
Credit equivalent ⁽²⁾	4,476	4,643	4,356	4,608	4,399	5,240	5,997
Risk-weighted equivalent ⁽³⁾	1,448	1,284	1,247	1,242	1,291	1,375	1,810
Interest Rate Related Contracts							
Swaps	440,743	388,737	404,712	398,214	377,655	378,617	437,908
Options							
- purchased	13,016	18,743	18,834	23,527	9,604	13,150	19,424
- sold	5,620	14,600	21,887	23,601	5,765	7,831	12,293
Exchange traded and OTC futures contracts	9,705	6,816	14,899	13,316	7,840	6,480	7,506
Total notional amount	469,084	428,896	460,332	458,658	400,864	406,078	477,131
Replacement cost							
- gross	3,883	4,426	4,215	5,930	7,629	5,966	7,190
- net ⁽¹⁾	1,005	1,202	1,129	1,353	1,609	1,663	1,648
Future credit risk	1,420	1,493	1,398	1,402	1,513	1,548	1,606
Credit equivalent ⁽²⁾	2,425	2,695	2,527	2,755	3,122	3,211	3,254
Risk-weighted equivalent ⁽³⁾	488	638	588	774	927	911	875
Financial Futures							
Total notional amount	72,600	125,581	111,574	116,470	121,080	101,956	108,307
Equity and Commodity Contracts							
Total notional amount	50,390	54,851	49,932	46,873	46,099	41,417	42,108
Replacement cost							
- gross	1,870	1,878	2,641	2,482	2,712	2,990	3,416
- net ⁽¹⁾	1,566	1,567	2,176	2,154	2,447	2,640	3,084
Future credit risk	2,227	2,505	2,194	2,037	1,899	1,638	1,693
Credit equivalent ⁽²⁾	3,793	4,072	4,370	4,191	4,346	4,278	4,777
Risk-weighted equivalent ⁽³⁾	250	298	368	324	314	515	537
Credit Derivatives							
Total notional amount (trading only) ⁽⁵⁾	5,373	4,763	2,585	2,086	3,082	2,341	2,164
Total Return Swap Notional Amount ^{(4) (5)}	32,979	33,160	31,389	30,477	27,900	27,064	25,101
Replacement cost ⁽⁵⁾							
- gross	258	148	173	104	101	81	90
- net ⁽¹⁾	29	40	33	34	27	42	40
Future credit risk	1,039	1,047	1,005	982	917	1,001	929
Credit equivalent ⁽²⁾	1,068	1,087	1,038	1,016	944	1,043	969
Risk-weighted equivalent ⁽³⁾	126	121	141	142	122	88	81
Total Derivatives							
Total notional amount	854,458	874,662	884,065	898,869	863,721	831,891	912,371
Replacement cost							
- gross	11,842	10,663	11,277	12,704	14,194	15,091	17,247
- net ⁽¹⁾	5,259	5,519	5,685	6,190	6,449	7,499	8,734
Future credit risk	6,503	6,978	6,606	6,380	6,362	6,273	6,263
Credit equivalent ⁽²⁾	11,762	12,497	12,291	12,570	12,811	13,772	14,997
Risk-weighted equivalent ⁽³⁾	2,312	2,341	2,344	2,482	2,654	2,889	3,303

(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⁾

(unaudited) (millions of Canadian dollars)	2017								
	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
Interest rate contracts	83,753	333,309	124,621	149,009	280,124	125,345	144,792	303,632	123,482
Foreign exchange contracts	194	-	223,838	91	-	227,319	459	-	227,794
Equity, commodity and credit derivative contracts ⁽²⁾	22,658	5,703	60,382	21,868	5,094	65,812	19,567	2,741	61,598

(unaudited) (millions of Canadian dollars)	2016								
	Q4			Q3			Q2		
	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
Interest rate contracts	155,838	297,612	121,678	129,581	265,437	126,926	115,717	267,983	124,333
Foreign exchange contracts	821	-	243,484	160	-	264,536	129	-	252,907
Equity, commodity and credit derivative contracts ⁽²⁾	18,658	1,977	58,801	17,778	2,792	56,511	13,263	1,880	55,679

(1) Notional amounts.

