SUPPLEMENTARY REGULATORY CAPITAL DISCLOSURE

Scotiabank

October 31, 2018

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OVERVIEW

This Appendix disclosure is based on OSFI's Pillar 3 disclosure requirements (issued in April 2017) and are primarily sourced from the BCBS' Revised Pillar 3 disclosure requirements - Phase 1 (2015). This document is not audited and should be read in conjunction with our 2018 Annual Report.

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, as per OSFI's Capital Adequacy Requirements Guideline (CAR). 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.

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.

OSFI approved the Bank's use of 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 and Canadian retail portfolios. The Bank uses internal estimates, based on historical experience, for probability of default (PD), loss given default (LGD) and exposure at default (EAD). As described in CR2 of this Supplementary Regulatory Capital Disclosure, the definition of regulatory capital default is consistent with the accounting definitions described in the Bank's annual report, except that all products, including credit cards, may be defaulted when a contractual payment is 90 days in arrears.

- 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 falling under the Securitization Framework are primarily computed under the Ratings-Based Approach (RBA), or the OSFI approved Internal Assessments Approach (IAA).
- RBA risk weights for other banking book exposures depend on the external ratings provided by the external credit assessment institutions (ECAI): S&P, Moody's and DBRS and are risk-weighted based on prescribed percentages and a mapping process consistent with OSFI's CAR.
- IAA risk weights for exposures to our asset-backed commercial paper conduits are based on a rating methodology similar to the criteria that are published by ECAIs and therefore are similar to the methodologies used by these institutions. Our ratings process includes a comparison of the available credit enhancement in a securitization structure to a stressed level of projected losses. The stress level used is determined by the desired risk profile of the transaction. As a result, we stress the cash flows of a given transaction at a higher level in order to achieve a higher rating. Conversely, transactions that only pass lower stress levels achieve lower ratings. We periodically compare our own ratings to ECAIs ratings to ensure that the ratings provided by ECAIs are reasonable. We have developed asset class specific criteria guidelines which provide the rating methodologies for different asset classes. The guidelines are reviewed periodically and are subject to a model validation process, for compliance with Basel rules. The Bank's Global Risk Management (GRM) is responsible for providing risk assessments for capital purposes. GRM is independent of the business originating the securitization exposures and performs its own analysis, sometimes in conjunction with but always independent of the applicable business.
- 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 and other exposures to CCPs 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. loan-to-value for retail, eligible collateral, allowances, 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. As at this reporting date, excluding the capital floor add-on requirement, the Bank's AMA RWA represents more than 80% of total operational risk RWA.

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.

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/about/investors-shareholders/regulatory-disclosures.html

BASEL III IMPLEMENTATION

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% as a Pillar 1 requirement. In June 2018, in order to provide increased transparency to the market, OSFI clarified its additional requirement for its Domestic Stability Buffer, already held by D-SIBs as a Pillar 2 buffer requirement. The Domestic Stability Buffer will range between 0 and 2.5% of a bank's total RWA. The buffer is presently set at 1.5%. OSFI will review the buffer on at least a semi-annual basis.

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 four jurisdictions apply a non-zero countercyclical buffer and the Bank's exposures within these four 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 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

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($MM)	Basel III					
	IFRS 9 (1)				IAS 39 (1)	
	Q4 2018	Q3 2018	Q2 2018	Q1 2018	Q4 2017	
	All-in Approach (2)	All-in Approach (2)	All-in Approach (2)	All-in Approach (2)	Transitional Approach	All-in Approach (2)
Common Equity Tier 1 capital	**44,443**	46,777	45,025	42,990	46,051	43,352
Tier 1 capital	**50,187**	52,540	50,708	48,648	50,623	49,473
Total capital	**57,364**	59,837	57,716	55,637	57,222	56,113
Risk-weighted Assets(3)(4)						
CET1 Capital Risk-weighted Assets	**400,507**	411,426	375,901	382,248	387,292	376,379
Tier 1 Capital Risk-weighted Assets	**400,680**	411,604	376,042	382,248	387,292	376,379
Total Capital Risk-weighted Assets	**400,853**	411,783	376,183	382,248	387,292	376,379
Capital Ratios (%)						
Common Equity Tier 1 (as a percentage of risk-weighted assets)	**11.1**	11.4	12.0	11.2	11.9	11.5
Tier 1 (as a percentage of risk-weighted assets)	**12.5**	12.8	13.5	12.7	13.1	13.1
Total capital (as a percentage of risk-weighted assets)	**14.3**	14.5	15.3	14.6	14.8	14.9
Leverage:						
Leverage Exposures	**1,119,099**	1,071,975	1,060,648	1,048,763	1,053,928	1,052,891
Leverage Ratio (%)	**4.5**	4.9	4.8	4.6	4.8	4.7
OSFI Pillar 1 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	40	40	50	50
Amount excluded from AT1 due to cap (excess over cap after redemptions and maturities)	**-**	110	110	455	-	-
Current cap on Tier 2 (T2) instruments subject to phase-out arrangements (%)	**40**	40	40	40	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 October 31, 2018, July 31, 2018 and April 30, 2018, the Bank did 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).

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

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($MM)		Q4 2018								Q3 2018	
		AIRB		Standardized		Total		% AIRB		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]
Non-Retail											
Corporate	Drawn	**145,000**	**70,750**	**59,018**	**56,897**	**204,018**	**127,647**	**71%**	**55%**	204,281	129,066
	Undrawn	**83,885**	**31,103**	**5,313**	**5,273**	**89,198**	**36,376**	**94%**	**86%**	88,102	37,068
	Other[3][4]	**43,440**	**10,590**	**3,501**	**3,430**	**46,941**	**14,020**	**93%**	**76%**	46,454	14,300
	Total	**272,325**	**112,443**	**67,832**	**65,600**	**340,157**	**178,043**	**80%**	**63%**	**338,837**	**180,434**
Bank	Drawn	**22,680**	**3,648**	**3,208**	**2,715**	**25,888**	**6,363**	**88%**	**57%**	21,522	6,427
	Undrawn	**2,146**	**287**	**160**	**159**	**2,306**	**446**	**93%**	**64%**	2,544	442
	Other[3][4]	**9,846**	**1,112**	**143**	**80**	**9,989**	**1,192**	**99%**	**93%**	10,649	1,167
	Total	**34,672**	**5,047**	**3,511**	**2,954**	**38,183**	**8,001**	**91%**	**63%**	**34,715**	**8,036**
Sovereign	Drawn	**106,288**	**3,524**	**5,299**	**1,424**	**111,587**	**4,948**	**95%**	**71%**	101,578	5,160
	Undrawn	**768**	**95**	**31**	**16**	**799**	**111**	**96%**	**86%**	789	92
	Other[3][4]	**1,806**	**94**	**6**	**2**	**1,812**	**96**	**100%**	**98%**	1,295	64
	Total	**108,862**	**3,713**	**5,336**	**1,442**	**114,198**	**5,155**	**95%**	**72%**	**103,662**	**5,316**
Total Non-Retail	Drawn	**273,968**	**77,922**	**67,525**	**61,036**	**341,493**	**138,958**			327,381	140,653
	Undrawn	**86,799**	**31,485**	**5,504**	**5,448**	**92,303**	**36,933**			91,435	37,602
	Other[3][4]	**55,092**	**11,796**	**3,650**	**3,512**	**58,742**	**15,308**			58,398	15,531
	Total	**415,859**	**121,203**	**76,679**	**69,996**	**492,538**	**191,199**			**477,214**	**193,786**
Retail											
Residential Mortgages	Drawn	**205,944**	**17,259**	**44,517**	**18,592**	**250,461**	**35,851**	**82%**	**48%**	250,699	37,240
	Undrawn	**-**	**-**	**-**	**-**	**-**	**-**			-	-
	Total	**205,944**	**17,259**	**44,517**	**18,592**	**250,461**	**35,851**	**82%**	**48%**	**250,699**	**37,240**
Secured Lines Of Credit	Drawn	**21,047**	**3,639**	**-**	**-**	**21,047**	**3,639**	**100%**	**100%**	20,968	3,553
	Undrawn	**17,864**	**1,081**	**-**	**-**	**17,864**	**1,081**	**100%**	**100%**	17,672	1,056
	Total	**38,911**	**4,720**	**-**	**-**	**38,911**	**4,720**	**100%**	**100%**	**38,640**	**4,609**
Qualifying Revolving Retail Exposures (QRRE)	Drawn	**17,337**	**9,993**	**-**	**-**	**17,337**	**9,993**	**100%**	**100%**	17,948	10,317
	Undrawn	**28,550**	**3,470**	**-**	**-**	**28,550**	**3,470**	**100%**	**100%**	27,794	3,373
	Total	**45,887**	**13,463**	**-**	**-**	**45,887**	**13,463**	**100%**	**100%**	**45,742**	**13,690**
Other Retail	Drawn	**31,176**	**14,876**	**42,100**	**30,826**	**73,276**	**45,702**	**43%**	**33%**	72,943	45,681
	Undrawn	**1,671**	**476**	**-**	**-**	**1,671**	**476**	**100%**	**100%**	1,515	415
	Total	**32,847**	**15,352**	**42,100**	**30,826**	**74,947**	**46,178**	**44%**	**33%**	**74,458**	**46,096**
Total Retail	Drawn	**275,504**	**45,767**	**86,617**	**49,418**	**362,121**	**95,185**			362,558	96,791
	Undrawn	**48,085**	**5,027**	**-**	**-**	**48,085**	**5,027**			46,981	4,844
	Total	**323,589**	**50,794**	**86,617**	**49,418**	**410,206**	**100,212**			**409,539**	**101,635**
Securitizations		**23,346**	**2,287**	**-**	**-**	**23,346**	**2,287**	**100%**	**100%**	23,567	2,286
Trading Derivatives		**22,843**	**7,594**	**301**	**301**	**23,144**	**7,895**	**99%**	**96%**	20,428	7,673
Derivatives - credit valuation adjustment[4]		**-**	**3,537**	**-**	**1,079**	**-**	**4,616**			-	4,755
Total Credit Risk (Excluding Equities & Other Assets)		**785,637**	**185,415**	**163,597**	**120,794**	**949,234**	**306,209**			**930,748**	**310,135**
Equities		**1,754**	**1,619**	**-**	**-**	**1,754**	**1,619**	**100%**	**100%**	1,696	1,571
Other Assets[5]		**-**	**-**	**60,124**	**28,258**	**60,124**	**28,258**			57,889	28,467
Total Credit Risk (Before Scaling Factor)		**787,391**	**187,034**	**223,721**	**149,052**	**1,011,112**	**336,086**			**990,333**	**340,173**
Add-on for 6% Scaling Factor[6]			**11,010**				**11,010**				11,014
Total Credit Risk		**787,391**	**198,044**	**223,721**	**149,052**	**1,011,112**	**347,096**			**990,333**	**351,187**

(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) Other Assets excludes exposures at default related to CCP.

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

Summary of Qualitative Requirements - Pillar III (Cross Referenced)

Item #	Pillar III - Requirements - Qualitative	2018 Annual Report: MD&A	2018 Annual Report: Financial Statements	Regulatory Capital Supplementary Package	Financial Reporting Supplementary Package
		Page Reference			
	Part 2 - OVA – Bank risk management approach				
Banks must describe their risk management objectives and policies, in particular:					
(a)	How the business model determines and interacts with the overall risk profile (eg the key risks related to the business model and how each of these risks is reflected and described in the risk disclosures) and how the risk profile of the bank interacts with the risk tolerance approved by the board.	72-109			
(b)	The risk governance structure: responsibilities attributed throughout the bank (eg oversight and delegation of authority; breakdown of responsibilities by type of risk, business unit etc); relationships between the structures involved in risk management processes (eg board of directors, executive management, separate risk committee, risk management structure, compliance function, internal audit function).	72-76			
(c)	Channels to communicate, decline and enforce the risk culture within the bank (eg code of conduct; manuals containing operating limits or procedures to treat violations or breaches of risk thresholds; procedures to raise and share risk issues between business lines and risk functions).	73-77			
(d)	The scope and main features of risk measurement systems.	75, 78, 83, 92-95, 106			
(e)	Description of the process of risk information reporting provided to the board and senior management, in particular the scope and main content of reporting on risk exposure.	73-75, 92			
(f)	Qualitative information on stress testing (eg portfolios subject to stress testing, scenarios adopted and methodologies used, and use of stress testing in risk management).	75-76, 80, 92-93, 95, 97	233-234		
(g)	The strategies and processes to manage, hedge and mitigate risks that arise from the bank's business model and the processes for monitoring the continuing effectiveness of hedges and mitigants.	76, 80, 84-87, 92, 94-96, 97	160, 181-185		

Summary of Qualitative Requirements - Pillar III (Cross Referenced)

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Item #	Pillar III - Requirements - Qualitative	2018 Annual Report: MD&A	2018 Annual Report: Financial Statements	Regulatory Capital Supplementary Package	Financial Reporting Supplementary Package
		Page Reference			
	Part 3 - LIA – Explanations of differences between accounting and regulatory exposures amounts				
Banks must explain the origins of the differences between accounting amounts, as reported in financial statements amounts and					
(a)	Banks must explain the origins of any significant differences between the amounts in columns (a) and (b) in LI1.			LI1	
(b)	Banks must explain the origins of differences between carrying values and amounts considered for regulatory purposes shown in LI2.			LI2	
	In accordance with the implementation of the guidance on prudent valuation, banks must describe systems and controls to ensure that the valuation estimates are prudent and reliable. Disclosure must include:				
	• Valuation methodologies, including an explanation of how far mark-to-market and mark-to-model methodologies are used.	85, 111-112	153, 159, 169-171, 175, 234		
(c)	• Description of the independent price verification process.	111-112	169-170		
	• Procedures for valuation adjustments or reserves (including a description of the process and the methodology for valuing trading positions by type of instrument).	111-112	153		
	Part 4 - CRA – General qualitative information about credit risk				
Banks must describe their risk management objectives and policies for credit risk, focusing in particular on:					
(a)	How the business model translates into the components of the bank's credit risk profile	78, 83			
(b)	Criteria and approach used for defining credit risk management policy and for setting credit risk limits	83			
(c)	Structure and organisation of the credit risk management and control function	83			
(d)	Relationships between the credit risk management, risk control, compliance and internal audit functions	73-74, 83			
(e)	Scope and main content of the reporting on credit risk exposure and on the credit risk management function to the executive management and to the board of directors	83			

Summary of Qualitative Requirements - Pillar III (Cross Referenced)

