



SUPPLEMENTARY REGULATORY CAPITAL DISCLOSURE

FIRST QUARTER 2018

(unaudited)

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



Notes to users

- 1) This Supplementary Regulatory Capital Disclosure document is unaudited and should be read in conjunction with the 2017 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 2018 and also in the document entitled *Supplementary Financial Information* which is available on the Bank's website at nbc.ca.



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Regulatory Capital and Capital Ratios under Basel III⁽¹⁾

		2018		2017			
		Q1	Q4	Q3	Q2	Q1	
(unaudited) (millions of Canadian dollars)		Reference ⁽²⁾	All-in basis				
Common Equity Tier 1 capital: instruments and reserves							
1	Directly issued qualifying common share capital plus related contributed surplus ⁽³⁾	a + a'	2 913	2 826	2 874	2 850	2 820
2	Retained earnings	b	7 785	7 706	7 540	7 164	7 065
3	Accumulated other comprehensive income and other reserves	c	110	168	122	221	173
5	Common share capital issued by subsidiaries and held by third parties (amount allowed in group CET1)	d	8	8	7	7	7
6	Common Equity Tier 1 capital before regulatory adjustments		10 816	10 708	10 543	10 242	10 065
Regulatory adjustments to Common Equity Tier 1 capital							
8	Goodwill (net of related tax liability)	e	1 662	1 668	1 660	1 677	1 662
9	Intangible assets other than mortgage-servicing rights	f - x	1 073	1 067	1 032	1 016	997
11	Accumulated other comprehensive income related to cash flow hedges	h	152	146	136	91	131
12	Shortfall of total provisions to expected losses	i	-	-	-	-	-
14	Gains (losses) due to changes in own credit risk on fair valued liabilities	j	(81)	(39)	(32)	(25)	(17)
15	Defined benefit pension plan assets (net of related tax liability)	k - y	3	4	14	7	18
16	Investments in own shares (if not already netted off contributed surplus on reported balance sheet)		5	6	-	6	6
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		2 814	2 852	2 810	2 772	2 797
29	Common Equity Tier 1 capital (CET1)		8 002	7 856	7 733	7 470	7 268
Additional Tier 1 capital: instruments							
30	Directly issued qualifying Additional Tier 1 instruments plus related contributed surplus ⁽³⁾	v	2 150	1 850	1 850	1 450	1 450
31	of which: classified as equity under applicable accounting standards	v + z	2 150	1 850	1 850	1 450	1 450
32	of which: classified as liabilities under applicable accounting standards	p	-	-	-	-	-
33	Directly issued capital instruments subject to phase out from Additional Tier 1 ⁽³⁾⁽⁴⁾	p' + v'	750	750	950	950	950
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	2	2	1
36	Additional Tier 1 capital before regulatory adjustments		2 902	2 602	2 802	2 402	2 401
Additional Tier 1 capital: regulatory adjustments							
41	Other deductions from Tier 1 capital as determined by OSFI		1	1	1	1	1
41a	of which: Reverse mortgages		1	1	1	1	1
43	Total regulatory adjustments to Additional Tier 1 capital		1	1	1	1	1
44	Additional Tier 1 capital (AT1)		2 901	2 601	2 801	2 401	2 400
45	Tier 1 capital (T1 = CET1 + AT1)		10 903	10 457	10 534	9 871	9 668
Tier 2 capital: instruments and provisions							
47	Directly issued capital instruments subject to phase out from Tier 2 ⁽³⁾	r'	8	9	9	10	1 009
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	t	154	193	210	204	234
51	Tier 2 capital before regulatory adjustments		164	204	221	216	1 245
Tier 2 capital: regulatory adjustments							
57	Total regulatory adjustments to Tier 2 capital		-	-	-	-	-
58	Tier 2 capital (T2)		164	204	221	216	1 245
59	Total capital (TC = T1 + T2)		11 067	10 661	10 755	10 087	10 913

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

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

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

(4) Figures as at October 31, 2017 include the redemption of the Series 28 preferred shares on November 15, 2017.

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

		2018		2017		
		Q1	Q4	Q3	Q2	Q1
(unaudited) (millions of Canadian dollars)		All-in basis				
60a	Common Equity Tier 1 Capital RWA (CET1)	71 179	70 173	69 156	69 383	68 574
60b	Tier 1 Capital RWA	71 271	70 327	69 289	69 533	68 715
60c	Total capital RWA	71 362	70 451	69 396	69 653	68 828
Capital ratios						
61	Common Equity Tier 1 (as a percentage of risk weighted assets)	11,2%	11,2%	11,2%	10,8%	10,6%
62	Tier 1 (as a percentage of risk weighted assets) ⁽²⁾	15,3%	14,9%	15,2%	14,2%	14,1%
63	Total capital (as a percentage of risk weighted assets) ⁽²⁾	15,5%	15,1%	15,5%	14,5%	15,9%
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%
67	of which: G-SIB buffer requirement	na	na	na	na	na
67a	of which: D-SIBs buffer requirement	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%	11,2%	11,2%	10,8%	10,6%
OSFI all-in target						
69	Common Equity Tier 1 all-in target ratio	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%
71	Total capital all-in target ratio	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	658	466	459	317	232
73	Significant investments in the common stock of financial institutions	235	221	237	238	257
75	Deferred tax assets arising from temporary differences (net of related tax liabilities)	50	54	31	61	22
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)	61	59	60	55	58
77	Cap on inclusion of allowances in Tier 2 under standardised approach	83	79	77	72	72
78	Allowance eligible for inclusion in Tier 2 in respect of exposures subject to internal ratings-based approach (prior to application of cap)	93	134	150	149	175
79	Cap on inclusion of allowances in Tier 2 under internal ratings-based approach	310	309	304	312	301
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	775	968	968	968	968
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	953	1 191	1 191	1 191	1 191
85	Amount excluded from T2 due to cap (excess over cap after redemptions and maturities)	-	-	-	-	-
Transitional Capital Disclosure Template⁽³⁾		Transitional basis				
29	Common Equity Tier 1 capital (CET1)		8 404	8 284	8 009	7 809
45	Tier 1 capital (T1 = CET1 + AT1)		10 668	10 741	10 074	9 876
59	Total capital (TC = T1 + T2)		10 872	10 961	10 289	11 120
60	Total risk weighted assets		71 254	71 481	70 428	69 567
61	Common Equity Tier 1 (as a percentage of risk weighted assets)		11,8%	11,6%	11,4%	11,2%
62	Tier 1 (as a percentage of risk weighted assets) ⁽²⁾		15,0%	15,0%	14,3%	14,2%
63	Total capital (as a percentage of risk weighted assets) ⁽²⁾		15,3%	15,3%	14,6%	16,0%

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

(2) Ratios as at October 31, 2017 include the redemption of the Series 28 preferred shares on November 15, 2017.

(3) Per CAR guidelines, transitional basis capital and ratios are not applicable subsequent to Q4 2017.

Leverage Ratio under Basel III

(unaudited) (millions of Canadian dollars)

		2018	2017			
		Q1 ⁽¹⁾	Q4	Q3	Q2	Q1
Accounting assets vs. leverage ratio exposure		All-in basis	Transitional basis			
1	Total consolidated assets as per published financial statements	251 065	245 827	240 072	239 020	234 119
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)	(80)	(68)	(90)	(60)
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 ⁽²⁾	3 635	(381)	519	2 280	1 621
5	Adjustment for securities financing transactions ⁽²⁾	(487)	1 714	2 086	3 408	3 062
6	Adjustment for off balance-sheet items	20 713	20 183	22 407	22 644	22 048
7	Other adjustments	(5 299)	(4 508)	(4 489)	(4 676)	(3 950)
8	Leverage Ratio Exposure	269 559	262 755	260 527	262 586	256 840

Leverage ratio common disclosure		All-in basis	Transitional basis			
On-balance sheet exposures						
1	On-balance sheet items (excluding derivatives, SFTs and grandfathered securitization exposures but including collateral)	223 550	214 702	211 909	210 621	208 226
2	(Asset amounts deducted in determining Basel III Tier 1 capital)	(2 897)	(2 676)	(2 634)	(2 592)	(2 304)
3	Total on-balance sheet exposures (excluding derivatives and SFTs) (sum of lines 1 and 2)	220 653	212 026	209 275	208 029	205 922
Derivative exposures						
4	Replacement cost associated with all derivative transactions (i.e., net of eligible cash variation margin)	3 991	1 277	3 551	3 974	4 405
5	Add-on amounts for PFE associated with all derivative transactions	8 166	6 766	6 597	7 044	6 624
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	4	-	12	7	-
10	(Adjusted effective notional offsets and add-on deductions for written credit derivatives)	-	-	-	-	-
11	Total derivative exposures (sum of lines 4 to 10)	12 161	8 043	10 160	11 025	11 029
Securities financing transaction exposures						
12	Gross SFT assets recognised for accounting purposes (with no recognition of netting), after adjusting for sale accounting transactions	16 520	20 789	16 600	17 481	14 779
13	(Netted amounts of cash payables and cash receivables of gross SFT assets)	(4 637)	(1 275)	(1 211)	(583)	(815)
14	Counterparty credit risk (CCR) exposure for SFTs	4 149	2 989	3 296	3 990	3 877
15	Agent transaction exposures	-	-	-	-	-
16	Total securities financing transaction exposures (sum of lines 12 to 15)	16 032	22 503	18 685	20 888	17 841
Other off-balance sheet exposures						
17	Off-balance sheet exposure at gross notional amount	66 194	64 167	62 996	63 451	61 284
18	(Adjustments for conversion to credit equivalent amounts)	(45 481)	(43 984)	(40 589)	(40 807)	(39 236)
19	Off-balance sheet items (sum of lines 17 and 18)	20 713	20 183	22 407	22 644	22 048
Capital and Total Exposures						
20	Tier 1 capital⁽³⁾	10 903	10 668	10 741	10 074	9 876
21	Total Exposures (sum of lines 3, 11, 16 and 19)	269 559	262 755	260 527	262 586	256 840
Leverage Ratio						
22	Basel III leverage ratio	4,0%	4,1%	4,1%	3,8%	3,8%
Leverage ratio – All-in basis		4,0%	4,0%	4,0%	3,8%	3,8%

(1) Prior to Q1 2018, the leverage ratio is calculated on a transitional basis.

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

(3) Figures as at October 31, 2017 include the redemption of the Series 28 preferred shares on November 15, 2017.



