

SUPPLEMENTARY REGULATORY CAPITAL DISCLOSURE



April 30, 2018

Table of Contents

Introduction, including Basel III Implementation	Pages 1 - 2
Regulatory Capital - Highlights	Page 3
Regulatory Capital - Definition of Capital Components	Page 4
Consolidated Balance Sheet: Source of Definition of Capital Components	Page 5
Balance Sheet Asset Categories Cross-Referenced to Credit Risk Exposures	Page 6
Flow Statement for Regulatory Capital	Page 7
Risk-weighted Assets and Capital Ratios	Page 8
Movement of Risk-weighted Assets by Risk Type (All-in Basis)	Page 9
Risk-weighted Assets Arising from the Activities of the Bank's Businesses	Page 10
Exposure at Default and Risk-weighted Assets for Credit Risk Portfolios	Pages 11 - 12
Credit Risk Exposures by Geography	Page 13
AIRB Credit Risk Exposures by Maturity	Page 14
Standardized Credit Risk Exposures by Risk-weight	Page 15
Risk Assessment of Credit Risk Exposures - Non-retail AIRB Portfolio	Pages 16 - 17
Risk Assessment of Credit Risk Exposures - Retail AIRB Portfolio	Pages 18 - 19
AIRB Credit Losses	Page 20
Estimated and Actual Loss Parameters - Non-retail and Retail AIRB Portfolios	Page 21
Credit Risk Mitigation	Page 22
Derivatives - Counterparty Credit Risk	Page 23
Risk-weighted Assets for Securitization Exposures - Banking Book	Pages 24 - 25
Total Market Risk-weighted Assets	Page 26
Leverage Ratio and Exposures	Pages 27 - 29
Glossary	Page 30

For further information contact: Adam Borgatti - (416) 866-5042 or Lemar Persaud - (416) 866-6124

INTRODUCTION



Effective November 1, 2012, Canadian banks are subject to the revised capital adequacy requirements as published by the Basel Committee on Banking Supervision (BCBS) and commonly referred to as Basel III. Basel III builds on the "International Convergence of Capital Measurement and Capital Standards: A Revised Framework" (Basel II). Refer to page 2 "Basel III Implementation" for further details.

The Basel III Framework is comprised of three Pillars:

- Pillar 1 – the actual methodologies that must be applied to calculate the minimum capital requirements.
- Pillar 2 – the requirement that banks have internal processes to assess their capital adequacy in relation to their strategies, risk appetite and actual risk profile. Regulators are expected to review these internal capital adequacy assessments.
- Pillar 3 – reflects the market disclosures required by banks to assist users of the information to better understand the risk profile.

This Appendix reflects the Pillar 3 market disclosures based on information gathered as part of the Pillar 1 process, and should assist users in understanding the changes to the risk-weighted assets and capital requirements.

Basel III classifies risk into three broad categories: credit risk, market risk and operational risk. Under Pillar 1 of the Basel III Framework, minimum capital for these three risks is calculated using one of the following approaches:

- Credit risk capital – Internal Ratings Based Approach (Advanced or Foundation) or Standardized Approach.
- Operational risk capital – Advanced Measurement Approach (AMA), Standardized Approach or Basic Indicator Approach.
- Market risk capital - Internal models or Standardized Approach.

Credit Risk

The credit risk component consists of on- and off- balance sheet claims. The Basel III rules are not applied to traditional balance sheet categories but to categories of on- and off- balance sheet exposures which represent general classes of assets/exposures (Corporate, Sovereign, Bank, Retail and Equity) based on their different underlying risk characteristics.

Generally, while calculating capital requirements, exposure types such as Corporate, Sovereign, Bank, Retail and Equity are analyzed by the following credit risk exposure sub-types: Drawn, Undrawn, Repo-style Transactions, Over-the-counter (OTC) Derivatives, Exchange Traded Derivatives and Other Off-balance Sheet claims.

The Bank uses the Advanced Internal Ratings Based (AIRB) approach for credit risk in its material Canadian, US and European portfolios and for a significant portion of international corporate and commercial portfolios. The Bank uses internal estimates, based on historical experience, for probability of default (PD), loss given default (LGD) and exposure at default (EAD).

- Under the AIRB approach, credit risk risk-weighted assets (RWA) are calculated by multiplying the capital requirement (K) by EAD times 12.5, where K is a function of the PD, LGD, maturity and prescribed correlation factors. This results in the capital calculations being more sensitive to underlying risks.
- Risk weights for exposures which fall under the securitization framework are computed under the Internal Assessments Approach (IAA) or the Ratings-Based Approach (RBA). RBA risk weights depend on the external rating grades given by two of the external credit assessment institutions (ECAI): S&P, Moody's and DBRS.
- A multiplier of 1.25 is applied to the correlation parameter of all exposures to all unregulated Financial Institutions, and regulated Financial Institutions with assets of at least US\$100 billion.
- Exchange-traded derivatives which previously were excluded from the capital calculation under Basel II are risk-weighted under Basel III.
- An overall scaling factor of 6% is added to the credit risk RWA for all AIRB portfolios. For the remaining portfolios, the Standardized Approach is used to compute credit risk.
- The Standardized Approach applies regulator prescribed risk weight factors to credit exposures based on the external credit assessments (public ratings), where available, and also considers other additional factors (e.g. provision levels for defaulted exposures, loan-to-value for retail, eligible collateral, etc.).

Operational Risk

OSFI has approved Scotiabank's application to use the Advanced Measurement Approach (AMA) for Operational Risk, subject to a capital floor based on the Standardized Approach, in the first quarter of 2017. The Bank also utilizes the Standardized Approach for operational risk for units not covered under AMA. AMA utilizes risk drivers for capital movements (such as internal loss experience, business environment and internal control factors, external loss experience, and scenarios); while the Standardized Approach is based on a fixed percentage ranging from 12% to 18% of the average of the previous three years' gross income.

Market Risk

The Bank uses both internal models and standardized approaches to calculate market risk capital. Commencing Q1 2012, the Bank implemented additional market risk measures in accordance with Basel's Revisions of the Basel II market risk framework (July 2009). Additional measures include stressed Value-at-Risk, incremental risk charge and comprehensive risk measure.

International Financial Reporting Standards (IFRS)

Effective Q1 2012, all amounts reflect the adoption of IFRS. Effective Q1 2014, all amounts reflect the adoption of new accounting standards, IFRS10 (Consolidated Financial Statements) and IAS19R (Employee Benefits). Effective Q1 2018, the Bank adopted IFRS 9 (Financial Instruments) and did not restate comparative periods. The full transitional impact on regulatory capital from IFRS 9 was recognized upon adoption. Prior period results are based on International Accounting Standard (IAS) 39 and therefore these amounts and related ratios are not comparable.

This "Supplementary Regulatory Capital Disclosure" has been updated to reflect OSFI's Advisory, "Required Public Disclosure Requirements related to Basel III Pillar 3" (issued July 2, 2013), effective Q3 2013 for all D-SIBs. The main features template that sets out a summary of information on the terms and conditions of the main features of all capital instruments is posted on the Bank's website as follows: <http://www.scotiabank.com/ca/en/0,,3066,00.htm>

Canadian banks are subject to the revised capital adequacy requirements as published by the Basel Committee on Banking Supervision (BCBS) - commonly referred to as Basel III - effective November 1, 2012. Basel III builds on the "International Convergence of Capital Measurement and Capital Standards: A Revised Framework" (Basel II). The Office of the Superintendent of Financial Institutions (OSFI) has issued guidelines, reporting requirements and disclosure guidance which are consistent with the Basel III reforms (except for implementation dates described below).

As compared to previous standards, Basel III places a greater emphasis on common equity by introducing a new category of capital, Common Equity Tier 1 (CET1), which consists primarily of common shareholders equity net of regulatory adjustments. These regulatory adjustments include goodwill, intangible assets, deferred tax assets, pension assets and investments in financial institutions over certain thresholds. Overall, the Basel III rules increase the level of regulatory deductions relative to Basel II. Basel III also increases the level of risk-weighted assets for significant investments and deferred tax amounts due to temporary timing differences under defined thresholds, exposures to large or unregulated financial institutions meeting specific criteria, exposures to centralized counterparties and exposures that give rise to wrong way risk.

To enable banks to meet the new standards, Basel III contains transitional arrangements commencing January 1, 2013, through January 1, 2019. Transitional requirements result in a phase-in of new deductions to common equity over 5 years. Under the transitional rules, all CET1 deductions are multiplied by a factor during the transitional period, beginning with 0% in 2013, 20% in 2014, 40% in 2015, 60% in 2016, 80% in 2017 and 100% in 2018. The portion of the CET1 regulatory adjustments not deducted during the transitional period will continue to be subject to Basel II treatment. In addition, non-qualifying capital instruments will be phased-out over 10 years and the capital conservation buffer will be phased in over 4 years. As of January 2019, the banks will be required to meet new minimum requirements related to risk-weighted assets of: Common Equity Tier 1 ratio of 4.5% plus a capital conservation buffer of 2.5%, collectively 7%. Including the capital conservation buffer, the minimum Tier 1 ratio will be 8.5%, and the Total capital ratio will be 10.5%.

OSFI required Canadian deposit-taking institutions to fully implement the 2019 Basel III reforms in 2013, without the transitional phase-in provisions for capital deductions, and achieve a minimum 7% common equity target, by the first quarter of 2013 along with a minimum Tier 1 ratio of 7% and Total capital ratio of 10%. Since the first quarter of 2014, the minimum Tier 1 ratio rose to 8.5% and the Total capital ratio rose to 10.5%.

The BCBS issued the rules on the assessment methodology for global systemically important banks (G-SIBs) and their additional loss absorbency requirements. In their view, additional policy measures for G-SIBs are required due to negative externalities (i.e., adverse side effects) created by systemically important banks which are not fully addressed by current regulatory policies. The assessment methodology for G-SIBs is based on an indicator-based approach and comprises five broad categories: size, interconnectedness, lack of readily available substitutes, global (cross-jurisdictional) activity and complexity. Additional loss absorbency requirements may range from 1% to 3.5% Common Equity Tier 1 depending upon a bank's systemic importance and will be introduced in parallel with the Basel III capital conservation and countercyclical buffers from 2016 through to 2019. Scotiabank is not designated as a G-SIB.

Since similar externalities can apply at a domestic level, the BCBS extended the G-SIBs framework to domestic systemically important banks (D-SIBs) focusing on the impact that a distress or failure would have on a domestic economy. Given that the D-SIB framework complements the G-SIB framework, the Committee considers that it would be appropriate if banks identified as D-SIBs by their national authorities are required by those authorities to comply with the principles in line with phase-in arrangements for the G-SIB framework, i.e., January 2016. In a March 2013 advisory letter, OSFI designated the 6 largest banks in Canada as domestic systemically important banks (D-SIBs), increasing their minimum capital ratio requirements by 1% for the identified D-SIBs. This 1% surcharge is applicable to all minimum capital ratio requirements for CET1, Tier 1 and Total Capital.

As of January 2016, the Scotiabank and other Canadian D-SIB banks are also required to meet new D-SIB minimum requirements; a minimum Common Equity Tier 1 ratio of 8.0%, Tier 1 ratio of 9.5% and a Total capital ratio of 11.5%.

In December 2013, OSFI announced its decision to implement the phase-in (over 5 years) of the regulatory capital for Credit Valuation Adjustment (CVA) on Bilateral OTC Derivatives effective Q1 2014. In accordance with OSFI's requirements, commencing in Q1, 2018, the CVA risk-weighted assets have been calculated using scalars of 0.80, 0.83 and 0.86, to compute the CET1 capital ratio, Tier 1 capital ratio and Total capital ratio, respectively (0.72, 0.77 and 0.81 in Fiscal 2017).

OSFI required Canadian deposit-taking institutions to implement the BCBS' countercyclical buffer requirements, starting Q1, 2017. The countercyclical buffer is only applicable to private sector credit exposures in jurisdictions with published buffer requirements. At present only three jurisdictions apply a countercyclical buffer and the Bank's exposures within these three jurisdictions are not material.

Risk-weighted assets are computed on an all-in Basel III basis unless otherwise indicated. All-in is defined as capital calculated to include all of the regulatory adjustments that will be required by 2019 but retaining the phase-out rules for non-qualifying capital instruments.

As at January 31, 2013, all of the Bank's preferred shares, capital instruments and subordinated debentures did not meet these additional criteria and are subject to phase-out commencing January 2013. The Bank reserves the right to redeem, call or repurchase any capital instruments within the terms of each offering at any time in the future.

Commencing in 2015, the Bank issued subordinated debentures and preferred shares which contain non-viability contingent capital (NVCC) provisions necessary for the preferred shares and debentures to qualify as Tier 1 or Tier 2 regulatory capital. Under the NVCC provisions, the preferred shares and debentures are convertible into a variable number of common shares upon: (i) the public announcement by OSFI that the Bank has ceased, or is about to cease, to be viable; or (ii) by a federal or provincial government of Canada that the Bank accepted or agreed to accept a capital injection.

In addition to risk-based capital requirements, the Basel III reforms introduced a simpler, non risk-based Leverage ratio requirement to act as a supplementary measure to its risk-based capital requirements. The Leverage ratio is defined as a ratio of Basel III Tier 1 capital to a leverage exposure measure which includes on-balance sheet assets and off-balance sheet commitments, derivatives and securities financing transactions, as defined within the requirements. As a member of the BCBS, OSFI has adopted the Basel III Leverage requirements as part of its domestic requirements for banks, bank holding companies, federally regulated trust and loan companies in Canada.

In October 2014, OSFI released its Leverage Requirements Guideline which outlines the application of the Basel III Leverage ratio in Canada and the replacement of the former Assets-to-Capital Multiple (ACM), effective Q1 2015. Institutions are expected to maintain a material operating buffer above the 3% minimum. The Bank meets OSFI's authorized leverage ratio. Commencing Q1 2015, disclosure in accordance with OSFI's September 2014 Public Disclosure Requirements related to Basel III Leverage ratio has been made in the Supplementary Regulatory Capital Disclosure on pages 27-29.

Since the introduction of Basel II in 2008, OSFI has prescribed a minimum capital floor requirement for institutions that use the AIRB approach for credit risk. Up to and including Q1 2018, the capital floor add-on was determined by comparing a Basel I capital requirement calculated by reference to Basel I against the Basel III capital requirement, as prescribed by OSFI. A shortfall in the Basel III capital requirement compared with 90% of Basel I capital floor requirement was added to RWAs.

Effective Q2 2018, OSFI has replaced the Basel I regulatory capital floor with a capital floor based on 70% of the Basel II standardized approach for credit risk RWAs (increasing to 72.5% in Q3 2018 and to 75% in Q4 2018). Revised capital floor requirements also include risk-weighted assets for market risk and CVA.

REGULATORY CAPITAL HIGHLIGHTS


(\$MM)	Basel III							
	IFRS 9 ⁽¹⁾		IAS 39 ⁽¹⁾					
	Q2 2018	Q1 2018	Q4 2017		Q3 2017		Q2 2017	
	All-in Approach ⁽²⁾	All-in Approach ⁽²⁾	Transitional Approach	All-in Approach ⁽²⁾	Transitional Approach	All-in Approach ⁽²⁾	Transitional Approach	All-in Approach ⁽²⁾
Common Equity Tier 1 capital	45,025	42,990	46,051	43,352	44,070	41,369	45,431	42,474
Tier 1 capital	50,708	48,648	50,623	49,473	47,076	45,913	48,357	47,048
Total capital	57,716	55,637	57,222	56,113	55,051	53,929	56,554	55,310
Risk-weighted Assets ⁽³⁾⁽⁴⁾								
CET1 Capital Risk-weighted Assets	375,901	382,248	387,292	376,379	376,358	365,411	381,977	374,876
Tier 1 Capital Risk-weighted Assets	376,042	382,248	387,292	376,379	376,358	365,411	381,977	375,148
Total Capital Risk-weighted Assets	376,183	382,248	387,292	376,379	376,358	365,411	381,977	375,366
Capital Ratios (%)								
Common Equity Tier 1 (as a percentage of risk-weighted assets)	12.0	11.2	11.9	11.5	11.7	11.3	11.9	11.3
Tier 1 (as a percentage of risk-weighted assets)	13.5	12.7	13.1	13.1	12.5	12.6	12.7	12.5
Total capital (as a percentage of risk-weighted assets)	15.3	14.6	14.8	14.9	14.6	14.8	14.8	14.7
Leverage:								
Leverage Exposures	1,060,648	1,048,763	1,053,928	1,052,891	1,033,500	1,032,443	1,063,119	1,061,939
Leverage Ratio (%)	4.8	4.6	4.8	4.7	4.6	4.4	4.5	4.4
OSFI Target: All-in Basis (%)								
Common Equity Tier 1 minimum ratio	8.0	8.0		8.0		8.0		8.0
Tier 1 capital all-in minimum ratio	9.5	9.5		9.5		9.5		9.5
Total capital all-in minimum ratio	11.5	11.5		11.5		11.5		11.5
Leverage all-in minimum ratio	3.0	3.0		3.0		3.0		3.0
Capital instruments subject to phase-out arrangements								
Current cap on Additional Tier 1 (AT1) instruments subject to phase-out arrangements (%)	40	40	50	50	50	50	50	50
Amount excluded from AT1 due to cap (excess over cap after redemptions and maturities)	110	455	-	-	-	-	-	-
Current cap on Tier 2 (T2) instruments subject to phase-out arrangements (%)	40	40	50	50	50	50	50	50
Amount excluded from T2 due to cap (excess over cap after redemptions and maturities)	-	-	-	-	-	-	-	-

(1) Effective Q1 2018, the Bank adopted IFRS 9 (Financial Instruments). The full transitional impact on regulatory capital from IFRS 9 was recognized upon adoption. Prior period results and ratios are based on International Accounting Standard (IAS) 39.