Scotiabank

Item #	Pillar III - Requirements - Qualitative	2018 Annual Report: MD&A	2018 Annual Report: Financial Statements	Regulatory Capital Supplementary Package	Financial Reporting Supplementary Package
		Page Reference			
	Part 4 - Table CRC: Qualitative disclosure requirements related to credit risk mitigation techniques				
Banks must disclose:					
(a)	Core features of policies and processes for, and an indication of the extent to which the bank makes use of, on- and off-balance sheet netting.	84, 85	179-180, 181, 185		
(b)	Core features of policies and processes for collateral evaluation and management.	84			
(c)	Information about market or credit risk concentrations under the credit risk mitigation instruments used (ie by guarantor type, collateral and credit derivative providers).	78, 83-85, 87	231		
	Part 4 - CRD: Qualitative disclosures on banks' use of external credit ratings under the standardized approach for credit risk				
A. For portfolios that are risk-weighted under the standardized approach for credit risk, banks must disclose the following information:					
(a)	Names of the external credit assessment institutions (ECAIs) and export credit agencies (ECAs) used by the bank, and the reasons for any changes over the reporting period;	64	231-232		
(b)	The asset classes for which each ECAI or ECA is used;	64	228, 232	EAD_RWA	
(c)	A description of the process used to transfer the issuer to issue credit ratings onto comparable assets in the banking book (see paragraphs 99–101 of the Basel framework); and	64	232		
(d)	The alignment of the alphanumerical scale of each agency used with risk buckets (except where the relevant supervisor publishes a standard mapping with which the bank has to comply).	64	232		
	Part 4 - CRE: Qualitative disclosures related to IRB models				
Banks must provide the following information on their use of IRB models:					
(a)	Internal model development, controls and changes: role of the functions involved in the development, approval and subsequent changes of the credit risk models.	65-66, 83, 85			
(b)	Relationships between risk management function and internal audit function and procedure to ensure the independence of the function in charge of the review of the models from the functions responsible for the development of the models.	72, 74			
(c)	Scope and main content of the reporting related to credit risk models.	64-66	228-232	Overview	
(d)	Scope of the supervisor's acceptance of approach.	64			

Item #	Pillar III - Requirements - Qualitative	2018 Annual Report: MD&A	2018 Annual Report: Financial Statements	Regulatory Capital Supplementary Package	Financial Reporting Supplementary Package
		Page Reference			
(e)	For each of the portfolios, the bank must indicate the part of EAD within the group (in percentage of total EAD) covered by standardized, FIRB and AIRB approach and the part of portfolios that are involved in a roll-out plan.			Overview, EAD RWA	
(f)	The number of key models used with respect to each portfolio, with a brief discussion of the main differences among the models within the same portfolios.	64-66	228-232		
(g)	Description of the main characteristics of the approved models: (i) definitions, methods and data for estimation and validation of PD (eg how PDs are estimated for low default portfolios; if there are regulatory floors; the drivers for differences observed between PD and actual default rates at least for the last three periods); and where applicable: (ii) LGD (eg methods to calculate downturn LGD; how LGDs are estimated for low default portfolio; the time lapse between the default event and the closure of the exposure); (iii) credit conversion factors, including assumptions employed in the derivation of these variables;	64-66	228-232		
	Part 5 - CCRA: Qualitative disclosure related to counterparty credit risk				
Banks must provide:					
(a)	Risk management objectives and policies related to counterparty credit risk, including:				
(b)	The method used to assign the operating limits defined in terms of internal capital for counterparty credit exposures and for CCP exposures;	73-74, 83	179-180, 228		
(c)	Policies relating to guarantees and other risk mitigants and assessments concerning counterparty risk, including exposures towards CCPs;	75, 83	180, 232		
(d)	Policies with respect to wrong-way risk exposures;	85	239		
(e)	The impact in terms of the amount of collateral that the bank would be required to provide given a credit rating downgrade.	99			
	Part 6 - SECA: Qualitative disclosure requirements related to securitization exposures				
Qualitative disclosures					
Banks must describe their risk management objectives and policies for securitization activities and main features of these activities					
(a) The bank's objectives in relation to securitization and re-securitization activity, including the extent to which these activities transfer credit risk of the underlying securitised exposures away from the bank to other entities, the type of risks assumed and the types of		67-69, 101, 113	198-200		
(b) The bank must provide a list of:					

Summary of Qualitative Requirements - Pillar III (Cross Referenced)

Scotiabank

Item #	Pillar III - Requirements - Qualitative	2018 Annual Report: MD&A	2018 Annual Report: Financial Statements	Regulatory Capital Supplementary Package	Financial Reporting Supplementary Package
		Page Reference			
•	special purpose entities (SPEs) where the bank acts as sponsor (but not as an originator such as an Asset Backed Commercial Paper (ABCP) conduit), indicating whether the bank consolidates the SPEs into its scope of regulatory consolidation;	67-69	197-200		
•	affiliated entities (i) that the bank manages or advises and (ii) that invest either in the securitization exposures that the bank has securitised or in SPEs that the bank sponsors; and	68-69	198-200		
•	a list of entities to which the bank provides implicit support and the associated capital impact for each of them (as required in paragraphs 551 and 564 of the securitization framework).	n/a			
(c) Summary of the bank’s accounting policies for securitization activities.		113	197-200		
(d) If applicable, the names of external credit assessment institution (ECAIs) used for securitizations and the types of securitization				Overview	
(e) If applicable, describe the process for implementing the Basel internal assessment approach (IAA). The description should include:				Overview	
•	structure of the internal assessment process and relation between internal assessment and external ratings, including information on ECAIs as referenced in item (d) of this table;			Overview	
•	control mechanisms for the internal assessment process including discussion of independence, accountability, and internal assessment process review; and			Overview	
•	the exposure type to which the internal assessment process is applied; and stress factors used for determining credit enhancement levels, by exposure type.24			Overview	
(f) Banks must describe the use of internal assessment other than for IAA capital purposes.		n/a			
	Part 7 - Market risk				
OSFI revised Pillar 3 Market Risk disclosure requirements allow for a continuation of the existing Basel 2.5 Market Risk disclosures until the implementation of the next phase of Pillar 3 disclosures in Canada. **As a result, the Bank's Market Risk disclosures continue to be based on Basel 2.5 disclosure requirements.** OSFI's requirements for Pillar 3 Requirements may be found in (http://www.osfi-bsif.gc.ca/Eng/fi-if/rg-ro/gdn-ort/gl-ld/Pages/plr3.aspx).		n/a			

Summary of Qualitative Requirements - Pillar III (Cross Referenced)

Scotiabank

Item #	Pillar III - Requirements - Qualitative	2018 Annual Report: MD&A	2018 Annual Report: Financial Statements	Regulatory Capital Supplementary Package	Financial Reporting Supplementary Package
		Page Reference			
	Part 8 - Operational risk				
(a) In addition to the general qualitative disclosure requirement (paragraph 824), the approach(es) for operational risk capital assessment for which the bank qualifies.		67			
(b) Description of the advanced measurement approaches for operational risk (AMA), if used by the bank, including a discussion of relevant internal and external factors considered in the bank's measurement approach. In the case of partial use, the scope and coverage of the different approaches used/applied in regulatory capital.		67	106	Overview	
(c)* For banks using the AMA, a description of the use of insurance for the purpose of mitigating operational risk.		n/a			
	Part 9 - Interest rate risk in the banking book (IRRBB)				
Qualitative disclosures					
(a) The general qualitative disclosure requirement (paragraph 824), including the nature of IRRBB and key assumptions, including assumptions regarding loan prepayments and behaviour of non-maturity deposits, and frequency of IRRBB measurement.		93-94	233		
Quantitative disclosures					
(b) The increase (decline) in earnings or economic value (or relevant measure used by management) for upward and downward rate shocks according to management's method for measuring IRRBB, broken down by currency (as relevant).		93-94			

OV1 – Overview of RWA

Amount in $ Millions		a	b	c
		CET1 RWA [1]		Minimum capital requirements [2]
		Q4 2018	Q3 2018	Q4 2018
1	Credit risk (excluding counterparty credit risk)	**309,711**	**313,095**	**24,776**
2	Of which: standardized approach (SA) [3]	*131,766*	*134,439*	*10,540*
3	Of which: foundation internal ratings-based (F-IRB) approach	-	-	-
4	Of which: supervisory slotting approach	-	-	-
5	Of which: advanced internal ratings-based (A-IRB) approach	*177,945*	*178,655*	*14,236*
6	Counterparty credit risk (CCR)	**13,196**	**12,903**	**1,056**
7	Of which: standardized approach for counterparty credit risk (SA-CCR) [4]	*2,354*	*2,251*	*188*
8	Of which: Internal Model Method (IMM)	*6,547*	*6,348*	*524*
9	Of which: other CCR [5]	*4,295*	*4,304*	*344*
10	Credit valuation adjustment (CVA)	4,616	4,755	369
11	Equity positions under the simple risk weight approach	-	-	-
12	Equity investments in funds – look-through approach	307	292	25
13	Equity investments in funds – mandate-based approach	175	179	14
14	Equity investments in funds – fall-back approach	1	1	-
15	Settlement risk	-	-	-

OV1 – Overview of RWA

Scotiabank

Amount in $ Millions		a	b	c
		CET1 RWA [1]		Minimum capital requirements [2]
		Q4 2018	Q3 2018	Q4 2018
16	Securitization exposures in banking book	**2,424**	**2,423**	**194**
17	Of which: securitization internal ratings-based approach (SEC-IRBA)	-	-	-
18	Of which: securitization external ratings-based approach (SEC-ERBA), including internal assessment approach (IAA)	*2,424*	*2,423*	*194*
19	Of which: securitization standardized approach (SEC-SA)	-	-	-
20	Market risk [6]	**8,357**	**16,402**	**669**
21	Of which: standardized approach (SA)	*380*	*3,467*	*31*
22	Of which: internal model approaches (IMA)	*7,977*	*12,935*	*638*
23	Capital charge for switch between trading book and banking book	-	-	-
24	Operational risk	45,054	43,837	3,604
25	Amounts below the thresholds for deduction (subject to 250% risk weight)	16,666	17,539	1,334
26	Floor adjustment	-	-	-
27	**Total (1 + 6 + 10 + 11 + 12 + 13 + 14 + 15 + 16 + 20 + 23 + 24 + 25 + 26)**	**400,507**	**411,426**	**32,041**

(1) RWA: risk-weighted assets according to the Basel framework, including the 1.06 scaling factor.

(2) Minimum capital requirement: Pillar 1 capital requirements are RWA * 8%.

(3) Includes equities under the AIRB Materiality Threshold which are risk weighted at 100% plus the 6% scalar requirement.

(4) SA-CCR will be implemented for Capital reporting in Q1, 2019. Figures in line 7 are based on Current Exposure Method (CEM).

(5) Includes SFT and CCP Default Fund.

(6) Decline in Market Risk RWA due to reduced positions and updates to model scope. Refer to RWA_Flow.

LI1 – Differences between accounting and regulatory scopes of consolidation and mapping of financial statement categories with regulatory risk categories [1]

Scotiabank

Q4 2018 $(MM)	a	b	c	d	e	f	g
			Carrying values of items: [2]				
	Carrying values as reported in published financial statements	Carrying values under scope of regulatory consolidation	Subject to credit risk framework	Subject to counterparty credit risk framework	Subject to the securitization framework	Subject to the market risk framework	Not subject to capital requirements or subject to deduction from capital [3]
Assets							
Cash and deposits with financial institutions	62,269	62,033	62,033	-	-	-	-
Precious metals	3,191	3,191	3,191	-	-	3,191	-
Trading assets							
Securities	85,474	85,469	17	-	-	85,445	7
Loans	14,334	14,334	7,194	-	-	13,746	-
Other	454	454	-	-	-	454	-
Financial instruments designated at fair value through profit or loss	12	12	12	-	-	-	-
Securities purchased under resale agreements and securities borrowed	104,018	104,011	-	104,011	-	-	-
Derivative financial instruments	37,558	37,558	-	37,558	-	33,937	-
Investment securities	78,396	77,419	77,285	-	134	-	-
Loans							
Residential mortgages [4]	253,357	253,169	253,169	-	-	-	-
Personal loans	96,019	96,004	94,257	-	1,747	-	-
Credit cards	16,485	16,485	14,330	-	553	-	1,601
Business and government	191,038	191,055	183,365	-	7,614	-	76
Allowance for credit loss	(5,065)	(5,065)	(5,065)	-	-	-	-
Customers' liability under acceptances, net of allowance	16,329	16,338	16,338	-	-	-	-
Property and equipment	2,684	2,680	2,680	-	-	-	-
Investments in associates	4,850	5,202	4,439	-	-	-	763
Goodwill and other intangible assets	17,719	18,216	1,788	-	-	-	16,428
Deferred tax assets	1,938	1,943	1,508	-	-	-	436
Other assets	17,433	13,708	13,461	3,699	-	-	246
Total assets	**998,493**	**994,216**	**730,002**	**145,268**	**10,048**	**136,773**	**19,557**

LI1 – Differences between accounting and regulatory scopes of consolidation and mapping of financial statement categories with regulatory risk categories [1]

Q4 2018 $(MM)	a	b	c	d	e	f	g
			Carrying values of items: [2]				
	Carrying values as reported in published financial statements	Carrying values under scope of regulatory consolidation	Subject to credit risk framework	Subject to counterparty credit risk framework	Subject to the securitization framework	Subject to the market risk framework	Not subject to capital requirements or subject to deduction from capital [3]
Liabilities							
Deposits							
Personal	214,545	214,540	-	-	-	-	214,540
Business and government	422,002	422,002	-	-	-	-	422,002
Financial institutions	39,987	39,987	-	-	-	-	39,987
Financial instruments designated at fair value through profit or loss	8,188	8,188	-	-	-	-	8,188
Acceptances	16,338	16,338	-	-	-	-	16,338
Obligations related to securities sold short	32,087	32,087	-	-	-	-	32,087
Derivative financial instruments	37,967	37,967	-	37,967	-	-	-
Obligations related to securities sold under repurchase agreements and securities lent	101,257	101,257	-	101,257	-	-	-
Subordinated debentures	5,698	5,698	-	-	-	-	5,698
Other liabilities	52,744	46,795	-	-	-	-	46,795
Total liabilities	**930,813**	**924,859**	**-**	**139,224**	**-**	**-**	**785,635**

(1) Based on the Consolidated Statement of Financial Position as reported in the Bank's 2018 Annual Report. Effective Q1 2018, the Bank fully adopted IFRS 9 (Financial Instruments).

(2) A single item may attract capital charges according to more than one risk category framework.

(3) Includes capital deductions net of associated deferred tax liabilities, and securitized credit card exposures not subject to capital requirements.

(4) Includes $83.5 billion in mortgages guaranteed by Canada Mortgage Housing Corporation (CMHC) and portions of privately insured mortgages.

LI2 – Main sources of differences between regulatory exposure amounts and carrying values in financial statements

Scotiabank

Q4 2018 $(MM)		a	b	c	d	e
		Total	Items subject to: [1]			
			Credit risk framework	Securitization framework	Counterparty credit risk framework	Market risk framework
1	**Asset carrying value amount under scope of regulatory consolidation (as per template LI1)**	**974,659**	**730,003**	**10,048**	**145,268**	**136,773**
2	Liabilities carrying value amount under regulatory scope of consolidation (as per template LI1)	139,224	-	-	139,224	-
3	Total net amount under regulatory scope of consolidation	835,435	730,003	10,048	6,044	136,773
4	Off-balance sheet amounts [2]	182,870	168,724	13,298	848	-
5	Differences in valuations [3]	433	433	-	-	-
6	Differences due to different netting rules, other than those already included in row 2	30,422	933	-	29,489	-
7	Differences due to considerations of provisions [4]	3,708	3,880	-	(172)	-
8	Collateral offsetting	(22,344)	-	-	(22,344)	-
9	Differences due to Potential Future Exposures and Collateral Haircut	54,091	-	-	54,091	-
10	Differences due to deconsolidated subsidiaries	582	582	-	-	-
11	Other differences not classified above [5]	11,780	11,780	-	-	-
12	**Exposure amounts considered for regulatory purposes [6]**	**1,096,977**	**916,335**	**23,346**	**67,956**	**136,773**

(1) A single item can attract capital charges according to more than one risk category framework.