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

(unaudited) (millions of Canadian dollars)	Q1 2018				
	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		11 205	-	11 205	
Securities		72 217	11 278	83 495	
Assets purchased under reverse repurchase agreements and securities borrowed		16 520	-	16 520	
Loans					
Residential mortgage		51 549	(26 018)	25 531	
Personal		35 556	-	35 556	
Credit card		2 206	(1 389)	817	
Business and government		41 117	-	41 117	
Customers' liability under acceptances		6 587	-	6 587	
Less: Allowances for credit losses		(663)	-	(663)	
Allowances reflected in Tier 2 regulatory capital	t				(154)
Shortfall of allowances to expected loss	l				-
Allowances reflected in regulatory capital					(509)
Other assets					
Derivative financial instruments		8 527	-	8 527	
Other		6 244	(66)	6 178	
Goodwill	e				1 662
Intangibles assets	f				1 246
Deferred tax assets					505
Deferred tax assets excluding those arising from temporary differences	g				-
Deferred tax assets arising from temporary differences exceeding regulatory thresholds	o				-
Deferred tax assets - realize through loss carrybacks					455
Deferred tax assets - other temporary differences					50
Defined-benefit pension fund net assets	k				4
Significant Investments in other financial institutions					235
Significant investments exceeding regulatory thresholds	m + n				-
Significant investments not exceeding regulatory thresholds					235
Other					2 526
Total assets		251 065	(16 195)	234 870	
Liabilities					
Deposits		156 779	-	156 779	
Derivatives financial instruments		7 251	-	7 251	
Other liabilities		73 319	(16 195)	57 124	
Gains and losses due to changes in own credit risk on fair value liabilities	j				(81)
Deferred tax liabilities					155
Related to goodwill	w				-
Related to intangibles	x				173
Related to pensions	y				1
Other deferred tax liabilities					(19)
Other					57 050
Subordinated debt		8	-	8	
Regulatory capital amortization of maturing debentures					-
Fair value adjustment and unamortized issuance cost					-
Subordinated debentures used for regulatory capital					8
Allowed for inclusion in Tier 2 capital	r				-
Subject to phase out	r'				8
Ineligible additional Tier 2 capital					-
Excluded from Tier 2 capital due to cap					-
Total liabilities		237 357	(16 195)	221 162	
Equity Attributable to Shareholders		12 958	-	12 958	
Common shares	a				2 861
Contributed surplus	a'				52
Retained Earnings	b				7 785
Accumulated Other Comprehensive Income (loss)	c				110
Net gains (losses) on instruments designated as cash flow hedges	h				152
Other					(42)
Preferred shares					2 150
Allowed for inclusion in additional Tier 1 capital	v				2 150
Subject to phase out	v'				-
Ineligible additional Tier 1 capital					-
Excluded from additional Tier 1 capital due to cap					-
Non-controlling interests		750	18	768	
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				8
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		13 708	18	13 726	
Total Liabilities and Equity		251 065	(16 177)	234 888	

(1) The basis of consolidation used for financial accounting purposes, described in note 1 to the 2017 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 \$170 million and \$17 million respectively.

(4) The amount is mainly due to securitization entities. For more information on structured entities, please see pages 187 to 189 of the 2017 Annual Report.



Capital Adequacy under Basel III⁽¹⁾

(unaudited) (millions of Canadian dollars)	2018					2017				
	Exposure at default	Q1				Capital requirement ⁽²⁾	Q4	Q3	Q2	Q1
		Standardized	AIRB Approach	Other	Total		Risk-weighted assets			
Credit risk										
Retail										
Residential mortgages	49 818	1 352	4 723	–	6 075	486	5 555	5 638	5 472	5 392
Qualifying revolving retail	6 070	–	1 195	–	1 195	96	1 275	1 210	1 190	1 155
Other retail	16 302	2 057	5 137	–	7 194	576	7 611	7 559	7 601	7 280
Non-retail										
Corporate	65 116	1 693	26 840	–	28 533	2 283	27 544	26 969	27 810	27 226
Sovereign	27 853	309	679	–	988	79	985	1 011	891	857
Financial institutions	5 336	393	1 051	–	1 444	115	1 531	1 531	1 639	1 473
Banking book equity ⁽³⁾	912	–	912	–	912	73	910	932	872	886
Securitization	5 012	–	408	–	408	33	390	423	402	304
Other assets	23 666	–	–	2 826	2 826	226	3 645	3 455	3 232	3 137
Counterparty credit risk										
Corporate	19 346	88	191	–	279	22	197	156	238	209
Sovereign	46 209	–	57	–	57	5	43	50	32	33
Financial institutions	54 157	–	394	–	394	31	366	508	510	436
Trading portfolio	9 539	76	2 170	–	2 246	179	2 178	2 151	2 183	2 190
Credit valuation adjustment charge ⁽⁴⁾		2 449	–	–	2 449	196	2 227	1 916	2 159	2 030
Regulatory scaling factor		–	2 625	–	2 625	210	2 580	2 557	2 624	2 540
Total - Credit risk	329 336	8 417	46 382	2 826	57 625	4 610	57 037	56 066	56 855	55 148
Market risk										
VaR		–	766	–	766	61	867	972	962	1 340
Stressed VaR		–	1 388	–	1 388	111	1 324	1 630	1 086	1 632
Interest-rate specific risk		1 182	–	–	1 182	95	906	661	720	843
Total - Market risk		1 182	2 154	–	3 336	267	3 097	3 263	2 768	3 815
Operational risk		10 218	–	–	10 218	817	10 039	9 827	9 760	9 611
Total	329 336	19 817	48 536	2 826	71 179	5 694	70 173	69 156	69 383	68 574
Capital ratio under Basel III										
Common Equity Tier 1 (CET1)					11,2%		11,2%	11,2%	10,8%	10,6%
Tier 1 ⁽⁵⁾					15,3%		14,9%	15,2%	14,2%	14,1%
Total ⁽⁵⁾					15,5%		15,1%	15,5%	14,5%	15,9%
Leverage ratio under Basel III					4,0%		4,0%	4,0%	3,8%	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.

(5) Ratios as at October 31, 2017 include the redemption of the Series 28 preferred shares on November 15, 2017.



Risk-Weighted Assets Movement by Key Drivers⁽¹⁾

(unaudited) (millions of Canadian dollars)	2018			2017			
	Q1			Q4	Q3	Q2	Q1
	Non-counterparty credit risk	Counterparty credit risk ⁽²⁾	Total	Total	Total	Total	Total
Credit risk – Risk-weighted assets at beginning	52 026	5 011	57 037	56 066	56 855	55 148	55 903
Book size	820	469	1 289	833	453	889	455
Book quality	(170)	27	(143)	141	(143)	176	(832)
Model updates	–	–	–	(426)	–	–	–
Methodology and policy	–	–	–	–	–	–	–
Acquisitions and disposals	–	–	–	–	–	–	–
Foreign exchange movements	(476)	(82)	(558)	423	(1 099)	642	(378)
Credit risk – Risk-weighted assets at end	52 200	5 425	57 625	57 037	56 066	56 855	55 148
Market risk – Risk-weighted assets at beginning			3 097	3 263	2 768	3 815	2 807
Movement in risk levels ⁽³⁾			239	(166)	353	(1 047)	1 008
Model updates			–	–	142	–	–
Methodology and policy			–	–	–	–	–
Acquisitions and disposals			–	–	–	–	–
Market risk – Risk-weighted assets at end			3 336	3 097	3 263	2 768	3 815
Operational risk – Risk-weighted assets at beginning			10 039	9 827	9 760	9 611	9 495
Movement in risk levels ⁽³⁾			179	212	67	149	116
Acquisitions and disposals			–	–	–	–	–
Operational risk – Risk-weighted assets at end			10 218	10 039	9 827	9 760	9 611
Risk-weighted assets at end			71 179	70 173	69 156	69 383	68 574

(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)	Q1 2018							
	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⁾	10 613	-	-	-	-	-	592	11 205
Securities								
At fair value through profit or loss	8 869	-	-	-	-	49 804	-	58 673
At fair value through other comprehensive income	6 063	-	-	-	-	-	121	6 184
At amortized cost	7 360	-	-	-	-	-	-	7 360
	22 292	-	-	-	-	49 804	121	72 217
Securities purchased under reverse repurchase agreements and securities borrowed	-	-	-	16 520	-	-	-	16 520
Loans and acceptances								
Residential mortgage ⁽³⁾	30 121	21 428	-	-	-	-	-	51 549
Personal	-	35 556	-	-	-	-	-	35 556
Credit card	-	817	1 389	-	-	-	-	2 206
Business and government	39 342	1 775	-	-	-	-	-	41 117
	69 463	59 576	1 389	-	-	-	-	130 428
Customers' liability under acceptances	6 587	-	-	-	-	-	-	6 587
Allowances for credit losses	(260)	(403)	-	-	-	-	-	(663)
	75 790	59 173	1 389	-	-	-	-	136 352
Other								
Derivative financial instruments ⁽²⁾	-	-	-	-	8 527	-	-	8 527
Investments in associates and joint ventures	-	-	-	-	-	-	635	635
Premises and equipment	-	22	-	-	-	-	559	581
Goodwill	-	-	-	-	-	-	1 401	1 401
Intangible assets	-	-	-	-	-	-	1 246	1 246
Other assets	-	-	-	-	-	-	2 381	2 381
	-	22	-	-	8 527	-	6 222	14 771
	108 695	59 195	1 389	16 520	8 527	49 804	6 935	251 065

(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.



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

(unaudited) (millions of Canadian dollars)	2018									2017																	
	Q1									Q4									Q3								
	0%	20%	35%	50%	75%	100%	150%	Total	0%	20%	35%	50%	75%	100%	150%	Total	0%	20%	35%	50%	75%	100%	150%	Total			
Retail																											
Residential mortgage	-	-	2 023	18	985	75	-	3 101	-	-	1 909	22	422	72	-	2 425	-	-	1 788	21	519	73	-	2 401			
Other retail	-	-	-	-	5 511	1	-	5 512	-	-	-	-	5 925	-	-	5 925	-	-	-	-	5 872	-	-	5 872			
	-	-	2 023	18	6 496	76	-	8 613	-	-	1 909	22	6 347	72	-	8 350	-	-	1 788	21	6 391	73	-	8 273			
Non-Retail																											
Corporate	-	-	-	-	-	6 391	27	6 418	-	-	-	-	-	6 395	-	6 395	-	-	-	-	-	4 395	-	4 395			
Sovereign	224	-	-	34	-	292	-	550	254	-	-	38	-	263	-	555	300	-	-	33	-	272	-	605			
Financial Institutions	-	100	-	1	-	354	11	466	-	198	-	3	-	349	12	562	-	331	-	-	-	228	11	570			
	224	100	-	35	-	7 037	38	7 434	254	198	-	41	-	7 007	12	7 512	300	331	-	33	-	4 895	11	5 570			
Trading	6	-	-	-	-	80	-	86	10	-	-	-	-	168	-	178	4	-	-	-	-	121	-	125			
Total	230	100	2 023	53	6 496	7 193	38	16 133	264	198	1 909	63	6 347	7 247	12	16 040	304	331	1 788	54	6 391	5 089	11	13 968			