(2) 'All-in' approach is defined as capital calculated to include all of the regulatory adjustments that will be required by 2019 but retaining the phase-out rules for non-qualifying capital instruments. The Transitional Approach is no longer applicable effective Q1, 2018.

(3) As per OSFI guideline, effective Q1 2014, Credit Valuation Adjustment (CVA) RWA on derivatives was phased-in using Scalars. Commencing in Q1, 2018, the CVA RWA have been calculated using scalars of 0.80, 0.83 and 0.86, to compute the CET1 capital ratio, Tier 1 capital ratio and Total capital ratio, respectively (0.72, 0.77 and 0.81 in Fiscal 2017).

(4) As at April 30, 2018, the Bank does not have a regulatory capital floor add-on for CET1, Tier 1 and Total capital risk-weighted assets (as at January 31, 2018: \$16.4 billion, \$16.3 billion and \$16.2 billion respectively; as at October 31, 2017: \$12.8 billion, \$12.6 billion and \$12.4 billion, respectively; as at July 31, 2017: \$5.6 billion, \$5.3 billion and \$5.1 billion, respectively).

REGULATORY CAPITAL - DEFINITION OF CAPITAL COMPONENTS ⁽¹⁾



(\$MM)

	Cross-Reference ⁽²⁾	All-in Q2 2018	All-in Q1 2018	
Common Equity Tier 1 Capital: Instruments and Reserves				
1	Directly issued qualifying common share capital plus related stock surplus	u+y	15,819	15,789
2	Retained Earnings	v	39,766	38,704
3	Accumulated Other Comprehensive Income	w	1,676	588
5	Common share capital issued by subsidiaries and held by third parties (amount allowed in group CET1)	bb	656	599
6	Common Equity Tier 1 capital before regulatory adjustments		57,917	55,680
Common Equity Tier 1 Capital: Regulatory Adjustments				
8	Goodwill (net of related tax liability)	g	(7,821)	(7,664)
9	Intangibles other than mortgage-servicing rights (net of related tax liability)	h-q+r	(3,856)	(3,791)
10	Deferred tax assets that rely on future profitability excluding those arising from temporary differences (net of related tax liability)	k	(341)	(382)
11	Cash flow hedge reserve	x	(94)	(164)
12	Shortfall of allowances to expected losses	ee	-	-
14	Gains and losses due to changes in own credit risk on fair value liabilities	p	(112)	(91)
15	Defined-benefit pension fund net assets (net of related tax liability)	t-s	(198)	(167)
16	Investments in own shares (if not already netted off paid-in capital on reported balance sheet)	a	(6)	(9)
19	Significant investments in the common stock of banking, financial and insurance entities that are outside the scope of regulatory consolidation, net of eligible short positions (amount above 10% threshold)	e	(410)	(380)
22	Amount exceeding the 15% threshold		(50)	(39)
23	of which: significant investments in the common stock of financials	f	(34)	(26)
25	of which: deferred tax assets arising from temporary differences	j	(16)	(13)
26	Other deductions from CET1 as determined by OSFI	o	(4)	(3)
28	Total regulatory adjustments to Common Equity Tier 1		(12,892)	(12,690)
29	Common Equity Tier 1 Capital (CET1)		45,025	42,990
Additional Tier 1 Capital: Instruments				
30	Directly issued qualifying Additional Tier 1 instruments plus related stock surplus	z	2,911	2,911
31	of which: classified as equity under applicable accounting standards		2,911	2,911
33	Directly issued capital instruments subject to phase-out from Additional Tier 1	aa ⁽³⁾	2,613	2,613
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)	cc	165	134
36	Additional Tier 1 capital before regulatory adjustments		5,689	5,658
Additional Tier 1 Capital: Regulatory Adjustments				
39	Non-significant investments in the capital of banking, financial and insurance entities, net of eligible short positions (amount above 10% threshold)		-	-
40	Significant investments in the capital of banking, financial and insurance entities that are outside the scope of regulatory consolidation (net of eligible short positions)	b	-	-
41	Other deductions from Tier 1 capital as determined by OSFI		(6)	-
43	Total regulatory adjustments to Additional Tier 1 capital		(6)	-
44	Additional Tier 1 Capital (AT1)		5,683	5,658
45	Tier 1 Capital (T1=CET1 + AT1)		50,708	48,648
Tier 2 Capital: Instruments and Provisions				
46	Directly issued qualifying Tier 2 instruments	m	3,536	3,466
47	Directly issued capital instruments subject to phase-out from Tier 2		2,131	2,235
48	Tier 2 instruments issued by subsidiaries and held by third parties (amount allowed in group Tier 2)	dd	105	104
50	Eligible Collective Allowance and Excess of allowance over expected loss	c+d	1,236	1,184
51	Tier 2 capital before regulatory adjustments		7,008	6,989

	Cross-Reference ⁽²⁾	All-in Q2 2018	All-in Q1 2018	
Tier 2 Capital: Regulatory Adjustments				
57	Total regulatory adjustments to Tier 2 capital		-	-
58	Tier 2 Capital (T2)		7,008	6,989
59	Total Capital (TC = T1 + T2)		57,716	55,637
60	Total Risk-weighted Assets			
60a	Common Equity Tier 1 (CET1) Capital RWA		375,901	382,248
60b	Tier 1 Capital RWA		376,042	382,248
60c	Total Capital RWA		376,183	382,248
Capital Ratios and Buffers				
61	Common Equity Tier 1 (as a percentage of risk-weighted assets)		12.0	11.2
62	Tier 1 (as a percentage of risk-weighted assets)		13.5	12.7
63	Total capital (as a percentage of risk-weighted assets)		15.3	14.6
64	Institution specific buffer requirement (minimum CET1 requirement plus capital conservation and countercyclical buffer requirements, expressed as a percentage of risk-weighted assets)		8.0%	8.0%
65	of which: capital conservation buffer requirement		2.5%	2.5%
66	of which: bank specific countercyclical buffer requirement		0.0%	0.0%
67	of which: G-SIB buffer requirement		0.0%	0.0%
68	Common Equity Tier 1 available to meet buffers (as a percentage of risk weighted assets)		12.0	11.2
OSFI all-in target (minimum + capital conservation buffer + DSIB surcharge (if applicable))				
69	Common Equity Tier 1 All-in target ratio		8.0%	8.0%
70	Tier 1 capital all-in target ratio		9.5%	9.5%
71	Total capital all-in target ratio		11.5%	11.5%
Amounts below the thresholds for the deduction (before risk-weighting)				
72	Non-significant investments in the capital of other financial institutions		915	669
73	Significant investments in the common stock of financial institutions		4,515	4,315
75	Deferred tax assets arising from temporary differences (net of related tax liability)		2,239	2,133
Applicable caps on the inclusion of allowances in Tier 2				
76	Allowances eligible for inclusion in Tier 2 in respect to exposures subject to standardized approach (prior to application of cap)		1,157	1,128
77	Cap on inclusion of allowances in Tier 2 under standardized approach		1,449	1,381
78	Allowances eligible for inclusion in Tier 2 in respect to exposures subject to internal ratings-based approach (prior to application of cap)		79	56
79	Cap for inclusion of allowances in Tier 2 under internal ratings-based approach		1,262	1,230
Capital instruments subject to phase-out arrangements (only applicable between Jan 1 2018 and Jan 1 2022)				
80	Current cap on CET1 instruments subject to phase-out arrangements		40%	40%
81	Amount excluded from CET1 due to cap (excess over cap after redemptions and maturities)		-	-
82	Current cap on AT1 instruments subject to phase-out arrangements		40%	40%
83	Amount excluded from AT1 due to cap (excess over cap after redemptions and maturities)		110	455
84	Current cap on T2 instruments subject to phase-out arrangements		40%	40%
85	Amount excluded from T2 due to cap (excess over cap after redemptions and maturities)		-	-

(1) Effective Q1 2018, the Bank adopted IFRS 9 (Financial Instruments). The full transitional impact on regulatory capital from IFRS 9 was recognized upon adoption. Prior period results were not restated and are based on International Accounting Standard (IAS) 39.

(2) Cross-referenced to the Consolidated Balance Sheet: Source of Definition of Capital Components on page 5 (refer to column: Under Regulatory Scope of Consolidation).

(3) Line 33 also includes \$1,400 of capital instruments issued by trusts not consolidated under accounting standard IFRS 10, effective Q1 2014.

CONSOLIDATED BALANCE SHEET: SOURCE OF DEFINITION OF CAPITAL COMPONENTS ⁽¹⁾


(\$MM)	Cross Reference to Page 4 Definition of Capital Components	Consolidated Statement of Financial Position ⁽¹⁾	Under regulatory scope of consolidation ⁽²⁾	(\$MM)	Cross Reference to Page 4 Definition of Capital Components	Consolidated Statement of Financial Position ⁽¹⁾	Under regulatory scope of consolidation ⁽²⁾
		Q2 2018	Q2 2018			Q2 2018	Q2 2018
Assets				Liabilities			
Cash and deposits with financial institutions		61,792	61,271	Deposits			
Precious metals		4,005	4,005	Personal		203,922	203,922
Trading Assets				Business and government		393,761	393,761
Securities		81,738	81,734	Financial institutions		42,960	42,960
- Investment in own shares	a		6			640,643	640,643
- Other trading securities			81,728	Financial instruments designated at fair value through profit or loss		6,575	6,575
Loans		16,399	16,399	Other			
Other		1,518	1,518	Acceptances		17,079	17,079
		99,655	99,651	Obligations related to securities sold short		29,050	29,050
Financial instruments designated at fair value through profit or loss		13	13	Derivative financial instruments		32,010	32,010
Securities purchased under resale agreements and securities borrowed		84,175	84,167	Obligations related to securities sold under repurchase agreements and securities lent		90,888	90,888
Derivative financial instruments		33,949	33,949	Subordinated debentures		5,667	5,667
Investment securities		74,220	73,549	- Regulatory capital amortization of maturing debentures			
- Significant investments in Additional Tier 1 capital of other financial institutions reflected in regulatory capital			-	- Subordinated debentures used for regulatory capital			
- Other securities ⁽³⁾	b		73,549	- of which: are included in Tier 2 capital	m		3,536
				- of which: are subject to phase-out included in Tier 2 capital (40%)			2,131
				- of which: are subject to phase-out not included in Tier 2 capital			
Loans				Other liabilities		41,263	39,012
Residential mortgages		242,760	242,576	- Liquidity reserves	o		4
Personal Loans		90,855	90,839	- Gains/losses due to changes in own credit risk including DVA on derivatives	p		112
Credit cards ⁽³⁾		15,109	13,908	- Deferred tax liabilities			605
Business and government ⁽³⁾		174,123	173,885	- Intangible assets (excl. computer software and mortgage servicing rights)	q		812
		522,847	521,208	- Intangible assets - computer software	r		285
Allowance for credit losses		4,929	4,929	- Defined benefit pension fund assets	s		98
- General Allowance reflected in Tier 2 capital	c		1,157	- Other deferred tax liabilities			(590)
- Shortfall of allowances to expected loss	ee		-	- Other liabilities			38,291
- Excess of allowances to expected loss	d		79			215,957	213,706
- Allowances not reflected in regulatory capital			3,693	Total liabilities		863,175	860,924
Other				Equity			
Customers' liability under acceptances		17,074	17,074	Common equity			
Property and equipment		2,390	2,386	- Common shares	u	15,711	15,711
Investments in associates		4,806	5,041	- Retained earnings	v	39,766	39,766
- Significant Investments in other financial institutions including deconsolidated subsidiaries exceeding 10% regulatory thresholds	e		410	- Accumulated other comprehensive income (loss)	w	1,676	1,676
- Significant Investments in other financial institutions including deconsolidated subsidiaries exceeding 15% regulatory thresholds	f		34	- Cash flow hedging reserve	x		94
- Significant Investments in other financial institutions including deconsolidated subsidiaries within regulatory thresholds			4,597	- Other			1,582
Goodwill & other intangible assets		12,273	12,774	- Other reserves	y	108	108
- Goodwill	g		7,320	Total common equity		57,261	57,261
- Imputed goodwill for significant investments	g		501	Preferred shares and other equity instruments		4,234	4,234
- Intangibles (excl. computer software)	h		2,881	- of which: are qualifying Tier 1 capital	z		2,911
- Computer software intangibles	i		2,072	- of which: are subject to phase out and included in Tier 1 capital (40%)	aa		1,213
Deferred tax assets		1,787	1,787	- of which: are subject to phase out and not included into Tier 1 capital			110
- Deferred tax assets arising from temporary differences exceeding the regulatory threshold	j		16	Total equity attributable to equity holders of the Bank		61,495	61,495
- Deferred tax assets that rely on future profitability	k		341	Non-controlling interests			
- Deferred tax assets not deducted from regulatory capital			1,430	Non-controlling interests in subsidiaries		1,640	1,640
Other assets		12,253	12,113	- portion allowed for inclusion into CET1	bb		656
- Defined pension fund assets	l		296	- portion allowed for inclusion into Tier 1 capital	cc		165
- Other assets			11,817	- portion allowed for inclusion into Tier 2 capital	dd		105
		50,583	51,175	- portion not allowed for regulatory capital			714
Total assets		926,310	924,059	Total equity		63,135	63,135
				Total liabilities and equity		926,310	924,059

(1) Consolidated Statement of Financial Position as reported in the 2018 Quarterly Report - Second Quarter results (page 35). Effective Q1 2018, the Bank fully adopted IFRS 9 (Financial Instruments).

(2) Legal Entities that are within the accounting scope of consolidation but excluded from the regulatory scope of consolidation represent the Bank's insurance subsidiaries whose principle activities include insurance, reinsurance, property and casualty insurance. Key subsidiaries are Scotia Insurance Barbados Ltd (assets: \$465MM, equity: \$221MM), Scotia Life Insurance Company (assets: \$149MM, equity: \$200MM), Scotia Reinsurance Limited (assets: \$30MM, equity \$117MM), Scotia Jamaica Life Insurance Co. Ltd (assets: \$591MM, equity: \$96MM), Scotia Life Trinidad and Tobago Ltd (assets: \$407MM, equity: \$67MM) and Scotia Seguros (assets: \$32MM, equity: \$11MM).

(3) Effective Q3 2016, securitized credit card exposures are excluded from the regulatory scope of consolidation under OSFI's Securitization Framework.