(2) Includes undrawn commitments and letters of credit/guarantee after application of the credit conversion factors, off balance sheet securitization exposures and unfunded default fund contributions.

(3) Includes fair value adjustments for credit riks items (loans, bonds).

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

(5) Includes synthetic positions.

(6) The aggregate amount considered as a starting point of the RWA calculation.

CR1: Credit quality of assets

Scotiabank

Q4 2018 $(MM)		a	b	c	d
		Gross carrying values of [1]		Allowances/ impairments [3]	Net values (a+b-c)
		Defaulted exposures [2]	Non-defaulted exposures		
1	Loans	5,179	624,091	5,077	624,193
2	Debt Securities	218	75,310	1	75,527
3	Off-balance sheet exposures [4]	888	243,926	73	244,741
4	**Total**	**6,285**	**943,327**	**5,151**	**944,461**

(1) The accounting value of on- and off-balance sheet exposures before any credit conversion factor (CCF) or credit risk mitigation (CRM), but after considering write-offs.

(2) Defaulted exposures include: (i) the Bank's reported Gross Impaired Loans, (ii) credit cards which meet the regulatory definition of default, and (iii) off-balance sheet commitments, LCs and/or LGs which meet the regulatory definition of default.

(3) Includes all three ECL Stages.

(4) Excludes all revocable loan commitments.

CR2: Changes in stock of defaulted loans and debt securities[1]

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Q4 2018 $(MM)		a
1	**Defaulted loans and debt securities - Beginning of Quarter** [2]	**7,032**
2	Loans and debt securities that have defaulted since the last reporting period	1,165
3	Returned to non-defaulted status	(452)
4	Amounts written off	(881)
5	Other changes [3]	(579)
6	**Defaulted loans and debt securities - End of Quarter (Q4 2018)** [2]	**6,285**

(1) Defaulted exposures include: (i) the Bank's reported Gross Impaired Loans, (ii) credit cards which meet the regulatory definition of default, and (iii) off-balance sheet commitments, LCs and/or LGs which meet the regulatory definition of default.

(2) Regulatory Definition of Default: when there is objective evidence that the Bank no longer has reasonable assurance as to the timely collection of interest and principal, or where a contractual payment is 90 days in arrears (including credit cards), or the customer is declared to be bankrupt.

(3) Includes the impact from foreign currency translation and changes in off-balance sheet exposures which meet the regulatory definition of default.

CRB - Additional disclosure related to the credit quality of assets

Scotiabank

Item #	Pillar III - Requirements	2018 Annual Report: MD&A	2018 Annual Report: Financial Statements	Regulatory Capital Supp. Package	Financial Reporting Supp. Package
Banks must provide the following disclosures:					
Qualitative disclosures					
(a)	The scope and definitions of "past due" and "impaired" exposures used for accounting purposes and the differences, if any, between the definition of past due and default for accounting and regulatory purposes.		155, 157	Overview	
(b)	The extent of past-due exposures (more than 90 days) that are not considered to be impaired and the reasons for this.		155, 157, 197		
(c)	Description of methods used for determining impairments.		153-155		
(d)	The bank's own definition of a restructured exposure. (i.e. modified loans)		155		
Quantitative disclosures					
(e)	Breakdown of exposures by geographical areas, industry and residual maturity;				
	(i) Geography	120, 125	190		
	(ii) Industry	122			
	(iii) Residual Maturity	104, 125	191		
(f)	Amounts of impaired exposures (according to the definition used by the bank for accounting purposes) and related allowances and write-offs, broken down by geographical areas and industry;				
	(i) Geography			ImpairedBy Region	
	(ii) Industry			ImpairedBy Industry	
(g)	Ageing analysis of accounting past-due exposures;		197		
(h)	Breakdown of restructured exposures between impaired and not impaired		195		

CR3: Credit risk mitigation techniques – overview

Scotiabank

Q4 2018 $(MM)		a Unsecured exposures: carrying amount (1)	b1 Exposures to be secured (1)	b Exposures secured by collateral (2), (3)	d Exposures secured by financial guarantees (4)	f Exposures secured by credit derivatives
1	Loans	242,647	381,546	285,122	96,424	-
2	Debt Securities	64,922	10,605	-	10,605	-
3	**Total**	**307,569**	**392,151**	**285,122**	**107,029**	**-**
4	Of which defaulted	1,808	1,912	1,624	288	-

(1) Carrying amounts of on-balance sheet exposures are net of all three ECL Stages and write-offs.

(2) Includes non-retail and retail AIRB exposures, where collateral is used within the estimation of LGD.

(3) Includes retail mortgages & real estate secured lines of credit under both AIRB and standardized approaches.

(4) Includes government insured mortgages.

CR4: Standardized approach – credit risk exposures and Credit Risk Mitigation (CRM) effects

Scotiabank

Q4 2018 $(MM)		a	b	c	d	e	f
		Exposures before CCF and CRM		Exposures post-CCF and CRM		RWA and RWA density	
	Asset classes	On-balance sheet amount	Off-balance sheet amount	On-balance sheet amount	Off-balance sheet amount	RWA	RWA density
1	Bank	3,208	508	3,208	303	2,954	84%
2	Corporate	59,018	29,023	59,018	8,814	65,600	97%
3	Sovereign	5,299	161	5,299	37	1,442	27%
4	Real Estate Secured	44,517	51	44,517	-	18,592	42%
5	Other Retail	42,100	21,727	42,100	-	30,826	73%
6	Equity (1)	1,163	-	1,163	-	1,232	106%
7	Other Assets (2)	53,457	-	53,457	-	11,120	21%
8	**Total**	**208,762**	**51,470**	**208,762**	**9,154**	**131,766**	**60%**

(1) Includes equities under the AIRB Materiality Threshold which are risk weighted at 100% plus the 6% scalar requirement.

(2) Exposures to CCP and risk-weighted threshold deductions are excluded.

CR5: Standardized approach – exposures by asset classes and risk weights

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Q4 2018 $(MM)	Risk weight / Asset classes	a	b	c	d	e	f	g	h	i	j
		0%	10%	20%	35%	50%	75%	100%	150%	Others	Total credit exposures amount (post-CCF and post-CRM) (1)
1	Bank	-	-	658	-	62	-	2,791	-	-	3,511
2	Corporate	2,185	-	358	-	292	-	64,226	771	-	67,832
3	Sovereign	2,903	-	-	-	1,984	-	449	-	-	5,336
4	Real Estate Secured	4,248	-	1,382	27,784	-	10,048	1,055	-	-	44,517
5	Other Retail	1,316	-	-	-	-	40,466	-	318	-	42,100
6	Equity (2)	-	-	-	-	-	-	1,163	-	-	1,163
7	Other Assets (3)	43,422	-	-	-	-	-	9,941	-	94	53,457
8	**Total**	**54,074**	**-**	**2,398**	**27,784**	**2,338**	**50,514**	**79,625**	**1,089**	**94**	**217,916**

(1) Exposure amount used for the calculation of capital requirements, including both on- and off-balance sheet amounts, net of allowances (ECL Stage 3) and write-offs. The amounts are after application of credit risk mitigation (CRM) techniques and credit conversion factors (CCF).

(2) Includes equities under the AIRB Materiality Threshold which are risk weighted at 100% plus the 6% scalar requirement.

(3) Exposures to CCP and risk-weighted threshold deductions are excluded.

CR6: IRB – Credit risk exposures by portfolio and PD range - Retail

Scotiabank

		a	b	c	d	e	f	g	h	i	j	k	l
Q4 2018 $(MM)	**PD scale**	**Original on-balance sheet gross exposures**	**Off-balance sheet exposures pre-CCF**	**Average CCF**	**EAD post-CRM and post- CCF [(1)]**	**Average PD [(2)]**	**Number of obligors [(3)]**	**Average LGD [(4)]**	**Average maturity [(5)]**	**RWA [(1) (6)]**	**RWA Density [(7)]**	**EL [(1)]**	**Provisions [(8)]**
Retail - insured exposures secured by residential real estate													
	0.00 to <0.15	32,740	-		85,294	0.00%	213,983	25.44%		373	0.4%	1	
	0.15 to <0.25	29,836	-		1,909	0.24%	139,975	22.01%		204	10.7%	1	
	0.25 to <0.50	817	-		21	0.34%	4,121	34.07%		4	19.0%	-	
	0.50 to <0.75	-	-		-		-			-		-	
	0.75 to <2.50	18,167	-		370	0.95%	80,876	16.34%		78	21.1%	1	
	2.50 to <10.00	4,559	-		-		20,386			-		-	
	10.00 to <100.00	1,187	-		-		5,651			-		-	
	100.00 (Default)	305	-		18	100.00%	1,805	88.35%		-	0.0%	16	
	Sub-total	**87,611**	**-**	**-**	**87,612**	**0.03%**	**466,797**	**25.35%**		**659**	**0.8%**	**19**	**13**
Retail - uninsured exposures secured by residential real estate													
	0.00 to <0.15	44,465	33,456	42%	58,682	0.06%	569,486	20.25%		1,968	3.4%	7	
	0.15 to <0.25	53,159	7,275	40%	56,033	0.22%	347,070	22.02%		5,502	9.8%	26	
	0.25 to <0.50	311	-		311	0.34%	1,759	33.69%		66	21.2%	-	
	0.50 to <0.75	4,527	1,156	52%	5,130	0.61%	67,474	32.62%		1,596	31.1%	10	
	0.75 to <2.50	28,189	230	57%	28,319	0.99%	105,772	21.85%		8,233	29.1%	63	
	2.50 to <10.00	7,482	41	59%	7,506	3.15%	28,695	22.04%		4,380	58.4%	52	
	10.00 to <100.00	999	19	79%	1,014	24.64%	7,288	21.28%		1,207	119.0%	52	
	100.00 (Default)	248	883	0%	248	100.00%	18,262	71.80%		-	0.0%	178	
	Sub-total	**139,380**	**43,060**	**41%**	**157,243**	**0.77%**	**1,145,806**	**21.77%**		**22,952**	**14.6%**	**388**	**87**

CR6: IRB – Credit risk exposures by portfolio and PD range - Retail

Scotiabank

Q4 2018 $(MM)	PD scale	a Original on-balance sheet gross exposures	b Off-balance sheet exposures pre-CCF	c Average CCF	d EAD post-CRM and post- CCF [1]	e Average PD [2]	f Number of obligors [3]	g Average LGD [4]	h Average maturity [5]	i RWA [1] [6]	j RWA Density [7]	k EL [1]	l Provisions [8]
Retail - qualifying revolving (QRRE)													
	0.00 to <0.15	973	18,009	59%	11,658	0.05%	871,154	74.23%		285	2.4%	4	
	0.15 to <0.25	848	12,481	68%	9,348	0.17%	1,615,651	67.31%		635	6.8%	11	
	0.25 to <0.50	3,453	4,990	70%	6,953	0.29%	343,055	82.10%		884	12.7%	17	
	0.50 to <0.75	400	360	105%	779	0.62%	23,689	41.30%		90	11.6%	2	
	0.75 to <2.50	6,018	5,621	78%	10,401	1.23%	1,029,091	81.09%		3,996	38.4%	106	
	2.50 to <10.00	4,432	1,059	96%	5,444	5.20%	657,040	84.80%		5,932	109.0%	242	
	10.00 to <100.00	1,066	44	204%	1,157	27.36%	195,043	81.70%		2,449	211.7%	255	
	100.00 (Default)	147	5,621	0%	147	100.00%	539,207	89.01%		-	0.0%	131	
	Sub-total	**17,337**	**48,185**	**59%**	**45,887**	**2.01%**	**5,273,930**	**76.50%**		**14,271**	**31.1%**	**768**	**762**
Other Retail Exposures													
	0.00 to <0.15	7,037	726	59%	7,467	0.10%	377,744	53.84%		1,011	13.5%	4	
	0.15 to <0.25	-	3	72%	2	0.17%	17	75.16%		1	50.0%	-	
	0.25 to <0.50	7,852	82	77%	7,915	0.28%	345,582	58.21%		2,484	31.4%	13	
	0.50 to <0.75	7,189	1,102	104%	8,337	0.71%	263,415	56.98%		4,376	52.5%	34	
	0.75 to <2.50	5,425	29	89%	5,451	1.61%	204,001	63.49%		4,443	81.5%	56	
	2.50 to <10.00	2,708	2	108%	2,710	5.12%	117,213	65.81%		2,795	103.1%	89	
	10.00 to <100.00	789	-	682%	789	27.95%	37,114	59.88%		1,163	147.4%	132	
	100.00 (Default)	176	129	0%	176	100.00%	17,196	89.58%		-	0.0%	158	
	Sub-total	**31,176**	**2,073**	**81%**	**32,847**	**2.17%**	**1,362,282**	**58.62%**		**16,273**	**49.5%**	**486**	**260**
Total		**275,504**	**93,318**	**52%**	**323,589**	**0.89%**	**8,248,815**	**34.24%**		**54,155**	**16.7%**	**1,661**	**1,122**

(1) Includes the retail residential mortgage exposures insured by CMHC, Genworth Canada and Canada Guaranty Insurance.

(2) Post-CRM PD weighted by post-CRM EAD.

(3) Number of obligors represents the number of retail accounts.

(4) Post-CRM LGD weighted by post-CRM EAD.

(5) Average maturity is not used in RWA calculation for retail exposures except for the retail residential mortgages where a substitution approach was done to recognize the government guarantee and guarantee of insurance companies.

(6) After application of AIRB scalar of 1.06.

(7) RWA density is calculated as Risk-weighted assets (column i) divided by EAD post-CRM and post-CCF (column d).

(8) Includes all three ECL stages under IFRS 9.