(unaudited) (millions of Canadian dollars)	2017									2016																	
	Q2									Q1									Q4								
	0%	20%	35%	50%	75%	100%	150%	Total	0%	20%	35%	50%	75%	100%	150%	Total	0%	20%	35%	50%	75%	100%	150%	Total			
Retail																											
Residential mortgage	-	-	1 673	25	460	83	-	2 241	-	-	1 511	27	470	83	-	2 091	47	-	1 598	27	311	87	-	2 070			
Other retail	-	-	-	-	5 948	-	-	5 948	-	-	-	-	5 748	-	-	5 748	-	-	-	-	5 189	-	-	5 189			
	-	-	1 673	25	6 408	83	-	8 189	-	-	1 511	27	6 218	83	-	7 839	47	-	1 598	27	5 500	87	-	7 259			
Non-Retail																											
Corporate	-	-	-	-	-	4 555	-	4 555	-	-	-	-	-	4 897	-	4 897	-	50	-	-	-	5 105	-	5 155			
Sovereign	362	-	-	33	-	249	-	644	312	-	-	26	-	212	-	550	396	-	-	-	-	223	-	619			
Financial Institutions	-	349	-	-	-	150	13	512	-	310	-	-	-	122	15	447	-	266	-	-	-	228	16	510			
	362	349	-	33	-	4 954	13	5 711	312	310	-	26	-	5 231	15	5 894	396	316	-	-	-	5 556	16	6 284			
Trading	11	-	-	-	-	202	-	213	11	-	-	-	-	106	-	117	10	-	-	-	-	249	-	259			
Total	373	349	1 673	58	6 408	5 239	13	14 113	323	310	1 511	53	6 218	5 420	15	13 850	453	316	1 598	27	5 500	5 892	16	13 802			

(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)	2018						2017						2017					
	Q1						Q4						Q3					
	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	41 981	7 837	–	–	–	49 818	41 308	7 720	–	–	–	49 028	40 891	6 307	–	–	–	47 198
Qualifying revolving retail	2 775	3 295	–	–	–	6 070	2 834	3 362	–	–	–	6 196	2 797	3 230	–	–	–	6 027
Other retail	14 842	1 446	–	–	14	16 302	15 169	1 452	–	–	14	16 635	15 086	1 412	–	–	–	16 556
	59 598	12 578	–	–	14	72 190	59 311	12 534	–	–	14	71 859	58 774	10 949	–	–	–	69 781
Non-retail																		
Corporate	45 294	17 134	19 334	12	2 688	84 462	44 554	16 002	16 553	14	2 936	80 059	44 022	15 368	12 559	15	2 921	74 885
Sovereign	23 016	4 693	45 411	798	144	74 062	24 325	4 024	35 289	314	144	64 096	21 834	3 773	33 267	335	130	59 339
Financial Institutions	4 474	168	53 787	370	694	59 493	4 505	193	52 811	358	641	58 508	4 624	221	47 414	437	624	53 320
	72 784	21 995	118 532	1 180	3 526	218 017	73 384	20 219	104 653	686	3 721	202 663	70 480	19 362	93 240	787	3 675	187 544
Trading book																		
Securitization	–	–	–	9 539	–	9 539	–	–	–	8 309	–	8 309	–	–	–	8 168	–	8 168
	–	–	–	–	5 012	5 012	–	–	–	–	4 740	4 740	–	–	–	–	5 152	5 152
Total - Gross Credit Risk	132 382	34 573	118 532	10 719	8 552	304 758	132 695	32 753	104 653	8 995	8 475	287 571	129 254	30 311	93 240	8 955	8 885	270 645

Standardized Approach	11 806	51	3 842	93	341	16 133	11 154	230	4 101	189	366	16 040	11 268	244	1 904	134	418	13 968
AIRB Approach⁽²⁾	120 576	34 522	114 690	10 626	8 211	288 625	121 541	32 523	100 552	8 806	8 109	271 531	117 986	30 067	91 336	8 821	8 467	256 677
Total - Gross Credit Risk	132 382	34 573	118 532	10 719	8 552	304 758	132 695	32 753	104 653	8 995	8 475	287 571	129 254	30 311	93 240	8 955	8 885	270 645
Adjustment to exposure for collateral																		
Standardized Approach	–	–	(3 760)	(4)	–	(3 764)	–	–	(4 063)	(8)	–	(4 071)	–	–	(1 879)	(3)	–	(1 882)
AIRB Approach⁽²⁾	–	–	(108 480)	–	–	(108 480)	–	–	(95 370)	–	–	(95 370)	–	–	(86 034)	–	–	(86 034)
Total - Net Credit Risk	132 382	34 573	6 292	10 715	8 552	192 514	132 695	32 753	5 220	8 987	8 475	188 130	129 254	30 311	5 327	8 952	8 885	182 729

(unaudited) (millions of Canadian dollars)	2017						2017						2016					
	Q2						Q1						Q4					
	Drawn	Undrawn commitments	Repo-style transactions	OTC derivatives	Other off-balance sheet items	Total	Drawn	Undrawn commitments	Repo-style transactions	OTC derivatives	Other off-balance sheet items	Total	Drawn	Undrawn commitments	Repo-style transactions	OTC derivatives	Other off-balance sheet items	Total
Retail																		
Residential mortgage	38 588	6 146	–	–	–	44 734	38 696	6 124	–	–	–	44 820	40 600	5 978	–	–	–	46 578
Qualifying revolving retail	2 772	3 072	–	–	–	5 844	2 719	2 914	–	–	–	5 633	2 795	2 921	–	–	–	5 716
Other retail	14 990	1 370	–	–	88	16 448	14 585	1 334	–	–	88	16 007	13 980	1 301	–	–	93	15 374
	56 350	10 588	–	–	88	67 026	56 000	10 372	–	–	88	66 460	57 375	10 200	–	–	93	67 668
Non-retail																		
Corporate	42 130	16 610	13 583	20	2 845	75 188	41 001	15 607	14 313	15	2 833	73 769	40 956	14 416	14 418	27	2 890	72 707
Sovereign	22 962	3 712	35 058	316	139	62 187	23 401	3 945	35 413	305	131	63 195	23 068	3 623	30 559	328	135	57 713
Financial Institutions	4 214	227	52 107	426	723	57 697	4 214	199	43 963	456	688	49 520	4 074	252	36 835	324	609	42 094
	69 306	20 549	100 748	762	3 707	195 072	68 616	19 751	93 689	776	3 652	186 484	68 098	18 291	81 812	679	3 634	172 514
Trading book																		
Securitization	–	–	–	9 129	–	9 129	–	–	–	9 174	–	9 174	–	–	–	9 623	–	9 623
	–	–	–	–	4 836	4 836	–	–	–	–	3 732	3 732	616	–	–	–	3 452	4 068
Total - Gross Credit Risk	125 656	31 137	100 748	9 891	8 631	276 063	124 616	30 123	93 689	9 950	7 472	265 850	126 089	28 491	81 812	10 302	7 179	253 873

Standardized Approach	10 968	76	2 354	230	485	14 113	10 799	71	2 378	126	476	13 850	10 458	277	2 294	282	491	13 802
AIRB Approach⁽²⁾	114 688	31 061	98 394	9 661	8 146	261 950	113 817	30 052	91 311	9 824	6 996	252 000	115 631	28 214	79 518	10 020	6 688	240 071
Total - Gross Credit Risk	125 656	31 137	100 748	9 891	8 631	276 063	124 616	30 123	93 689	9 950	7 472	265 850	126 089	28 491	81 812	10 302	7 179	253 873
Adjustment to exposure for collateral																		
Standardized Approach	–	–	(2 309)	(10)	–	(2 319)	–	–	(2 320)	(5)	–	(2 325)	–	–	(2 152)	(36)	–	(2 188)
AIRB Approach⁽²⁾	–	–	(92 119)	–	–	(92 119)	–	–	(85 152)	–	–	(85 152)	–	–	(74 517)	–	–	(74 517)
Total - Net Credit Risk	125 656	31 137	6 320	9 881	8 631	181 625	124 616	30 123	6 217	9 945	7 472	178 373	126 089	28 491	5 143	10 266	7 179	177 168

(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⁾

			2018									
			Q1									
			EAD	Notional of undrawn commitments	Exposure weighted-average (EAD %)	Exposure weighted-average (PD %)	Exposure weighted-average (LGD %)	Exposure weighted-average risk weight asset (RWA %)	RWA	Expected Losses (EL)	EL adjusted average risk weight % ⁽²⁾	
(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%	717	-	100%	0,07%	18,0%	3,0%	24	0,1	4%
		Very low	0.145% - 0.506%	907	-	100%	0,30%	12,0%	6,0%	53	0,3	6%
		Low	0.507% - 1.116%	426	-	100%	0,76%	6,0%	7,0%	28	0,2	7%
		Low	1.117% - 2.681%	255	-	100%	1,76%	4,0%	8,0%	20	0,2	9%
		Medium	2.682% - 9.348%	155	-	100%	4,72%	3,0%	10,0%	16	0,2	12%
		High	9.349% - 99.99%	81	-	100%	28,79%	3,0%	16,0%	13	0,7	27%
		Default	100.00%	54	-	100%	100,00%	3,0%	13,0%	7	1,6	50%
					2 595	-	100%	3,68%	11,0%	6,0%	161	3,3
Uninsured Undrawn⁽⁴⁾	Exceptionally low	0.000% - 0.144%	6 150	12 446	62%	0,05%	17,0%	2,0%	150	0,6	3%	
	Very low	0.145% - 0.506%	1 342	1 930	78%	0,26%	19,0%	9,0%	127	0,7	10%	
	Low	0.507% - 1.116%	231	313	82%	0,72%	19,0%	20,0%	45	0,3	21%	
	Low	1.117% - 2.681%	70	108	77%	1,65%	19,0%	33,0%	23	0,2	37%	
	Medium	2.682% - 9.348%	20	24	86%	4,57%	19,0%	59,0%	12	0,2	71%	
	High	9.349% - 99.99%	1	1	95%	14,97%	20,0%	100,0%	1	-	138%	
	Default	100.00%	3	3	81%	100,00%	17,0%	167,0%	4	0,1	212%	
				7 817	14 825	66%	0,17%	18,0%	5,0%	362	2,1	5%
Uninsured Drawn⁽⁵⁾	Exceptionally low	0.000% - 0.144%	19 020			0,07%	21,0%	4,0%	720	2,9	4%	
	Very low	0.145% - 0.506%	11 915			0,27%	23,0%	12,0%	1 379	7,5	12%	
	Low	0.507% - 1.116%	3 289			0,73%	24,0%	24,0%	791	5,8	26%	
	Low	1.117% - 2.681%	1 192			1,68%	23,0%	41,0%	485	4,7	46%	
	Medium	2.682% - 9.348%	540			4,66%	22,0%	69,0%	374	5,6	82%	
	High	9.349% - 99.99%	265			23,34%	24,0%	129,0%	343	15,2	201%	
	Default	100.00%	78			100,00%	23,0%	138,0%	108	10,8	311%	
				36 299			0,70%	22,0%	12,0%	4 200	52,5	13%
Qualifying revolving credit	Exceptionally low	0.000% - 0.144%	3 200	5 608	60%	0,05%	73,0%	2,0%	77	1,2	3%	
	Very low	0.145% - 0.506%	1 124	933	79%	0,29%	76,0%	11,0%	121	2,5	14%	
	Low	0.507% - 1.116%	638	303	89%	0,78%	74,0%	23,0%	148	3,7	30%	
	Low	1.117% - 2.681%	582	179	96%	1,80%	80,0%	48,0%	277	8,4	66%	
	Medium	2.682% - 9.348%	414	54	102%	4,56%	81,0%	91,0%	375	15,2	136%	
	High	9.349% - 99.99%	90	5	104%	21,67%	78,0%	195,0%	175	15,8	416%	
	Default	100.00%	22	-	104%	100,00%	59,0%	96,0%	22	12,0	760%	
				6 070	7 082	74%	1,34%	75,0%	20,0%	1 195	58,8	32%
Other retail⁽⁶⁾	Exceptionally low	0.000% - 0.144%	2 397	1 711	82%	0,07%	43,0%	8,0%	180	0,7	8%	
	Very low	0.145% - 0.506%	2 868	432	97%	0,30%	54,0%	28,0%	802	4,7	30%	
	Low	0.507% - 1.116%	2 486	341	98%	0,78%	61,0%	55,0%	1 380	12,1	62%	
	Low	1.117% - 2.681%	1 829	121	103%	1,69%	65,0%	80,0%	1 455	20,3	93%	
	Medium	2.682% - 9.348%	879	56	99%	4,41%	66,0%	95,0%	838	25,7	132%	
	High	9.349% - 99.99%	236	5	99%	20,15%	64,0%	135,0%	319	30,9	299%	
	Default	100.00%	101	2	99%	100,00%	58,0%	161,0%	163	46,6	739%	
				10 796	2 668	95%	2,30%	56,0%	48,0%	5 137	141,0	64%
			63 577	24 575	87%	1,09%	32,0%	17,0%	11 055	257,7	22%	