BALANCE SHEET ASSET CATEGORIES CROSS-REFERENCED TO CREDIT RISK EXPOSURES ⁽¹⁾

	Credit Risk Exposures						Other Exposures		Total
	Drawn		Other Exposures				Market Risk Exposures	All Other ⁽²⁾	
	Non-retail	Retail	Securitization	Repo-style		Equity	Also subject to Credit Risk		
				Transactions	OTC Derivatives				
As at April 30, 2018 (\$MM)									
Cash and deposits with financial institutions	59,074	-	-	-	-	-	-	2,718	61,792
Precious metals	-	-	-	-	-	-	4,005	-	4,005
Trading assets:									
Securities	22	-	-	-	-	-	81,716	-	81,738
Loans	8,243	12	-	-	-	-	7,649	8,144	16,399
Other	-	-	-	-	-	-	-	1,518	1,518
Financial assets designated at fair value through profit or loss	13	-	-	-	-	-	-	-	13
Securities purchased under resale agreements and securities borrowed	-	-	-	84,167	-	-	-	8	84,175
Derivative financial instruments	-	-	-	-	33,949	-	30,000	-	33,949
Investment securities	72,087	-	-	-	-	1,561	-	-	74,220
Loans:									
Residential mortgages ⁽³⁾	92,127	150,449	-	-	-	-	-	184	242,760
Personal loans	-	88,932	1,908	-	-	-	-	15	90,855
Credit cards	-	13,304	770	-	-	-	-	1,035	15,109
Business & government	164,247	3,067	6,864	-	-	-	-	(55)	174,123
Allowances for credit losses ⁽⁴⁾	(571)	(769)	-	-	-	-	-	(3,589)	(4,929)
Customers' liability under acceptances	17,079	-	-	-	-	-	-	(5)	17,074
Property and equipment	-	-	-	-	-	-	-	2,390	2,390
Investments in associates	-	-	-	-	-	-	-	4,806	4,806
Goodwill and other intangible assets	-	-	-	-	-	-	-	12,273	12,273
Other (including Deferred tax assets)	971	605	-	-	-	-	-	12,464	14,040
Total	413,292	255,600	9,542	84,167	33,949	1,561	37,649	95,383	926,310

	Credit Risk Exposures						Other Exposures		Total
	Drawn		Other Exposures				Market Risk Exposures	All Other ⁽²⁾	
	Non-retail	Retail	Securitization	Repo-style		Equity	Also subject to Credit Risk		
				Transactions	OTC Derivatives				
As at January 31, 2018 (\$MM)									
Cash and deposits with financial institutions	54,759	-	-	-	-	-	-	2,606	57,365
Precious metals	-	-	-	-	-	-	5,471	-	5,471
Trading assets:									
Securities	-	-	-	-	-	-	87,377	-	87,377
Loans	9,175	18	-	-	-	-	8,592	7,533	16,726
Other	-	-	-	-	-	-	-	1,561	1,561
Financial assets designated at fair value through profit or loss	14	-	-	-	-	-	-	-	14
Securities purchased under resale agreements and securities borrowed	-	-	-	88,643	-	-	-	5	88,648
Derivative financial instruments	-	-	-	-	36,847	-	32,227	-	36,847
Investment securities	73,087	-	-	-	-	1,424	-	637	75,148
Loans:									
Residential mortgages ⁽³⁾	94,516	144,744	-	-	-	-	-	159	239,419
Personal loans ⁽⁵⁾	-	87,588	2,001	-	-	-	-	16	89,605
Credit cards ⁽⁵⁾	-	12,823	665	-	-	-	-	1,089	14,577
Business & government	155,219	2,972	6,252	-	-	-	-	(30)	164,413
Allowances for credit losses ⁽⁴⁾	(562)	(702)	-	-	-	-	-	(3,553)	(4,817)
Customers' liability under acceptances	16,398	-	-	-	-	-	-	(18)	16,380
Property and equipment	-	-	-	-	-	-	-	2,314	2,314
Investments in associates	-	-	-	-	-	-	-	4,518	4,518
Goodwill and other intangible assets	-	-	-	-	-	-	-	12,049	12,049
Other (including Deferred tax assets)	1,326	586	-	-	-	-	-	13,625	15,537
Total	403,932	248,029	8,918	88,643	36,847	1,424	40,819	101,942	923,152

(1) Based on the Consolidated Statement of Financial Position as reported in the 2018 Quarterly Report - Second Quarter results (page 35). Effective Q1 2018, the Bank fully adopted IFRS 9 (Financial Instruments).

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

(3) Includes \$89.4 billion (Q1, 2018 - \$91.9 billion) in mortgages guaranteed by Canada Mortgage Housing Corporation (CMHC) and portions of privately insured mortgages. CMHC guarantees under the PD substitution are reclassified to sovereign.

(4) Amounts for AIRB exposures are reported gross of IFRS 9 specific allowances and amounts for Standardized exposures are reported net of IFRS 9 specific allowances.

(5) Restated to reflect the current period presentation.

FLOW STATEMENT FOR REGULATORY CAPITAL



	Basel III All-in									
	IFRS 9 ⁽¹⁾		IAS 39 ⁽¹⁾							
	Q2 2018	Q1 2018	Q4 2017	Q3 2017	Q2 2017	Q1 2017	Q4 2016	Q3 2016	Q2 2016	Q1 2016
(\$MM)										
Common Equity Tier 1 (CET1) capital										
Opening amount	42,990	43,352	41,369	42,474	40,540	39,989	37,690	35,911	37,645	36,965
Net income attributable to equity holders of the Bank	2,107	2,279	2,015	2,045	1,997	1,948	1,939	1,897	1,523	1,758
Dividends paid to equity holders of the Bank	(1,047)	(979)	(976)	(940)	(947)	(934)	(924)	(904)	(899)	(871)
Shares issued	34	62	61	21	93	138	185	114	22	42
Shared repurchased/redeemed	-	(178)	-	(299)	(572)	(138)	-	-	(15)	(65)
Removal of own credit spread (net of tax)	(21)	35	17	132	(4)	40	5	(8)	143	(142)
Movements in other comprehensive income (OCI), excluding cash flow hedges	1,158	(918)	1,029	(2,740)	1,611	(534)	894	627	(2,835)	842
Currency translation differences	1,222	(1,006)	1,007	(2,885)	1,835	(1,151)	802	991	(2,826)	1,455
Debt and equity investments fair valued through OCI ⁽²⁾	(92)	27	(23)	(92)	103	(49)	(49)	33	13	(177)
Employee Benefits	5	58	29	222	(338)	667	133	(386)	(25)	(443)
Other	23	3	16	15	11	(1)	8	(11)	3	7
Goodwill and other intangible assets (deduction, net of related tax liability)	(222)	50	(159)	370	(233)	106	(123)	(166)	(121)	(161)
Other, including regulatory adjustments and transitional arrangements	26	(713)	(4)	306	(11)	(75)	323	219	448	(723)
Deferred tax assets that rely on future probability	41	35	18	9	23	17	3	11	41	-
IFRS 9 impact ⁽³⁾	-	(564)	-	-	-	-	-	-	-	-
Threshold deductions	(41)	(148)	29	284	(181)	32	373	203	308	(655)
Other	26	(36)	(51)	13	147	(124)	(53)	5	99	(68)
Closing Amount	45,025	42,990	43,352	41,369	42,474	40,540	39,989	37,690	35,911	37,645
Other Additional Tier 1 capital										
Opening amount	5,658	6,121	4,544	4,574	4,707	5,077	4,574	4,848	4,338	4,401
Capital issuances	-	-	1,560	-	-	-	500	-	500	350
Redeemed capital	(345)	-	-	-	(230)	(345)	-	(345)	(345)	-
Other, capital including regulatory adjustments and transitional arrangements (NVCC)	370	(463)	17	(30)	97	(25)	3	71	355	(413)
Closing Amount	5,683	5,658	6,121	4,544	4,574	4,707	5,077	4,574	4,848	4,338
Total Tier 1 capital	50,708	48,648	49,473	45,913	47,048	45,247	45,066	42,264	40,759	41,983
Tier 2 capital										
Opening amount	6,989	6,640	8,016	8,262	8,153	8,264	8,207	8,080	8,430	6,864
Capital issuances	-	-	-	-	-	-	-	-	-	2,537
Redeemed capital	(119)	(113)	(1,500)	-	-	-	-	(16)	(19)	(1,000)
Amortization adjustments	-	-	-	-	-	-	-	-	-	-
Other, including regulatory adjustments and transitional adjustments (NVCC)	138	462	124	(246)	109	(111)	57	143	(331)	29
Closing Amount	7,008	6,989	6,640	8,016	8,262	8,153	8,264	8,207	8,080	8,430
Total regulatory capital	57,716	55,637	56,113	53,929	55,310	53,400	53,330	50,471	48,839	50,413

(1) Effective Q1 2018, the Bank adopted IFRS 9 (Financial Instruments). The full transitional impact on regulatory capital from IFRS 9 was recognized upon adoption. Prior period results and ratios are based on International Accounting Standard (IAS) 39.

(2) Referred to as Available-for-Sale under IAS 39 (prior to Fiscal 2018).

(3) Represents the full transitional impact on retained earnings from the Bank's adoption of IFRS 9 (Financial Instruments) on November 1, 2017.

RISK-WEIGHTED ASSETS AND CAPITAL RATIOS



(\$B)	Basel III - All-in									
	IFRS 9 ⁽¹⁾		IAS 39 ⁽¹⁾							
	Q2 2018	Q1 2018	Q4 2017	Q3 2017	Q2 2017	Q1 2017	Q4 2016	Q3 2016	Q2 2016	Q1 2016
RISK-WEIGHTED ASSETS:⁽²⁾										
On-Balance Sheet Assets										
Cash Resources	3.5	3.1	3.1	3.0	4.3	3.5	3.7	3.9	4.1	3.7
Securities	8.5	8.6	8.8	9.2	10.2	9.4	9.6	10.7	10.3	11.2
Residential Mortgages	32.0	31.6	30.0	28.8	27.9	25.7	25.0	23.2	22.5	25.9
Loans										
- Personal Loans	54.3	53.7	53.3	52.1	51.9	50.5	52.0	49.5	49.0	48.7
- Non-Personal Loans	118.6	114.3	116.0	115.1	121.0	114.6	118.8	118.6	120.4	125.1
All Other	32.2	31.6	30.0	29.5	29.8	29.2	28.8	27.6	27.0	29.0
	249.1	242.9	241.2	237.7	245.1	232.9	237.9	233.5	233.2	243.6
Off-Balance Sheet Assets										
Indirect Credit Instruments	53.5	51.2	52.8	51.6	58.1	53.1	54.1	51.0	48.5	49.2
Derivative Instruments	12.1	10.1	10.7	11.2	12.0	13.4	12.1	12.9	13.2	20.0
	65.6	61.3	63.5	62.8	70.1	66.5	66.2	63.9	61.7	69.2
Total Credit Risk before AIRB scaling factor	314.7	304.2	304.7	300.5	315.2	299.4	304.1	297.4	294.9	312.8
AIRB Scaling factor ⁽³⁾	10.7	10.5	10.5	10.3	10.9	10.4	10.7	10.5	10.6	11.1
Total Credit Risk after AIRB scaling factor	325.4	314.7	315.2	310.8	326.1	309.8	314.8	307.9	305.5	323.9
Market Risk - Risk Assets Equivalent	8.8	9.9	7.8	8.9	9.2	10.6	10.6	11.7	13.9	14.1
Operational Risk - Risk Assets Equivalent	41.7	41.2	40.6	40.1	39.6	39.2	38.6	38.1	37.5	36.5
Regulatory Capital Floor Adjustment to CET1 RWA ⁽⁴⁾	-	16.4	12.8	5.6	-	-	-	-	-	-
CET1 Risk-weighted Assets ⁽⁴⁾⁽⁵⁾	375.9	382.2	376.4	365.4	374.9	359.6	364.0	357.7	356.9	374.5
Tier 1 Risk-weighted Assets ⁽⁴⁾⁽⁵⁾	376.0	382.2	376.4	365.4	375.1	359.9	364.5	358.2	357.4	375.4
Total Risk-weighted Assets ⁽⁴⁾⁽⁵⁾	376.2	382.2	376.4	365.4	375.4	360.2	364.9	358.6	357.8	376.1
REGULATORY CAPITAL RATIOS (%):										
Common Equity Tier 1	12.0	11.2	11.5	11.3	11.3	11.3	11.0	10.5	10.1	10.1
Tier 1	13.5	12.7	13.1	12.6	12.5	12.6	12.4	11.8	11.4	11.2
Total	15.3	14.6	14.9	14.8	14.7	14.8	14.6	14.1	13.6	13.4

(1) Effective Q1 2018, the Bank adopted IFRS 9 (Financial Instruments). The full transitional impact on regulatory capital from IFRS 9 was recognized upon adoption. Prior period results and ratios are based on International Accounting Standard (IAS) 39.

(2) For purposes of this presentation only, Risk-weighted Assets (RWA) are shown by balance sheet categories. Details by Basel III exposure type are shown on pages 11-12 entitled, "Exposure at Default and Risk-Weighted Assets for Credit Risk Portfolios".

(3) The Basel Framework requires an additional 6% scaling factor to AIRB credit risk portfolios (excluding CVA and exposures with a risk-weight of 1250%).

(4) As at April 30, 2018, the Bank does not have a regulatory capital floor add-on for CET1, Tier 1 and Total risk-weighted assets (as at January 31, 2018: \$16.4 billion, \$16.3 billion and \$16.2 billion respectively; as at October 31, 2017: \$12.8 billion, \$12.6 billion and \$12.4 billion, respectively).

(5) In accordance with OSFI's requirements, in 2018 scalars for CVA RWA of 0.80, 0.83 and 0.86 were used to compute the CET1 capital ratio, Tier 1 capital ratio and Total capital ratio, respectively.

MOVEMENT OF RISK-WEIGHTED ASSETS BY RISK TYPE (ALL-IN BASIS)


Credit Risk Risk-weighted Assets (RWA) (\$MM)	Q2 2018		Q1 2018	
	Credit Risk ⁽¹⁾	Of which Counterparty Credit Risk	Credit Risk ⁽¹⁾	Of which Counterparty Credit Risk
CET1 Credit risk-weighted assets as at beginning of Quarter	314,739	17,209	315,159	16,494
Book size ⁽²⁾	5,235	340	5,017	1,007
Book quality	(1,079)	(19)	544	(46)
Model updates ⁽³⁾	(1,037)	-	-	-
Methodology and policy ⁽⁴⁾	-	-	332	332
Acquisitions and disposals	-	-	-	-
Foreign exchange movements	7,488	570	(6,146)	(578)
Other	-	-	(167)	-
CET1 Credit risk-weighted assets as at end of Quarter	325,346	18,100	314,739	17,209
Tier 1 CVA scalar	141	141	104	104
Tier 1 Credit risk-weighted assets as at end of Quarter	325,487	18,241	314,843	17,313
Total CVA scalar	141	141	103	103
Total Credit risk-weighted assets as at end of Quarter	325,628	18,382	314,946	17,416

(1) In accordance with OSFI's requirements, in 2018 scalars for CVA RWA of 0.80, 0.83 and 0.86 were used to compute the CET1 capital ratio, Tier 1 capital ratio and Total capital ratio, respectively.

(2) Book size is defined as organic changes in book size and composition (including new business and maturing loans).

(3) Model updates are defined as model implementation, change in model scope or any change to address model enhancement.

(4) Methodology and policy is defined as methodology changes to the calculations driven by regulatory policy changes, such as new regulation (e.g. Basel III).

Market Risk RWA (\$MM)	Q2 2018	Q1 2018
Market risk-weighted assets as at beginning of Quarter	9,905	7,839
Movement in risk levels ⁽¹⁾	(1,070)	1,685
Model updates ⁽²⁾	-	381
Methodology and policy ⁽³⁾	-	-
Acquisitions and disposals	-	-
Other	-	-
Market risk-weighted assets as at end of Quarter	8,835	9,905

(1) Movement in risk levels are defined as changes in risk due to position changes and market movements. Foreign exchange movements are embedded within Movement in risk levels.

(2) Model updates are defined as updates to the model to reflect recent experience and change in model scope.

(3) Methodology and policy is defined as methodology changes to the calculations driven by regulatory policy changes (e.g. Basel III).

Operational Risk RWA (\$MM)	Q2 2018	Q1 2018
Operational risk-weighted assets as at beginning of Quarter	41,205	40,564
Acquisitions and disposals	-	-
Higher Revenue	515	641
Operational risk-weighted assets as at end of Quarter	41,720	41,205

RISK-WEIGHTED ASSETS ARISING FROM THE ACTIVITIES OF THE BANK'S BUSINESSES


CET1 Risk-weighted Assets (RWA)	Q2 2018				
	Canadian Banking	International Banking	Global Banking & Markets	Other	All Bank
CET1 RWA (\$B)	\$123.3	\$143.0	\$100.2	\$9.4	\$375.9
Proportion of Bank	33%	38%	27%	2%	100%
Comprised of:					
Credit risk	85%	88%	86%	94%	87%
Market risk	- %	1%	6%	11%	2%
Operational risk	15%	11%	8%	-5%	11%
Other	0%	0%	0%	0%	0%

CET1 Risk-weighted Assets (RWA)	Q1 2018				
	Canadian Banking	International Banking	Global Banking & Markets	Other ⁽¹⁾	All Bank ⁽¹⁾
CET1 RWA (\$B)	\$121.9	\$135.7	\$99.4	\$25.2	\$382.2
Proportion of Bank	32%	36%	26%	6%	100%
Comprised of:					
Credit risk	85%	88%	85%	32%	82%
Market risk	- %	1%	7%	5%	3%
Operational risk	15%	11%	8%	-2%	11%
Other	- %	- %	- %	65%	4%

(1) Includes Basel I capital floor adjustments for Q1 2018.

