Supplemental Regulatory Disclosure

For the Fourth Quarter Ended October 31, 2018

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Introduction

The information contained in this package is designed to facilitate the readers' understanding of the capital requirements of TD Bank Group ("TD" or the "Bank"). This information should be used in conjunction with the Bank's fourth quarter 2018 Earnings News Release (ENR), the 2018 Management's Discussion and Analysis (MD&A), the Bank's Consolidated Financial Statements for the year ended October 31, 2018, Supplemental Financial Information, and Investor Presentation. For Basel-related terms and acronyms used in this package, refer to the "Glossary – Basel" and "Acronyms" pages, respectively.

How the Bank Reports

The Bank prepares its Consolidated Financial Statements in accordance with International Financial Reporting Standards (IFRS) as issued by the International Accounting Standards Board (IASB), the current generally accepted accounting principles (GAAP), and refers to results prepared in accordance with IFRS as "reported" results. Certain comparative amounts have been reclassified to conform with the presentation adopted in the current period.

Effective November 1, 2017, the Bank adopted IFRS 9, *Financial Instruments* (IFRS 9), which replaces the guidance in IAS 39, *Financial Instruments: Recognition and Measurement* (IAS 39). Accordingly, fiscal 2018 numbers are based on IFRS 9. The Bank did not restate prior periods which continue to be based on IAS 39. For further details, refer to Note 4 of the Bank's 2018 Consolidated Financial Statements.

Basel III Reporting

The Office of the Superintendent of Financial Institutions Canada (OSFI) has implemented a phased-in approach to the Credit Valuation Adjustment (CVA) component included in credit risk-weighted assets (RWA). The CVA capital charge phase-in is based on a scalar approach whereby a CVA capital charge of 80% applies in 2018 for the Common Equity Tier 1 (CET1) calculation and will increase to 100% in 2019. A different scalar applies to the CET1, Tier 1, and Total Capital ratios. Therefore, each capital ratio has its own RWA measure. For fiscal 2017, the scalars for inclusion of CVA for CET1, Tier 1, and Total Capital RWA were 72%, 77%, and 81%, respectively. For fiscal 2018, the corresponding scalars are 80%, 83%, and 86%, respectively. Effective in the second quarter of 2018, OSFI implemented a revised methodology for calculating the regulatory capital floor. The revised floor is based on the Basel II standardized approach, with the floor factor transitioned in over three quarters. The factor increases from 70% in the second quarter of 2018, to 72.5% in the third quarter, and 75% in the fourth quarter. Under the revised methodology, the Bank is no longer constrained by the capital floor. All three RWA measures are disclosed as part of the RWA disclosures on page 6, as well as the Capital Position disclosures on pages 1 to 2.

OSFI approved the Bank i) to use the Advanced Measurement Approach (AMA), and ii) to calculate the majority of the retail portfolio credit RWA in the U.S. Retail segment using the Advanced Internal Ratings Based (AIRB) approach.

Effective the fourth quarter of 2018, the Bank implemented the new Pillar 3 disclosure requirements. As noted in the Pillar 3 disclosure Index on the following pages, the disclosures are grouped by topic. Of note, Part 4 – Credit Risk is credit risk exposures excluding counterparty credit risk and includes drawn, undrawn and other off balance sheet exposures whereas counterparty credit risk (CCR) for Part 5 – Counterparty Credit Risk includes repo-style transactions and derivative exposures. The glossary provides additional details of items included in these exposure types.

Risk-weighted assets disclosed in each disclosure include the 6% OSFI prescribed scaling factor, where applicable.

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Pillar 3 Disclosure Requirements – In January 2015, the Basel Committee on Banking Supervision (BCBS) published the standard for the *Revised Pillar 3 Disclosure Requirements* (Revised Basel Pillar 3 standard). The Revised Basel Pillar 3 standard aim to address the problems identified through the financial crisis and to improve comparability and consistency of financial regulatory disclosures through more standardized formats between banks and across jurisdictions. Furthermore, OSFI issued the Pillar 3 Disclosure Requirements guideline April 2017, effective October 31, 2018. The index below includes disclosure requirement per the BCBS document (and required by OSFI) and lists the location of the related disclosures presented in the fourth quarter 2018, Supplemental Financial Information (SFI), or Supplemental Regulatory Disclosures (SRD). Information on TD's website, SFI, and SRD is not and should not be considered incorporated herein by reference into the 2018 Annual Report, Management's Discussion and Analysis, or the Consolidated Financial Statements.