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

Aggregate Amount of Securitization Exposures

(unaudited) (millions of Canadian dollars)	2017												2016											
	Q3			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	Banking Book		Trading book			
	On balance sheet	Off balance sheet	On balance sheet	Off balance sheet	On balance sheet	Off balance sheet	On balance sheet	Off balance sheet	On balance sheet	Off balance sheet	On balance sheet	Off balance sheet	On balance sheet	Off balance sheet	On balance sheet	Off balance sheet	On balance sheet	Off balance sheet	On balance sheet	Off balance sheet	On balance sheet			
Bank's own assets																								
Traditional exposures																								
Insured Mortgage loans																								
Retained ⁽¹⁾	6,579	-	-	7,589	-	-	7,484	-	-	5,457	-	-	3,748	-	-	4,341	-	-	3,420	-	-			
Credit Cards																								
Retained ⁽¹⁾	195	389	-	192	383	-	158	329	-	213	426	-	209	419	-	193	391	-	164	340	-			
Purchased ⁽²⁾	478	-	-	478	-	-	478	-	-	89	-	-	89	-	-	89	-	-	89	-	-			
Total - Bank's own assets	7,252	389	-	8,259	383	-	8,120	329	-	5,759	426	-	4,046	419	-	4,623	391	-	3,673	340	-			
Third party assets																								
Sponsored																								
Traditional exposures ⁽³⁾																								
Residential Mortgages - Insured	-	1,579	-	-	1,634	-	-	1,671	1	-	1,744	2	-	1,790	1	-	1,440	19	-	1,204	7			
Residential Mortgages - conventional	-	862	-	-	671	-	-	694	1	-	738	1	-	734	-	-	562	7	-	483	3			
Fleet Lease Receivables	-	251	-	-	252	-	-	255	-	-	258	-	-	261	-	-	259	3	-	263	1			
Auto Floorplans	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
Auto Loans	-	128	-	-	132	-	-	136	-	-	136	-	-	137	-	-	136	2	-	141	1			
Investment Loans	-	200	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
Purchased																								
Traditional exposures																								
Insured Mortgage loans - MBS	2,759	-	2,259	3,217	-	2,145	4,198	-	1,885	4,377	-	1,732	4,536	-	1,207	4,715	-	1,388	5,240	-	1,390			
Credit Cards - ABS	479	-	86	481	-	70	478	-	42	89	-	26	89	-	36	89	-	49	89	-	68			
Home Equity - ABS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
Commercial mortgage back securities (CMBS)	18	-	-	19	-	-	12	-	-	13	-	-	13	-	-	13	-	-	13	-	-			
Collateralized debt obligation (CDO)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
Collateralized mortgage obligation (CMO)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
Other	1,440	193	-	1,425	225	-	488	-	-	477	-	-	-	-	-	-	-	-	-	-	-			
Synthetic exposures																								
CDX tranches	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
Resecuritized exposures																								
Master Asset Vehicles ⁽⁴⁾	-	-	-	-	-	-	-	-	-	542	-	-	543	-	-	543	-	-	545	-	-			
Commercial paper not included in the Pan-Canadian restructuring plan	-	-	-	-	-	-	-	-	-	74	-	-	92	-	-	91	-	-	102	-	-			
Collateralized mortgage obligation (CMO)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
Total - Third party assets	4,696	3,213	2,345	5,142	2,914	2,215	5,176	2,756	1,929	5,572	2,876	1,761	5,273	2,922	1,244	5,451	2,397	1,468	5,989	2,091	1,470			
Total - Bank	11,948	3,602	2,345	13,401	3,297	2,215	13,296	3,085	1,929	11,331	3,302	1,761	9,319	3,341	1,244	10,074	2,788	1,468	9,662	2,431	1,470			