EXPOSURE AT DEFAULT AND RISK-WEIGHTED ASSETS FOR CREDIT RISK PORTFOLIOS



(SMM)		Q2 2018				Q1 2018				Q4 2017		Q3 2017		Q2 2017		Q1 2017	
		AIRB		Standardized		Total		Total		Total		Total		Total		Total	
Exposure Type	Sub-type	EAD ⁽¹⁾	RWA ⁽²⁾	EAD ⁽¹⁾	RWA ⁽²⁾	EAD ⁽¹⁾	RWA ⁽²⁾	EAD ⁽¹⁾	RWA ⁽²⁾	EAD ⁽¹⁾	RWA ⁽²⁾	EAD ⁽¹⁾	RWA ⁽²⁾	EAD ⁽¹⁾	RWA ⁽²⁾	EAD ⁽¹⁾	RWA ⁽²⁾
Non-Retail																	
Corporate	Drawn	139,072	67,350	51,078	49,110	190,150	116,460	182,052	112,280	183,262	114,622	180,278	113,458	181,498	119,608	171,433	113,535
	Undrawn	80,025	30,869	5,572	5,497	85,597	36,366	79,478	34,185	81,214	34,473	77,423	34,172	82,966	39,115	74,738	34,789
	Other ⁽³⁾⁽⁴⁾	39,870	12,186	3,063	2,984	42,933	15,170	42,633	15,696	44,190	15,431	42,369	15,098	43,339	16,227	38,657	16,060
	Total	258,967	110,405	59,713	57,591	318,680	167,996	304,163	162,161	308,666	164,526	300,070	162,728	307,803	174,950	284,828	164,384
Bank	Drawn	16,938	3,531	2,874	2,553	19,812	6,084	21,021	6,459	22,223	6,115	18,494	5,974	24,561	7,125	20,462	5,670
	Undrawn	2,554	362	51	49	2,605	411	2,681	452	2,656	477	2,511	430	3,895	732	1,953	345
	Other ⁽³⁾⁽⁴⁾	10,268	1,028	37	37	10,305	1,065	10,534	1,598	9,132	1,623	9,805	1,341	11,074	1,639	9,118	1,328
	Total	29,760	4,921	2,962	2,639	32,722	7,560	34,236	8,509	34,011	8,215	30,810	7,745	39,530	9,496	31,533	7,343
Sovereign	Drawn	107,860	3,749	6,035	1,640	113,895	5,389	109,002	4,692	103,797	4,665	104,750	4,542	93,554	4,976	95,419	4,640
	Undrawn	775	90	11	5	786	95	752	104	1,023	299	743	102	963	134	898	103
	Other ⁽³⁾⁽⁴⁾	1,279	54	7	7	1,286	61	943	22	977	26	911	10	769	10	1,018	13
	Total	109,914	3,893	6,053	1,652	115,967	5,545	110,697	4,818	105,797	4,990	106,404	4,654	95,286	5,120	97,335	4,756
Total Non-Retail		263,870	74,630	59,987	53,303	323,857	127,933	312,075	123,431	309,282	125,402	303,522	123,974	299,613	131,709	287,314	123,845
	Undrawn	83,354	31,321	5,634	5,551	88,988	36,872	82,911	34,741	84,893	35,249	80,677	34,704	87,824	39,981	77,589	35,237
	Other ⁽³⁾⁽⁴⁾	51,417	13,268	3,107	3,028	54,524	16,296	54,110	17,316	54,299	17,080	53,085	16,449	55,182	17,876	48,793	17,401
	Total	398,641	119,219	68,728	61,882	467,369	181,101	449,096	175,488	448,474	177,731	437,284	175,127	442,619	189,566	413,696	176,483
Retail																	
Residential Mortgages	Drawn	203,876	16,426	36,139	15,572	240,015	31,998	236,753	31,567	234,620	30,024	229,568	28,751	226,173	27,857	221,928	25,739
	Undrawn	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Total	203,876	16,426	36,139	15,572	240,015	31,998	236,753	31,567	234,620	30,024	229,568	28,751	226,173	27,857	221,928	25,739
Secured Lines Of Credit	Drawn	20,648	3,384	-	-	20,648	3,384	20,295	3,375	20,281	3,351	19,642	3,193	19,642	3,079	19,099	3,056
	Undrawn	17,409	1,050	-	-	17,409	1,050	15,795	920	15,356	917	15,007	857	14,648	827	14,334	793
	Total	38,057	4,434	-	-	38,057	4,434	36,090	4,295	35,637	4,268	35,241	4,050	34,290	3,906	33,433	3,849
Qualifying Revolving Retail Exposures (QRRE)	Drawn	17,311	9,565	-	-	17,311	9,565	17,116	9,973	16,939	9,676	16,908	9,580	16,875	9,413	16,753	9,683
	Undrawn	27,240	3,235	-	-	27,240	3,235	27,886	3,349	27,445	3,291	26,726	3,164	26,309	3,102	25,916	3,085
	Total	44,551	12,800	-	-	44,551	12,800	45,002	13,322	44,384	12,967	43,634	12,744	43,184	12,515	42,669	12,768
Other Retail	Drawn	29,952	14,184	37,110	27,160	67,062	41,344	65,722	40,305	65,924	40,318	64,455	39,374	63,900	39,367	61,325	37,777
	Undrawn	1,340	353	-	-	1,340	353	1,317	319	1,300	311	1,183	276	1,042	233	1,009	225
	Total	31,292	14,537	37,110	27,160	68,402	41,697	67,039	40,624	67,224	40,629	65,638	39,650	64,942	39,600	62,334	38,002
Total Retail		271,787	43,559	73,249	42,732	345,036	86,291	339,886	85,220	337,764	83,369	331,165	80,898	326,590	79,716	319,105	76,255
	Undrawn	45,989	4,638	-	-	45,989	4,638	44,998	4,588	44,101	4,519	42,916	4,297	41,999	4,162	41,259	4,103
	Total	317,776	48,197	73,249	42,732	391,025	90,929	384,884	89,808	381,865	87,888	374,081	85,195	368,589	83,878	360,364	80,358
Securitized		24,196	2,461	-	-	24,196	2,461	23,327	2,426	23,591	2,529	23,278	2,529	24,785	2,717	23,589	2,561
Trading Derivatives		22,495	7,733	-	-	22,495	7,733	23,371	6,834	24,483	7,147	21,844	6,942	24,370	7,547	24,842	8,295
Derivatives - credit valuation adjustment ⁽⁴⁾		-	3,757	-	-	-	3,757	-	2,760	-	2,988	-	3,733	-	3,923	-	4,775
Total Credit Risk (Excluding Equities & Other Assets)		763,108	181,367	141,977	104,614	905,085	285,981	880,678	277,316	878,413	278,283	856,487	273,526	860,363	287,631	822,491	272,472
Equities		1,561	1,438	-	-	1,561	1,438	1,424	1,298	1,281	1,188	1,880	1,811	2,333	2,276	2,386	2,426
Other Assets		-	-	52,393	27,185	52,393	27,185	53,211	25,593	50,631	25,201	49,430	25,172	51,607	25,339	46,171	24,380
Total Credit Risk (Before Scaling Factor)		764,669	182,805	194,370	131,799	959,039	314,604	935,313	304,207	930,325	304,672	907,797	300,509	914,303	315,246	871,048	299,278
Add-on for 6% Scaling Factor ⁽⁵⁾			10,742				10,742		10,532		10,487		10,328		10,864		10,441
Total Credit Risk		764,669	193,547	194,370	131,799	959,039	325,346	935,313	314,739	930,325	315,159	907,797	310,837	914,303	326,110	871,048	309,719

(1) Exposure at default, before credit risk mitigation for AIRB exposures, after related IFRS 9 allowances for credit losses for Standardized exposures.
 (2) CET1 Risk-weighted Assets.
 (3) Includes lending instruments such as letters of credit and letters of guarantee; banking book derivatives and repo-style exposures, net of related collateral.
 (4) In accordance with OSFI's requirements, in 2018 scalars for CVA RWA of 0.80, 0.83 and 0.86 were used to compute the CET1 capital ratio, Tier 1 capital ratio and Total capital ratio, respectively.
 (5) The Basel Framework requires an additional 6% scaling factor to AIRB credit risk portfolios (excluding CVA and exposures with a risk-weight of 1250%).

EXPOSURE AT DEFAULT AND RISK-WEIGHTED ASSETS FOR CREDIT RISK PORTFOLIOS (CONTINUED)



(\$MM)		Q4 2016		Q3 2016		Q2 2016 ⁽⁶⁾		Q1 2016		Q4 2015		Q3 2015		Q2 2015		Q1 2015	
Exposure Type	Sub-type	EAD ⁽¹⁾	RWA ⁽²⁾	EAD ⁽¹⁾	RWA ⁽²⁾	EAD ⁽¹⁾	RWA ⁽²⁾	EAD ⁽¹⁾	RWA ⁽²⁾	EAD ⁽¹⁾	RWA ⁽²⁾	EAD ⁽¹⁾	RWA ⁽²⁾	EAD ⁽¹⁾	RWA ⁽²⁾	EAD ⁽¹⁾	RWA ⁽²⁾
Non-Retail																	
Corporate	Drawn	175,784	117,178	175,250	117,309	173,987	118,625	175,672	122,318	157,514	112,836	151,360	106,697	146,075	100,609	145,012	101,339
	Undrawn	73,711	34,499	70,614	32,197	67,024	30,648	71,934	32,458	58,915	29,035	56,306	27,606	51,361	24,589	53,974	24,963
	Other ⁽³⁾	39,943	16,356	40,458	16,043	42,964	15,968	45,648	16,314	40,425	15,476	43,981	16,093	37,643	14,254	35,068	12,327
	Total	289,438	168,033	286,322	165,549	283,975	165,241	293,254	171,090	256,854	157,347	251,647	150,396	235,079	139,452	234,054	138,629
Bank	Drawn	26,022	6,567	26,609	6,662	24,836	6,579	25,881	7,522	27,165	8,344	27,400	7,109	25,700	6,679	32,358	8,435
	Undrawn	1,982	368	1,894	271	1,847	315	1,784	260	11,386	3,726	11,741	3,793	11,406	3,672	12,222	3,914
	Other ⁽³⁾	13,175	2,567	12,313	1,749	10,497	1,539	12,430	2,069	14,906	3,253	12,351	2,188	10,190	1,830	9,535	1,753
	Total	41,179	9,502	40,816	8,682	37,180	8,433	40,095	9,851	53,457	15,323	51,492	13,090	47,296	12,181	54,115	14,102
Sovereign	Drawn	88,760	5,161	108,164	5,266	99,458	5,698	109,153	5,654	96,263	4,203	102,869	5,471	80,325	5,527	82,035	5,544
	Undrawn	1,052	119	841	98	872	129	816	46	2,133	355	1,802	168	1,543	161	1,465	139
	Other ⁽³⁾	497	12	547	3	371	4	508	8	1,016	36	694	46	544	15	1,137	63
	Total	90,309	5,292	109,552	5,367	100,701	5,831	110,477	5,708	99,412	4,594	105,365	5,685	82,412	5,703	84,637	5,746
Total Non-retail	Drawn	290,566	128,906	310,023	129,237	298,281	130,902	310,706	135,494	280,942	125,383	281,629	119,277	252,100	112,815	259,405	115,318
	Undrawn	76,745	34,986	73,349	32,566	69,743	31,092	74,534	32,764	72,434	33,116	69,849	31,567	64,310	28,422	67,661	29,016
	Other ⁽³⁾	53,615	18,935	53,318	17,795	53,832	17,511	58,586	18,391	56,347	18,765	57,026	18,327	48,377	16,099	45,740	14,143
	Total	420,926	182,827	436,690	179,598	421,856	179,505	443,826	186,649	409,723	177,264	408,504	169,171	364,787	157,336	372,806	158,477
Retail																	
Residential Mortgages	Drawn	220,917	25,028	217,538	23,207	214,633	22,467	217,345	25,942	215,590	24,967	214,183	24,854	211,805	22,196	213,185	21,893
	Undrawn	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Total	220,917	25,028	217,538	23,207	214,633	22,467	217,345	25,942	215,590	24,967	214,183	24,854	211,805	22,196	213,185	21,893
Secured Lines Of Credit	Drawn	19,233	4,497	19,200	4,412	18,918	4,390	18,550	4,310	18,804	4,197	18,992	4,207	19,047	4,293	18,952	4,435
	Undrawn	14,587	1,359	14,298	1,286	14,045	1,268	13,778	1,225	12,631	1,133	12,553	1,181	12,354	1,158	12,312	1,243
	Total	33,820	5,856	33,498	5,698	32,963	5,658	32,328	5,535	31,435	5,330	31,545	5,388	31,401	5,451	31,264	5,678
Qualifying Revolving	Drawn	16,717	9,463	16,483	9,316	17,474	9,997	17,244	9,953	16,910	10,031	16,602	9,662	16,426	9,556	16,257	9,564
	Undrawn	21,108	2,656	20,519	2,564	20,100	2,549	19,693	2,481	17,705	2,241	17,123	2,135	16,734	2,058	16,716	2,151
	Total	37,825	12,119	37,002	11,880	37,574	12,546	36,937	12,434	34,615	12,272	33,725	11,797	33,160	11,614	32,973	11,715
Other Retail	Drawn	62,182	38,006	58,627	35,742	56,615	34,574	56,432	34,436	53,313	32,002	51,959	31,308	48,315	29,555	48,656	29,929
	Undrawn	799	203	691	165	674	159	669	158	712	178	677	164	660	156	667	165
	Total	62,981	38,209	59,318	35,907	57,289	34,733	57,101	34,594	54,025	32,180	52,636	31,472	48,975	29,711	49,323	30,094
Total Retail	Drawn	319,049	76,994	311,848	72,677	307,640	71,428	309,571	74,641	304,617	71,197	301,736	70,031	295,593	65,600	297,050	65,821
	Undrawn	36,494	4,218	35,508	4,015	34,819	3,976	34,140	3,864	31,048	3,552	30,353	3,480	29,748	3,372	29,695	3,559
	Total	355,543	81,212	347,356	76,692	342,459	75,404	343,711	78,505	335,665	74,749	332,089	73,511	325,341	68,972	326,745	69,380
Securitized		25,025	2,613	25,110	2,793	23,763	2,588	23,527	2,719	21,000	2,759	20,926	3,705	20,083	3,711	21,166	4,086
Trading Derivatives		23,421	6,599	23,633	6,758	23,144	6,924	31,216	9,042	28,234	8,232	30,013	8,485	28,854	7,971	36,673	10,178
Derivatives - credit valuation adjustment ⁽⁴⁾		-	4,165	-	4,749	-	4,778	-	8,304	-	7,183	-	7,282	-	6,732	-	8,154
Total Credit risk (excl. Equities & Other Assets)		824,915	277,416	832,789	270,590	811,222	269,199	842,280	285,219	794,622	270,187	791,532	262,154	739,065	244,722	757,390	250,275
Equities		2,042	2,042	2,331	2,331	2,393	2,393	2,703	2,703	2,985	2,985	3,427	3,427	3,636	3,636	4,132	4,132
Other Assets		49,829	24,659	50,229	24,486	53,444	23,297	59,267	24,882	50,873	24,265	52,878	23,551	54,146	23,056	59,475	24,208
		876,786	304,117	885,349	297,407	867,059	294,889	904,250	312,804	848,480	297,437	847,837	289,132	796,847	271,414	820,997	278,615
Add-on for 6% scaling factor ⁽⁵⁾			10,705		10,513		10,576		11,095		10,597		10,183		9,593		9,801
Total Credit Risk		876,786	314,822	885,349	307,920	867,059	305,465	904,250	323,899	848,480	308,034	847,837	299,315	796,847	281,007	820,997	288,416

(1) Exposure at default, before credit risk mitigation for AIRB exposures, after related allowances for credit losses for Standardized exposures.

(2) CET1 Risk-weighted Assets.

(3) Includes lending instruments such as letters of credit and letters of guarantee; banking book derivatives and repo-style exposures, net of related collateral.