CR6: IRB – Credit risk exposures by portfolio and PD range - Non-Retail [1]

Scotiabank

Q4 2018 $(MM)	PD scale	a Original on-balance sheet gross exposures	b Off-balance sheet exposures pre-CCF	c Average CCF	d EAD post-CRM and post- CCF	e Average PD [2]	f Number of obligors [3]	g Average LGD [4]	h Average maturity [5]	i RWA [6]	j RWA Density [7]	k EL	l Provisions [8]
Sovereign													
	0.00 to <0.15	98,494	1,529	41%	99,266	0.02%	94	11.79%	1.54	1,858	1.9%	3	
	0.15 to <0.25	1,342	63	60%	1,379	0.22%	3	21.00%	2.14	314	22.7%	1	
	0.25 to <0.50	1,944	287	70%	2,145	0.40%	9	19.37%	1.17	516	24.1%	2	
	0.50 to <0.75	1,451	166	17%	1,479	0.55%	9	21.28%	1.02	418	28.3%	2	
	0.75 to <2.50	1,672	106	40%	1,710	1.19%	8	14.52%	1.60	564	33.0%	3	
	2.50 to <10.00	733	5	43%	733	2.77%	10	7.24%	0.78	138	18.8%	1	
	10.00 to <100.00	338	-	-	338	19.45%	1	3.07%	0.25	52	15.5%	2	
	100.00 (Default)	219	2	10%	219	100.00%	3	25.00%	4.34	1	0.6%	55	
	Sub-total	**106,193**	**2,158**	**43%**	**107,269**	**0.34%**	**137**	**12.21%**	**1.53**	**3,861**	**3.6%**	**69**	**4**
Bank													
	0.00 to <0.15	18,040	6,698	62%	22,232	0.07%	268	31.35%	0.67	2,402	10.8%	5	
	0.15 to <0.25	1,135	327	66%	1,370	0.20%	27	34.53%	0.37	330	24.1%	1	
	0.25 to <0.50	1,409	364	72%	1,669	0.37%	51	38.61%	0.47	624	37.4%	2	
	0.50 to <0.75	1,916	211	25%	1,981	0.56%	32	37.10%	0.48	1,023	51.7%	4	
	0.75 to <2.50	51	94	43%	93	1.05%	13	36.22%	0.44	58	63.1%	-	
	2.50 to <10.00	24	1	30%	22	2.77%	11	33.51%	0.25	17	75.6%	-	
	10.00 to <100.00	58	26	11%	61	22.70%	5	34.42%	0.97	113	184.0%	5	
	100.00 (Default)	12	1	37%	2	100.00%	8	30.81%	0.15	1	49.7%	2	
	Sub-total	**22,645**	**7,722**	**62%**	**27,430**	**0.19%**	**415**	**32.39%**	**0.63**	**4,568**	**16.7%**	**19**	**4**

CR6: IRB – Credit risk exposures by portfolio and PD range - Non-Retail [(1)]

Scotiabank

Q4 2018 $(MM)	PD scale	a Original on-balance sheet gross exposures	b Off-balance sheet exposures pre-CCF	c Average CCF	d EAD post-CRM and post- CCF	e Average PD [(2)]	f Number of obligors [(3)]	g Average LGD [(4)]	h Average maturity [(5)]	i RWA [(6)]	j RWA Density [(7)]	k EL	l Provisions [(8)]
Corporate - Other [(9)]													
	0.00 to <0.15	48,985	97,981	56%	111,345	0.08%	1,935	37.68%	2.16	25,134	22.6%	34	
	0.15 to <0.25	12,765	30,509	54%	25,877	0.18%	1,263	41.57%	2.46	10,580	40.9%	20	
	0.25 to <0.50	32,630	38,191	45%	48,048	0.38%	3,613	45.34%	2.21	28,978	60.3%	82	
	0.50 to <0.75	13,441	7,818	32%	15,018	0.53%	508	55.64%	2.24	13,452	89.6%	44	
	0.75 to <2.50	16,813	13,059	42%	21,161	0.95%	2,382	40.92%	2.19	16,722	79.0%	81	
	2.50 to <10.00	1,267	1,441	43%	1,757	2.77%	263	39.44%	1.81	1,819	103.5%	19	
	10.00 to <100.00	1,876	1,221	51%	2,250	20.86%	225	39.55%	2.01	4,281	190.3%	186	
	100.00 (Default)	709	614	92%	917	100.00%	97	46.17%	1.68	3,209	350.1%	269	
	Sub-total	**128,486**	**190,834**	**51%**	**226,373**	**0.90%**	**10,286**	**41.31%**	**2.21**	**104,175**	**46.0%**	**735**	**458**
Corporate – Specialized Lending													
	0.00 to <0.15	2,973	4,331	55%	5,807	0.10%	130	43.32%	2.01	1,506	25.9%	2	
	0.15 to <0.25	3,436	2,338	54%	5,503	0.18%	185	44.01%	1.79	1,994	36.2%	4	
	0.25 to <0.50	8,636	7,330	52%	11,341	0.34%	582	44.97%	1.76	5,947	52.4%	18	
	0.50 to <0.75	152	86	50%	195	0.54%	9	47.59%	1.69	132	67.3%	1	
	0.75 to <2.50	986	437	28%	1,034	0.84%	70	43.71%	1.53	773	74.7%	4	
	2.50 to <10.00	164	97	54%	211	2.77%	6	38.03%	3.47	261	123.5%	2	
	10.00 to <100.00	288	45	41%	280	13.87%	12	41.27%	2.07	558	199.5%	16	
	100.00 (Default)	9	-	75%	9	100.00%	3	48.04%	1.00	15	177.2%	3	
	Sub-total	**16,644**	**14,664**	**53%**	**24,380**	**0.48%**	**997**	**44.23%**	**1.84**	**11,186**	**45.9%**	**50**	**22**
Total		**273,968**	**215,378**	**52%**	**385,452**	**0.67%**	**11,835**	**36.43%**	**1.88**	**123,790**	**32.1%**	**873**	**488**

(1) Excludes the retail residential mortgages insured by CMHC, Genworth Canada and Canada Guaranty Insurance.

(2) Post-CRM PD weighted by post-CRM EAD.

(3) Represents the number of individual borrowers.

(4) Post-CRM LGD weighted by post-CRM EAD.

(5) Effective remaining maturity in years.

(6) After application of AIRB scalar of 1.06.

(7) RWA density is calculated as Risk-weighted assets (column i) divided by EAD post-CRM and post-CCF (column d).

(8) Includes all three ECL stages under IFRS 9, and partial write-offs.

(9) Includes purchased receivables portfolio totaling $1.4 billion EAD, $0.2 billion RWA.

CR7: IRB – Effect on RWA of credit derivatives used as CRM techniques

Scotiabank

Q4 2018 $(MM)		a Pre-credit derivatives RWA	b Actual RWA[1]
1	Sovereign – FIRB	-	-
2	Sovereign – AIRB	3,861	3,861
3	Bank – FIRB	-	-
4	Bank – AIRB	4,568	4,568
5	Corporate – FIRB	-	-
6	Corporate – AIRB	103,969	103,969
7	Specialized lending – FIRB	-	-
8	Specialized lending – AIRB	11,186	11,186
9	Retail – qualifying revolving (QRRE)	14,271	14,271
10	Retail – residential mortgage exposures	23,611	23,611
11	Retail – SME	-	-
12	Other retail exposures	16,273	16,273
13	Equity – FIRB	-	-
14	Equity – AIRB	-	-
15	Purchased receivables – FIRB	-	-
16	Purchased receivables – AIRB	206	206
17	**Total**	**177,945**	**177,945**

(1) As at the reporting date, there was no impact on RWA from credit derivatives, used as a CRM technique, within the banking book.

CR8: RWA flow statements of credit risk exposures under IRB

Scotiabank

Q4 2018 $(MM)		a RWA
1	**RWA as at end of previous reporting period**	**178,655**
2	Asset size [(1)]	289
3	Asset quality [(2)]	(1,541)
4	Model updates [(3)]	-
5	Methodology and policy [(4)]	-
6	Acquisitions and disposals [(5)]	67
7	Foreign exchange movements [(6)]	475
8	Other [(7)]	-
9	**RWA as at end of reporting period**	**177,945**

(1) Organic changes in book size and composition (including origination of new businesses and maturing loans) excluding acquisitions and disposal of entities.

(2) Changes in the assessed quality of the bank's assets due to changes in borrower risk, such as rating grade migration, parameter recalibration, or similar effects.

(3) Changes due to model implementation, changes in model scope, or any changes intended to address model weaknesses.

(4) Changes due to methodological changes in calculations driven by regulatory policy changes, including both revisions to existing regulations and new regulations.

(5) Changes in book size due to acquisitions and/or divestitures.

(6) Changes driven by market movements such as foreign exchange movements.

(7) This category captures changes that cannot be attributed to any other category.

CR9: IRB – Backtesting of probability of default (PD) per portfolio - Retail[1]

a	b	c	d	e	f		g	h	i
Portfolio	PD Range	External rating equivalent[2]	Weighted average PD[3]	Arithmetic average PD by obligors[4]	Number of obligors[5]		Defaulted obligors in the year[8]	of which: new defaulted obligors in the year	Average historical annual default rate[9]
					End of previous year[6],[10]	End of the year[7],[10]			
Retail - insured exposures secured by residential real estate									
	0.00 to <0.15		0.05%	0.05%	227,571	213,983	70	2	0.03%
	0.15 to <0.25		0.24%	0.24%	-	139,975	-	-	0.14%
	0.25 to <0.50		0.34%	0.34%	162,501	4,121	230	5	0.18%
	0.50 to <0.75		0.00%	0.00%	-	-	-	-	0.00%
	0.75 to <2.50		0.96%	0.96%	92,468	80,876	490	13	0.54%
	2.50 to <10.00		3.51%	3.59%	19,387	20,386	539	9	2.23%
	10.00 to <100.00		26.45%	26.18%	4,059	5,651	1,122	9	19.40%
Retail - uninsured exposures secured by residential real estate									
	0.00 to <0.15		0.06%	0.06%	565,127	569,486	142	19	0.03%
	0.15 to <0.25		0.22%	0.19%	190,544	347,070	137	10	0.11%
	0.25 to <0.50		0.34%	0.35%	147,334	1,759	154	6	0.20%
	0.50 to <0.75		0.61%	0.61%	69,757	67,474	220	6	0.37%
	0.75 to <2.50		0.99%	1.11%	96,651	105,772	569	23	0.65%
	2.50 to <10.00		3.15%	3.48%	25,567	28,695	560	15	2.21%
	10.00 to <100.00		24.64%	23.01%	6,504	7,288	1,292	5	16.77%

CR9: IRB – Backtesting of probability of default (PD) per portfolio - Retail[1]

Scotiabank

a	b	c	d	e	f		g	h	i
Portfolio	PD Range	External rating equivalent[2]	Weighted average PD[3]	Arithmetic average PD by obligors[4]	Number of obligors[5]		Defaulted obligors in the year[8]	of which: new defaulted obligors in the year	Average historical annual default rate[9]
					End of previous year[6],[10]	End of the year[7],[10]			
Retail - qualifying revolving (QRRE)									
	0.00 to <0.15		0.05%	0.05%	826,278	871,154	256	6	0.03%
	0.15 to <0.25		0.17%	0.17%	1,499,604	1,615,651	2,213	120	0.13%
	0.25 to <0.50		0.29%	0.29%	321,481	343,055	792	57	0.21%
	0.50 to <0.75		0.62%	0.62%	24,767	23,689	92	1	0.43%
	0.75 to <2.50		1.22%	1.04%	961,393	1,029,091	7,552	1,278	0.76%
	2.50 to <10.00		5.20%	4.54%	684,332	657,040	22,645	801	3.34%
	10.00 to <100.00		27.36%	25.18%	115,924	195,043	29,168	87	20.23%
Other Retail Exposures									
	0.00 to <0.15		0.10%	0.10%	380,809	377,744	209	8	0.07%
	0.15 to <0.25		0.17%	0.17%	13	17	-	-	0.13%
	0.25 to <0.50		0.28%	0.28%	342,851	345,582	539	72	0.23%
	0.50 to <0.75		0.71%	0.73%	256,760	263,415	1,099	187	0.59%
	0.75 to <2.50		1.61%	1.60%	195,307	204,001	1,530	136	1.26%
	2.50 to <10.00		5.12%	5.10%	113,187	117,213	2,946	69	4.11%
	10.00 to <100.00		27.95%	27.69%	39,932	37,114	7,831	54	24.76%

(1) The following percentage of RWAs covered by backtesting results: (a)"Retail - insured exposures secured by residential real estate" portfolio – 99.8% , (b) "Retail - uninsured exposures secured by residential real estate" portfolio – 99.9%, (c) "Retail - qualifying revolving (QRRE)" portfolio – 99.4%, (d) "Other Retail Exposures" portfolio – 99.9%.

(2) External rating equivalent is not available for retail portfolio.

(3) Obligor PD as of Q4 2018 weighted by pre-CRM EAD as of Q4 2018.

(4) Arithmetic average PD by obligors: PD within range by number of obligors within the range.

(5) Number of obligors represents the number of retail accounts.

(6) Includes non-defaulted accounts at Q4 2017; PD Estimates as of Q4 2017.

(7) Includes all the non-defaulted accounts at Q4 2017 and all new accounts acquired during Q1 -Q4 2018 which did not go into default during Q1-Q4 2018; PD Estimates as of Q4 2018.

(8) Includes accounts not in default at Q4 2017 which went into default during Q1-Q4 2018; PD Estimates as of Q4 2017.

(9) The 13-year average of the defaulted rate.

(10) Obligors migration is attributed to PD parameters update in Q1 2018 and does not reflect true model migration.

CR9: IRB – Backtesting of probability of default (PD) per portfolio - Non-Retail

Scotiabank

a	b	c	d	e	f		g	h	i
Portfolio [1]	PD Range	External rating equivalent (S&P)[2]	Weighted average PD[3]	Arithmetic average PD by obligors[4]	Number of obligors		Defaulted obligors in the year[7]	of which: new defaulted obligors in the year[8]	Average historical annual default rate[9]
					End of previous year[5]	End of the year[6]			
Sovereign [10]									
	0.00 to <0.15	AAA to BBB	0.02%	0.05%	109	117	-	-	0.00%
	0.15 to <0.25	BBB+ to BBB-	0.21%	0.21%	4	6	-	-	0.00%
	0.25 to <0.50	BBB to BB	0.36%	0.40%	10	11	-	-	0.00%
	0.50 to <0.75	BB+ to BB	0.54%	0.54%	11	9	-	-	0.00%
	0.75 to <2.50	BB- to B+	1.07%	0.92%	4	8	-	-	0.00%
	2.50 to <10.00	B to B-	2.77%	2.77%	13	10	-	-	3.20%
	10.00 to <100.00	CCC+ and lower	10.18%	10.18%	8	2	2	-	23.13%
Bank									
	0.00 to <0.15	AAA to BBB	0.07%	0.08%	424	418	-	-	0.00%
	0.15 to <0.25	BBB+ to BBB-	0.19%	0.19%	87	77	-	-	0.05%
	0.25 to <0.50	BBB to BB	0.35%	0.37%	122	100	-	-	0.00%
	0.50 to <0.75	BB+ to BB	0.55%	0.54%	83	57	-	-	0.18%
	0.75 to <2.50	BB- to B+	0.80%	0.88%	32	29	-	-	0.00%
	2.50 to <10.00	B to B-	2.77%	2.77%	13	14	-	-	0.22%
	10.00 to <100.00	CCC+ and lower	17.37%	15.18%	17	5	4	2	1.47%

CR9: IRB – Backtesting of probability of default (PD) per portfolio - Non-Retail

Scotiabank

a	b	c	d	e	f		g	h	i
					Number of obligors				
Portfolio [1]	PD Range	External rating equivalent (S&P)[2]	Weighted average PD[3]	Arithmetic average PD by obligors[4]	End of previous year[5]	End of the year[6]	Defaulted obligors in the year[7]	of which: new defaulted obligors in the year[8]	Average historical annual default rate[9]
Corporate - Other[11]									
	0.00 to <0.15	AAA to BBB	0.08%	0.08%	2,013	2,240	-	-	0.00%
	0.15 to <0.25	BBB+ to BBB-	0.18%	0.18%	1,152	1,333	-	-	0.05%
	0.25 to <0.50	BBB to BB	0.38%	0.38%	2,899	3,609	4	-	0.03%
	0.50 to <0.75	BB+ to BB	0.54%	0.55%	550	532	-	-	0.08%
	0.75 to <2.50	BB- to B+	0.92%	0.88%	1,872	2,224	5	3	0.36%
	2.50 to <10.00	B to B-	2.77%	2.77%	280	250	4	-	1.61%
	10.00 to <100.00	CCC+ and lower	22.30%	20.34%	255	228	17	1	8.66%
Corporate-Specialized Lending [12]									
	0.00 to <0.15	AAA to BBB	0.10%	0.11%	129	141	-	-	0.00%
	0.15 to <0.25	BBB+ to BBB-	0.18%	0.18%	184	185	-	-	0.00%
	0.25 to <0.50	BBB to BB	0.33%	0.35%	485	588	-	-	0.09%
	0.50 to <0.75	BB+ to BB	0.57%	0.57%	14	13	-	-	0.12%
	0.75 to <2.50	BB- to B+	0.95%	0.84%	49	80	1	-	0.58%
	2.50 to <10.00	B to B-	2.77%	2.77%	6	3	-	-	4.17%
	10.00 to <100.00	CCC+ and lower	32.66%	35.13%	4	7	-	-	8.05%

(1) All of the AIRB models were back tested.