(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)			Q1 2018							Q4 2017							Q3 2017									
			EAD Amount			Average PD (%)	Average LGD (%)	RWA	Percentage RWA (%)	EAD Amount			Average PD (%)	Average LGD (%)	RWA	Percentage RWA (%)	EAD Amount			Average PD (%)	Average LGD (%)	RWA	Percentage RWA (%)			
Internal Ratings grades	PD Range 0.000%	S&P rating equivalent	Drawn	Undrawn	Other	Total					Drawn	Undrawn	Other	Total					Drawn	Undrawn	Other	Total				
1	0.000 - 0.035	AAA-, AA-	99	10	35	144	0.03%	33.0%	3	2%	88	20	46	154	0.03%	36.6%	4	3%	66	42	38	146	0.03%	49.3%	7	5%
1.5	0.035 - 0.044	A+	70	54	260	384	0.04%	40.9%	23	6%	80	47	190	317	0.04%	40.2%	20	6%	55	11	229	295	0.04%	41.2%	17	6%
2	0.044 - 0.063	A	221	786	258	1 265	0.05%	50.8%	277	22%	208	596	590	1 394	0.05%	53.3%	263	19%	153	571	592	1 316	0.05%	52.5%	253	19%
2.5	0.063 - 0.103	A-	989	1 209	250	2 448	0.08%	46.8%	553	23%	988	1 151	198	2 337	0.08%	45.1%	507	22%	1 070	1 121	305	2 496	0.08%	46.0%	524	21%
3	0.103 - 0.170	BBB+	4 535	3 694	614	8 843	0.13%	37.4%	2 240	25%	4 815	3 262	595	8 672	0.13%	37.0%	2 171	25%	4 826	3 078	473	8 377	0.13%	37.4%	2 046	24%
3.5	0.170 - 0.280	BBB	7 123	4 079	603	11 805	0.22%	38.9%	4 000	34%	7 091	3 554	517	11 162	0.22%	39.5%	3 755	34%	6 993	3 137	437	10 567	0.22%	40.0%	3 586	34%
4	0.280 - 0.462	BBB-	8 351	3 202	661	12 214	0.36%	35.1%	4 744	39%	7 764	3 115	683	11 562	0.36%	35.8%	4 521	39%	7 250	3 180	683	11 113	0.36%	35.5%	4 352	39%
4.5	0.462 - 0.762	BB+	6 175	1 955	289	8 419	0.59%	35.2%	3 917	47%	6 540	1 859	177	8 576	0.59%	35.2%	3 841	45%	6 256	1 666	172	8 094	0.59%	35.4%	3 524	44%
5	0.762 - 1.256	BB	6 586	1 096	305	7 987	0.98%	34.1%	4 147	52%	6 522	1 117	262	7 901	0.98%	33.6%	4 068	51%	6 719	1 250	301	8 270	0.98%	34.8%	4 349	53%
5.5	1.256 - 2.070	BB-	3 369	486	59	3 914	1.61%	36.1%	2 549	65%	3 053	435	103	3 591	1.61%	34.3%	2 240	62%	3 220	438	87	3 745	1.61%	35.2%	2 278	61%
6	2.070 - 3.412	B+	2 282	244	56	2 582	2.66%	34.8%	1 899	74%	2 337	311	70	2 718	2.66%	34.0%	1 959	72%	2 117	297	109	2 523	2.66%	32.2%	1 819	72%
6.5	3.412 - 5.625	B	1 596	158	108	1 862	4.38%	20.6%	1 028	55%	1 647	145	97	1 889	4.38%	20.5%	1 024	54%	1 633	172	86	1 891	4.38%	20.6%	1 037	55%
7	5.625 - 9.272	B-	750	78	23	851	7.22%	34.3%	893	105%	798	145	33	976	7.22%	32.5%	975	100%	783	149	26	958	7.22%	30.1%	883	92%
7.5	9.272 - 15.284	CCC+	296	37	12	345	11.90%	33.5%	433	126%	267	29	11	307	11.90%	28.9%	320	104%	234	24	6	264	11.90%	22.0%	201	76%
8	15.284 - 25.195	CCC	52	3	2	57	19.62%	38.8%	94	165%	51	2	2	55	19.62%	39.6%	92	167%	47	9	1	56	19.62%	37.9%	90	161%
8.5	25.195 - 100	CCC-	31	2	1	34	32.35%	29.2%	45	132%	34	4	4	38	32.35%	28.1%	47	124%	38	1	1	40	32.35%	31.9%	56	140%
9	100	CC	323	9	1	333	100.00%	28.1%	186	56%	282	1	1	283	100.00%	32.1%	187	66%	390	1	1	390	100.00%	24.9%	249	64%
9.5	100	C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10	100	D	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total			42 848	17 102	3 537	63 487	1.23%	36.4%	27 031	43%	42 565	15 793	3 574	61 932	1.21%	36.3%	25 994	42%	41 850	15 146	3 545	60 541	1.37%	36.5%	25 271	42%

(unaudited) (millions of Canadian dollars)			Q1 2018							Q4 2017							Q3 2017									
			EAD Amount			Average PD (%)	Average LGD (%)	RWA	Percentage RWA (%)	EAD Amount			Average PD (%)	Average LGD (%)	RWA	Percentage RWA (%)	EAD Amount			Average PD (%)	Average LGD (%)	RWA	Percentage RWA (%)			
Internal Ratings grades	PD Range 0.000%	S&P rating equivalent	Drawn	Undrawn	Other	Total					Drawn	Undrawn	Other	Total					Drawn	Undrawn	Other	Total				
1	0.000 - 0.010	AAA-, AA-	15 651	266	1 751	17 668	0.01%	5.5%	124	1%	16 898	282	913	18 093	0.01%	5.8%	125	1%	14 578	274	1 023	15 875	0.01%	5.6%	118	1%
1.5	0.010 - 0.019	A+	4 859	3 431	816	9 106	0.02%	12.7%	337	4%	4 972	2 666	662	8 300	0.03%	12.8%	320	4%	4 755	2 482	1 007	8 244	0.03%	12.9%	321	4%
2	0.019 - 0.033	A	1 765	968	784	3 517	0.04%	17.1%	185	5%	1 657	1 028	463	3 148	0.04%	17.8%	178	6%	1 579	961	73	2 613	0.04%	18.2%	168	6%
2.5	0.033 - 0.060	A-	85	-	1 008	1 093	0.07%	10.8%	30	3%	85	-	1 052	1 137	0.07%	10.8%	32	3%	84	1	231	316	0.07%	10.7%	11	3%
3	0.060 - 0.107	BBB+	-	-	2	2	0.12%	17.2%	-	-	-	-	-	5	0.12%	17.2%	-	-	-	-	740	740	0.12%	11.3%	28	4%
3.5	0.107 - 0.191	BBB	-	-	3	3	0.21%	11.6%	-	-	-	-	-	5	0.21%	11.6%	-	-	-	10	10	10	0.21%	11.6%	1	10%
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	107	28	10	145	5.07%	14.1%	60	41%	159	48	11	218	5.07%	14.1%	91	42%	216	54	5	275	5.07%	14.1%	115	42%
7	6.276 - 11.231	B-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7.5	11.231 - 20.099	CCC+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8	20.099 - 35.967	CCC	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8.5	35.967 - 100	CCC-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9	100	CC	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9.5	100	C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10	100	D	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total			22 467	4 693	4 374	31 534	0.04%	9.1%	736	2%	23 771	4 024	3 111	30 906	0.05%	9.2%	746	2%	21 229	3 772	3 089	28 090	0.06%	9.2%	774	3%

(unaudited) (millions of Canadian dollars)			Q1 2018							Q4 2017							Q3 2017									
			EAD Amount			Average PD (%)	Average LGD (%)	RWA	Percentage RWA (%)	EAD Amount			Average PD (%)	Average LGD (%)	RWA	Percentage RWA (%)	EAD Amount			Average PD (%)	Average LGD (%)	RWA	Percentage RWA (%)			
Internal Ratings grades	PD Range 0.000%	S&P rating equivalent	Drawn	Undrawn	Other	Total					Drawn	Undrawn	Other	Total					Drawn	Undrawn	Other	Total				
1	0.000 - 0.035	AAA-, AA-	347	-	256	603	0.03%	42.9%	61	10%	639	-	236	875	0.03%	44.8%	92	11%	569	-	252	821	0.03%	45.5%	95	12%
1.5	0.035 - 0.044	A+	619	-	1 551	2 170	0.04%	44.4%	210	10%	499	-	1 572	2 071	0.04%	41.7%	170	8%	452	-	1 610	2 062	0.04%	40.1%	172	8%
2	0.044 - 0.063	A	425	-	69	494	0.05%	39.8%	96	15%	416	-	79	495	0.05%	38.6%	77	16%	441	-	130	571	0.05%	38.5%	76	13%
2.5	0.063 - 0.103	A-	520	30	153	703	0.08%	49.5%	132	22%	229	30	149	408	0.08%	49.0%	84	21%	308	30	158	496	0.08%	49.8%	104	21%
3	0.103 - 0.170	BBB+	278	-	162	440	0.13%	50.6%	139	32%	46	-	151	197	0.13%	49.7%	54	27%	78	-	152	230	0.13%	49.9%	65	28%
3.5	0.170 - 0.280	BBB	1 484	-	131	1 615	0.22%	33.9%	204	1																