(4) In accordance with OSFI's requirements, in 2018 scalars for CVA RWA of 0.80, 0.83 and 0.86 were used to compute the CET1 capital ratio, Tier 1 capital ratio and Total capital ratio, respectively.

(5) The Basel Framework requires an additional 6% scaling factor to AIRB credit risk portfolios (excluding exposure with risk weight of 1250%).

(6) As of Q2 2016, the bank implemented the Internal Modelling Method for determination of Counterparty Credit Risk and Credit Valuation Adjustment (CVA) RWA.

CREDIT RISK EXPOSURES BY GEOGRAPHY ⁽¹⁾⁽²⁾

Exposure at Default

(\$MM)	Q2 2018					Q1 2018				
	Non-Retail			Retail	Total	Non-Retail			Retail	Total
	Drawn	Undrawn	Other ⁽³⁾			Drawn	Undrawn	Other ⁽³⁾		
Canada	98,088	38,869	37,025	333,999	507,981	96,090	37,889	39,229	330,813	504,021
USA	101,086	31,722	40,841	-	173,649	89,709	29,296	38,370	-	157,375
Mexico	18,844	1,379	2,506	10,322	33,051	17,963	1,038	2,983	9,669	31,653
Peru	15,570	1,510	2,924	7,956	27,960	14,910	1,486	2,873	7,565	26,834
Chile	13,479	774	1,720	14,042	30,015	12,787	678	1,765	13,307	28,537
Colombia	5,491	546	388	6,292	12,717	5,526	405	489	5,874	12,294
Other International										
Europe	21,244	8,394	11,401	-	41,039	26,366	6,955	10,619	-	43,940
Caribbean	18,093	1,640	1,254	17,678	38,665	17,483	1,625	1,275	16,972	37,355
Latin America (other)	8,133	724	942	736	10,535	7,724	465	458	684	9,331
All Other	23,829	3,430	2,214	-	29,473	23,517	3,074	2,747	-	29,338
Total	323,857	88,988	101,215	391,025	905,085	312,075	82,911	100,808	384,884	880,678

	Q4 2017	Q3 2017	Q2 2017	Q1 2017	Q4 2016
Canada	502,224	482,840	481,291	472,304	468,923
USA	157,386	156,672	151,257	141,195	143,808
Mexico	30,528	33,202	30,094	24,561	26,873
Peru	28,733	27,474	29,973	27,368	28,328
Chile	27,190	26,306	26,701	24,367	23,510
Colombia	10,859	10,586	11,399	10,597	10,943
Other International					
Europe	43,030	43,344	47,129	41,444	41,525
Caribbean	39,358	38,484	42,217	40,009	41,168
Latin America (other)	9,035	8,225	9,433	8,995	8,908
All Other	30,070	29,354	30,869	31,651	30,929
Total	878,413	856,487	860,363	822,491	824,915

(1) Before credit risk mitigation, excluding equity investment securities and other assets.

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

(3) Includes off-balance sheet lending instruments such as letters of credit and letters of guarantee, OTC derivatives, securitization and repo-style transactions net of related collateral.

AIRB CREDIT RISK EXPOSURES BY MATURITY ⁽¹⁾⁽²⁾



NON-RETAIL AND RETAIL PORTFOLIO EXPOSURE AT DEFAULT

(\$MM)	Q2 2018				Q1 2018			
	Drawn	Undrawn	Other ⁽³⁾	Total	Drawn	Undrawn	Other ⁽³⁾	Total
Non-Retail								
Less than 1 year	139,609	24,410	61,385	225,404	134,997	23,619	63,476	222,092
1 to 5 years	112,843	56,503	30,027	199,373	107,880	52,135	27,454	187,469
Over 5 Years	11,418	2,441	6,696	20,555	10,222	1,803	6,771	18,796
Total Non-Retail	263,870	83,354	98,108	445,332	253,099	77,557	97,701	428,357
Retail								
Less than 1 year	31,408	18,750		50,158	33,071	17,111		50,182
1 to 5 years	185,391	-		185,391	182,504	-		182,504
Over 5 Years	15,670	-		15,670	15,860	-		15,860
Revolving Credits ⁽⁴⁾	39,316	27,240		66,556	38,771	27,886		66,657
Total Retail	271,785	45,990		317,775	270,206	44,997		315,203
Total	535,655	129,344	98,108	763,107	523,305	122,554	97,701	743,560

	Q4 2017	Q3 2017	Q2 2017	Q1 2017
Non-Retail				
Less than 1 year	213,124	215,852	211,844	197,585
1 to 5 years	192,087	180,521	187,145	182,036
Over 5 Years	23,217	18,309	20,113	17,458
Total Non-Retail	428,428	414,682	419,102	397,079
Retail				
Less than 1 year	51,045	47,810	39,967	41,006
1 to 5 years	178,940	177,145	176,341	173,686
Over 5 Years	16,299	17,009	19,388	18,908
Revolving Credits ⁽⁴⁾	66,027	65,215	64,051	62,991
Total Retail	312,311	307,179	299,747	296,591
Total	740,739	721,861	718,849	693,670

(1) Before credit risk mitigation, excluding equity investment securities and other assets.

(2) Remaining term to maturity of the credit exposure.

(3) Off-balance sheet lending instruments such as letters of credit and letters of guarantee, securitization, derivatives and repo-style transactions net of related collateral.

(4) Credit cards and lines of credit with unspecified maturity.

STANDARDIZED CREDIT RISK EXPOSURES BY RISK WEIGHT



EXPOSURE AT DEFAULT ⁽¹⁾

Risk-weight	Q2 2018							Q1 2018						
	Non-Retail				Retail			Non-Retail				Retail		
	Corporate	Bank	Sovereign	Total	Res Mtgs	Other Retail	Total	Corporate	Bank	Sovereign	Total	Res Mtgs	Other Retail	Total
0%	2,117	-	3,748	5,865	3,319	1,327	4,646	2,170	-	4,094	6,264	2,961	1,307	4,268
20%	501	356	-	857	1,338	-	1,338	771	597	-	1,368	1,320	-	1,320
35%	-	-	-	-	21,376	-	21,376	-	-	-	-	19,140	-	19,140
50%	14	77	1,306	1,397	6	277	283	924	60	1,811	2,795	4	127	131
75%	-	-	-	-	9,118	34,983	44,101	-	-	-	-	9,570	33,709	43,279
100%	56,275	2,529	999	59,803	982	-	982	53,638	2,420	265	56,323	1,005	-	1,005
150%+	806	-	-	806	-	523	523	686	1	-	687	-	537	537
Total	59,713	2,962	6,053	68,728	36,139	37,110	73,249	58,189	3,078	6,170	67,437	34,000	35,680	69,680

Risk-weight	Q4 2017		Q3 2017		Q2 2017		Q1 2017		Q4 2016		Q3 2016		Q2 2016	
	Non-Retail	Retail	Non-Retail	Retail	Non-Retail	Retail	Non-Retail	Retail	Non-Retail	Retail	Non-Retail	Retail	Non-Retail	Retail
0%	6,122	3,998	6,378	3,629	7,981	3,107	6,892	2,779	7,801	2,507	7,117	2,078	6,375	1,886
20%	1,154	1,593	1,367	1,587	1,400	1,780	1,259	1,737	2,326	1,823	2,037	1,821	2,306	1,985
35%	-	19,771	-	19,069	-	19,343	-	17,715	-	17,025	-	16,295	-	15,819
50%	2,151	133	2,032	277	1,808	339	282	331	462	345	634	419	835	203
75%	-	42,006	-	40,421	-	42,226	-	39,257	-	41,048	-	36,866	-	35,648
100%	57,919	1,142	57,084	1,048	60,318	1,135	55,967	1,117	55,022	1,221	54,192	1,295	53,109	1,288
150%+	774	911	863	871	1,165	912	648	837	761	832	716	998	735	760
Total	68,120	69,554	67,724	66,902	72,672	68,842	65,048	63,773	66,372	64,801	64,696	59,772	63,360	57,589

(1) Effective Q1 2018, net of specific IFRS 9 allowances for credit losses, after credit risk mitigation. Prior period specific allowances are based on IAS 39.

NON-RETAIL AIRB PORTFOLIO - CREDIT QUALITY

(\$MM)			Q2 2018							Q1 2018					
Category external ratings ⁽¹⁾	Internal grades	PD bands ⁽²⁾	Drawn Exposure at Default ⁽³⁾	Undrawn Exposure at Default ⁽³⁾	Other Exposure at Default ⁽³⁾	Total Exposure at Default ⁽³⁾	RWA	Weighted Average PD ⁽⁴⁾⁽⁷⁾	Weighted Average LGD ⁽⁵⁾⁽⁷⁾	Weighted Average RW ⁽⁶⁾⁽⁷⁾	Total Exposure at Default ⁽³⁾	RWA	Weighted Average PD ⁽⁴⁾⁽⁷⁾	Weighted Average LGD ⁽⁵⁾⁽⁷⁾	Weighted Average RW ⁽⁶⁾⁽⁷⁾
			\$	\$	\$	\$	\$	%	%	%	\$	\$	%	%	%
Investment Grade															
<u>Corporate</u>															
			77,167	61,818	37,581	176,566	49,319	0.12	41	28	168,716	47,845	0.12	42	28
	99	0.00% - 0.05%	381	240	562	1,183	102	0.03	45	9	758	85	0.03	46	11
AAA to AA+	98	0.00% - 0.05%	337	1,852	514	2,703	222	0.04	32	8	2,309	215	0.04	29	9
AA to A-	95	0.05% - 0.13%	7,251	6,474	5,592	19,317	2,948	0.05	40	15	19,939	3,281	0.05	40	16
AA to A-	90	0.06% - 0.14%	13,866	16,043	9,151	39,060	6,679	0.06	37	17	36,703	6,378	0.06	37	17
BBB+ to BBB	87	0.09% - 0.22%	17,636	12,925	11,073	41,634	10,732	0.10	41	26	38,648	10,531	0.09	41	27
BBB+ to BBB	85	0.13% - 0.32%	18,450	13,533	5,701	37,684	13,397	0.16	45	36	36,200	12,007	0.15	44	33
BBB-	83	0.19% - 0.46%	19,246	10,751	4,988	34,985	15,239	0.24	45	44	34,159	15,348	0.24	45	45
<u>Bank</u>															
			15,091	2,452	18,765	36,308	6,455	0.10	35	18	36,022	6,536	0.11	35	18
	99	0.00% - 0.05%	16	210	-	226	9	0.03	31	4	226	10	0.03	31	5
AAA to AA+	98	0.00% - 0.05%	1,124	700	176	2,000	239	0.04	30	12	2,224	274	0.04	30	12
AA to A-	95	0.05% - 0.13%	5,086	322	3,821	9,229	1,383	0.05	42	15	10,028	1,456	0.05	41	15
AA to A-	90	0.06% - 0.14%	5,624	1,025	9,926	16,575	2,772	0.08	33	17	13,995	1,839	0.08	33	13
BBB+ to BBB	87	0.09% - 0.22%	645	72	1,484	2,201	443	0.12	32	20	2,131	463	0.13	35	22
BBB+ to BBB	85	0.13% - 0.32%	1,732	44	1,940	3,716	878	0.22	35	24	4,392	1,518	0.22	35	35
BBB-	83	0.19% - 0.46%	864	79	1,418	2,361	731	0.29	34	31	3,026	976	0.28	33	32
<u>Sovereign</u>															
			103,172	753	4,960	108,885	2,509	0.03	11	2	104,471	2,432	0.03	11	2
	99	0.00% - 0.05%	78,524	149	2,835	81,508	-	-	9	-	72,637	-	-	10	-
AAA to AA+	98	0.00% - 0.05%	2,823	9	604	3,436	204	0.04	15	6	3,328	185	0.04	14	6
AA to A-	95	0.05% - 0.13%	14,095	350	590	15,035	907	0.05	18	6	18,488	1,013	0.05	15	5
AA to A-	90	0.06% - 0.14%	2,014	29	844	2,887	193	0.10	16	7	3,774	257	0.10	17	7
BBB+ to BBB	87	0.09% - 0.22%	3,806	43	9	3,858	744	0.22	25	19	4,068	502	0.22	15	12
BBB+ to BBB	85	0.13% - 0.32%	825	132	-	957	139	0.32	13	15	995	157	0.32	14	16
BBB-	83	0.19% - 0.46%	1,085	41	78	1,204	322	0.46	24	27	1,181	318	0.46	24	27
Sub-Total			195,430	65,023	61,306	321,759	58,283	0.09	31	18	309,209	56,813	0.09	31	18
Non-Investment Grade															
<u>Corporate</u>															
			58,559	17,531	11,744	87,834	55,639	0.61	44	63	84,254	51,700	0.62	43	61
BB+	80	0.29% - 0.51%	24,303	10,424	4,755	39,482	22,064	0.35	45	56	34,752	18,722	0.34	45	54
BB	77	0.47% - 0.57%	16,324	2,953	2,209	21,486	13,262	0.49	43	62	21,871	13,463	0.49	43	62
BB-	75	0.57% - 0.75%	12,082	2,718	3,522	18,322	12,973	0.75	43	71	19,288	12,248	0.75	42	63
B+	73	0.75% - 1.44%	4,190	917	934	6,041	4,899	1.44	37	81	6,017	4,997	1.44	38	83
B to B-	70	1.44% - 2.77%	1,660	519	324	2,503	2,441	2.77	38	98	2,326	2,270	2.77	39	98
<u>Bank</u>															
			1,799	100	264	2,163	1,023	0.59	36	47	2,266	1,107	0.64	36	49
BB+	80	0.29% - 0.51%	556	13	164	733	318	0.48	38	43	608	264	0.47	37	43
BB	77	0.47% - 0.57%	1,159	62	61	1,282	623	0.57	35	49	1,446	712	0.57	35	49
BB-	75	0.57% - 0.75%	58	18	23	99	48	0.75	36	49	125	69	0.75	38	55
B+	73	0.75% - 1.44%	4	2	16	22	13	1.44	32	60	6	5	1.44	40	74
B to B-	70	1.44% - 2.77%	22	5	-	27	21	2.77	34	77	81	57	2.77	29	69
<u>Sovereign</u>															
			4,178	21	59	4,258	1,206	1.24	16	28	3,465	1,037	1.08	17	30
BB+	80	0.29% - 0.51%	637	-	1	638	156	0.51	20	24	566	156	0.51	21	28
BB	77	0.47% - 0.57%	965	5	57	1,027	274	0.57	22	27	941	250	0.57	21	27
BB-	75	0.57% - 0.75%	525	15	1	541	102	0.75	11	19	325	71	0.75	14	22
B+	73	0.75% - 1.44%	1,288	-	-	1,288	536	1.44	18	42	1,400	503	1.44	15	36
B to B-	70	1.44% - 2.77%	763	1	-	764	138	2.77	7	18	233	57	2.77	9	24
Sub-Total			64,536	17,652	12,067	94,255	57,868	0.64	42	61	89,985	53,844	0.64	42	60

(1) The cross references of the Bank's internal borrower grades (IG) with equivalent rating categories utilized by external rating agencies are outlined on page 203 of the Bank's 2017 Annual Report.

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

(3) Amounts are before credit risk mitigation (excludes government guaranteed residential mortgages), and includes all non-retail exposures except securitization, equity and other assets.

(4) PD - Probability of Default, see glossary for details.

(5) LGD - Loss Given Default including certain conservative factors as per Basel accord, see glossary for details.

(6) RW - risk weight.

(7) Exposure at default (EAD) used as basis for estimated weightings, see glossary for details.