Topic	Pillar 3 Disclosure Requirements	Frequency	Page		
			SFI Fourth Quarter 2018	SRD Fourth Quarter 2018	Annual Report 2018
Part 2 – Overview of risk management	**OVA** – Bank risk management approach.	Annual			10, 60, 67-76, 84, 101
	OV1 – Overview of RWA.	Quarterly		6	
Part 3 – Linkages between financial statements and regulatory exposures	**LI1** – Differences between accounting and regulatory scopes of consolidation and mapping of financial statements with regulatory risk categories.	Quarterly		9	
	LI2 – Main sources of differences between regulatory exposure amounts and carrying values in financial statements.	Quarterly		10	
	LIA – Explanations of differences between accounting and regulatory exposure amounts.	Quarterly		10	
Part 4 – Credit risk	**CRA** – General information about credit risk.	Annual			72-74, 76-79
	CR1 – Credit quality of assets.	Quarterly		10	
	CR2 – Changes in stock of defaulted loans and debt securities.[1]	Quarterly			
	CRB – Additional disclosure related to the credit quality of assets a) to d).	Annual			80, 130-131, 137, 169
	CRB – Additional disclosure related to the credit quality of assets - e) Breakdown of exposures by geographical areas, industry and residual maturity.[1]	Quarterly		11-13	
	CRB – Additional disclosure related to the credit quality of assets - f) Amounts of impaired exposures (according to definition used by the bank for accounting purposes) and related allowances and write-offs broken down by geographical areas and industry.	Quarterly	20-22, 25-28		
	CRB – Additional disclosure related to the credit quality of assets - g) Ageing analysis of accounting past-due exposures.[1]	Quarterly			169
	CRB – Additional disclosure related to the credit quality of assets - h) Breakdown of restructured exposures between impaired and not impaired exposures.	Quarterly		10	
	CRC – Qualitative disclosure requirements related to credit risk mitigation techniques.	Annual			80
	CR3 – Credit risk mitigation techniques – overview.	Quarterly		10	
	CRD – Qualitative disclosures on banks' use of external credit ratings under the standardized approach for credit risk.	Annual			79
	CR4 – Standardized approach – credit risk exposure and Credit Risk Mitigation (CRM) effects.	Quarterly		14	
	CR5 – Standardized approach – exposures by asset classes and risk weights.	Quarterly		14	
	CRE – Qualitative disclosures related to IRB models.	Annual			72-74, 77-81, 89
	CR6 – IRB - Credit risk exposures by portfolio and PD range.	Quarterly		15-18	

Topic	Pillar 3 Disclosure Requirements	Frequency	Page		
			SFI Fourth Quarter 2018	SRD Fourth Quarter 2018	Annual Report 2018
	CR7 – IRB – Effect on RWA of credit derivatives used as CRM techniques.	N/A	Impact is immaterial and has been disclosed in CR3, footnote 2.		
	CR8 – RWA flow statements of credit risk exposures under IRB.	Quarterly		7	
	CR9 – IRB – Backtesting of probability of default (PD) per portfolio.	Annual		25-27	
	CR10 – IRB (specialized lending and equities under the simple risk weight method).	N/A	TD does not use this approach.		
Part 5 – Counterparty credit risk	**CCRA** – Qualitative disclosure related to counterparty credit risk.	Annual			79-80, 95
	CCR1 – Analysis of counterparty credit risk (CCR) exposure by approach.	Quarterly		19	
	CCR2 – Credit valuation adjustment (CVA) capital charge.	Quarterly		19	
	CCR3 – Standardized approach of CCR exposures by regulatory portfolio and risk weights.	Quarterly		19	
	CCR4 – IRB – CCR exposures by portfolio and PD scale.	Quarterly		20	
	CCR5 – Composition of collateral for CCR exposure.	Quarterly		21	
	CCR6 – Credit derivatives exposures.	Quarterly		21	
	CCR7 – RWA flow statements of CCR exposures under the Internal Model Method (IMM).	N/A	TD does not use IMM		
	CCR8 – Exposures to central counterparties.	Quarterly		21	
Part 6 – Securitization	**SECA** – Qualitative disclosure requirements related to securitization exposures.	Annual			64-65, 81, 134, 171-172
	SEC1 – Securitization exposures in the banking book.	Quarterly		22	
	SEC2 – Securitization exposures in the trading book.	Quarterly		22	
	SEC3 – Securitization exposures in the banking book and associated regulatory capital requirements – bank acting as originator or as sponsor.	Quarterly		23	
	SEC4 – Securitization exposures in the banking book and associated capital requirements – bank acting as investor.	Quarterly		23	
Part 7 – Market risk[1]	**MRA** – Qualitative disclosure requirements related to market risk.	TD has deferred these disclosures as allowed per OSFI's Pillar 3 guideline issued April 2017			
	MRB – Qualitative disclosures for banks using the Internal Models Approach (IMA).				
	MR1 – Market risk under standardized approach.				
	MR2 – RWA flow statements of market risk exposures under an IMA.				
	MR3 – IMA values for trading portfolios.				
	MR4 – Comparison of VaR[2] estimates with gains/losses.				