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

			Q2 2017								Q1 2017								Q4 2016							
(unaudited) (millions of Canadian dollars)			Corporate AIRB exposures by Internal PD grade																							
Internal Ratings grades	PD Range 0.00%	S&P rating equivalent	EAD Amount			Average PD (%)	Average LGD (%)	RWA	Percentage RWA (%)	EAD Amount			Average PD (%)	Average LGD (%)	RWA	Percentage RWA (%)	EAD Amount			Average PD (%)	Average LGD (%)	RWA	Percentage RWA (%)			
			Drawn	Undrawn	Other					Drawn	Undrawn	Other					Drawn	Undrawn	Other							
1	0.000 - 0.035	AAA-, AA-	26	19	40	95	0.03%	39.3%	6	6	12	138	0.03%	36.2%	6	5	19	71	139	0.03%	35.3%	5	4%			
1.5	0.035 - 0.044	A+	63	6	387	456	0.04%	42.4%	26	6	32	369	0.04%	40.0%	24	6	43	146	350	0.04%	39.5%	22	5%			
2	0.044 - 0.063	A	146	577	618	1 361	0.05%	52.9%	257	19%	167	583	0.05%	51.5%	262	19%	163	511	540	0.05%	51.3%	233	19%			
2.5	0.063 - 0.103	A-	1 269	1 281	266	2 816	0.08%	48.5%	647	23%	1 381	1 151	0.08%	50.0%	626	22%	1 603	1 001	223	2 827	0.08%	52.4%	624	22%		
3	0.103 - 0.170	BBB+	3 897	2 834	480	7 211	0.13%	39.7%	1 883	26%	3 730	2 427	0.13%	39.6%	1 792	27%	4 052	2 445	402	6 899	0.13%	40.5%	1 900	28%		
3.5	0.170 - 0.280	BBB	6 841	4 133	426	11 400	0.22%	40.8%	3 918	34%	6 003	4 070	0.22%	40.9%	3 722	35%	5 914	3 405	608	9 927	0.22%	38.3%	3 264	33%		
4	0.280 - 0.462	BBB-	6 774	3 469	566	10 809	0.36%	34.2%	4 125	38%	7 048	2 789	0.36%	34.5%	3 949	38%	6 662	2 370	550	9 582	0.36%	36.5%	3 752	39%		
4.5	0.462 - 0.762	BB+	6 212	1 545	194	7 951	0.59%	35.8%	3 394	43%	5 376	1 423	0.59%	35.9%	2 976	43%	5 660	1 551	135	7 346	0.59%	35.7%	3 297	45%		
5	0.762 - 1.256	BB	6 637	1 253	390	8 280	0.98%	34.8%	4 236	51%	6 894	1 528	0.98%	36.2%	4 673	54%	6 255	1 494	414	9 988	0.98%	35.1%	4 478	55%		
5.5	1.256 - 2.070	BB-	3 148	622	93	3 863	1.61%	36.2%	2 536	66%	3 195	664	1.61%	34.9%	2 478	63%	3 326	646	121	4 093	1.61%	35.3%	2 643	65%		
6	2.070 - 3.412	B+	2 257	391	59	2 707	2.66%	33.7%	1 926	71%	2 285	519	2.66%	33.8%	2 073	72%	2 047	333	45	2 425	2.66%	32.4%	1 681	69%		
6.5	3.412 - 5.625	B	1 478	187	151	1 816	4.38%	34.8%	1 877	103%	1 122	247	4.38%	28.8%	1 161	75%	1 142	298	205	1 645	4.38%	30.7%	1 354	82%		
7	5.625 - 9.272	B-	694	205	8	907	7.22%	31.2%	882	97%	710	83	9	802	7.22%	28.2%	668	83%	840	82	933	7.22%	30.3%	831	89%	
7.5	9.272 - 15.284	CCC+	268	29	6	303	11.90%	23.4%	248	82%	241	33	3	277	11.90%	27.2%	278	100%	290	51	15	356	11.90%	24.4%	328	92%
8	15.284 - 25.195	CCC	37	5	-	42	19.62%	30.4%	51	121%	68	11	-	79	19.62%	41.1%	130	165%	78	6	-	84	19.62%	34.2%	116	138%
8.5	25.195 - 100	CCC-	35	1	1	37	32.35%	43.0%	70	189%	22	1	1	24	32.35%	39.5%	42	175%	16	1	1	18	32.35%	29.0%	22	122%
9	100	CC	309	1	-	310	100.00%	26.9%	236	76%	326	3	3	332	100.00%	25.6%	698	210%	337	3	5	345	100.00%	44.1%	1 033	299%
9.5	100	C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10	100	D	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total			40 101	16 558	3 685	60 344	1.25%	37.5%	26 318	44%	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%

			Q2 2017								Q1 2017								Q4 2016							
Sovereign AIRB exposures by Internal PD grade																										
Internal Ratings grades	PD Range 0.00%	S&P rating equivalent	EAD Amount			Average PD (%)	Average LGD (%)	RWA	Percentage RWA (%)	EAD Amount			Average PD (%)	Average LGD (%)	RWA	Percentage RWA (%)	EAD Amount			Average PD (%)	Average LGD (%)	RWA	Percentage RWA (%)			
			Drawn	Undrawn	Other					Drawn	Undrawn	Other					Drawn	Undrawn	Other							
1	0.000 - 0.010	AAA-, AA-	15 759	295	940	16 994	0.01%	5.9%	149	3%	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%
1.5	0.010 - 0.019	A+	4 605	2 646	848	8 099	0.01%	13.0%	229	3%	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%
2	0.019 - 0.033	A	1 685	712	150	2 547	0.03%	17.8%	121	5%	1 690	763	72	2 525	0.02%	17.8%	122	5%	1 479	642	328	2 449	0.03%	18.0%	110	4%
2.5	0.033 - 0.060	A-	8	-	1	287	0.05%	10.8%	4	1%	8	1	7	16	0.04%	16.6%	1	6%	9	1	1	11	0.05%	16.4%	1	9%
3	0.060 - 0.107	BBB+	-	-	623	623	0.08%	0.1%	17	3%	-	-	-	885	0.08%	11.3%	21	2%	-	-	742	742	0.08%	11.3%	20	3%
3.5	0.107 - 0.191	BBB	-	-	7	7	0.14%	11.6%	-	-	-	-	-	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%
4.5	0.342 - 0.612	BB+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5	0.612 - 1.095	BB	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	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	245	57	12	314	4.69%	14.1%	127	40%	257	27	12	296	4.69%	14.1%	120	41%	200	25	12	237	4.69%	14.1%	99	42%
7	6.276 - 11.231	B-	17	-	-	17	8.40%	18.5%	12	71%	18	-	18	18	8.40%	18.5%	12	67%	18	-	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			22 319	3 711	2 867	28 897	0.05%	9.2%	659	2%	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%

			Q2 2017								Q1 2017								Q4 2016							
Financial Institutions AIRB exposures by Internal PD grade																										
Internal Ratings grades	PD Range 0.00%	S&P rating equivalent	EAD Amount			Average PD (%)	Average LGD (%)	RWA	Percentage RWA (%)	EAD Amount			Average PD (%)	Average LGD (%)	RWA	Percentage RWA (%)	EAD Amount			Average PD (%)	Average LGD (%)	RWA	Percentage RWA (%)			
			Drawn	Undrawn	Other					Drawn	Undrawn	Other					Drawn	Undrawn	Other							
1	0.000 - 0.035	AAA-, AA-	706	-	303	1 009	0.03%	39.6%	111	11%	1 079	-	332	1 411	0.03%	43.9%	164	12%	637	-	195	832	0.03%	42.2%	105	13%
1.5	0.035 - 0.044	A+	433	-	1 515	1 948	0.04%	44.0%	159	8%	334	-	1 756	2 090	0.04%	43.9%	166	8%	687	-	1 626	2 313	0.04%	48.0%	234	10%
2	0.044 - 0.063	A	371	-	330	701	0.05%	42.7%	109	16%	286	30	287	603	0.05%	39.4%	96	16%	203	30	186	419	0.05%	32.3%	45	11%
2.5	0.063 - 0.103	A-	244	30	1 043	1 317	0.08%	36.4%	164	12%	190	-	293	483	0.08%	41.0%	81	17%	26	-	263	289	0.08%	37.9%	41	14%
3	0.103 - 0.170	BBB+	115	-	201	316	0.13%	48.8%	88	28%	31	-	145	176	0.13%	49.9%	47	27%	64	-	118	182	0.13%	50.6%	53	29%
3.5	0.170 - 0.280	BBB	1 092	-	11	1 103	0.22%	13.7%	133	12%	1 272	-	83	1 355	0.22%	19.5%	226	17%	1 456	-	81	1 537	0.22%	23.0%	318	21%
4	0.280 - 0.462	BBB-	222	153	217</																					



AIRB Credit Risk Exposure - Back-Testing⁽¹⁾

	2018						2017					
	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⁾	0,39%	0,24%	22,90%	11,12%	90,99%	83,21%	0,39%	0,19%	25,69%	15,01%	98,75%	81,82%
Insured residential mortgages ⁽⁷⁾	1,20%	0,71%	2,65%	na	na	na	1,30%	0,75%	3,34%	na	na	na
Qualifying revolving retail	1,31%	1,19%	71,95%	82,05%	99,57%	99,15%	1,29%	1,20%	70,85%	79,60%	99,18%	98,33%
Other retail	1,78%	1,39%	70,31%	61,65%	95,66%	90,60%	1,80%	1,45%	70,43%	60,68%	96,00%	89,96%
Wholesale & Sovereign portfolio⁽⁸⁾												
Corporate	1,26%	0,45%	38,26%	27,94%	83,99%	82,90%	1,44%	0,37%	38,85%	25,07%	83,39%	80,03%
Sovereign ⁽⁹⁾	0,06%	0,00%	11,54%	na	88,30%	na	0,03%	0,00%	11,54%	na	88,30%	na
Financial Institutions ⁽⁹⁾	0,56%	0,00%	40,75%	na	100,00%	na	0,52%	0,00%	40,75%	na	100,00%	na

	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	1,46%	0,39%	39,21%	22,16%	86,87%	82,46%	1,45%	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