RISK ASSESSMENT OF CREDIT RISK EXPOSURES - NON-RETAIL AIRB PORTFOLIO (CONTINUED)

NON-RETAIL AIRB PORTFOLIO - CREDIT QUALITY

(\$MM)	Category external ratings ⁽¹⁾	Internal grades	PD bands ⁽²⁾	Q2 2018							Q1 2018					
				Drawn Exposure at Default ⁽³⁾	Undrawn Exposure at Default ⁽³⁾	Other Exposure at Default ⁽³⁾	Total Exposure at Default ⁽³⁾	RWA	Weighted Average PD ⁽⁴⁾⁽⁷⁾	Weighted Average LGD ⁽⁵⁾⁽⁷⁾	Weighted Average RW ⁽⁶⁾⁽⁷⁾	Total Exposure at Default ⁽³⁾	RWA	Weighted Average PD ⁽⁴⁾⁽⁷⁾	Weighted Average LGD ⁽⁵⁾⁽⁷⁾	Weighted Average RW ⁽⁶⁾⁽⁷⁾
				\$	\$	\$	\$	\$	%	%	%	\$	\$	%	%	%
Watch List (CCC+ to CC)																
Corporate		65 - 30	2.77% - 59.51%	2,405	299	412	3,116	6,089	21.09	42	196	3,263	6,132	21.28	41	188
Bank		65 - 30	2.77% - 59.51%	47	4	-	51	89	23.53	35	175	76	129	20.32	36	169
Sovereign		65 - 30	2.77% - 59.51%	509	-	-	509	328	19.44	13	64	944	436	14.93	10	46
Sub-Total				2,961	303	412	3,676	6,506	20.90	38	177	4,283	6,697	19.86	34	156
Default⁽⁶⁾																
Corporate		27-21	100%	941	376	127	1,444	4,295	100.00	42	297	1,551	5,943	100.00	44	383
Bank		27-21	100%	2	-	-	2	-	100.00	33	0	2	-	100.00	33	0
Sovereign		27-21	100%	-	-	-	-	-	-	-	-	-	-	-	-	-
Sub-Total				943	376	127	1,446	4,295	100.00	42	297	1,553	5,943	100.00	44	383
Total				263,870	83,354	73,912	421,136	126,952	0.74	33	30	405,030	123,297	0.80	33	30

(1) The cross references of the Bank's internal borrower grades (IG) with equivalent rating categories utilized by external rating agencies are outlined on page 203 of the Bank's 2017 Annual Report.

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

(3) Amounts are before credit risk mitigation (excludes government guaranteed residential mortgages), and includes all non-retail exposures except securitization, equity and other assets.

(4) PD - Probability of Default, see glossary for details.

(5) LGD - Loss Given Default including certain conservative factors as per Basel accord, see glossary for details.

(6) RW - risk weight.

(7) Exposure at default (EAD) used as basis for estimated weightings, see glossary for details.

(8) EAD for defaulted exposures before related specific provisions (based on IFRS 9 as of Q1 2018, based on IAS 39 for prior periods) and write-offs.

NON-RETAIL AIRB PORTFOLIO - CREDIT COMMITMENTS

(\$MM)	Basel III			
	Q2 2018		Q1 2018	
	Notional Undrawn	Weighted Average EAD	Notional Undrawn	Weighted Average EAD
	\$	%	\$	%
Corporate	151,866	52	137,906	52
Bank	4,141	58	4,249	58
Sovereign	1,233	57	1,164	58
Total	157,240	53	143,319	53

(1) Excludes unconditionally cancellable commitments.

RETAIL AIRB PORTFOLIO EXPOSURES - CREDIT QUALITY ⁽¹⁾

Category of PD Grades	PD Range	Q2 2018								
		EAD ⁽²⁾	Notional of undrawn commitments	Exposure weighted-average EAD ⁽³⁾	Exposure weighted-average PD	Exposure weighted-average LGD ⁽⁴⁾	Exposure weighted-average RW	RWA	EL	EL adjusted average risk weight ⁽⁵⁾
		\$	\$	%	%	%	%	\$	\$	%
Residential Real Estate Secured⁽⁶⁾										
Insured Drawn and Undrawn⁽⁷⁾										
Exceptionally Low	0.01% to 0.04%	89,435	-	100.00	-	22.9	-	-	-	-
Very Low	0.05% to 0.19%	1,869	1	99.94	0.05	21.4	3.0	59	-	3
Low	0.20% to 0.99%	2,255	-	100.00	0.38	22.6	13.0	299	2	14
Medium Low	1.00% to 2.99%	1	-	95.37	2.00	31.1	61.0	-	-	69
Medium	3.00% to 9.99%	-	-	-	-	-	-	-	-	-
High	10.00% to 19.99%	-	-	-	-	-	-	-	-	-
Extremely High	20.00% to 99.99%	1	-	102.77	28.39	21.3	124.0	1	-	200
Default	100%	17	-	100.00	100.00	85.7	-	-	15	1,071
Sub-total		93,578	1	100.00	0.03	22.9	0.4	359	17	1
Uninsured Undrawn										
Exceptionally Low	0.00% to 0.04%	-	-	-	-	-	-	-	-	-
Very Low	0.05% to 0.19%	16,680	39,724	20.99	0.07	24	5	764	3	5
Low	0.20% to 0.99%	582	1,087	26.77	0.61	32	29	170	1	32
Medium Low	1.00% to 2.99%	111	195	28.59	2.00	35	68	75	1	76
Medium	3.00% to 9.99%	23	40	28.17	4.94	29	99	22	-	117
High	10.00% to 19.99%	11	15	34.74	13.64	28	144	15	-	192
Extremely High	20.00% to 99.99%	2	1	117.29	38.10	28	153	3	-	287
Default	100%	-	800	100.00	-	-	-	-	-	-
Sub-total		17,409	41,862	21.27	0.12	24	6	1,049	5	6
Uninsured Drawn										
Exceptionally Low	0.00% to 0.04%	-	-	-	-	-	-	-	-	-
Very Low	0.05% to 0.19%	52,806	-	100.00	0.07	21	4	2,232	9	4
Low	0.20% to 0.99%	69,228	-	100.00	0.52	22	17	11,821	81	19
Medium Low	1.00% to 2.99%	6,821	-	100.00	2.54	24	53	3,596	40	60
Medium	3.00% to 9.99%	950	-	100.00	6.51	23	83	792	14	101
High	10.00% to 19.99%	479	-	100.00	13.84	22	112	538	15	150
Extremely High	20.00% to 99.99%	435	-	100.00	36.00	20	109	473	31	198
Default	100%	227	-	100.00	100.00	71	-	-	162	893
Sub-total		130,946	-	100.00	0.83	22	15	19,452	352	18
Qualifying Revolving Retail Exposures (QRRE)										
Exceptionally Low	0.00% to 0.04%	11,466	17,536	31.72	0.05	73	2	261	4	3
Very Low	0.05% to 0.19%	9,043	12,043	36.20	0.17	67	6	577	11	8
Low	0.20% to 0.99%	11,721	9,004	50.92	0.54	76	17	1,996	46	22
Medium Low	1.00% to 2.99%	7,630	1,933	77.90	1.76	84	49	3,705	114	67
Medium	3.00% to 9.99%	3,474	246	93.97	6.41	86	121	4,188	191	189
High	10.00% to 19.99%	358	21	99.78	11.18	84	166	595	34	283
Extremely High	20.00% to 99.99%	705	16	101.11	35.65	80	210	1,478	200	564
Default	100%	154	5,195	100.00	100.00	88	-	-	134	1,095
Sub-total		44,551	45,994	52.32	1.99	76	29	12,800	734	49
Other Retail										
Exceptionally Low	0.00% to 0.04%	529	779	32.43	0.05	70	10	51	-	10
Very Low	0.05% to 0.19%	6,971	3	99.95	0.10	53	13	907	4	14
Low	0.20% to 0.99%	15,536	855	94.89	0.51	58	40	6,210	45	44
Medium Low	1.00% to 2.99%	4,831	12	99.72	1.70	66	81	3,930	55	95
Medium	3.00% to 9.99%	2,458	1	99.96	5.24	64	96	2,349	82	137
High	10.00% to 19.99%	478	-	100.00	18.15	60	128	610	52	263
Extremely High	20.00% to 99.99%	307	-	99.68	43.96	60	157	480	81	486
Default	100%	182	124	100.00	100.00	89	-	-	162	1,117
Sub-total		31,292	1,774	96.26	2.24	59	46	14,537	481	66
Total Retail										
Exceptionally Low	0.01% to 0.04%	101,430	18,315	91.93	0.01	29	0	312	4	0
Very Low	0.05% to 0.19%	87,369	51,771	78.31	0.09	29	5	4,539	27	6
Low	0.20% to 0.99%	99,322	10,946	92.98	0.52	34	21	20,496	175	23
Medium Low	1.00% to 2.99%	19,394	2,140	90.82	2.02	58	58	11,306	210	72
Medium	3.00% to 9.99%	6,905	287	96.72	6.00	69	106	7,351	287	158
High	10.00% to 19.99%	1,326	36	99.42	14.67	52	133	1,758	101	227
Extremely High	20.00% to 99.99%	1,450	17	100.50	37.51	58	168	2,435	312	437
Default	100%	580	6,119	100.00	100.00	82	-	-	473	1,022
Total		317,776	89,631	88.63	0.86	34	15	48,197	1,589	21

(1) Represents retail exposures under the AIRB Approach which are domiciled in Canada.

(2) Amounts are before any allowances for credit losses and before credit risk mitigation.

(3) EAD rate represents combined drawn and undrawn exposure for a facility.

(4) Effective November 1, 2016, new exposures secured by residential real estate located in Canada are subject to a downturn LGD (DLGD) floor equivalent to the sum of the segment's long-run default-weighted average LGD and an add-on. The Bank implemented DLGD floor in Q1, 2017.

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

(6) Includes Canadian residential mortgages and home equity lines of credit.

(7) The Bank uses the PD Substitution approach to reflect default insurance.

RETAIL AIRB PORTFOLIO EXPOSURES - CREDIT QUALITY ⁽¹⁾

Category of PD Grades	PD Range	Q1 2018								
		EAD ⁽²⁾	Notional of undrawn commitments	Exposure weighted-average EAD ⁽³⁾	Exposure weighted-average PD	Exposure weighted-average LGD ⁽⁴⁾	Exposure weighted-average RW	RWA	EL	EL adjusted average risk weight ⁽⁵⁾
		\$	\$	%	%	%	%	\$	\$	%
Residential Real Estate Secured⁽⁶⁾										
Insured Drawn and Undrawn⁽⁷⁾										
Exceptionally Low	0.01% to 0.04%	91,883	-	100.00	0.00	22	-	1	-	-
Very Low	0.05% to 0.19%	1,840	1	99.94	0.05	21	3	53	-	3
Low	0.20% to 0.99%	2,412	-	99.96	0.39	21	13	320	2	14
Medium Low	1.00% to 2.99%	-	-	98.52	2.02	21	41	-	-	47
Medium	3.00% to 9.99%	-	-	102.83	4.96	21	69	-	-	82
High	10.00% to 19.99%	-	-	-	-	-	-	-	-	-
Extremely High	20.00% to 99.99%	1	-	102.83	52.22	21	103	1	-	240
Default	100%	19	-	100.00	100.00	73	-	-	14	910
Sub-total		96,155	1	100.00	0.03	22	0	375	16	1
Uninsured Undrawn										
Exceptionally Low	0.00% to 0.04%	-	-	-	-	-	-	-	-	-
Very Low	0.05% to 0.19%	15,211	38,997	19.50	0.08	23	5	696	3	5
Low	0.20% to 0.99%	456	1,073	21.25	0.62	31	28	127	1	30
Medium Low	1.00% to 2.99%	94	194	24.14	2.02	34	66	62	1	75
Medium	3.00% to 9.99%	20	40	24.48	4.96	27	87	17	-	104
High	10.00% to 19.99%	11	17	31.05	13.70	28	144	15	-	192
Extremely High	20.00% to 99.99%	2	1	154.51	39.64	29	155	3	-	298
Default	100%	-	762	100.00	-	-	-	-	-	-
Sub-total		15,794	41,084	19.61	0.12	24	6	920	5	6
Uninsured Drawn										
Exceptionally Low	0.00% to 0.04%	3,520	-	100.00	0.05	27	4	127	-	4
Very Low	0.05% to 0.19%	47,668	-	100.00	0.07	20	4	1,898	8	4
Low	0.20% to 0.99%	67,456	-	100.00	0.54	23	18	12,335	85	20
Medium Low	1.00% to 2.99%	6,148	-	100.00	2.51	24	53	3,286	37	61
Medium	3.00% to 9.99%	945	-	100.00	6.35	22	82	771	13	99
High	10.00% to 19.99%	475	-	100.00	13.75	21	109	518	14	146
Extremely High	20.00% to 99.99%	454	-	100.00	36.27	20	107	486	32	196
Default	100%	228	-	100.00	100.00	63	-	-	144	793
Sub-total		126,894	-	100.00	0.84	22	15	19,421	333	19
Qualifying Revolving Retail Exposures (QRRE)										
Exceptionally Low	0.00% to 0.04%	11,946	17,068	34.01	0.05	77	2	289	4	3
Very Low	0.05% to 0.19%	8,842	11,685	36.53	0.17	69	7	578	11	8
Low	0.20% to 0.99%	11,684	8,911	51.56	0.50	79	17	1,953	45	22
Medium Low	1.00% to 2.99%	5,874	1,249	80.91	1.39	87	43	2,517	73	58
Medium	3.00% to 9.99%	5,686	1,008	84.72	5.58	86	110	6,235	276	170
High	10.00% to 19.99%	-	-	-	-	-	-	-	-	-
Extremely High	20.00% to 99.99%	807	19	100.66	35.26	83	217	1,750	233	578
Default	100%	163	5,074	100.00	100.00	90	-	-	146	1,119
Sub-total		45,002	45,014	53.02	2.06	78	30	13,322	788	51
Other Retail										
Exceptionally Low	0.00% to 0.04%	562	773	34.76	0.05	74	10	58	-	11
Very Low	0.05% to 0.19%	6,970	3	99.95	0.10	50	13	876	4	13
Low	0.20% to 0.99%	15,268	828	94.78	0.51	56	39	5,968	44	43
Medium Low	1.00% to 2.99%	4,873	12	99.72	1.74	65	80	3,908	55	94
Medium	3.00% to 9.99%	2,590	1	99.96	5.36	63	94	2,439	87	136
High	10.00% to 19.99%	523	-	100.00	19.74	57	127	666	59	269
Extremely High	20.00% to 99.99%	370	-	99.92	41.46	58	151	558	89	451
Default	100%	203	121	100.00	100.00	92	-	-	187	1,151
Sub-total		31,359	1,738	96.23	2.45	57	46	14,473	525	67
Total Retail										
Exceptionally Low	0.01% to 0.04%	107,911	17,841	92.36	0.01	29	0	475	4	0
Very Low	0.05% to 0.19%	80,531	50,686	77.82	0.09	29	5	4,101	26	5
Low	0.20% to 0.99%	97,276	10,812	92.99	0.52	35	21	20,703	177	24
Medium Low	1.00% to 2.99%	16,989	1,455	92.90	1.90	58	58	9,773	166	70
Medium	3.00% to 9.99%	9,241	1,049	90.43	5.60	73	102	9,462	376	153
High	10.00% to 19.99%	1,009	17	99.28	16.85	40	119	1,199	73	210
Extremely High	20.00% to 99.99%	1,634	20	100.37	36.96	59	171	2,798	354	443
Default	100%	613	5,957	100.00	100.00	80	-	-	491	1,002
Total		315,204	87,837	88.89	0.89	34	15	48,511	1,667	22

(1) Represents retail exposures under the AIRB Approach which are domiciled in Canada.

(2) Amounts are before any allowances for credit losses and before credit risk mitigation.

(3) EAD rate represents combined drawn and undrawn exposure for a facility.

(4) Effective November 1, 2016, new exposures secured by residential real estate located in Canada are subject to a downturn LGD (DLGD) floor equivalent to the sum of the segment's long-run default-weighted average LGD and an add-on. The Bank implemented DLGD floor in Q1, 2017.

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

(6) Includes Canadian residential mortgages and home equity lines of credit.

(7) The Bank uses the PD Substitution approach to reflect default insurance.

AIRB CREDIT LOSSES


Exposure Type	Q2 2018		Q1 2018		Q4 2017		Q3 2017		Q2 2017	
	Actual Loss Rate	Expected Loss Rate	Actual Loss Rate	Expected Loss Rate	Actual Loss Rate	Expected Loss Rate	Actual Loss Rate	Expected Loss Rate	Actual Loss Rate	Expected Loss Rate
	%	%	%	%	%	%	%	%	%	%
Non-Retail⁽¹⁾										
Corporate	0.08	0.68	0.06	0.76	0.07	0.80	0.11	0.81	0.14	0.78
Sovereign	-	0.02	-	0.02	-	0.02	-	0.02	-	0.02
Bank	-	0.09	-	0.09	-	0.08	-	0.09	-	0.10
Retail⁽²⁾										
Real Estate Secured	0.01	0.12	0.01	0.12	0.01	0.12	0.01	0.11	0.01	0.11
QRRE	2.87	3.94	3.04	4.38	3.18	4.22	2.77	4.16	2.62	4.23
Other Retail	0.67	1.85	0.69	2.01	0.69	1.85	0.66	1.91	0.62	1.86

(1) Non-retail actual loss rates represent the credit losses net of recoveries for the current and prior three quarters divided by the 5-point average of outstanding loan balances for the same four-quarter period beginning 12 months ago. Expected loss rates represent the expected losses that were predicted at the beginning of the four-quarter period divided by outstanding loan balances at the beginning of the four-quarter period.