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

(3) Obligor PD as of Q3 2017 weighted by pre-CRM EAD as of Q3 2017.

(4) Obligor PD as of Q3 2017 weighted by number of obligors within the PD range as of Q3 2017.

(5) Number of non-defaulted obligors as of Q3 2017.

(6) Number of non-defaulted obligors as of Q3 2018.

(7) Number of defaulted obligors during the year ended Q3 2018.

(8) Number of defaulted obligors out of the new obligors during the year ended Q3 2018.

(9) Eight-year average of the annual default rate (number of defaulted obligors during the year out of those non-defaulted obligors existed at the beginning of the year / number of non-defaulted obligors at the beginning of the year). The denominator of annual default rate calculation includes obligors that were no longer on the book by the end of the year.

(10) Average historical annual default rate for Sovereign in the PD range: 10.00 to <100.00 is higher than the reported average PD due to a small number of obligors in this PD range.

(11) Includes the purchased receivables portfolio.

(12) Average historical annual default rate for Corporate - Specialized Lending in the PD range: 2.5 to <10.00 is higher than the reported average PD due to a small number of obligors in this PD range.

CR10: IRB (Specialized lending and equities under the simple risk-weight method) as at Q4 2018 (1)

Specialized Lending

Other than HVCRE

Regulatory Categories	Remaining Maturity	On-balance sheet amount	Off-balance sheet amount	RW	Exposure Amount					RWA	Expected Losses
					PF	OF	CF	IPRE	Total		
Strong	Less than 2.5 Years	-	-	50%	-	-	-	-	-	-	-
	Equal to or more than 2.5 years	-	-	70%	-	-	-	-	-	-	-
Good	Less than 2.5 Years	-	-	70%	-	-	-	-	-	-	-
	Equal to or more than 2.5 years	-	-	90%	-	-	-	-	-	-	-
Satisfactory		-	-	115%	-	-	-	-	-	-	-
Weak		-	-	250%	-	-	-	-	-	-	-
Default		-	-	-	-	-	-	-	-	-	-
Total		-	-		-	-	-	-	-	-	-

HVCRE

Regulatory Categories	Remaining Maturity	On-balance sheet amount	Off-balance sheet amount	RW	Exposure Amount	RWA	Expected Losses
Strong	Less than 2.5 Years	-	-	70%	-	-	-
	Equal to or more than 2.5 years	-	-	95%	-	-	-
Good	Less than 2.5 Years	-	-	95%	-	-	-
	Equal to or more than 2.5 years	-	-	120%	-	-	-
Satisfactory		-	-	140%	-	-	-
Weak		-	-	250%	-	-	-
Default		-	-	-	-	-	-
Total		-	-		-	-	-

Equities under the simple risk-weight approach

Categories	Off-balance sheet amount	RW	Exposure Amount	RWA
Exchange-traded equity exposures	-	190%	-	-
Private equity exposures	-	290%	-	-
Other equity exposures	-	370%	-	-
Total	-		-	-

(1) As at the reporting date, specialized lending and equities under the simple risk-weight method are not applicable.

CCR1: Analysis of counterparty credit risk (CCR) exposure by approach (1)

Scotiabank

Q4 2018 $(MM)		a	b	c	d	e	f
		Replacement cost	Potential future exposure	EEPE	Alpha used for computing regulatory EAD	EAD post- CRM	RWA
1	CEM / SA-CCR (for derivatives) (2)	1,876	1,822		1.00	3,695	2,197
2	Internal Model Method (for derivatives and SFTs) (3)			14,644	1.40	20,501	6,535
3	Simple Approach for credit risk mitigation (for SFTs)					-	-
4	Comprehensive Approach for credit risk mitigation (for SFTs)					29,355	3,991
5	VaR for SFTs					-	-
6	**Total**						**12,723**

(1) Excludes exposures cleared through a CCP and CVA charges.

(2) SA-CCR will be implemented for Capital reporting in Q1, 2019. Figures in line 1 are based on Current Exposure Method (CEM).

(3) Includes OTC derivatives related transactions only.

CCR2: Credit valuation adjustment (CVA) capital charge

Scotiabank

Q4 2018 $(MM)		a EAD post-CRM	b RWA [1]
	Total portfolios subject to the Advanced CVA capital charge	21,711	3,537
1	(i) VaR component (including the 3×multiplier)		847
2	(ii) Stressed VaR component (including the 3×multiplier)		2,690
3	All portfolios subject to the Standardized CVA capital charge	2,657	1,079
4	Total subject to the CVA capital charge	24,368	4,616

(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.

CCR3: Standardized approach – CCR exposures by regulatory portfolio and risk weights

Scotiabank

Q4 2018 $(MM)	a	b	c	d	e	f	g	h	i
Risk weight[1] / Regulatory portfolio	0%	10%	20%	50%	75%	100%	150%	Others	Total credit exposure
Sovereigns	-	-	-	-	-	-	-	-	-
Non-central government public sector entities (PSEs)	-	-	-	-	-	-	-	-	-
Multilateral development banks (MDBs)	-	-	-	-	-	-	-	-	-
Banks	-	-	-	-	-	-	-	-	-
Securities firms	-	-	-	-	-	-	-	-	-
Corporates	-	-	-	-	-	301	-	-	301
Regulatory retail portfolios	-	-	-	-	-	-	-	-	-
Other assets [2]	-	-	-	-	-	-	-	-	-
Total	-	-	-	-	-	301	-	-	301

(1) Total credit exposure: the amount relevant for the capital requirements calculation, having applied CRM techniques.

(2) Other assets: the amount excludes exposures to CCPs, which are reported in CCR8.

CCR4: IRB – CCR exposures by portfolio and PD scale [1]

Q4 2018 $(MM)	PD scale	a	b	c	d	e	f	g
		EAD post-CRM	Average PD [2]	Number of obligors	Average LGD [3]	Average maturity [4]	RWA [5]	RWA Density [6]
Sovereign								
	0.00 to <0.15	6,569	0.03%	51	16%	2	231	3.5%
	0.15 to <0.25	46	0.18%	5	25%	1	8	16.7%
	0.25 to <0.50	23	0.46%	1	25%	1	7	29.4%
	0.50 to <0.75	1	0.57%	1	25%	2	-	38.9%
	0.75 to <2.50	1	0.75%	1	25%	1	1	37.9%
	2.50 to <10.00	-	0.00%	-	0%	-	-	0.0%
	10.00 to <100.00	-	10.18%	1	25%	5	-	131.5%
	100.00 (Default)	-	0.00%	-	0%	-	-	0.0%
	Sub-total	**6,640**	**0.03%**	**60**	**16%**	**2**	**247**	**3.7%**
Bank								
	0.00 to <0.15	12,494	0.07%	169	40%	1	2,500	20.0%
	0.15 to <0.25	1,068	0.18%	37	31%	1	324	30.4%
	0.25 to <0.50	409	0.33%	54	38%	2	218	53.2%
	0.50 to <0.75	86	0.54%	12	40%	1	49	56.8%
	0.75 to <2.50	14	1.38%	4	30%	1	9	61.6%
	2.50 to <10.00	-	2.77%	1	40%	3	-	125.3%
	10.00 to <100.00	-	0.00%	-	0%	-	-	0.0%
	100.00 (Default)	-	0.00%	-	0%	-	-	0.0%
	Sub-total	**14,071**	**0.09%**	**277**	**39%**	**1**	**3,100**	**22.0%**
Corporate								
	0.00 to <0.15	23,922	0.07%	3,002	45%	1	3,591	15.0%
	0.15 to <0.25	2,848	0.19%	418	50%	1	1,248	43.8%
	0.25 to <0.50	2,663	0.37%	772	52%	1	1,677	63.0%
	0.50 to <0.75	300	0.53%	228	60%	2	284	94.6%
	0.75 to <2.50	2,644	0.83%	949	46%	1	2,098	79.3%
	2.50 to <10.00	93	2.77%	60	34%	2	87	93.8%
	10.00 to <100.00	35	12.93%	27	55%	2	90	253.0%
	100.00 (Default)	32	100.00%	7	45%	1	-	0.0%
	Sub-total	**32,537**	**0.29%**	**5,463**	**47%**	**1**	**9,075**	**27.9%**
Total		**53,248**	**0.21%**	**5,800**	**41%**	**1**	**12,422**	**23.3%**

(1) Represents AIRB exposures for Derivatives and SFT.

(2) Post-CRM PD weighted by post-CRM EAD.

(3) Post-CRM LGD weighted by post-CRM EAD.

(4) Effective remaining maturity in years.

(5) After application of AIRB scalar of 1.06.

(6) RWA density is calculated as Risk-weighted assets (column f) divided by EAD post-CRM (column a).

CCR5: Composition of collateral for CCR exposure [1]

Q4 2018 $(MM)	a	b	c	d	e	f
	Collateral used in derivative transactions				Collateral used in SFTs	
	Fair value of collateral received		Fair value of posted collateral		Fair value of collateral received	Fair value of posted collateral
	Segregated [2]	Unsegregated	Segregated [2]	Unsegregated		
Cash – domestic currency	-	1,607	-	266	8,341	4,405
Cash – other currencies	-	5,091	85	6,467	32,301	21,045
Domestic sovereign debt	-	109	-	2,103	297	5,076
Other sovereign debt	-	668	373	1,801	3,410	3,477
Government agency debt	-	818	-	1,714	812	9,765
Corporate bonds	-	85	-	58	15,981	19,500
Equity securities	-	-	5	-	28,304	15,610
Other collateral	-	-	-	-	25	-
Total	**-**	**8,378**	**463**	**12,409**	**89,471**	**78,878**

(1) Provides breakdown of collateral posted or received for SFTs or derivative transactions, including transactions cleared through a CCPs.

(2) Segregated refers to collateral which is held in a bankruptcy-remote manner. Unsegregated refers to collateral that is not held in a bankruptcy-remote manner.

CCR6: Credit derivatives exposures

Q4 2018 $(MM)	a Protection bought	b Protection sold
Notionals		
Single-name credit default swaps	12,296	5,622
Index credit default swaps	-	-
Credit default swaps	12,296	5,622
Total return swaps	11,785	164
Credit options	-	-
Other credit derivatives	-	-
Total notionals	**24,081**	**5,786**
Fair values		
Positive fair value (asset)	323	26
Negative fair value (liability)	(104)	(1)

CCR7: RWA flow statements of CCR exposures under Internal Model Method (IMM)

Scotiabank

	Q4 2018 $(MM)	a Amounts
1	**RWA as at end of previous reporting period [(1)]**	**6,348**
2	Asset size [(2)]	135
3	Asset quality [(3)]	(3)
4	Model updates [(4)]	-
5	Methodology and policy [(5)]	-
6	Acquisitions and disposals [(6)]	-
7	Foreign exchange movements [(7)]	67
8	Other [(8)]	-
9	**RWA as at end of current reporting period**	**6,547**

(1) Includes IMM exposures cleared through a CCP.

(2) Organic changes in book size and composition (including origination of new businesses) excluding acquisitions and disposal of entities.

(3) Changes in the assessed quality of the bank's assets due to changes in borrower risk, such as rating grade migration, parameter recalibrations, or similar effects.

(4) Changes due to model implementation, changes in model scope, or any changes intended to address model weaknesses.

(5) Changes due to methodological changes in calculations driven by regulatory policy changes, including both revisions to existing regulations and new regulations.

(6) Changes in book sizes from acquisitions and/or divestitures.

(7) Changes driven by market movements such as foreign exchange movements.

(8) This category captures changes that cannot be attributed to any other category.

CCR8: Exposures to central counterparties

Scotiabank

	Q4 2018 $(MM)	a EAD (post-CRM)	b RWA
1	**Exposures to QCCPs (total)**		**426**
2	Exposures for trades at QCCPs (excluding initial margin and default fund contributions); of which	9,858	205
3	(i) OTC derivatives	781	16
4	(ii) Exchange-traded derivatives	7,300	153
5	(iii) Securities financing transactions	1,777	36
6	(iv) Netting sets where cross-product netting has been approved	-	-
7	Segregated initial margin	3,247	
8	Non-segregated initial margin	-	-
9	Pre-funded default fund contributions	448	221
10	Unfunded default fund contributions	848	-
11	**Exposures to non-QCCPs (total)**		**47**
12	Exposures for trades at non-QCCPs (excluding initial margin and default fund contributions); of which	-	-
13	(i) OTC derivatives	-	-
14	(ii) Exchange-traded derivatives	-	-
15	(iii) Securities financing transactions	-	-
16	(iv) Netting sets where cross-product netting has been approved	-	-
17	Segregated initial margin	-	
18	Non-segregated initial margin	-	-
19	Pre-funded default fund contributions	4	47
20	Unfunded default fund contributions	-	-

SEC1: Securitization exposures in the banking book

Q4 2018 $(MM)		a [1]	a [2]	b	c	e	f	g	i	j	k
		Bank acts as Originator				Bank acts as Sponsor [3]			Bank acts as Investor [4]		
		Traditional	Traditional	Synthetic	Sub-total	Traditional	Synthetic	Sub-total	Traditional	Synthetic	Sub-total
1	**Retail (total)** – of which	**134**	**652**	**-**	**786**	**11,898**	**-**	**11,898**	**3,957**	**-**	**3,957**
2	Residential Mortgage [5]	-	-	-	**-**	526	-	**526**	143	-	**143**
3	Credit Card	134	-	-	**134**	1,269	-	**1,269**	2,000	-	**2,000**
4	Consumer Receivables	-	205	-	**205**	2,334	-	**2,334**	658	-	**658**
5	Auto Loans/Leases	-	447	-	**447**	7,769	-	**7,769**	1,156	-	**1,156**
6	**Wholesale (total)** – of which	**-**	**-**	**-**	**-**	**6,633**	**-**	**6,633**	**724**	**-**	**724**
7	Trade Receivables	-	-	-	**-**	3,693	-	**3,693**	-	-	**-**
8	Diversified Asset-Backed Securities	-	-	-	**-**	-	-	**-**	36	-	**36**
9	Auto Wholesale/Rentals	-	-	-	**-**	1,843	-	**1,843**	371	-	**371**
10	Other Wholesale	-	-	-	**-**	1,097	-	**1,097**	244	-	**244**
11	Re-Securitization	-	-	-	**-**	-	-	**-**	73	-	**73**

(1) Retained positions where the Bank acts as an originator and has achieved significant and effective risk transfer.