(1) Actual and estimated parameters are reported on a three-month lag. For example, for Q1 2018, estimated percentages are as of October 31st, 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	2018						2017						2016					
	Q1						Q4						Q3					
	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	4 156	268	7	–	–	4 431	4 017	310	6	–	–	4 333	3 895	314	8	–	–	4 217
Oil and Gas	2 244	1 972	117	–	–	4 333	2 211	1 957	56	–	–	4 224	2 079	2 013	51	–	–	4 143
Mining	385	833	45	–	–	1 263	411	817	52	–	–	1 280	439	723	46	–	–	1 208
Utilities	2 604	1 848	601	–	–	5 053	2 723	1 737	515	–	–	4 975	3 036	1 579	479	–	–	5 094
Construction ⁽²⁾	2 730	1 199	238	–	–	4 167	2 676	1 154	216	–	–	4 046	2 506	1 129	203	–	–	3 838
Manufacturing	4 428	2 071	248	–	–	6 747	4 156	1 961	239	–	–	6 356	4 097	2 005	251	–	–	6 353
Wholesale Trade	1 936	589	37	–	–	2 562	1 981	753	38	–	–	2 772	2 063	700	39	–	–	2 802
Retail Trade	3 126	1 106	45	–	–	4 277	2 933	1 158	40	–	–	4 131	2 821	1 220	42	–	–	4 083
Transportation	2 541	2 229	120	29	–	4 919	2 416	2 365	111	22	–	4 914	2 331	2 076	108	11	–	4 526
Communications	1 408	832	190	–	–	2 430	1 555	810	207	–	–	2 572	1 629	699	260	–	–	2 588
Finance and Insurance	22 533	3 222	597	99 228	1 175	126 755	23 780	2 289	838	89 876	671	117 454	21 690	2 023	794	75 819	783	101 109
Real Estate ⁽³⁾	9 103	1 345	27	58	–	10 533	8 745	850	25	56	–	9 676	8 443	908	31	53	–	9 435
Professional Services	1 210	661	360	–	–	2 231	1 232	565	414	–	–	2 211	1 193	566	389	–	–	2 148
Education & Health Care	2 851	1 162	9	5	–	4 027	2 615	987	8	9	–	3 619	2 672	826	7	7	–	3 512
Other Services	4 427	1 248	285	–	–	5 960	4 604	999	310	1	–	5 914	4 559	1 114	291	–	–	5 964
Government	4 450	1 376	16	19 100	–	24 942	4 750	1 414	17	14 592	–	20 773	4 724	1 431	10	17 247	–	23 412
Other	2 652	34	584	112	5	3 387	2 579	93	629	97	15	3 413	2 303	36	666	103	4	3 112
Total – Non-retail⁽⁴⁾	72 784	21 995	3 526	118 532	1 180	218 017	73 384	20 219	3 721	104 653	686	202 663	70 480	19 362	3 675	93 240	787	187 544

Non-Retail Portfolio	2017						2016						2015					
	Q2						Q1						Q4					
	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	3 741	299	8	–	–	4 048	3 772	285	8	–	–	4 065	3 572	349	6	–	–	3 927
Oil and Gas	1 880	1 830	45	–	–	3 755	2 019	1 623	54	–	–	3 696	2 126	1 510	62	–	–	3 698
Mining	414	680	47	–	–	1 141	424	690	42	–	–	1 156	527	704	33	–	–	1 264
Utilities	2 543	1 656	465	–	–	4 664	2 302	1 711	471	–	–	4 484	2 093	1 638	465	–	–	4 196
Construction ⁽²⁾	2 424	1 133	214	–	–	3 771	2 281	1 025	214	–	–	3 520	2 200	1 151	212	–	–	3 563
Manufacturing	4 022	2 218	231	–	–	6 471	3 730	2 221	214	–	–	6 165	3 516	2 065	231	–	–	5 812
Wholesale Trade	2 032	729	43	–	–	2 804	1 903	743	39	–	–	2 685	1 918	723	39	–	–	2 680
Retail Trade	2 744	1 687	42	–	–	4 473	2 765	1 615	43	–	–	4 423	2 790	913	45	–	–	3 748
Transportation	2 414	2 024	109	7	–	4 554	2 376	1 792	105	51	–	4 324	2 812	1 753	97	17	–	4 679
Communications	1 497	811	259	–	–	2 567	1 511	681	259	–	–	2 451	1 511	686	285	–	–	2 482
Finance and Insurance	21 698	2 014	886	82 368	748	107 714	22 259	1 829	919	76 261	774	102 042	22 090	1 440	865	66 450	679	91 524
Real Estate ⁽³⁾	8 296	992	32	58	–	9 378	7 942	898	34	59	–	8 933	7 746	814	29	61	–	8 650
Professional Services	1 385	902	312	–	2	2 601	1 220	771	303	–	2	2 296	1 174	721	320	–	–	2 215
Education & Health Care	2 635	893	6	15	–	3 549	2 545	1 290	7	5	–	3 847	2 473	1 325	7	8	–	3 813
Other Services	4 277	1 242	281	189	–	5 989	4 511	1 106	275	7	–	5 899	4 485	1 193	294	3	–	5 975
Government	4 957	1 439	18	17 351	–	23 765	5 024	1 471	17	16 587	–	23 099	4 715	1 287	23	14 716	–	20 741
Other	2 347	–	709	760	12	3 828	2 032	–	648	719	–	3 399	2 350	19	621	557	–	3 547
Total – Non-retail⁽⁴⁾	69 306	20 549	3 707	100 748	762	195 072	68 616	19 751	3 652	93 689	776	186 484	68 098	18 291	3 634	81 812	679	172 514

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

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

(3) Includes residential mortgages 5 units and more.

(4) This total excludes SME retail exposure.

Gross Credit Risk Exposure at Default in Europe ⁽¹⁾

(unaudited) (millions of Canadian dollars)	2018						2017											
	Q1						Q4						Q3					
	Drawn	Undrawn commitments	Repo-style transactions ⁽²⁾	OTC derivatives	Other off-balance sheet items ⁽³⁾	Total	Drawn	Undrawn commitments	Repo-style transactions ⁽²⁾	OTC derivatives	Other off-balance sheet items ⁽³⁾	Total	Drawn	Undrawn commitments	Repo-style transactions ⁽²⁾	OTC derivatives	Other off-balance sheet items ⁽³⁾	Total
Greece	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ireland	-	-	4 467	4	-	4 471	1	-	1 091	5	-	1 097	-	-	1 130	6	-	1 136
Italy	-	-	-	-	-	-	-	-	-	1	-	1	-	-	-	-	-	-
Portugal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Spain	-	-	-	7	46	53	-	-	-	-	68	68	-	-	-	2	63	65
Total GIIPS	-	-	4 467	11	46	4 524	1	-	1 091	5	69	1 166	-	-	1 130	8	63	1 201
France	147	34	768	206	315	1 470	88	41	902	136	363	1 530	13	32	784	115	340	1 284
Germany	-	-	-	2	37	39	-	-	-	2	55	57	-	-	-	4	56	60
United Kingdom	721	7	16 657	1 510	4	18 899	302	5	13 891	950	4	15 152	257	5	13 415	1 109	5	14 791
Other Europe	45	4	2 388	140	53	2 630	54	-	2 917	108	3	3 082	36	-	1 502	116	7	1 661
Total - Credit Risk	913	45	24 280	1 869	455	27 562	445	46	18 801	1 201	494	20 987	306	37	16 831	1 352	471	18 997

Adjustment to exposure for collateral	Drawn	Undrawn commitments	Net Repo-Style transactions and OTC derivatives	Other off-balance sheet items ⁽³⁾	Total	Drawn	Undrawn commitments	Net Repo-Style transactions and OTC derivatives	Other off-balance sheet items ⁽³⁾	Total	Drawn	Undrawn commitments	Net Repo-Style transactions and OTC derivatives	Other off-balance sheet items ⁽³⁾	Total
Total - Net Credit Risk⁽⁴⁾	913	45	1 575	455	2 988	445	46	984	494	1 969	306	37	1 674	471	2 488

(unaudited) (millions of Canadian dollars)	2017						2016											
	Q2						Q1						Q4					
	Drawn	Undrawn commitments	Repo-style transactions ⁽²⁾	OTC derivatives	Other off-balance sheet items ⁽³⁾	Total	Drawn	Undrawn commitments	Repo-style transactions ⁽²⁾	OTC derivatives	Other off-balance sheet items ⁽³⁾	Total	Drawn	Undrawn commitments	Repo-style transactions ⁽²⁾	OTC derivatives	Other off-balance sheet items ⁽³⁾	Total
Greece	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ireland	-	-	854	2	-	856	13	-	1 102	3	-	1 118	-	-	1 183	2	-	1 185
Italy	-	-	-	-	1	1	-	-	-	1	-	1	-	-	-	-	1	1
Portugal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Spain	6	-	-	2	66	74	23	-	-	81	104	25	-	-	-	-	91	116
Total GIIPS	6	-	854	4	67	931	36	-	1 102	3	82	1 223	25	-	1 183	2	92	1 302
France	42	40	1 230	202	365	1 879	15	39	1 379	220	264	1 917	157	41	1 208	175	296	1 877
Germany	1	-	-	-	61	62	-	-	8	38	46	11	-	7	-	41	59	
United Kingdom	216	6	14 228	1 122	4	15 576	235	5	4 647	918	5	5 810	57	5	2 377	961	4	3 404
Other Europe	42	-	2 403	130	16	2 591	34	-	1 702	151	16	1 903	45	-	1 661	155	19	1 880
Total - Credit Risk	307	46	18 715	1 458	513	21 039	320	44	8 830	1 300	405	10 899	295	46	6 429	1 300	452	8 522

Adjustment to exposure for collateral	Drawn	Undrawn commitments	Net Repo-Style transactions and OTC derivatives	Other off-balance sheet items ⁽³⁾	Total	Drawn	Undrawn commitments	Net Repo-Style transactions and OTC derivatives	Other off-balance sheet items ⁽³⁾	Total	Drawn	Undrawn commitments	Net Repo-Style transactions and OTC derivatives	Other off-balance sheet items ⁽³⁾	Total
Total - Net Credit Risk⁽⁴⁾	307	46	1 699	513	2 565	320	44	2 126	405	2 895	295	46	1 684	452	2 477

(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⁽¹⁾

(unaudited) (millions of Canadian dollars)	IFRS 9	IAS 39								IFRS 9	IAS 39	IAS 39	
	2018	2017				2016				YTD		Full Year	
Formation of Gross Impaired Loans ⁽²⁾ (by sector)	Q1	Q4	Q3	Q2	Q1	Q4	Q3	Q2	Q1	2018	2017	2017	2016
Balance at beginning	583	460	422	442	492	452	521	434	457	583	492	492	457
Write-offs													
Personal and Commercial													
Retail	(18)	(21)	(19)	(21)	(18)	(20)	(18)	(20)	(23)	(18)	(18)	(79)	(81)
Credit card	(25)									(25)			
Commercial	(37)	(58)	(2)	(33)	(10)	(19)	(66)	(5)	(20)	(37)	(10)	(103)	(110)
Wealth Management	(1)	(2)	(1)	(1)	(3)	(1)	(2)	(1)	(2)	(1)	(3)	(7)	(6)
Financial Markets	-	(5)	-	-	-	-	-	-	-	-	-	(5)	-
U.S. Specialty Finance and International													
Credigy	(25)	-	-	-	-	-	-	-	-	(25)	-	-	-
ABA Bank ⁽³⁾	-	-	-	-	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-	-	-	-	-
Total write-offs	(106)	(86)	(22)	(55)	(31)	(40)	(86)	(26)	(45)	(106)	(31)	(194)	(197)
Formation													
Personal and Commercial													
Retail	4	17	13	18	23	17	11	21	23	4	23	71	72
Credit card	25									25			
Commercial	8	(5)	36	14	(43)	60	6	89	(5)	8	(43)	2	150
Wealth Management	1	2	1	1	-	2	(1)	3	4	1	-	4	8
Financial Markets	-	-	-	-	-	-	-	-	-	-	-	-	-
U.S. Specialty Finance and International													
Credigy	27	-	-	-	-	-	-	-	-	27	-	-	-
ABA Bank ⁽³⁾	4	(8)	10	2	1	1	1			4	1	5	2
Other	-	-	-	-	-	-	-	-	-	-	-	-	-
Total formation	69	6	60	35	(19)	80	17	113	22	69	(19)	82	232
Balance at end	546	380	460	422	442	492	452	521	434	546	442	380	492