(2) Retail actual loss rates represent write-offs net of recoveries for the current and prior three quarters divided by the 5-point average of outstanding loan balances for the same four-quarter period beginning 12 months ago. Expected loss rates represent the expected losses that were predicted at the beginning of the four-quarter period divided by outstanding loan balances at the beginning of the four-quarter period.

ESTIMATED AND ACTUAL LOSS PARAMETERS - NON-RETAIL AND RETAIL AIRB PORTFOLIOS


	Q2 2018 ⁽¹⁾						Q1 2018 ⁽¹⁾					
	Average estimated PD %	Actual default rate %	Average estimated LGD %	Actual LGD %	Average estimated CCF ⁽²⁾ %	Actual CCF ⁽²⁾ %	Average estimated PD %	Actual default rate %	Average estimated LGD %	Actual LGD %	Average estimated CCF ⁽²⁾ %	Actual CCF ⁽²⁾ %
Non-Retail	0.99	0.29	41.24	26.50	48.48	17.22	0.92	0.33	41.62	26.14	48.42	13.94

⁽¹⁾ Reporting is on a one quarter lag basis. For reporting as of Q2/18, estimated parameters are based on portfolio averages at Q1/17 whereas actual parameters are based on averages of realized parameters during the subsequent four quarters (Q2/17 – Q1/18).

⁽²⁾ EAD back-testing is performed through Credit Conversion Factor (CCF) back-testing, as EAD is computed using the sum of the drawn exposure and undrawn exposure multiplied by the estimated CCF.

(\$MM)	Four-quarter period ending Q2 2018 ⁽¹⁾						Four-quarter period ending Q1 2018 ⁽¹⁾					
	Average estimated PD ⁽²⁾⁽⁷⁾ %	Actual default rate ⁽²⁾⁽⁵⁾ %	Average estimated LGD ⁽³⁾⁽⁷⁾ %	Actual LGD ⁽³⁾⁽⁶⁾ %	Estimated EAD ⁽⁴⁾⁽⁷⁾ \$	Actual EAD ⁽⁴⁾⁽⁵⁾ \$	Average estimated PD ⁽²⁾⁽⁷⁾ %	Actual default rate ⁽²⁾⁽⁵⁾ %	Average estimated LGD ⁽³⁾⁽⁷⁾ %	Actual LGD ⁽³⁾⁽⁶⁾ %	Estimated EAD ⁽⁴⁾⁽⁷⁾ \$	Actual EAD ⁽⁴⁾⁽⁵⁾ \$
Residential real estate secured												
Residential mortgages												
Insured mortgages ⁽⁸⁾	0.76	0.49	-	-	-	-	0.71	0.52	-	-	-	-
Uninsured mortgages	0.52	0.36	16.74	11.67	-	-	0.47	0.38	18.11	10.92	-	-
Secured lines of credit	0.43	0.28	29.50	15.21	94	85	0.78	0.32	28.65	13.67	105	90
Qualifying revolving retail exposures	2.15	1.73	79.55	67.68	704	617	2.15	1.85	77.69	65.07	733	641
Other retail	2.04	1.21	60.39	49.01	5	5	2.1	1.28	58.80	48.36	6	5

(1) Estimates and Actual Values are recalculated to align with new models implemented during the period.

(2) Account weighted aggregation.

(3) Default weighted aggregation.

(4) EAD is estimated for revolving products only.

(5) Actual based on accounts not at default as at four quarters prior to reporting date.

(6) Actual LGD calculated based on 24 month recovery period after default and therefore excludes any recoveries received after the 24 month period.

(7) Estimates are based on the four quarters prior to the reporting date.

(8) Actual and Estimated LGD for insured mortgages are not shown. Actual LGD includes the insurance benefit, whereas estimated LGD may not.

EXPOSURE AT DEFAULT ⁽¹⁾

Exposure type	Q2 2018			Q1 2018			Q4 2017			Q3 2017			Q2 2017		
	Financial Collateral	Guarantees / Credit Derivatives		Financial Collateral	Guarantees / Credit Derivatives		Financial Collateral	Guarantees / Credit Derivatives		Financial Collateral	Guarantees / Credit Derivatives		Financial Collateral	Guarantees / Credit Derivatives	
	Standardized Approach	Standardized Approach	AIRB Approach	Standardized Approach	Standardized Approach	AIRB Approach	Standardized Approach	Standardized Approach	AIRB Approach	Standardized Approach	Standardized Approach	AIRB Approach	Standardized Approach	Standardized Approach	AIRB Approach
Non-Retail															
Corporate	585	2,015	14,886	633	2,010	16,304	635	1,974	16,341	628	1,866	15,745	580	1,840	19,210
Bank	-	-	8,742	-	-	9,046	-	-	9,273	-	-	8,436	-	-	8,703
Sovereign	-	67	2,774	-	69	3,899	-	73	6,109	2	76	6,288	-	-	6,124
Total Non-Retail	585	2,082	26,402	633	2,079	29,249	635	2,047	31,723	630	1,942	30,469	580	1,840	34,037
Retail															
Residential Mortgages ⁽²⁾	6	4,657	89,435	4	4,281	91,857	4	4,243	93,095	-	3,746	96,794	-	3,522	98,354
Secured Lines of Credit															
Qualifying Revolving Retail Exposures (QRRE)															
Other Retail	526	1,079	-	362	1,074	-	373	1,104	-	547	1,199	-	637	1,067	-
Total Retail	532	5,736	89,435	366	5,355	91,857	377	5,347	93,095	547	4,945	96,794	637	4,589	98,354
Total	1,117	7,818	115,837	999	7,434	121,106	1,012	7,394	124,818	1,177	6,887	127,263	1,217	6,429	132,391

(1) Includes drawn, undrawn and other off-balance sheet exposures (e.g., letters of credit and letters of guarantee) covered by eligible collateral and guarantees.

(2) Primarily includes insured drawn Canadian residential mortgages (e.g. CMHC insured mortgages).

DERIVATIVES - COUNTERPARTY CREDIT RISK ⁽¹⁾


(SMM)	Q2 2018				Q1 2018				Q4 2017				Q3 2017			
	Notional Amount	Credit Risk Amount	Credit Risk Equivalent Amount	Risk-weighted Amount ⁽³⁾	Notional Amount	Credit Risk Amount	Credit Risk Equivalent Amount	Risk-weighted Amount ⁽³⁾	Notional Amount	Credit Risk Amount	Credit Risk Equivalent Amount	Risk-weighted Amount ⁽³⁾	Notional Amount	Credit Risk Amount	Credit Risk Equivalent Amount	Risk-weighted Amount ⁽³⁾
Contract Types																
Interest Rate Contracts:																
Futures and Forward Rate Agreements	522,515	72	295	80	475,328	9	204	40	491,651	20	95	20	415,898	17	157	14
Swaps	3,605,918	253	4,870	1,142	3,106,659	561	4,560	854	2,803,343	250	5,459	1,341	2,640,075	94	4,716	1,350
Options Purchased	44,468	3	1,122	351	44,681	1	89	41	39,664	5	105	57	51,756	12	106	49
Options Written	35,392	-	3	1	39,851	-	1	-	40,993	-	15	3	51,034	-	124	36
Total	4,208,293	328	6,290	1,574	3,666,519	571	4,854	935	3,375,651	275	5,674	1,421	3,158,763	123	5,103	1,449
Foreign Exchange Contracts:																
Futures and Forwards	497,076	1,419	4,900	1,665	540,034	2,889	5,423	1,569	481,187	2,370	6,367	1,765	436,986	2,379	4,961	1,493
Swaps	379,532	3,668	5,950	1,982	379,457	3,674	6,404	1,980	386,010	4,023	7,308	1,899	363,821	3,908	6,722	2,015
Options Purchased	40,694	482	614	190	34,873	458	407	121	39,116	523	515	113	29,540	752	578	152
Options Written	39,683	-	98	29	35,032	-	46	7	40,028	-	83	12	30,850	-	69	10
Total	956,985	5,569	11,562	3,866	989,396	7,021	12,280	3,677	946,341	6,916	14,273	3,789	861,197	7,039	12,330	3,670
Other Derivatives Contracts:																
Equity	112,499	13	5,307	1,670	108,887	5	4,674	1,425	101,390	45	5,123	1,575	91,683	160	5,291	1,470
Credit	33,586	46	950	164	34,372	1	1,295	182	37,591	12	1,421	174	37,431	18	1,423	217
Other	110,229	1,555	8,240	1,033	113,275	856	8,770	1,082	87,415	9	10,953	807	95,161	145	8,361	683
Total	256,314	1,614	14,497	2,867	256,534	862	14,739	2,689	226,396	66	17,497	2,556	224,275	323	15,075	2,370
Credit Valuation Adjustment⁽²⁾⁽³⁾				3,757				2,760				2,988				3,733
Total Derivatives after Netting and Collateral	5,421,592	7,511	32,349	12,064	4,912,449	8,454	31,873	10,061	4,548,388	7,257	37,444	10,754	4,244,235	7,485	32,508	11,222

Contract Types	Q2 2017		Q1 2017		Q4 2016		Q3 2016	
	Notional Amount	Risk-weighted Amount ⁽³⁾	Notional Amount	Risk-weighted Amount ⁽³⁾	Notional Amount	Risk-weighted Amount ⁽³⁾	Notional Amount	Risk-weighted Amount ⁽³⁾
Interest Rate Contracts:								
Futures and Forward Rate Agreements	476,404	14	422,104	17	422,104	17	517,818	19
Swaps	2,343,203	1,626	2,294,534	2,125	2,294,534	2,125	2,404,362	2,321
Options Purchased	40,690	77	50,830	52	50,830	52	58,697	59
Options Written	43,454	3	40,147	-	40,147	-	50,236	-
Total	2,903,751	1,720	2,807,615	2,194	2,807,615	2,194	3,031,113	2,399
Foreign Exchange Contracts:								
Futures and Forwards	461,815	1,375	485,153	1,342	485,153	1,342	484,425	1,564
Swaps	377,982	1,881	354,604	1,594	354,604	1,594	341,829	1,359
Options Purchased	26,363	226	16,616	129	16,616	129	20,451	134
Options Written	26,732	38	16,245	19	16,245	19	20,173	16
Total	892,892	3,520	872,618	3,084	872,618	3,084	866,878	3,073
Other Derivatives Contracts:								
Equity	100,502	1,740	87,908	1,677	87,908	1,677	77,185	1,556
Credit	42,705	196	49,058	340	49,058	340	46,779	388
Other	118,764	905	78,753	645	78,753	645	76,838	739
Total	261,971	2,841	215,719	2,662	215,719	2,662	200,802	2,683
Total Derivatives	4,058,614	8,081	3,895,952	7,940	3,895,952	7,940	4,098,793	8,155
Credit Valuation Adjustment⁽²⁾⁽³⁾		3,923		4,165		4,165		4,749
Risk-weighted Amount		12,004		12,105		12,105		12,904

(1) The impact of Master Netting Agreements and Collateral has been incorporated within the various contracts. As a result, risk-weighted amounts are reported net of impact of collateral and master netting arrangements.

(2) As per OSFI guideline, Credit Valuation Adjustment RWA on derivatives was phased-in in 2014. Effective Q1, 2018 the CVA risk-weighted assets have been calculated using scalars of 0.80, 0.83 and 0.86 to compute the CET1 capital ratio, Tier 1 capital ratio and Total capital ratio, respectively.

(3) As of Q2 2016, the bank implemented the Internal Modelling Method for determination of Counterparty Credit Risk and Credit Valuation Adjustment RWA.

RISK-WEIGHTED ASSETS FOR SECURITIZATION EXPOSURES - BANKING BOOK⁽¹⁾


(\$MM)			Q2 2018				Q1 2018				Q4 2017				Q3 2017			
Risk Category	External Rating (S&P)	Risk-Weight %	Exposure at Default ⁽²⁾			Risk-Weighted Assets	Exposure at Default ⁽²⁾			Risk-Weighted Assets	Exposure at Default ⁽²⁾			Risk-Weighted Assets	Exposure at Default ⁽²⁾			Risk-Weighted Assets
			On- Balance Sheet	Off- Balance Sheet	Total		On- Balance Sheet	Off- Balance Sheet	Total		On- Balance Sheet	Off- Balance Sheet	Total		On- Balance Sheet	Off- Balance Sheet	Total	
Securitization																		
Investment Grade	AAA to A	7 - 25	9,265	14,308	23,573	1,982	8,709	14,069	22,778	2,006	8,850	14,184	23,034	2,097	10,157	12,567	22,724	2,070
	A- to BBB- ⁽³⁾	35 - 100	194	342	536	278	130	338	468	227	135	336	471	230	130	335	465	223
Non-Investment Grade	BB+ to BB-	150 - 650	11	2	13	54	11	1	12	52	12	1	13	54	18	1	19	95
	Below BB-	1250	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			9,470	14,652	24,122	2,314	8,850	14,408	23,258	2,285	8,997	14,521	23,518	2,381	10,305	12,903	23,208	2,388
Resecuritization																		
Investment Grade	AAA to A	20 - 65	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	A- to BBB-	100 - 350	72	2	74	147	69	1	70	141	73	-	73	148	70	-	70	141
Non-Investment Grade	BB+ to BB-	500 - 850	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Below BB-	1250	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			72	2	74	147	69	1	70	141	73	-	73	148	70	-	70	141
Total			9,542	14,654	24,196	2,461	8,919	14,409	23,328	2,426	9,070	14,521	23,591	2,529	10,375	12,903	23,278	2,529

(\$MM)		Q2 2018				Q1 2018				Q4 2017				Q3 2017			
Underlying Asset		Exposure at Default ⁽²⁾			Exposures at Default (RW=1250%)	Exposure at Default ⁽²⁾			Exposures at Default (RW=1250%)	Exposure at Default ⁽²⁾			Exposures at Default (RW=1250%)	Exposure at Default ⁽²⁾			Exposures at Default (RW=1250%)
		On- Balance Sheet	Off- Balance Sheet	Total		On- Balance Sheet	Off- Balance Sheet	Total		On- Balance Sheet	Off- Balance Sheet	Total		On- Balance Sheet	Off- Balance Sheet	Total	
Residential Mortgages		3	1,608	1,611	-	4	1,608	1,612	-	5	1,608	1,613	-	6	1,608	1,614	-
Commercial Mortgages		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Credit cards/Consumer receivables		1,020	3,114	4,134	-	695	2,653	3,348	-	724	2,652	3,376	-	642	2,665	3,307	-
Auto loans/Leases		4,652	6,027	10,679	-	4,252	6,892	11,144	-	4,032	6,907	10,939	-	5,107	5,915	11,022	-
Diversified asset-backed securities		107	12	119	-	107	8	115	-	115	5	120	-	189	2	191	-
Business Loans		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Trade receivables		3,285	3,380	6,665	-	3,486	3,241	6,727	-	3,681	3,339	7,020	-	3,935	2,703	6,638	-
Other		475	513	988	-	374	7	381	-	513	10	523	-	496	10	506	-
Total		9,542	14,654	24,196	-	8,918	14,409	23,327	-	9,070	14,521	23,591	-	10,375	12,903	23,278	-

(1) Capital charges related to trading book securitization exposures are based upon the Bank's internal market risk models including its comprehensive risk measure.

(2) Includes banking book on-balance sheet investments in asset backed securities (ABS), collateralized loan obligations (CLOs), collateralized debt obligations (CDOs), and off-balance sheet liquidity lines and credit enhancements to Bank sponsored and non-bank sponsored ABCP conduits.

(3) Included in on-balance sheet exposures effective Q3 2016 are investment grade subordinated notes retained by the Bank, issued by Trillium Credit Card Trust II, and backed by bank originated credit card receivables. OSFI's Securitization Framework is applied.