[1] Current disclosures in SFI and annual report do not contain any exposures related to the deconsolidated insurance entities, therefore the Pillar 3 requirements are fulfilled based on current disclosure.

[2] Value-at-Risk.

Capital Position – Basel III[1]

($ millions) *As at*	Line #	2018 Q4	2018 Q3	2018 Q2	2018 Q1	2017 Q4	Cross Reference[2]	OSFI Template
Common Equity Tier 1 Capital								
Common shares plus related contributed surplus	1	**$ 21,267**	$ 21,123	$ 21,287	$ 21,228	$ 20,967	A1+A2+B	1
Retained earnings	2	**46,145**	44,223	43,363	41,744	40,489	C	2
Accumulated other comprehensive income (loss)	3	**6,639**	6,498	5,923	4,472	8,006	D	3
Common Equity Tier 1 Capital before regulatory adjustments	4	**74,051**	71,844	70,573	67,444	69,462		6
Common Equity Tier 1 Capital regulatory adjustments								
Goodwill (net of related tax liability)	5	**(19,285)**	(19,079)	(18,856)	(18,136)	(18,820)	E1+E2-E3	8
Intangibles (net of related tax liability)	6	**(2,236)**	(2,254)	(2,274)	(2,242)	(2,310)	F1-F2	9
Deferred tax assets excluding those arising from temporary differences	7	**(317)**	(248)	(121)	(122)	(113)	G	10
Cash flow hedge reserve	8	**2,568**	2,228	2,160	1,731	506	H	11
Shortfall of provisions to expected losses[3]	9	**(953)**	(967)	(734)	(679)	(805)	I	12
Gains and losses due to changes in own credit risk on fair valued liabilities	10	**(115)**	(109)	(118)	(68)	(73)	J	14
Defined benefit pension fund net assets (net of related tax liability)	11	**(113)**	(65)	(13)	(13)	(13)	K	15
Investment in own shares	12	**(123)**	–	–	(21)	–		16
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)	13	**(1,088)**	(1,254)	(1,132)	(1,085)	(1,206)	L1+L2+L3	19
Total regulatory adjustments to Common Equity Tier 1 Capital	14	**(21,662)**	(21,748)	(21,088)	(20,635)	(22,834)		28
Common Equity Tier 1 Capital	15	**52,389**	50,096	49,485	46,809	46,628		29
Additional Tier 1 capital instruments								
Directly issued qualifying Additional Tier 1 instruments plus stock surplus	16	**4,996**	4,600	4,599	4,246	4,247	M+N+O	30/31
Directly issued capital instruments subject to phase out from Additional Tier 1	17	**2,455**	2,456	2,455	2,455	3,229	P1+P2+P3	33
Additional Tier 1 instruments issued by subsidiaries and held by third parties subject to phase out	18	**245**	245	245	245	–	Q	34/35
Additional Tier 1 capital instruments before regulatory adjustments	19	**7,696**	7,301	7,299	6,946	7,476		36
Additional Tier 1 capital instruments regulatory adjustments								
Investment in own Additional Tier 1 instruments	20	**–**	–	–	–	(1)		37
Significant investments in the capital of banking, financial and insurance entities that are outside the scope of regulatory consolidation, net of eligible short positions	21	**(350)**	(350)	(350)	(352)	(352)	R+S	40
Total regulatory adjustments to Additional Tier 1 Capital	22	**(350)**	(350)	(350)	(352)	(353)		43
Additional Tier 1 Capital	23	**7,346**	6,951	6,949	6,594	7,123		44
Tier 1 Capital	24	**59,735**	57,047	56,434	53,403	53,751		45
Tier 2 capital instruments and provisions								
Directly issued qualifying Tier 2 instruments plus related stock surplus	25	**8,927**	7,184	7,127	7,028	7,156	T	46
Directly issued capital instruments subject to phase out from Tier 2	26	**198**	199	848	836	2,648	U	47
Tier 2 instruments issued by subsidiaries and held by third parties subject to phase out	27	**–**	–	–	–	–		48/49
Collective allowance	28	**1,734**	1,665	1,721	1,662	1,668	V	50
Tier 2 Capital before regulatory adjustments	29	**10,859**	9,048	9,696	9,526	11,472		51
Tier 2 regulatory adjustments								
Investments in own Tier 2 instruments	30	**–**	(2)	–	–	(25)		52
Significant investments in the capital of banking, financial and insurance entities that are outside the scope of regulatory consolidation, net of eligible short positions	31	**(160)**	(160)	(160)	(160)	(160)	W	55
Total regulatory adjustments to Tier 2 Capital	32	**(160)**	(162)	(160)	(160)	(185)		57
Tier 2 Capital	33	**10,699**	8,886	9,536	9,366	11,287		58
Total Capital	34	**70,434**	65,933	65,970	62,769	65,038		59
Common Equity Tier 1 Capital RWA[4,5]	35	**435,632**	428,943	417,819	441,273	435,750		60a
Tier 1 Capital RWA[4,5]	36	**435,780**	429,083	417,951	441,273	435,750		60b
Total Capital RWA[4,5]	37	**$ 435,927**	$ 429,222	$ 418,082	$ 441,273	$ 435,750		60c