Formation of Gross Impaired Loans ⁽²⁾ (by activity)	IFRS 9	IAS 39								IFRS 9	IAS 39	IAS 39	
	2018	2017				2016				YTD		Full Year	
	Q1	Q4	Q3	Q2	Q1	Q4	Q3	Q2	Q1	2018	2017	2017	2016
Balance at beginning	583	460	422	442	492	452	521	434	457	583	492	492	457
Classified as credit-impaired during the period		132	159	192	79	190	204	211	145		79	562	750
Transferred to performing loans during the period		(4)	(4)	(5)	(5)	(4)	(6)	(6)	(3)		(5)	(18)	(19)
Transfers:													
To Stage 1	(19)									(19)			
To Stage 2	(76)									(76)			
To Stage 3	126									126			
Net repayments		(86)	(60)	(121)	(60)	(80)	(158)	(66)	(91)		(60)	(327)	(395)
Derecognition (excluding write-offs) / Disposals of loans	(113)	-	-	-	-	-	-	-	-	(113)	-	-	-
Net variation in loan balances	152									152			
Changes to models	-									-			
Write-offs	(99)	(119)	(52)	(82)	(54)	(59)	(104)	(45)	(64)	(99)	(54)	(307)	(272)
Recoveries of loans previously written off	(7)	(7)	(5)	(5)	(7)	(7)	(6)	(5)	(4)	(7)	(7)	(24)	(22)
Exchange and other movements	(1)	4	-	1	(3)	-	1	(2)	(6)	(1)	(3)	2	(7)
Balance at end	546	380	460	422	442	492	452	521	434	546	442	380	492

(1) Given the adoption of IFRS 9, impaired loans are all loans classified in stage 3 of the expected credit loss model. Under IAS 39, loans were considered impaired according to different criteria.

(2) Including acceptances and excluding POCI loans.

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



Gross Credit Exposure by Residual Contractual Maturity⁽¹⁾

(unaudited) (millions of Canadian dollars)

	2018				2017							
	Q1				Q4				Q3			
	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	29 240	17 218	253	46 711	29 363	16 942	298	46 603	27 830	16 658	308	44 796
Qualifying revolving retail	6 070	-	-	6 070	6 196	-	-	6 196	6 027	-	-	6 027
Other retail	5 267	3 050	2 479	10 796	5 269	2 982	2 459	10 710	5 334	2 932	2 419	10 685
	40 577	20 268	2 732	63 577	40 828	19 924	2 757	63 509	39 191	19 590	2 727	61 508
Non-retail												
Corporate	54 213	21 637	2 194	78 044	50 772	20 888	2 004	73 664	48 987	19 784	1 719	70 490
Sovereign	54 311	15 319	3 882	73 512	45 631	13 601	4 309	63 541	41 397	13 067	4 270	58 734
Financial Institutions	56 849	2 142	36	59 027	55 450	2 466	30	57 946	50 184	2 535	31	52 750
	165 373	39 098	6 112	210 583	151 853	36 955	6 343	195 151	140 568	35 386	6 020	181 974
Trading book	2 056	5 546	1 851	9 453	1 420	4 884	1 827	8 131	1 439	4 793	1 811	8 043
Total	208 006	64 912	10 695	283 613	194 101	61 763	10 927	266 791	181 198	59 769	10 558	251 525

(unaudited) (millions of Canadian dollars)

	2017				2016							
	Q2				Q1				Q4			
	Within 1 year	1 to 5 years	Over 5 years	Total	Within 1 year	1 to 5 years	Over 5 years	Total	Within 1 year	1 to 5 years	Over 5 years	Total
Retail												
Residential mortgages	26 504	15 725	264	42 493	26 437	16 037	255	42 729	27 348	16 855	305	44 508
Qualifying revolving retail	5 844	-	-	5 844	5 633	-	-	5 633	5 716	-	-	5 716
Other retail	5 279	2 941	2 280	10 500	5 232	2 844	2 183	10 259	5 181	2 837	2 167	10 185
	37 627	18 666	2 544	58 837	37 302	18 881	2 438	58 621	38 245	19 692	2 472	60 409
Non-retail												
Corporate	48 010	20 811	1 812	70 633	48 276	18 534	2 062	68 872	47 848	17 643	2 061	67 552
Sovereign	43 626	13 043	4 874	61 543	45 614	11 990	5 041	62 645	40 121	11 829	5 144	57 094
Financial Institutions	56 265	881	39	57 185	48 068	990	15	49 073	39 702	1 880	2	41 584
	147 901	34 735	6 725	189 361	141 958	31 514	7 118	180 590	127 671	31 352	7 207	166 230
Trading book	1 589	4 439	2 888	8 916	1 410	4 736	2 911	9 057	1 322	4 847	3 195	9 364
Total	187 117	57 840	12 157	257 114	180 670	55 131	12 467	248 268	167 238	55 891	12 874	236 003

(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)	2018		2017			
	Q1		Q4		Q3	
Total exposure covered by:	Standardized ⁽¹⁾	AIRB ⁽²⁾	Standardized ⁽¹⁾	AIRB ⁽²⁾	Standardized ⁽¹⁾	AIRB ⁽²⁾
Retail						
Residential mortgage	334	2 176	288	2 707	462	3 387
Qualifying revolving retail	-	-	-	-	-	-
Other retail	2 770	178	2 782	181	2 640	186
	3 104	2 354	3 070	2 888	3 102	3 573
Non-retail						
Corporate	889	2 003	861	2 012	986	1 984
Sovereign	-	-	-	-	-	-
Financial Institutions	-	63	-	112	-	115
	889	2 066	861	2 124	986	2 099
Trading book	-	61	-	43	-	93
Total	3 993	4 481	3 931	5 055	4 088	5 765

(unaudited) (millions of Canadian dollars)	2017				2016	
	Q2		Q1		Q4	
Total exposure covered by:	Standardized ⁽¹⁾	AIRB ⁽²⁾	Standardized ⁽¹⁾	AIRB ⁽²⁾	Standardized ⁽¹⁾	AIRB ⁽²⁾
Retail						
Residential mortgage	295	2 497	426	3 302	427	5 364
Qualifying revolving retail	-	-	-	-	-	-
Other retail	2 633	189	2 705	188	2 650	195
	2 928	2 686	3 131	3 490	3 077	5 559
Non-retail						
Corporate	1 162	2 042	1 056	2 012	797	2 096
Sovereign	-	-	-	-	-	-
Financial Institutions	-	6	-	-	-	-
	1 162	2 048	1 056	2 012	797	2 096
Trading book	-	7	-	23	-	10
Total	4 090	4 741	4 187	5 525	3 874	7 665

(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)	2018				2017							
	Q1				Q4				Q3			
	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	515	–	515	96	529	–	529	89	524	–	524	77
Private	397	36	361	41	381	39	342	44	408	38	370	66
	912	36	876	137	910	39	871	133	932	38	894	143

(unaudited) (millions of Canadian dollars)	2017								2016			
	Q2				Q1				Q4			
	Total exposures	Unfunded commitments	On balance sheet exposures at carrying value	Gross unrealized gains (losses)	Total exposures	Unfunded commitments	On balance sheet exposures at carrying value	Gross unrealized gains (losses)	Total exposures	Unfunded commitments	On balance sheet exposures at carrying value	Gross unrealized gains (losses)
Public	522	–	522	139	563	–	563	99	529	–	529	36
Private	350	37	313	79	323	40	283	70	346	40	306	69
	872	37	835	218	886	40	846	169	875	40	835	105



Credit Derivative Positions (notional amounts)

	2018				2017							
	Q1				Q4				Q3			
	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	76	18	1 493	65	80	19	4 748	3 514	77	19	3 089	2 076
Tranches on indices	-	-	-	-	-	-	-	-	-	-	-	-
Total return swaps	-	-	179	-	-	-	180	-	-	-	208	-
Credit options	-	-	-	-	-	-	-	-	-	-	-	-

	2017								2016			
	Q2				Q1				Q4			
	Credit portfolio ⁽¹⁾		Trading		Credit portfolio ⁽¹⁾		Trading		Credit portfolio ⁽¹⁾		Trading	
	Protection purchased	Protection sold	Protection purchased	Protection sold	Protection purchased	Protection sold	Protection purchased	Protection sold	Protection purchased	Protection sold	Protection purchased	Protection sold
(unaudited) (millions of Canadian dollars)												
Credit default swaps												
Indices, singles names and other	132	20	2 419	2 127	125	20	1 402	966	60	20	1 188	627
Tranches on indices	-	-	-	-	-	-	-	-	-	-	-	-
Total return swaps	-	-	217	-	-	-	216	-	-	-	217	-
Credit options	-	-	-	-	-	-	-	-	-	-	27	27