(2) Retained positions where the Bank acts as an originator and has not achieved significant and effective risk transfer.

(3) Retained positions where the bank acts as sponsor include exposures to commercial paper conduits to which the bank provides liquidity facilities.

(4) Retained positions where the bank acts as an investor are the investment positions purchased in third-party deals.

(5) Excludes mortgage-backed securities that do not involve the tranching of credit risk (e.g. NHA MBS) which are not considered securitizations as per OSFI Capital Adequacy Requirements Guideline, Chapter 7, paragraph 3.

SEC2: Securitization exposures in the Trading book

Scotiabank

	Q4 2018 $(MM)	a(1)	a(2)	b	c	e	f	g	i	j	k
		Bank acts as Originator				Bank acts as Sponsor(3)			Bank acts as Investor(4)		
		Traditional	Traditional	Synthetic	Sub-total	Traditional	Synthetic	Sub-total	Traditional	Synthetic	Sub-total
1	**Retail (total)** (5) – of which	**-**	**60**	**-**	**60**	**-**	**-**	**-**	**102**	**-**	**102**
2	Residential Mortgage (6)	-	-	-	**-**	-	-	**-**	-	-	**-**
3	Credit Card	-	-	-	**-**	-	-	**-**	56	-	**56**
4	Consumer Receivables	-	60	-	**60**	-	-	**-**	30	-	**30**
5	Auto Loans/Leases	-	-	-	**-**	-	-	**-**	16	-	**16**
6	**Wholesale (total)** (5) – of which	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**47**	**-**	**47**
7	Trade Receivables	-	-	-	**-**	-	-	**-**	-	-	**-**
8	Diversified Asset-Backed Securities	-	-	-	**-**	-	-	**-**	-	-	**-**
9	Auto Wholesale/Rentals	-	-	-	**-**	-	-	**-**	35	-	**35**
10	Other Wholesale	-	-	-	**-**	-	-	**-**	12	-	**12**
11	Re-Securitization	-	-	-	**-**	-	-	**-**	-	-	**-**

(1) Retained positions where the Bank acts as an originator and has achieved significant and effective risk transfer.

(2) Retained positions where the Bank acts as an originator and has not achieved significant and effective risk transfer.

(3) Retained positions where the Bank acts as sponsor include exposures to commercial paper conduits to which the bank provides liquidity facilities.

(4) Retained positions where the Bank acts as an investor are the investment positions purchased in third-party deals.

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

(6) Excludes mortgage-backed securities that do not involve the tranching of credit risk (e.g. NHA MBS) which are not considered securitizations as per OSFI Capital Adequacy Requirements Guideline, Chapter 7, paragraph 3.

SEC3: Securitization exposures in the banking book and associated regulatory capital requirements – bank acting as originator or as sponsor

Scotiabank

Q4 2018 $(MM)		a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	p	q
		Exposure values (by RW bands)					Exposure values (by regulatory approach)				RWA (by regulatory approach)				Capital charge after cap			
		≤20% RW	>20% to 50% RW	>50% to 100% RW	>100% to <1250% RW	1250% RW	IRB RBA (including IAA)	IRB SFA	SA/SSF A	1250%	IRB RBA (including IAA	IRB SFA	SA/SSF A	1250%	IRB RBA (including IAA)	IRB SFA	SA/SSF A	1250%
1	**Total exposures [(1)(2)]**	**18,531**	**-**	**134**	**-**	**-**	**18,665**	**-**	**-**	**-**	**1,710**	**-**	**-**	**-**	**137**	**-**	**-**	**-**
2	Traditional securitization	18,531	-	134	-	-	18,665	-	-	-	1,710	-	-	-	137	-	-	-
3	Of which securitization	18,531	-	134	-	-	18,665	-	-	-	1,710	-	-	-	137	-	-	-
4	Of which retail underlying	11,898	-	134	-	-	12,032	-	-	-	1,082	-	-	-	87	-	-	-
5	Of which wholesale	6,633	-	-	-	-	6,633	-	-	-	628	-	-	-	50	-	-	-
6	Of which re-securitization	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7	Of which senior	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8	Of which non-senior	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9	Synthetic securitization	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10	Of which securitization	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	Of which retail underlying	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12	Of which wholesale	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13	Of which re-securitization	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14	Of which senior	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15	Of which non-senior	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

(1) 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 conduits.

(2) Included in on-balance sheet exposures 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.

SEC4: Securitization exposures in the banking book and associated capital requirements – bank acting as investor

Scotiabank

Q4 2018 $(MM)		a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	p	q
		Exposure values (by RW bands)					Exposure values (by regulatory approach)				RWA (by regulatory approach)				Capital charge after cap			
		≤20% RW	>20% to 50% RW	>50% to 100% RW	>100% to <1250% RW	1250% RW	IRB RBA (including IAA)	IRB SFA	SA/SSF A	1250%	IRB RBA (including IAA	IRB SFA	SA/SSF A	1250%	IRB RBA (including IAA)	IRB SFA	SA/SSF A	1250%
1	**Total exposures [1][2]**	**4,330**	**298**	**26**	**27**	**-**	**4,681**	**-**	**-**	**-**	**714**	**-**	**-**	**-**	**57**	**-**	**-**	**-**
2	Traditional securitization	4,330	298	26	27	-	4,681	-	-	-	714	-	-	-	57	-	-	-
3	Of which securitization	4,330	241	26	11	-	4,608	-	-	-	607	-	-	-	48	-	-	-
4	Of which retail underlying	3,814	142	1	-	-	3,957	-	-	-	428	-	-	-	34	-	-	-
5	Of which wholesale	516	99	25	11	-	651	-	-	-	179	-	-	-	14	-	-	-
6	Of which re-securitization	-	57	-	16	-	73	-	-	-	107	-	-	-	9	-	-	-
7	Of which senior	-	57	-	16	-	73	-	-	-	107	-	-	-	9	-	-	-
8	Of which non-senior	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9	Synthetic securitization	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10	Of which securitization	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	Of which retail underlying	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12	Of which wholesale	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13	Of which re-securitization	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14	Of which senior	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15	Of which non-senior	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

(1) 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 conduits.

(2) Included in on-balance sheet exposures 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.

LR1 – Summary comparison of accounting assets vs leverage ratio exposure measure

Scotiabank

In $MM		Q4 2018	Q3 2018
1	Total consolidated assets as per published financial statements	998,493	946,703
2	Adjustment for investments in banking, financial, insurance or commercial entities that are consolidated for accounting purposes but outside the scope of regulatory consolidation	(3,834)	(656)
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	(37)	(143)
5	Adjustment for securities financing transactions (ie repos and similar secured lending)	9,993	8,391
6	Adjustment for off-balance sheet items (ie conversion to credit equivalent amounts of off-balance sheet exposures)	132,245	132,839
7	Other adjustments	(17,761)	(15,159)
8	**Leverage ratio exposure measure**	**1,119,099**	**1,071,975**

LR2 – Leverage ratio common disclosure template

Scotiabank

		a	b
		Q4 2018	**Q3 2018**
On-balance sheet exposures in $MM (1)			
1	On-balance sheet exposures (excluding derivatives and securities financing transactions (SFTs), but including collateral)	853,082	826,457
2	(Asset amounts deducted in determining Basel III Tier 1 capital)	(17,761)	(15,159)
3	**Total on-balance sheet exposures** (excluding derivatives and SFTs) (sum of rows 1 and 2)	**835,321**	**811,298**
Derivative exposures			
4	Replacement cost associated with *all* derivatives transactions (where applicable net of eligible cash variation margin and/or with bilateral netting)	7,792	8,014
5	Add-on amounts for PFE associated with *all* derivatives transactions	33,277	28,742
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 derivatives transactions)	(5,525)	(4,264)
8	(Exempted CCP leg of client-cleared trade exposures)	-	-
9	Adjusted effective notional amount of written credit derivatives	5,784	6,811
10	(Adjusted effective notional offsets and add-on deductions for written credit derivatives)	(3,807)	(4,455)
11	**Total derivative exposures (sum of rows 4 to 10)**	**37,521**	**34,848**
Securities financing transaction exposures			
12	Gross SFT *assets* (with no recognition of netting), after adjusting for sale accounting transactions	116,376	96,720
13	(Netted amounts of cash payables and cash receivables of gross SFT assets)	(12,357)	(12,121)
14	CCR exposure for SFT assets	9,993	8,391
15	Agent transaction exposures	-	-
16	**Total securities financing transaction exposures (sum of rows 12 to 15)**	**114,012**	**92,990**
Other off-balance sheet exposures			
17	Off-balance sheet exposure at gross notional amount	424,109	421,335
18	(Adjustments for conversion to credit equivalent amounts)	(291,864)	(288,496)
19	**Off-balance sheet items (sum of rows 17 and 18)**	**132,245**	**132,839**
Capital and total exposures			
20	**Tier 1 capital**	**50,187**	**52,540**
21	**Total exposures (sum of rows 3, 11, 16 and 19)**	**1,119,099**	**1,071,975**
Leverage ratio			
22	**Basel III leverage ratio**	**4.5%**	**4.9%**

(1) On-balance sheet items excludes securities purchased under resale agreements and securities borrowed ($104,019), derivative financial instruments ($37,558), assets outside the regulatory scope of consolidation ($3,834).

REGULATORY CAPITAL - DEFINITION OF CAPITAL COMPONENTS [1]

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	($MM)	Cross-Reference[2]	All-in Q4 2018	All-in Q3 2018
	Common Equity Tier 1 Capital: Instruments and Reserves			
1	Directly issued qualifying common share capital plus related stock surplus	u+y	**18,321**	18,454
2	Retained Earnings	v	**41,414**	40,652
3	Accumulated Other Comprehensive Income	w	**992**	1,646
5	Common share capital issued by subsidiaries and held by third parties (amount allowed in group CET1)	bb	**1,628**	1,329
6	Common Equity Tier 1 capital before regulatory adjustments		**62,355**	62,081
	Common Equity Tier 1 Capital: Regulatory Adjustments			
8	Goodwill (net of related tax liability)	g	**(10,504)**	(9,403)
9	Intangibles other than mortgage-servicing rights (net of related tax liability)	h-q+i-r	**(5,924)**	(4,641)
10	Deferred tax assets that rely on future profitability excluding those arising from temporary differences (net of related tax liability)	k	**(335)**	(343)
11	Cash flow hedge reserve	x	**121**	22
12	Shortfall of allowances to expected losses	ee	**-**	-
14	Gains and losses due to changes in own credit risk on fair value liabilities	p	**(151)**	(145)
15	Defined-benefit pension fund net assets (net of related tax liability)	l-s	**(246)**	(189)
16	Investments in own shares (if not already netted off paid-in capital on reported balance sheet)	a	**(7)**	(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	**(577)**	(416)
22	Amount exceeding the 15% threshold		**(286)**	(177)
23	of which: significant investments in the common stock of financials	f	**(186)**	(117)
25	of which: deferred tax assets arising from temporary differences	j	**(100)**	(60)
26	Other deductions from CET1 as determined by OSFI	o	**(3)**	(3)
28	Total regulatory adjustments to Common Equity Tier 1		**(17,912)**	(15,304)
29	**Common Equity Tier 1 Capital (CET1)**		**44,443**	46,777
	Additional Tier 1 Capital: Instruments			
30	Directly issued qualifying Additional Tier 1 instruments plus related stock surplus	z	**3,210**	2,911
31	of which: classified as equity under applicable accounting standards		**3,210**	2,911
33	Directly issued capital instruments subject to phase-out from Additional Tier 1	aa [3]	**2,374**	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	**160**	239
36	**Additional Tier 1 capital before regulatory adjustments**		**5,744**	5,763
	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		**-**	-
43	**Total regulatory adjustments to Additional Tier 1 capital**		**-**	-
44	**Additional Tier 1 Capital (AT1)**		**5,744**	5,763
45	**Tier 1 Capital (T1=CET1 + AT1)**		**50,187**	52,540
	Tier 2 Capital: Instruments and Provisions			
46	Directly issued qualifying Tier 2 instruments	m	**3,569**	3,557
47	Directly issued capital instruments subject to phase-out from Tier 2		**2,129**	2,130
48	Tier 2 instruments issued by subsidiaries and held by third parties (amount allowed in group Tier 2)	dd	**99**	95
50	Eligible Allowance and Excess of allowance over expected loss	c+d	**1,380**	1,515
51	Tier 2 capital before regulatory adjustments		**7,177**	7,297

	($MM)	Cross-Reference[2]	All-in Q4 2018	All-in Q3 2018
	Tier 2 Capital: Regulatory Adjustments			
57	Total regulatory adjustments to Tier 2 capital		**-**	-
58	**Tier 2 Capital (T2)**		**7,177**	7,297
59	**Total Capital (TC = T1 + T2)**		**57,364**	59,837
60	**Total Risk-weighted Assets**		**-**	-
60a	**Common Equity Tier 1 (CET1) Capital RWA**		**400,507**	411,426
60b	**Tier 1 Capital RWA**		**400,680**	411,604
60c	**Total Capital RWA**		**400,853**	411,783
	Capital Ratios and Buffers			
61	**Common Equity Tier 1 (as a percentage of risk-weighted assets)**		**11.1**	11.4
62	**Tier 1 (as a percentage of risk-weighted assets)**		**12.5**	12.8
63	**Total capital (as a percentage of risk-weighted assets)**		**14.3**	14.5
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)		**11.1**	11.4
	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		**786**	1,080
73	Significant investments in the common stock of financial institutions		**4,344**	4,620
75	Deferred tax assets arising from temporary differences (net of related tax liability)		**2,322**	2,396
	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)		**1,323**	1,411
77	Cap on inclusion of allowances in Tier 2 under standardized approach		**1,659**	1,709
78	Allowances eligible for inclusion in Tier 2 in respect to exposures subject to internal ratings-based approach (prior to application of cap)		**58**	105
79	Cap for inclusion of allowances in Tier 2 under internal ratings-based approach		**1,293**	1,294
	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
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 transtional 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)