1 Capital position has been calculated using the "all-in" basis.
2 Cross referenced to the Reconciliation with Balance Sheet Under Regulatory Scope of Consolidation table on page 4.
3 Effective November 1, 2017, amounts are presented in accordance with IFRS 9. Prior periods have not been restated and are based on IAS 39. Refer to Note 4 of the Bank's 2018 Consolidated Financial Statements.
4 Each capital ratio has its own RWA measure due to the OSFI prescribed scalar for inclusion of the CVA. For fiscal 2018, the scalars for inclusion of CVA for CET1, Tier 1, and Total Capital RWA are 80%, 83%, and 86%, respectively. For fiscal 2017, the corresponding scalars were 72%, 77%, and 81%, respectively.
5 Prior to the second quarter of 2018, RWA for all ratios were the same due to the regulatory floor which was based on Basel I risk weights. Subsequently, the regulatory floor is based on standardized risk weights and is no longer triggered resulting in a separate RWA for each ratio due to the CVA scalar.

Capital Position – Basel III (Continued)

($ millions, except as noted) *As at*	Line #	2018 Q4	2018 Q3	2018 Q2	2018 Q1	2017 Q4	OSFI Template
Capital Ratios[1]							
Common Equity Tier 1 Capital (as percentage of CET1 Capital RWA)	38	**12.0 %**	11.7 %	11.8 %	10.6 %	10.7 %	61
Tier 1 (as percentage of Tier 1 Capital RWA)	39	**13.7**	13.3	13.5	12.1	12.3	62
Total Capital (as percentage of Total Capital RWA)	40	**16.2**	15.4	15.8	14.2	14.9	63
Buffer requirement (minimum CET1 requirement plus capital conservation buffer plus global systemically important banks (G-SIBs) buffer plus domestic systemically important banks (D-SIBs) buffer requirement expressed as percentage of RWA)[2,3]	41	**8.0**	8.0	8.0	8.0	8.0	64
of which: capital conservation buffer requirement	42	***2.5***	*2.5*	*2.5*	*2.5*	*2.5*	65
of which: countercyclical buffer requirement[4]	43	**–**	–	–	–	–	66
of which: D-SIB buffer requirement[5]	44	***1.0***	*1.0*	*1.0*	*1.0*	*1.0*	67a
Common Equity Tier 1 available to meet buffers (as percentage of RWA)	45	**12.0**	11.7	11.8	10.6	10.7	68
OSFI all-in target (minimum plus conservation buffer plus D-SIB surcharge (if applicable))[6]							
Common Equity Tier 1 all-in target ratio	46	**8.0**	8.0	8.0	8.0	8.0	69
Tier 1 all-in target ratio	47	**9.5**	9.5	9.5	9.5	9.5	70
Total Capital all-in target ratio	48	**11.5**	11.5	11.5	11.5	11.5	71
Amounts below the thresholds for deduction (before risk weighting)							
Non-significant investments in the capital of other financials	49	**$ 4,273**	$ 3,075	$ 4,129	$ 3,318	$ 2,624	72
Significant investments in the common stock of financials	50	**5,348**	5,135	5,061	4,789	4,783	73
Mortgage servicing rights	51	**39**	37	34	31	31	74
Deferred tax assets arising from temporary differences (net of related tax liability)	52	**885**	1,029	1,158	1,100	909	75
Applicable caps on the inclusion of allowances in Tier 2							