(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 ⁽¹⁾

	2017																	
	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	
(unaudited) (millions of Canadian dollars)	Exposure Amount	Risk-Weighted Assets	Exposure Amount	Risk-Weighted Assets	Exposure Amount	Risk-Weighted Assets	Exposure Amount	Risk-Weighted Assets	Exposure Amount	Risk-Weighted Assets	Exposure Amount	Risk-Weighted Assets	Exposure Amount	Risk-Weighted Assets	Exposure Amount	Risk-Weighted Assets	Exposure Amount	Risk-Weighted Assets
Bank's own assets ⁽²⁾																		
Credit Cards																		
Seller's interest exposure ⁽³⁾	195	119	389	51	-	-	192	120	383	51	-	-	157	103	329	44	-	-
Purchased	478	55	-	-	-	-	481	55	-	-	-	-	478	54	-	-	-	-
Total - Bank's own assets	673	174	389	51	-	-	673	175	383	51	-	-	635	157	329	44	-	-
Third party assets																		
Securitized																		
7% - 30%	1,911	176	3,213	228	86	61	1,896	179	2,914	204	70	49	953	71	2,756	214	42	29
35% - 100%	26	19	-	-	-	-	26	19	-	-	-	-	26	19	-	-	-	-
150% - 850%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1250 %	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Home Equity - ABS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Collateralized mortgage obligation (CMO)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Others	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Resecuritized																		
7% - 30%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
35% - 100%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
150% - 850%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1250 %	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Master Asset Vehicles	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Commercial paper not included in the Pan-Canadian restructuring plan	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Collateralized mortgage obligation (CMO)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total - Third party assets	1,937	195	3,213	228	86	61	1,922	198	2,914	204	70	49	979	90	2,756	214	42	29
Total	2,610	369	3,602	279	86	61	2,595	373	3,297	255	70	49	1,614	247	3,085	258	42	29

	2016																	
	Q4						Q3						Q2					
	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	
(unaudited) (millions of Canadian dollars)	Exposure Amount	Risk-Weighted Assets	Exposure Amount	Risk-Weighted Assets	Exposure Amount	Risk-Weighted Assets	Exposure Amount	Risk-Weighted Assets	Exposure Amount	Risk-Weighted Assets	Exposure Amount	Risk-Weighted Assets	Exposure Amount	Risk-Weighted Assets	Exposure Amount	Risk-Weighted Assets	Exposure Amount	Risk-Weighted Assets
Bank's own assets ⁽²⁾																		
Credit Cards																		
Seller's interest exposure ⁽³⁾	213	136	426	58	-	-	209	131	419	58	-	-	193	123	391	56	-	-
Purchased	89	41	-	-	-	-	89	41	-	-	-	-	89	41	-	-	-	-
Total - Bank's own assets	302	177	426	58	-	-	298	172	419	58	-	-	282	164	391	56	-	-
Third party assets																		
Securitized																		
7% - 30%	536	11	2,876	235	26	21	59	11	2,922	171	36	25	59	11	2,397	165	49	34
35% - 100%	43	32	-	-	-	-	43	32	-	-	-	-	43	32	-	-	-	-
150% - 850%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1250 %	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Home Equity - ABS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Collateralized mortgage obligation (CMO)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Others	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Resecuritized																		
7% - 30%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
35% - 100%	500	210	-	-	-	-	515	216	-	-	-	-	516	217	-	-	-	-
150% - 850%	113	301	-	-	-	-	116	309	-	-	-	-	114	307	-	-	-	-
1250 %	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Master Asset Vehicles	3	42	-	-	-	-	4	46	-	-	-	-	4	49	-	-	-	-
Commercial paper not included in the Pan-Canadian restructuring plan	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Collateralized mortgage obligation (CMO)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total - Third party assets	1,195	596	2,876	235	26	21	737	614	2,922	171	36	25	736	616	2,397	165	49	34
Total	1,497	773	3,302	293	26	21	1,035	786	3,341	229	36	25	1,018	780	2,788	221	49	34

(1) National Bank uses the following approaches for determining the risk-weighted assets : RBA, IAA and, starting Q2 2017, the Supervisory Formula.

(2) 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.

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

Asset Securitization - Managed Loans

		2017														
		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		20,684	–	–	1,051	–	21,640	–	–	1,805	–	21,093	–	–	3,749	–
Credit card receivables		1,389	9	13	–	–	1,389	9	13	–	–	1,389	8	12	461	–
Total		22,073	9	13	1,051	–	23,029	9	13	1,805	–	22,482	8	12	4,210	–
Trading Book																
Insured mortgage loans		5,652	–	–	107	374	5,844	–	–	118	151	5,850	–	–	383	282

		2016														
		Q4					Q3					Q2				
		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		18,709	–	–	3,134	–	17,123	–	–	1,134	–	17,903	–	–	2,623	–
Credit card receivables		1,389	8	11	–	–	1,389	8	12	–	–	1,389	9	14	–	–
Total		20,098	8	11	3,134	–	18,512	8	12	1,134	–	19,292	9	14	2,623	–
Trading Book																
Insured mortgage loans		5,631	–	–	1,389	323	4,324	–	–	513	1,045	4,051	–	–	360	570

(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.