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



Derivatives Financial Instruments According to Basel Definition

	2018		2017			
	Q1	Q4	Q3	Q2	Q1	Q1
(unaudited) (millions of Canadian dollars)						
Under Basel III						
Foreign Exchange Related Contracts						
Swaps	182 228	182 196	180 440	182 943	182 895	182 895
Options	7 258	8 515	7 385	7 105	6 883	6 883
	<i>- purchased</i>	<i>- sold</i>	<i>- purchased</i>	<i>- sold</i>	<i>- purchased</i>	<i>- sold</i>
	6 532	8 940	7 689	7 809	6 698	6 698
Exchange traded and OTC futures contracts	29 000	29 509	28 518	29 554	31 777	31 777
Total notional amount	225 018	229 160	224 032	227 411	228 253	228 253
Replacement cost	4 515	4 368	5 831	4 211	4 248	4 248
	<i>- gross</i>	<i>- net⁽¹⁾</i>	<i>- gross</i>	<i>- net⁽¹⁾</i>	<i>- gross</i>	<i>- net⁽¹⁾</i>
	2 302	2 512	2 659	2 710	2 347	2 347
Future credit risk	1 895	1 892	1 817	1 933	2 009	2 009
Credit equivalent ⁽²⁾	4 197	4 404	4 476	4 643	4 356	4 356
Risk-weighted equivalent ⁽³⁾	1 388	1 374	1 448	1 284	1 247	1 247
Interest Rate Related Contracts						
Swaps	425 864	468 827	440 743	388 737	404 712	404 712
Options	28 113	20 747	13 016	18 743	18 834	18 834
	<i>- purchased</i>	<i>- sold</i>	<i>- purchased</i>	<i>- sold</i>	<i>- purchased</i>	<i>- sold</i>
	10 350	5 044	5 620	14 600	21 887	21 887
Exchange traded and OTC futures contracts	5 269	4 733	9 705	6 816	14 899	14 899
Total notional amount	469 596	499 351	469 084	428 896	460 332	460 332
Replacement cost	3 768	3 519	3 883	4 426	4 215	4 215
	<i>- gross</i>	<i>- net⁽¹⁾</i>	<i>- gross</i>	<i>- net⁽¹⁾</i>	<i>- gross</i>	<i>- net⁽¹⁾</i>
	1 028	979	1 005	1 202	1 129	1 129
Future credit risk	1 390	1 330	1 420	1 493	1 398	1 398
Credit equivalent ⁽²⁾	2 418	2 309	2 425	2 695	2 527	2 527
Risk-weighted equivalent ⁽³⁾	396	479	488	638	588	588
Financial Futures						
Total notional amount	90 467	122 714	72 600	125 581	111 574	111 574
Equity and Commodity Contracts						
Total notional amount	69 357	53 923	50 390	54 851	49 932	49 932
Replacement cost	2 484	1 908	1 870	1 878	2 641	2 641
	<i>- gross</i>	<i>- net⁽¹⁾</i>	<i>- gross</i>	<i>- net⁽¹⁾</i>	<i>- gross</i>	<i>- net⁽¹⁾</i>
	1 937	1 441	1 566	1 567	2 176	2 176
Future credit risk	2 889	2 314	2 227	2 505	2 194	2 194
Credit equivalent ⁽²⁾	4 826	3 755	3 793	4 072	4 370	4 370
Risk-weighted equivalent ⁽³⁾	442	306	250	298	368	368
Credit Derivatives						
Total notional amount (trading only) ⁽⁵⁾	1 737	8 442	5 373	4 763	2 585	2 585
Total Return Swap Notional Amount ⁽⁴⁾⁽⁵⁾	34 930	34 744	32 979	33 160	31 389	31 389
Replacement cost ⁽⁵⁾	781	297	258	148	173	173
	<i>- gross</i>	<i>- net⁽¹⁾</i>	<i>- gross</i>	<i>- net⁽¹⁾</i>	<i>- gross</i>	<i>- net⁽¹⁾</i>
	529	41	29	40	33	33
Future credit risk	1 943	1 081	1 039	1 047	1 005	1 005
Credit equivalent ⁽²⁾	2 472	1 122	1 068	1 087	1 038	1 038
Risk-weighted equivalent ⁽³⁾	172	148	126	121	141	141
Total Derivatives						
Total notional amount	891 105	948 334	854 458	874 662	884 065	884 065
Replacement cost	11 548	10 092	11 842	10 663	11 277	11 277
	<i>- gross</i>	<i>- net⁽¹⁾</i>	<i>- gross</i>	<i>- net⁽¹⁾</i>	<i>- gross</i>	<i>- net⁽¹⁾</i>
	5 796	4 973	5 259	5 519	5 685	5 685
Future credit risk	8 117	6 617	6 503	6 978	6 606	6 606
Credit equivalent ⁽²⁾	13 913	11 590	11 762	12 497	12 291	12 291
Risk-weighted equivalent ⁽³⁾	2 398	2 307	2 312	2 341	2 344	2 344

(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)	2018			2017					
	Q1			Q4			Q3		
	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	122 334	316 141	121 588	143 394	359 969	118 702	83 753	333 309	124 621
Foreign exchange contracts	351	-	224 667	153	-	229 007	194	-	223 838
Equity, commodity and credit derivative contracts ⁽²⁾	22 715	2 148	81 161	21 188	8 893	67 028	22 658	5 703	60 382

(unaudited) (millions of Canadian dollars)	2017						2016		
	Q2			Q1			Q4		
	Exchange-traded contracts	OTC-Traded		Exchange-traded contracts	OTC-Traded		Exchange-traded contracts	OTC-Traded	
		Settled by central counterparties	Not settled by central counterparties		Settled by central counterparties	Not settled by central counterparties		Settled by central counterparties	Not settled by central counterparties
Interest rate contracts	149 009	280 124	125 345	144 792	303 632	123 482	155 838	297 612	121 678
Foreign exchange contracts	91	-	227 319	459	-	227 794	821	-	243 484
Equity, commodity and credit derivative contracts ⁽²⁾	21 868	5 094	65 812	19 567	2 741	61 598	18 658	1 977	58 801

(1) Notional amounts.

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



Aggregate Amount of Securitization Exposures

	2018			2017											
	Q1		Trading book	Q4			Q3			Q2			Q1		
	Banking Book			Banking Book	Trading book	Banking Book		Trading book	Banking Book		Trading book	Banking Book		Trading book	
On balance sheet	Off balance sheet	On balance sheet	On balance sheet	Off balance sheet	On balance sheet	On balance sheet	Off balance sheet	On balance sheet	On balance sheet	Off balance sheet	On balance sheet	On balance sheet	Off balance sheet	On balance sheet	
Bank's own assets															
Traditional exposures															
Insured Mortgage loans															
Retained ⁽¹⁾	7 131	-	-	6 693	-	-	6 579	-	-	7 589	-	-	7 484	-	-
Credit Cards															
Retained ⁽¹⁾															
Seller's interest	144	298	-	191	381	-	195	389	-	192	383	-	158	329	-
Purchased ⁽²⁾	479	-	-	480	-	-	479	-	-	481	-	-	478	-	-
Total - Bank's own assets	7 754	298	-	7 364	381	-	7 253	389	-	8 262	383	-	8 120	329	-
Third party assets															
Sponsored															
Traditional exposures ⁽³⁾															
Residential Mortgages - Insured	-	833	-	-	1 014	2	-	1 579	-	-	1 634	-	-	1 671	1
Residential Mortgages - conventional	-	1 248	-	-	1 129	2	-	862	-	-	671	-	-	694	1
Fleet Lease Receivables	-	267	-	-	250	1	-	251	-	-	252	-	-	255	-
Auto Floorplans	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Auto Loans	-	131	-	-	128	-	-	128	-	-	132	-	-	136	-
Investment Loans	-	201	-	-	200	-	-	200	-	-	-	-	-	-	-
Purchased															
Traditional exposures															
Insured Mortgage loans - MBS	1 874	-	4 766	3 010	-	2 246	2 759	-	2 259	3 217	-	2 145	4 198	-	1 885
Credit Cards - ABS	-	-	121	-	-	122	-	-	86	-	-	70	-	-	42
Home Equity - ABS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Commercial mortgage back securities (CMBS)	7	-	-	18	-	-	18	-	-	19	-	-	12	-	-
Collateralized debt obligation (CDO)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Collateralized mortgage obligation (CMO)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other	1 359	486	-	1 306	216	-	1 439	193	-	1 422	225	-	488	-	-
Synthetic exposures															
CDX tranches	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Resecuritized exposures															
Master Asset Vehicules	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Commercial paper not included in the Pan-Canadian restructuring plan	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Collateralized mortgage obligation (CMO)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total - Third party assets	3 240	3 166	4 887	4 334	2 937	2 373	4 216	3 213	2 345	4 658	2 914	2 215	4 698	2 756	1 929
Total - Bank	10 994	3 464	4 887	11 698	3 318	2 373	11 469	3 602	2 345	12 920	3 297	2 215	12 818	3 085	1 929

(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.

Capital Requirements for Securitization Exposures Under Securitization Framework⁽¹⁾

(unaudited) (millions of Canadian dollars)	2018							2017										
	Q1				Q4			Q3										
	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	Off balance sheet	On balance sheet	Off balance sheet	On balance sheet	Off balance sheet							
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⁾	144	92	298	38	--	--	191	119	381	52	--	--	195	119	389	51	--	--
Purchased	479	54	--	--	--	--	480	55	--	--	--	--	479	55	--	--	--	--
Total - Bank's own assets	623	146	298	38	--	--	671	174	381	52	--	--	674	174	389	51	--	--
Third party assets																		
Securitized																		
7% - 30%	1 366	128	3 166	226	121	9	1 324	124	2 937	211	122	9	1 457	141	3 213	228	86	61
35% - 100%	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
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	1 366	128	3 166	226	121	9	1 324	124	2 937	211	122	9	1 457	141	3 213	228	86	61
Total	1 989	274	3 464	264	121	9	1 995	298	3 318	263	122	9	2 131	315	3 602	279	86	61

(unaudited) (millions of Canadian dollars)	2017							2016										
	Q2				Q1			Q4										
	Banking Book		Trading book		Banking Book		Trading book		Banking Book		Trading book							
	On balance sheet	Off balance sheet	On balance sheet	On balance sheet	Off balance sheet	On balance sheet	Off balance sheet	On balance sheet	Off balance sheet	On balance sheet	Off balance sheet							
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⁾	192	120	383	51	--	--	158	103	329	44	--	--	213	136	426	58	--	--
Purchased	481	55	--	--	--	--	478	54	--	--	--	--	89	41	--	--	--	--
Total - Bank's own assets	673	175	383	51	--	--	636	157	329	44	--	--	302	177	426	58	--	--
Third party assets																		
Securitized																		
7% - 30%	1 441	139	2 914	204	70	49	500	36	2 756	214	42	29	490	35	2 876	235	26	21
35% - 100%	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
150% - 850%	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1250 %	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Home Equity - ABS	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Collateralized mortgage obligation (CMO)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Others	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Resecuritized																		
7% - 30%	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
35% - 100%	--	--	--	--	--	--	--	--	--	--	--	--	500	210	--	--	--	--
150% - 850%	--	--	--	--	--	--	--	--	--	--	--	--	113	301	--	--	--	--
1250 %	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Master Asset Vehicles	--	--	--	--	--	--	--	--	--	--	--	--	3	42	--	--	--	--
Commercial paper not included in the Pan-Canadian restructuring plan	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Collateralized mortgage obligation (CMO)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total - Third party assets	1 441	139	2 914	204	70	49	500	36	2 756	214	42	29	1 106	588	2 876	235	26	21
Total	2 114	314	3 297	255	70	49	1 136	193	3 085	258	42	29	1 408	765	3 302	293	26	21

(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

	2018					2017					2016				
	Q1					Q4					Q3				
	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	21 372	–	–	1 828	–	20 962	–	–	1 930	–	20 684	–	–	1 051	–
Credit card receivables	1 389	9	12	–	–	1 389	9	12	–	–	1 389	9	13	–	–
Total	22 761	9	12	1 828	–	22 351	9	12	1 930	–	22 073	9	13	1 051	–
Trading Book															
Insured mortgage loans	5 198	–	–	148	207	5 475	–	–	155	153	5 652	–	–	107	374

	2017					2016									
	Q2					Q1					Q4				
	Total gross loans ⁽¹⁾	Gross impaired loans and other past due loans ⁽²⁾	Net write-offs	Securitization activities for the quarter ended	Exposure amount intended to be securitized	Total gross loans ⁽¹⁾	Gross impaired loans and other past due loans ⁽²⁾	Net write-offs	Securitization activities for the quarter ended	Exposure amount intended to be securitized	Total gross loans ⁽¹⁾	Gross impaired loans and other past due loans ⁽²⁾	Net write-offs	Securitization activities for the quarter ended	Exposure amount intended to be securitized
(unaudited) (millions of Canadian dollars)															
Banking Book															
Insured mortgage loans	21 640	–	–	1 805	–	21 093	–	–	3 749	–	18 709	–	–	3 134	–
Credit card receivables	1 389	9	13	–	–	1 389	8	12	461	–	1 389	8	11	–	–
Total	23 029	9	13	1 805	–	22 482	8	12	4 210	–	20 098	8	11	3 134	–
Trading Book															
Insured mortgage loans	5 844	–	–	118	151	5 850	–	–	383	282	5 631	–	–	1 389	323

(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.