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($MM)	Cross Reference to Tab Def_Cap Definition of Capital Components	Consolidated Statement of Financial Position (1) Q4 2018	Under regulatory scope of consolidation (2) Q4 2018
Assets			
Cash and deposits with financial institutions		**62,269**	62,033
Precious metals		**3,191**	3,191
Trading Assets			
Securities		**85,474**	85,469
- Investment in own shares	a		7
- Other trading securities			85,462
Loans		**14,334**	14,334
Other		**454**	454
		100,262	100,257
Financial instruments designated at fair value through profit or loss		**12**	12
Securities purchased under resale agreements and securities borrowed		**104,018**	104,011
Derivative financial instruments		**37,558**	37,558
Investment securities		**78,396**	77,419
- Significant investments in Additional Tier 1 capital of other financial institutions reflected in regulatory capital	b		-
-Other securities (3)			77,419
Loans			
Residential mortgages		**253,357**	253,169
Personal loans		**96,019**	96,004
Credit cards (3)		**16,485**	14,884
Business and government (3)		**191,038**	190,979
		556,899	555,036
Allowance for credit losses		**5,065**	5,065
- Allowance reflected in Tier 2 capital	c		1,322
- Shortfall of allowances to expected loss	ee		-
- Excess of allowances to expected loss	d		58
- Allowances not reflected in regulatory capital			3,685
Other			
Customers' liability under acceptances, net of allowance		**16,329**	16,338
Property and equipment		**2,684**	2,680
Investments in associates		**4,850**	5,202
- Significant Investments in other financial institutions including deconsolidated subsidiaries exceeding 10% regulatory thresholds	e		577
- Significant Investments in other financial institutions including deconsolidated subsidiaries exceeding 15% regulatory thresholds	f		186
- Significant Investments in other financial institutions including deconsolidated subsidiaries within regulatory thresholds			4,416
Goodwill and other intangible assets		**17,719**	18,216
- Goodwill	g		10,007
- Imputed goodwill for significant investments	g		497
- Intangibles (excl. computer software)	h		5,471
- Computer software intangibles	i		2,241
Deferred tax assets		**1,938**	1,943
- Deferred tax assets arising from temporary differences exceeding the regulatory threshold	j		100
- Deferred tax assets that rely on future profitability	k		335
- Deferred tax assets not deducted from regulatory capital			1,508
Other assets		**17,433**	13,708
- Defined pension fund assets	l		365
- Other assets			13,343
		60,953	58,087
Total assets		**998,493**	992,539

($MM)	Cross Reference to Tab Def_Cap Definition of Capital Components	Consolidated Statement of Financial Position (1) Q4 2018	Under regulatory scope of consolidation (2) Q4 2018
Liabilities			
Deposits			
Personal		**214,545**	214,540
Business and government		**422,002**	422,002
Financial institutions		**39,987**	39,987
		676,534	676,534
Financial instruments designated at fair value through profit or loss		**8,188**	8,188
Other			
Acceptances		**16,338**	16,338
Obligations related to securities sold short		**32,087**	32,087
Derivative financial instruments		**37,967**	37,967
Obligations related to securities sold under repurchase agreements and securities lent		**101,257**	101,257
Subordinated debentures		**5,698**	5,698
- Regulatory capital amortization of maturing debentures			-
- Subordinated debentures used for regulatory capital			-
- of which: are included in Tier 2 capital	m		3,569
- of which: are subject to phase-out included in Tier 2 capital (40%)			2,129
- of which: are subject to phase-out not included in Tier 2 capital			-
Other liabilities		**52,744**	46,795
- Liquidity reserves	o		3
- Gains/losses due to changes in own credit risk including DVA on derivatives	p		151
- Deferred tax liabilities			1,205
- Intangible assets (excl. computer software and mortgage servicing rights)	q		1,472
- Intangible assets - computer software	r		316
- Defined benefit pension fund assets	s		119
- Other deferred tax liabilities			(702)
- Other liabilities			45,436
		246,091	240,142
Total liabilities		**930,813**	924,864
Equity			
Common equity			
- Common shares	u	**18,234**	18,234
- Retained earnings	v	**41,414**	41,414
- Accumulated other comprehensive income	w	**992**	992
- Cash flow hedging reserve	x		(121)
- Other			1,113
- Other reserves		**404**	404
- portion allowed for inclusion into CET1	y		87
- portion not allowed for regulatory capital			317
Total common equity		**61,044**	61,044
Preferred shares and other equity instruments		**4,184**	4,184
- of which: are qualifying Tier 1 capital	z		3,210
- of which: are subject to phase out and included in Tier 1 capital (40%)	aa		974
- of which: are subject to phase out and not included into Tier 1 capital			-
Total equity attributable to equity holders of the Bank		**65,228**	65,228
Non-controlling interests			-
Non-controlling interests in subsidiaries		**2,452**	2,452
- portion allowed for inclusion into CET1	bb		1,628
- portion allowed for inclusion into Tier 1 capital	cc		160
- portion allowed for inclusion into Tier 2 capital	dd		99
- portion not allowed for regulatory capital			565
Total equity		**67,680**	67,680
Total liabilities and equity		**998,493**	992,539

(1) Consolidated Statement of Financial Position as reported in the 2018 Annual Report (page 142). 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: $528MM, equity: $143MM), Scotia Life Insurance Company (assets: $163MM, equity: $210MM), Scotia Reinsurance Limited (assets: $214MM, equity $82MM), Scotia Jamaica Life Insurance Co. Ltd (assets: $607MM, equity: $104MM), Scotia Life Trinidad and Tobago Ltd (assets: $434MM, equity: $76MM), Scotia Seguros SA Dominican Republic (assets: $33MM, equity: $14MM), Scotia Insurance Caribbean Ltd. (assets: $12MM, equity: $14MM), BBVA Seguros (assets: $272MM, equity: $71MM), Scotia Seguros SA El Salvador (assets: $100MM, equity: $85MM) and MD Life Insurance Company (assets: $2,754MM, equity: $16MM).

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

FLOW STATEMENT FOR REGULATORY CAPITAL

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Scotiabank

($MM)	Basel III All-in							
	IFRS 9 (1)				IAS 39 (1)			
	Q4 2018	Q3 2018	Q2 2018	Q1 2018	Q4 2017	Q3 2017	Q2 2017	Q1 2017
Common Equity Tier 1 (CET1) capital								
Opening amount	46,777	45,025	42,990	43,352	41,369	42,474	40,540	39,989
Net income attributable to equity holders of the Bank	2,179	1,983	2,107	2,279	2,015	2,045	1,997	1,948
Dividends paid to equity holders of the Bank	(1,108)	(1,038)	(1,047)	(979)	(976)	(940)	(947)	(934)
Shares issued	16	2,596	34	62	61	21	93	138
Shared repurchased/redeemed	(380)	(74)	-	(178)	-	(299)	(572)	(138)
Removal of own credit spread (net of tax)	(6)	(33)	(21)	35	17	132	(4)	40
Movements in other comprehensive income (OCI), excluding cash flow hedges	(556)	87	1,158	(918)	1,029	(2,740)	1,611	(534)
Currency translation differences	(566)	(70)	1,222	(1,006)	1,007	(2,885)	1,835	(1,151)
Debt and equity investments fair valued through OCI (2)	(63)	(19)	(92)	27	(23)	(92)	103	(49)
Employee Benefits	81	158	5	58	29	222	(338)	667
Other	(8)	18	23	3	16	15	11	(1)
Goodwill and other intangible assets (deduction, net of related tax liability)	(2,384)	(2,367)	(222)	50	(159)	370	(233)	106
Other, including regulatory adjustments and transitional arrangements	(95)	598	26	(713)	(4)	306	(11)	(75)
Deferred tax assets that rely on future probability	8	(2)	41	35	18	9	23	17
IFRS 9 impact (3)	-	-	-	(564)	-	-	-	-
Threshold deductions	(270)	(133)	(41)	(148)	29	284	(181)	32
Other	167	733	26	(36)	(51)	13	147	(124)
Closing Amount	**44,443**	**46,777**	**45,025**	**42,990**	**43,352**	**41,369**	**42,474**	**40,540**
Other Additional Tier 1 capital								
Opening amount	5,763	5,683	5,658	6,121	4,544	4,574	4,707	5,077
Capital issuances	300	-	-	-	1,560	-	-	-
Redeemed capital	(350)	-	(345)	-	-	-	(230)	(345)
Other, capital including regulatory adjustments and transitional arrangements (NVCC)	31	80	370	(463)	17	(30)	97	(25)
Closing Amount	5,744	5,763	5,683	5,658	6,121	4,544	4,574	4,707
Total Tier 1 capital	**50,187**	**52,540**	**50,708**	**48,648**	**49,473**	**45,913**	**47,048**	**45,247**
Tier 2 capital								
Opening amount	7,297	7,008	6,989	6,640	8,016	8,262	8,153	8,264
Capital issuances	-	-	-	-	-	-	-	-
Redeemed capital	-	-	(119)	(113)	(1,500)	-	-	-
Amortization adjustments	-	-	-	-	-	-	-	-
Other, including regulatory adjustments and transitional adjustments (NVCC)	(120)	289	138	462	124	(246)	109	(111)
Closing Amount	7,177	7,297	7,008	6,989	6,640	8,016	8,262	8,153
Total regulatory capital	**57,364**	**59,837**	**57,716**	**55,637**	**56,113**	**53,929**	**55,310**	**53,400**

(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

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($B)	Basel III - All-in							
	IFRS 9 (1)				IAS 39 (1)			
	Q4 2018	Q3 2018	Q2 2018	Q1 2018	Q4 2017	Q3 2017	Q2 2017	Q1 2017
RISK-WEIGHTED ASSETS:(2)								
On-Balance Sheet Assets								
Cash Resources	**3.9**	3.3	3.5	3.1	3.1	3.0	4.3	3.5
Securities	**7.9**	8.9	8.5	8.6	8.8	9.2	10.2	9.4
Residential Mortgages	**35.9**	37.2	32.0	31.6	30.0	28.8	27.9	25.7
Loans								
- Personal Loans	**59.3**	59.6	54.3	53.7	53.3	52.1	51.9	50.5
- Non-Personal Loans	**130.0**	131.1	118.6	114.3	116.0	115.1	121.0	114.6
All Other	**31.9**	32.1	32.2	31.6	30.0	29.5	29.8	29.2
	268.9	**272.2**	**249.1**	**242.9**	**241.2**	**237.7**	**245.1**	**232.9**
Off-Balance Sheet Assets								
Indirect Credit Instruments	**54.2**	55.1	53.5	51.2	52.8	51.6	58.1	53.1
Derivative Instruments	**13.0**	12.9	12.1	10.1	10.7	11.2	12.0	13.4
	67.2	**68.0**	**65.6**	**61.3**	**63.5**	**62.8**	**70.1**	**66.5**
Total Credit Risk before AIRB scaling factor	**336.1**	**340.2**	**314.7**	**304.2**	**304.7**	**300.5**	**315.2**	**299.4**
AIRB Scaling factor(3)	**11.0**	11.0	10.7	10.5	10.5	10.3	10.9	10.4
Total Credit Risk after AIRB scaling factor	**347.1**	**351.2**	**325.4**	**314.7**	**315.2**	**310.8**	**326.1**	**309.8**
Market Risk - Risk Assets Equivalent	**8.4**	16.4	8.8	9.9	7.8	8.9	9.2	10.6
Operational Risk - Risk Assets Equivalent	**45.0**	43.8	41.7	41.2	40.6	40.1	39.6	39.2
Regulatory Capital Floor Adjustment to CET1 RWA (4)	**-**	-	-	16.4	12.8	5.6	-	-
CET1 Risk-Weighted Assets (4)(5)	**400.5**	**411.4**	**375.9**	**382.2**	**376.4**	**365.4**	**374.9**	**359.6**
Tier 1 Risk-Weighted Assets(4)(5)	**400.7**	**411.6**	**376.0**	**382.2**	**376.4**	**365.4**	**375.1**	**359.9**
Total Risk-Weighted Assets (4)(5)	**400.9**	**411.8**	**376.2**	**382.2**	**376.4**	**365.4**	**375.4**	**360.2**
REGULATORY CAPITAL RATIOS (%):								
Common Equity Tier 1	**11.1**	11.4	12.0	11.2	11.5	11.3	11.3	11.3
Tier 1	**12.5**	12.8	13.5	12.7	13.1	12.6	12.5	12.6
Total	**14.3**	14.5	15.3	14.6	14.9	14.8	14.7	14.8

(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 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 July 31, 2018 and 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).

(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)

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Credit Risk Risk-weighted Assets (RWA) [1]	Q4 2018		Q3 2018	
($MM)	Credit Risk	Of which Counterparty Credit Risk	Credit Risk	Of which Counterparty Credit Risk
CET1 Credit risk-weighted assets as at beginning of Quarter	**351,187**	**17,349**	325,346	18,100
Book size[2]	**617**	**(6)**	2,482	(3,866)
Book quality	**(1,552)**	**(12)**	1,599	(32)
Model updates[3]	**-**	**-**	-	-
Methodology and policy[4]	**-**	**-**	-	-
Acquisitions and disposals	**139**	**-**	21,056	2,998
Foreign exchange movements	**(3,295)**	**212**	704	149
Other	**-**	**-**	-	-
CET1 Credit risk-weighted assets as at end of Quarter	**347,096**	**17,543**	351,187	17,349
Tier 1 CVA scalar	**173**	**173**	178	178
Tier 1 Credit risk-weighted assets as at end of Quarter	**347,269**	**17,716**	351,366	17,528
Total CVA scalar	**173**	**173**	178	178
Total Credit risk-weighted assets as at end of Quarter	**347,442**	**17,889**	351,544	17,706

(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)	Q4 2018	Q3 2018
Market risk-weighted assets as at beginning of Quarter	**16,402**	8,835
Movement in risk levels[1]	**(5,701)**	4,532
Model updates[2]	**(2,344)**	-
Methodology and policy[3]	**-**	-
Acquisitions and disposals	**-**	3,035
Other	**-**	-
Market risk-weighted assets as at end of Quarter	**8,357**	16,402

(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)	Q4 2018	Q3 2018
Operational risk-weighted assets as at beginning of Quarter	**43,837**	41,720
Acquisitions and disposals	**648**	1,541
Higher Revenue	**569**	576
Operational risk-weighted assets as at end of Quarter	**45,054**	43,837

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

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($B)	Q4 2018				
CET1 Risk-weighted Assets (RWA)	Canadian Banking	International Banking	Global Banking & Markets	Other	All Bank
CET1 RWA	$129.5	$165.5	$96.3	$9.2	$400.5
Proportion of Bank	32%	41%	24%	3%	100%
Comprised of:					
Credit risk	85%	89%	85%	93%	87%
Market risk	- %	1%	6%	14%	2%
Operational risk	15%	10%	9%	-7%	11%

($B)	Q3 2018				
CET1 Risk-weighted Assets (RWA)	Canadian Banking	International Banking	Global Banking & Markets	Other	All Bank
CET1 RWA ($B)	$128.5	$174.0	$100.5	$8.4	$411.4
Proportion of Bank	31%	42%	24%	3%	100%
Comprised of:					
Credit risk	85%	87%	81%	94%	85%
Market risk	- %	3%	10%	13%	4%
Operational risk	15%	10%	9%	-7%	11%