RISK-WEIGHTED ASSETS FOR SECURITIZATION EXPOSURES - BANKING BOOK ⁽¹⁾ (CONTINUED)


Risk Category	External Rating (S&P)	Risk-Weight %	Q2 2017				Q1 2017				Q4 2016				Q3 2016			
			Exposure at Default ⁽²⁾			Risk-Weighted Assets	Exposure at Default ⁽²⁾			Risk-Weighted Assets	Exposure at Default ⁽²⁾			Risk-Weighted Assets	Exposure at Default ⁽²⁾			Risk-Weighted Assets
On- Balance Sheet	Off- Balance Sheet	Total	On- Balance Sheet	Off- Balance Sheet	Total		On- Balance Sheet	Off- Balance Sheet	Total		On- Balance Sheet	Off- Balance Sheet	Total		On- Balance Sheet	Off- Balance Sheet	Total	
Securitization																		
Investment Grade	AAA to A	7 - 25	10,423	14,132	24,555	2,225	9,999	13,363	23,362	2,074	10,176	14,602	24,778	2,081	10,183	14,600	24,783	2,090
	A- to BBB- ⁽³⁾	35 - 100	134	4	138	114	142	4	146	117	136	12	148	119	169	10	179	151
Non-Investment Grade	BB+ to BB- Below BB-	150 - 650 1250	13	-	13	57	-	-	-	-	-	-	-	-	3	-	3	8
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			10,570	14,136	24,706	2,396	10,141	13,367	23,508	2,191	10,312	14,614	24,926	2,200	10,355	14,610	24,965	2,249
Resecuritization																		
Investment Grade	AAA to A	20 - 65	-	-	-	-	-	-	-	-	-	-	-	-	-	38	38	25
	A- to BBB-	100 - 350	62	2	64	128	61	-	61	122	79	-	79	158	69	-	69	151
Non-Investment Grade	BB+ to BB- Below BB-	500 - 850 1250	-	-	-	-	-	-	-	-	-	-	-	-	18	-	18	119
			15	-	15	193	20	-	20	248	20	-	20	255	20	-	20	249
			77	2	79	321	81	-	81	370	99	-	99	413	107	38	145	544
Total			10,647	14,138	24,785	2,717	10,222	13,367	23,589	2,561	10,411	14,614	25,025	2,613	10,462	14,648	25,110	2,793

Underlying Asset	Q2 2017				Q1 2017				Q4 2016				Q3 2016			
	Exposure at Default ⁽²⁾			Exposures at Default (RW=1250%)	Exposure at Default ⁽²⁾			Exposures at Default (RW=1250%)	Exposure at Default ⁽²⁾			Exposures at Default (RW=1250%)	Exposure at Default ⁽²⁾			Exposures at Default (RW=1250%)
On- Balance Sheet	Off- Balance Sheet	Total	On- Balance Sheet		Off- Balance Sheet	Total	On- Balance Sheet		Off- Balance Sheet	Total	On- Balance Sheet		Off- Balance Sheet	Total	On- Balance Sheet	
Residential Mortgages	-	1,275	1,275	-	468	1,275	1,743	-	510	1,275	1,785	-	461	1,275	1,736	-
Commercial Mortgages	-	-	-	-	-	-	-	-	-	-	-	-	3	-	3	-
Credit cards/Consumer receivables	703	2,720	3,423	-	614	2,213	2,827	-	623	2,304	2,927	-	765	2,491	3,256	-
Auto loans/Leases	5,461	6,355	11,816	-	4,180	6,440	10,620	-	4,295	6,889	11,184	-	4,242	6,824	11,066	-
Diversified asset-backed securities	125	38	163	15	54	61	115	20	136	34	170	20	169	14	183	20
Business Loans	-	-	-	-	-	12	12	-	-	22	22	-	-	32	32	-
Trade receivables	3,604	3,714	7,318	-	4,176	3,342	7,518	-	3,963	4,070	8,033	-	4,093	3,850	7,943	-
Other	754	36	790	-	730	24	754	-	884	20	904	-	729	162	891	-
Total	10,647	14,138	24,785	15	10,222	13,367	23,589	20	10,411	14,614	25,025	20	10,462	14,648	25,110	20

(1) Capital charges related to trading book securitization exposures are based upon the Bank's internal market risk models including its comprehensive risk measure. Prior periods have been restated to conform with current presentation.

(2) Includes banking book on-balance sheet investments in asset backed securities (ABS), collateralized loan obligations (CLOs), collateralized debt obligations (CDOs), and off-balance sheet liquidity lines and credit enhancements to bank sponsored and non-bank sponsored ABCP conduits.

(3) Included in on-balance sheet exposures effective Q3 2016 are investment grade subordinated notes retained by the Bank, issued by Trillium Credit Card Trust II, and backed by bank originated credit card receivables. OSFI's Securitization Framework is applied.

TOTAL MARKET RISK-WEIGHTED ASSETS



(\$MM)	Q2 2018	Q1 2018	Q4 2017	Q3 2017	Q2 2017
All Bank VaR	1,814	1,646	1,380	1,398	1,390
All Bank stressed VaR	4,882	5,080	3,745	3,368	3,201
Incremental risk charge	1,672	2,500	2,181	3,383	3,557
Comprehensive risk measure ⁽¹⁾	-	-	-	264	602
Standardized approach	468	679	533	491	402
Market risk-weighted assets as at end of Quarter	8,836	9,905	7,839	8,904	9,152

(1) Comprehensive risk measure charges are no longer applicable as of Q4 2017.

SUMMARY COMPARISON OF ACCOUNTING BASIS vs LEVERAGE RATIO EXPOSURE MEASURE - for D-SIBs


(\$MM)	Item	Q2 2018	Q1 2018
1	Total consolidated assets as per published financial statements	926,310	923,152
2	Adjustment for investments in banking, financial, insurance or commercial entities that are consolidated for accounting purposes but outside the scope of regulatory consolidation	(1,162)	(531)
3	Adjustment for fiduciary assets recognized on the balance sheet pursuant to the operative accounting framework but excluded from the leverage ratio exposure measure	-	-
4	Adjustments for derivative financial instruments	4,062	371
5	Adjustment for securities financing transactions (i.e., repo assets and similar secured lending)	11,811	11,504
6	Adjustment for off balance-sheet items (i.e., credit equivalent amounts of off-balance sheet exposures)	132,413	126,866
7	Other adjustments	(12,786)	(12,599)
8	Leverage Ratio Exposure	1,060,648	1,048,763

LEVERAGE RATIO FRAMEWORK



(\$MM)	Item	Q2 2018	Q1 2018
	On-balance sheet exposures ⁽¹⁾		
1	On-balance sheet items (excluding derivatives, SFTs and grandfathered securitization exposures but including collateral)	807,025	797,126
2	(Asset amounts deducted in determining Basel III Tier 1 capital)	(12,786)	(12,599)
3	Total on-balance sheet exposures (excluding derivatives and SFTs) (sum of lines 1 and 2)	794,239	784,527
	Derivative exposures		
4	Replacement cost associated with all derivative transactions (i.e. net of eligible cash variation margin)	4,798	5,100
5	Add-on amounts for PFE associated with all derivative transactions	33,904	33,370
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)	(3,429)	(3,927)
8	(Exempted CCP-leg of client cleared trade exposures)	-	-
9	Adjusted effective notional amount of written credit derivatives	7,939	7,760
10	(Adjusted effective notional offsets and add-on deductions for written credit derivatives)	(5,201)	(5,085)
11	Total derivative exposures (sum of lines 4 to 10)	38,011	37,218
	Securities financing transaction exposures		
12	Gross SFT assets recognized for accounting purposes (with no recognition of netting), after adjusting for sale accounting transactions	99,187	101,411
13	(Netted amounts of cash payables and cash receivables of gross SFT assets)	(15,013)	(12,763)
14	Counterparty credit risk (CCR) exposure for SFT assets	11,811	11,504
15	Agent transaction exposures	-	-
16	Total securities financing transaction exposures (sum of lines 12 to 15)	95,985	100,152
	Other off-balance sheet exposures		
17	Off-balance sheet exposure at gross notional amount	413,186	391,302
18	(Adjustments for conversion to credit equivalent amounts)	(280,773)	(264,436)
19	Off-balance sheet items (sum of lines 17 and 18)	132,413	126,866
	Capital and Total Exposures		
20	Tier 1 capital	50,708	48,648
21	Total Exposures (sum of lines 3, 11, 16 and 19)	1,060,648	1,048,763
	Leverage Ratios		
22	Basel III leverage ratio	4.8%	4.6%

(1) On-balance sheet items exclude securities purchased under resale agreements and securities borrowed (\$84,174MM), derivative financial instruments (\$33,949MM), assets outside the regulatory scope of consolidation (\$1,162MM).

LEVERAGE RATIO FRAMEWORK - DESCRIPTION OF LINE ITEMS



Row Number	Explanation
1	On-balance sheet assets (excluding derivatives, Securities Financing Transactions (SFTs) and grandfathered securitization exposures but including collateral) according to paragraphs 14 and 17 to 20 of the Leverage Requirements Guideline.
2	Deductions from Basel III Tier 1 capital determined by paragraphs 4, 15 and 16 of the Leverage Requirements Guideline and excluded from the leverage ratio exposure measure, reported as negative amounts.
3	Sum of lines 1 and 2.
4	Replacement cost (RC) associated with all derivative transactions (including exposure resulting from transactions described in paragraph 42 of the Leverage Requirements Guideline), net of cash variation margin received and with, where applicable, bilateral netting according to paragraphs 22 to 35 and 40 of the Leverage Requirements Guideline.
5	Add-on amount for all derivatives exposure according to paragraphs 22 to 35 of the Leverage Requirements Guideline.
6	Grossed-up amount for collateral provided according to paragraph 38 of the Leverage Requirements Guideline.
7	Deductions of receivables assets from cash variation margin provided in derivative transactions according to paragraph 40 of the Leverage Requirements Guideline, reported as negative amounts.
8	Exempted trade exposures associated with the CCP-leg of derivative transactions resulting from client cleared transactions according to paragraph 41 of the Leverage Requirements Guideline, reported as negative amounts.
9	Adjusted effective notional amount (i.e. the effective notional amount reduced by any negative change in fair value) for written credit derivatives according to paragraphs 45 to 47 of the Leverage Requirements Guideline.
10	Adjusted effective notional offsets of written credit derivatives according to paragraphs 45 to 47 of the Leverage Requirements Guideline and deducted add-on amounts relating to written credit derivatives according to paragraph 48 of the Leverage Requirements Guideline, reported as negative amounts.
11	Sum of lines 4 to 10.
12	Gross SFT assets recognized for accounting purposes with no recognition of any netting other than novation with QCCPs as set out in footnote 30 of the Leverage Requirements Guideline, removing certain securities received as determined by paragraph 50 (i) of the Leverage Requirements Guideline and adjusting for any sales accounting transactions as determined by paragraph 53 of the Leverage Requirements Guideline.
13	Cash payables and cash receivables of Gross SFT assets netted according to paragraph 50 (i) of the Leverage Requirements Guideline, reported as negative amounts.
14	Measure of counterparty credit risk for SFTs as determined by paragraph 50 (ii) of the Leverage Requirements Guideline.
15	Agent transaction exposure amount determined according to paragraphs 54 to 56 of the Leverage Requirements Guideline.
16	Sum of lines 12 to 15.
17	Total off-balance sheet exposure amounts on a gross notional basis, before any adjustment for credit conversion factors according to paragraphs 57 to 65 of the Leverage Requirements Guideline.
18	Reduction in gross amount of off-balance sheet exposures due to the application of credit conversion factors in paragraphs 57 to 65 of the Leverage Requirements Guideline.
19	Sum of lines 17 and 18.
20	Tier 1 capital as determined by paragraph 10 of the Leverage Requirements Guideline.
21	Sum of lines 3, 11, 16 and 19.
22	Basel III leverage ratio according to paragraph 5 of the Leverage Requirements Guideline. (Line 20/21)
23	Tier 1 capital measured on an all-in basis as specified in Chapter 2 of OSFI's Capital Adequacy Requirements Guideline.
24	Regulatory adjustments to Tier 1 capital measured on an all-in basis as specified in Chapter 2 of OSFI's Capital Adequacy Requirements Guideline, reported as negative amounts.
25	Sum of lines 21 and 24, less the amount reported in line 2.
26	Leverage ratio measured on all-in basis; the ratio of the Tier 1 capital amount reported in line 23 to the Total Exposure amount reported in line 25.

GLOSSARY



Credit Risk Parameters	
Exposure at Default (EAD)	Generally represents the expected gross exposures at default and includes outstanding amounts for on-balance sheet exposures and loan equivalent amounts for off-balance sheet exposures.
Probability of Default (PD)	Measures the likelihood that a borrower will default within a 1-year time horizon, expressed as a percentage.
Loss Given Default (LGD)	Measures the severity of loss on a facility in the event of a borrower's default, expressed as a percentage of exposure at default.
Exposure Types	
Non-retail	
Corporate	Debt obligation of a corporation, partnership, or proprietorship.
Bank	Debt obligation of a bank or bank equivalent (including certain public sector entities (PSEs) treated as Bank equivalent exposures).
Sovereign	Debt obligation of a sovereign, central bank, certain Multi Development Banks (MDBs) and certain PSEs treated as Sovereign.
Securitization	On-balance sheet investments in asset backed securities (ABS), mortgage backed securities (MBS), collateralized loan obligations (CLOs) and collateralized debt obligations (CDOs). Off-balance sheet liquidity lines including credit enhancements to Bank's sponsored ABCP conduits and liquidity lines to non-bank sponsored ABCP conduits.
Retail	
Real Estate Secured	
Residential Mortgages	Loans to individuals against residential property (four units or less).
Secured Lines Of Credit	Revolving personal lines of credit secured by first charge on residential real estate.
Qualifying Revolving Retail Exposures (QRRE)	Credit cards and unsecured line of credit for individuals.
Other Retail	All other personal loans.
Exposure Sub-types	
Drawn	Outstanding amounts for loans, leases, acceptances, deposits with banks and available-for-sale debt securities.
Undrawn	Unutilized portion of an authorized credit line.
Repo-Style Transactions	Reverse repurchase agreements (reverse repos) and repurchase agreements (repos), securities lending and borrowing.
Over-the-counter (OTC) Derivatives	Over-the-counter derivatives contracts.
Exchange-traded derivatives (ETD)	Derivative contracts (e.g. futures contracts and options) that are transacted on an organized futures exchange. These include Futures contracts (both Long and Short positions), Purchased Options and Written Options.
Other Off-Balance Sheet	Direct credit substitutes such as standby letters of credits and guarantees, trade letters of credits, and performance letters of credits and guarantees.
Qualifying central counterparty (QCCP)	A qualifying central counterparty (QCCP) is licensed as a central counterparty and is also considered as "qualifying" when it is compliant with CPSS-IOSCO standards and is able to assist clearing member banks in properly capitalizing for CCP exposures by either undertaking the calculations and/or making available sufficient information to its clearing members, or others, to enable the completion of capital calculations.
Non-qualifying central counterparties (NQCCP)	Defined as those central counterparties which are not compliant with CPSS-IOSCO standards as outlined under qualifying CCP's. The exposures to NQCCP will follow standardized treatment under the Basel accord.
Other	
Asset Value Correlation Multiplier (AVC)	Basel III has increased the risk-weights on exposures to certain Financial Institutions (FIs) relative to the non-financial corporate sector by introducing an Asset Value Correlation multiplier (AVC). The correlation factor in the risk-weight formula is multiplied by this AVC factor of 1.25 for all exposures to regulated FIs whose total assets are greater than or equal to US \$100 billion and all exposures to unregulated FIs.
Regulatory Capital Floor	A minimum capital floor requirement is prescribed for institutions that use the AIRB approach for credit risk. Up to and including Q1 2018, the capital floor add-on was determined by comparing a capital requirement calculated by reference to Basel I against the Basel III calculation, as prescribed by OSFI. A shortfall in the Basel III capital requirement compared with the Basel I capital floor was added to RWAs. Effective Q2 2018, OSFI has replaced the Basel I regulatory capital floor with a capital floor based on the Basel II standardized approach for credit risk. Revised capital floor requirements also include risk-weighted assets for market risk and CVA.
Specific Wrong-Way Risk (WWR)	Specific Wrong-Way Risk arises when the exposure to a particular counterparty is positively correlated with the probability of default of the counterparty due to the nature of the transactions with the counterparty.
Credit Valuation Adjustment (CVA)	Credit Valuation Adjustment (CVA) is the difference between the risk free value of a portfolio and the true value of that portfolio, accounting for the possible default of a counterparty. CVA adjustment aims to identify the impact of Counterparty Risk.
Advanced Measurement Approaches (AMA)	Under the AMA, the regulatory capital requirement for Operational Risk will equal the risk measure generated by the bank's internal operational risk measurement system using the quantitative and qualitative criteria. AMA utilizes risk drivers for capital movements (such as internal loss experience, business environment and internal control factors, external loss experience, and scenarios).