CREDIT RISK EXPOSURES BY GEOGRAPHY (1)(2)

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Exposure at Default

($MM)	Q4 2018					Q3 2018				
	Non-Retail			Retail	Total	Non-Retail			Retail	Total
	Drawn	Undrawn	Other (3)			Drawn	Undrawn	Other (3)		
Canada	**101,207**	**41,691**	**37,748**	**341,157**	**521,803**	98,613	40,098	36,859	339,036	**514,606**
USA	**102,265**	**33,103**	**42,771**	**-**	**178,139**	88,011	33,556	40,772	-	**162,339**
Chile	**23,140**	**1,038**	**5,066**	**23,908**	**53,152**	26,798	677	5,485	24,545	**57,505**
Mexico	**18,714**	**1,339**	**2,611**	**10,630**	**33,294**	19,786	1,279	2,691	10,974	**34,730**
Peru	**15,686**	**1,506**	**2,992**	**8,311**	**28,495**	16,287	1,394	3,070	8,238	**28,989**
Colombia	**5,233**	**486**	**434**	**7,496**	**13,649**	5,642	562	411	8,175	**14,790**
Other International										
Europe	**25,357**	**7,041**	**10,215**	**-**	**42,613**	24,906	7,950	9,325	-	**42,181**
Caribbean	**17,712**	**1,676**	**910**	**18,004**	**38,302**	17,968	1,578	1,116	17,865	**38,527**
Latin America (other)	**9,532**	**909**	**227**	**700**	**11,368**	8,095	647	366	706	**9,814**
All Other	**22,647**	**3,514**	**2,258**	**-**	**28,419**	21,275	3,694	2,298	-	**27,267**
Total	**341,493**	**92,303**	**105,232**	**410,206**	**949,234**	**327,381**	**91,435**	**102,393**	**409,539**	**930,748**

($MM)	Q2 2018	Q1 2018	Q4 2017	Q3 2017	Q2 2017
Canada	507,981	504,021	502,224	482,840	481,291
USA	173,649	157,375	157,386	156,672	151,257
Chile	30,015	28,537	27,190	26,306	26,701
Mexico	33,051	31,653	30,528	33,202	30,094
Peru	27,960	26,834	28,733	27,474	29,973
Colombia	12,717	12,294	10,859	10,586	11,399
Other International					
Europe	41,039	43,940	43,030	43,344	47,129
Caribbean	38,665	37,355	39,358	38,484	42,217
Latin America (other)	10,535	9,331	9,035	8,225	9,433
All Other	29,473	29,338	30,070	29,354	30,869
Total	**905,085**	**880,678**	**878,413**	**856,487**	**860,363**

(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)

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NON-RETAIL AND RETAIL PORTFOLIO EXPOSURE AT DEFAULT

($MM)	Q4 2018				Q3 2018			
	Drawn	Undrawn	Other (3)	Total	Drawn	Undrawn	Other (3)	Total
Non-Retail								
Less than 1 year	**145,558**	**25,264**	**64,808**	**235,630**	129,813	25,654	66,233	**221,700**
1 to 5 years	**119,182**	**59,726**	**29,892**	**208,800**	117,780	58,365	26,266	**202,411**
Over 5 Years	**9,228**	**1,809**	**6,581**	**17,618**	8,242	2,172	5,301	**15,715**
Total Non-Retail	**273,968**	**86,799**	**101,281**	**462,048**	**255,835**	**86,191**	**97,800**	**439,826**
Retail								
Less than 1 year	**31,406**	**19,535**		**50,941**	30,115	19,187		**49,302**
1 to 5 years	**188,922**	**-**		**188,922**	188,710	-		**188,710**
Over 5 Years	**15,259**	**-**		**15,259**	15,487	-		**15,487**
Revolving Credits (4)	**39,917**	**28,550**		**68,467**	40,383	27,794		**68,177**
Total Retail	**275,504**	**48,085**		**323,589**	**274,695**	**46,981**		**321,676**
Total	**549,472**	**134,884**	**101,281**	**785,637**	**530,530**	**133,172**	**97,800**	**761,502**

($MM)	Q2 2018	Q1 2018	Q4 2017	Q3 2017
Non-Retail				
Less than 1 year	225,404	222,092	213,124	215,852
1 to 5 years	199,373	187,469	192,087	180,521
Over 5 Years	20,555	18,796	23,217	18,309
Total Non-Retail	**445,332**	**428,357**	**428,428**	**414,682**
Retail				
Less than 1 year	50,158	50,182	51,045	47,810
1 to 5 years	185,391	182,504	178,940	177,145
Over 5 Years	15,670	15,860	16,299	17,009
Revolving Credits (4)	66,556	66,657	66,027	65,215
Total Retail	**317,775**	**315,203**	**312,311**	**307,179**
Total	**763,107**	**743,560**	**740,739**	**721,861**

(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.

AIRB CREDIT LOSSES

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Exposure Type	Q4 2018		Q3 2018		Q2 2018		Q1 2018		Q4 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**	**0.57**	0.06	0.59	0.08	0.68	0.06	0.76	0.07	0.80
Sovereign	**-**	**0.02**	-	0.02	-	0.02	-	0.02	-	0.02
Bank	**-**	**0.10**	-	0.13	-	0.09	-	0.09	-	0.08
Retail(2)										
Real Estate Secured	**0.01**	**0.12**	0.01	0.12	0.01	0.12	0.01	0.12	0.01	0.12
QRRE	**2.50**	**3.92**	2.65	3.87	2.87	3.94	3.04	4.38	3.18	4.22
Other Retail	**0.57**	**1.66**	0.61	1.74	0.67	1.85	0.69	2.01	0.69	1.85

(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

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($MM) [1]	Q4 2018						Q3 2018					
	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	**0.89**	**0.27**	**40.76**	**31.16**	**48.92**	**10.64**	0.92	0.18	41.38	27.88	48.79	21.98

(1) Reporting is on a one quarter lag basis. For reporting as of Q4/18, estimated parameters are based on portfolio averages at Q3/17 whereas actual parameters are based on averages of realized parameters during the subsequent four quarters (Q4/17 – Q3/18).

(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) [1]	Four-quarter period ending Q4 2018						Four-quarter period ending Q3 2018					
	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]	**0.70**	**0.47**	**-**	**-**	**-**	**-**	0.66	0.45	-	-	-	-
Uninsured mortgages	**0.51**	**0.30**	**18.23**	**11.78**	**-**	**-**	0.47	0.31	17.05	12.17	-	-
Secured lines of credit	**0.39**	**0.26**	**28.87**	**17.25**	**91**	**83**	0.40	0.27	29.24	16.28	89	81
Qualifying revolving retail exposures	**2.00**	**1.64**	**79.69**	**70.04**	**681**	**593**	2.01	1.65	79.73	69.26	669	582
Other retail	**1.90**	**1.14**	**60.77**	**49.38**	**7**	**7**	1.90	1.17	60.53	49.17	4	4

(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.

DERIVATIVES - COUNTERPARTY CREDIT RISK (1)

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($MM)	Q4 2018				Q3 2018				Q2 2018				Q1 2018			
Contract Types	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)
Interest Rate Contracts:																
Futures and Forward Rate Agreements	**458,028**	**36**	**250**	**82**	437,173	40	247	89	522,515	72	295	80	475,328	9	204	40
Swaps	**3,598,398**	**96**	**4,436**	**1,125**	3,503,927	1,024	5,678	1,919	3,605,918	253	4,870	1,142	3,106,659	561	4,560	854
Options Purchased	**33,019**	**36**	**138**	**63**	41,843	12	90	46	44,468	3	1,122	351	44,681	1	89	41
Options Written	**34,655**	**-**	**2**	**1**	37,075	-	1	-	35,392	-	3	1	39,851	-	1	-
Total	**4,124,100**	**168**	**4,826**	**1,271**	**4,020,018**	**1,076**	**6,016**	**2,054**	**4,208,293**	**328**	**6,290**	**1,574**	**3,666,519**	**571**	**4,854**	**935**
Foreign Exchange Contracts:																
Futures and Forwards	**474,024**	**2,571**	**5,525**	**2,006**	516,792	1,904	4,128	1,625	497,076	1,419	4,900	1,665	540,034	2,889	5,423	1,569
Swaps	**399,538**	**4,297**	**8,267**	**2,611**	392,657	5,263	5,828	1,915	379,532	3,668	5,950	1,982	379,457	3,674	6,404	1,980
Options Purchased	**42,545**	**712**	**240**	**76**	50,450	620	247	73	40,694	482	614	190	34,873	458	407	121
Options Written	**41,804**	**-**	**20**	**5**	48,963	-	19	5	39,683	-	98	29	35,032	-	46	7
Total	**957,911**	**7,580**	**14,052**	**4,698**	**1,008,862**	**7,787**	**10,222**	**3,618**	**956,985**	**5,569**	**11,562**	**3,866**	**989,396**	**7,021**	**12,280**	**3,677**
Other Derivatives Contracts:																
Equity	**123,305**	**455**	**4,927**	**1,505**	118,693	78	4,796	1,468	112,499	13	5,307	1,670	108,887	5	4,674	1,425
Credit	**29,866**	**239**	**420**	**119**	31,283	55	351	104	33,586	46	950	164	34,372	1	1,295	182
Other	**100,576**	**1,182**	**8,052**	**830**	97,325	1,256	7,695	899	110,229	1,555	8,240	1,033	113,275	856	8,770	1,082
Total	**253,747**	**1,876**	**13,399**	**2,454**	**247,301**	**1,389**	**12,842**	**2,471**	**256,314**	**1,614**	**14,497**	**2,867**	**256,534**	**862**	**14,739**	**2,689**
Credit Valuation Adjustment(2)				**4,616**				**4,755**				**3,757**				**2,760**
Total Derivatives after Netting and Collateral	**5,335,758**	**9,624**	**32,277**	**13,039**	**5,276,181**	**10,252**	**29,080**	**12,898**	**5,421,592**	**7,511**	**32,349**	**12,064**	**4,912,449**	**8,454**	**31,873**	**10,061**

	Q4 2017		Q3 2017		Q2 2017		Q1 2017	
Contract Types	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	491,651	20	415,898	14	476,404	14	332,808	25
Swaps	2,803,343	1,341	2,640,075	1,350	2,343,203	1,626	2,230,451	1,774
Options Purchased	39,664	57	51,756	49	40,690	77	47,480	51
Options Written	40,993	3	51,034	36	43,454	3	39,102	21
Total	**3,375,651**	**1,421**	**3,158,763**	**1,449**	**2,903,751**	**1,720**	**2,649,841**	**1,871**
Foreign Exchange Contracts:								
Futures and Forwards	481,187	1,765	436,986	1,493	461,815	1,375	444,052	1,303
Swaps	386,010	1,899	363,821	2,015	377,982	1,881	360,893	1,821
Options Purchased	39,116	113	29,540	152	26,363	226	21,701	233
Options Written	40,028	12	30,850	10	26,732	38	21,607	20
Total	**946,341**	**3,789**	**861,197**	**3,670**	**892,892**	**3,520**	**848,253**	**3,377**
Other Derivatives Contracts:								
Equity	101,390	1,575	91,683	1,470	100,502	1,740	105,035	1,670
Credit	37,591	174	37,431	217	42,705	196	43,928	496
Other	87,415	807	95,161	683	118,764	905	111,153	1,259
Total	**226,396**	**2,556**	**224,275**	**2,370**	**261,971**	**2,841**	**260,116**	**3,425**
Total Derivatives	**4,548,388**	**7,766**	**4,244,235**	**7,489**	**4,058,614**	**8,081**	**3,758,210**	**8,673**
Credit Valuation Adjustment(2)		**2,988**		**3,733**		**3,923**		**4,769**
Risk-weighted Amount		**10,754**		**11,222**		**12,004**		**13,442**

(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) Includes derivative exposures cleared through a CCP. Excludes (i) risk weighted assets for default fund contributions to a CCP and (ii) the 6% AIRB scalar.

IMPAIRED [1] LOANS BY REGION

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($MM)	As at Q4 2018 [1] Gross impaired loans	Allowance for credit losses	Net impaired loans	Fiscal 2018 Net Write-offs [2]
Residential mortgages[3]	1,797	360	1,437	(123)
Personal loans[3]	1,069	644	425	(1,166)
Credit cards[3]	-	-	-	(854)
Business and government[4]	2,264	673	1,591	(208)
Total	5,130	1,677	3,453	(2,351)
By geography:				
Canada	999	381	618	(809)
United States	80	25	55	(12)
Mexico	359	164	195	(221)
Peru	581	317	264	(302)
Chile	753	158	595	(272)
Colombia	619	159	460	(310)
Other International	1,739	473	1,266	(425)
Total	5,130	1,677	3,453	(2,351)

(1) Amounts for the year ended October 31, 2018 have been prepared in accordance with IFRS 9.

(2) Whole year fiscal 2018 net write-offs are net of recoveries.

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

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

IMPAIRED [1] LOANS BY INDUSTRY

Scotiabank

($MM)	As at Q4 2018 [1] Gross impaired loans	Allowance for credit losses	Net impaired loans	Fiscal 2018 Net Write-offs [2]
Residential mortgages[3]	1,797	360	1,437	(123)
Personal loans[3]	1,069	644	425	(1,166)
Credit cards[3]	-	-	-	(854)
Personal loans	2,866	1,004	1,862	(2,143)
Financial services				
Non-bank	19	13	6	(15)
Bank	2	2	-	-
Wholesale and retail	390	168	222	(37)
Real estate and construction	469	112	357	(38)
Energy	135	30	105	(20)
Transportation	233	60	173	(13)
Automotive	50	16	34	(1)
Agriculture	150	50	100	(8)
Hospitality and leisure	37	1	36	(2)
Mining	25	5	20	(1)
Metals	48	17	31	-
Utilities	51	22	29	(54)
Health care	76	19	57	(12)
Technology and media	21	5	16	(2)
Chemicals	10	3	7	(2)
Food and beverage	99	50	49	(3)
Forest products	27	7	20	(2)
Other	159	78	81	(4)
Sovereign	263	15	248	6
Business and government loans[4]	2,264	673	1,591	(208)
Total	5,130	1,677	3,453	(2,351)

(1) Amounts for the year ended October 31, 2018 have been prepared in accordance with IFRS 9.

(2) Whole year fiscal 2018 net write-offs are net of recoveries.

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

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

TOTAL MARKET RISK-WEIGHTED ASSETS

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($MM)	Q4 2018	Q3 2018	Q2 2018	Q1 2018	Q4 2017
All Bank VaR	**1,553**	1,667	1,814	1,646	1,380
All Bank stressed VaR	**5,240**	5,620	4,882	5,080	3,745
Incremental risk charge	**1,184**	5,648	1,672	2,500	2,181
Comprehensive risk measure[1]	**-**	-	-	-	-
Standardized approach	**380**	3,467	468	679	533
Market risk-weighted assets as at end of Quarter	**8,357**	**16,402**	**8,836**	**9,905**	**7,839**

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

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).