Allowance eligible for inclusion in Tier 2 in respect of exposures subject to standardized approach (prior to application of cap)	53	**1,734**	1,665	1,721	1,662	1,668	76
Cap on inclusion of allowances in Tier 2 under standardized approach	54	**2,070**	2,020	2,041	1,941	2,029	77
Capital instruments subject to phase-out arrangements (only applicable between January 1, 2013 to January 1, 2022)							
Current cap on Additional Tier 1 instruments subject to phase out arrangements	55	**2,700**	2,700	2,700	2,700	3,376	82
Amounts excluded from Additional Tier 1 due to cap (excess over cap after redemptions and maturities)	56	**31**	284	541	535	–	83
Current cap on Tier 2 instruments subject to phase out arrangements	57	**3,505**	3,505	3,505	3,505	4,381	84
Amounts excluded from Tier 2 due to cap (excess over cap after redemptions and maturities)	58	**–**	–	–	–	–	85
Capital Ratios – transitional basis[7]							
Risk-weighted assets	59	**$ n/a**[8]	$ n/a	$ n/a	$ n/a	$ 443,186	
Common Equity Tier 1 Capital	60	**n/a**	n/a	n/a	n/a	51,294	
Tier 1 Capital	61	**n/a**	n/a	n/a	n/a	54,523	
Total Capital	62	**n/a**	n/a	n/a	n/a	65,646	
Common Equity Tier 1 (as percentage of RWA)	63	**n/a %**	n/a %	n/a %	n/a %	11.6 %	
Tier 1 Capital (as percentage of RWA)	64	**n/a**	n/a	n/a	n/a	12.3	
Total Capital (as percentage of RWA)	65	**n/a**	n/a	n/a	n/a	14.8	
Capital Ratios for significant bank subsidiaries							
TD Bank, National Association (TD Bank, N.A.)[9]							
Common Equity Tier 1 Capital	66	**14.9**	14.7	14.9	14.8	14.8	
Tier 1 Capital	67	**14.9**	14.7	14.9	14.8	14.8	
Total Capital	68	**15.7**	15.6	15.7	15.6	15.7	
TD Mortgage Corporation							
Common Equity Tier 1 Capital	69	**40.7**	39.9	37.2	35.9	35.9	
Tier 1 Capital	70	**40.7**	39.9	37.2	35.9	35.9	
Total Capital	71	**41.6**	40.7	38.1	36.7	36.9	

1 Capital position has been calculated using the "all-in" basis.
2 The minimum CET1 requirement prior to the buffers is 4.5%.
3 The Financial Stability Board, in consultation with BCBS and national authorities, has identified the 2018 list of G-SIBs, using 2017 fiscal year-end data. The Bank was not identified as a G-SIB.
4 The countercyclical buffer surcharge is in effect.
5 Common equity capital D-SIB surcharge is in effect.
6 Reflects Pillar 1 targets and does not include Pillar 2 domestic stability buffer of 1.5%.
7 The "transitional" basis of regulatory reporting allows for certain adjustments to CET1, the largest of which being goodwill, intangible assets and the threshold deductions, to be phased-in over a period of five years starting in 2014. Effective the first quarter of 2018, the transitional period has ended and thus there is no longer a transitional ratio.
8 Not applicable.
9 On a stand-alone basis, TD Bank, N.A. reports regulatory capital to the Office of the Comptroller of the Currency (OCC) on calendar quarter ends.

Flow Statement for Regulatory Capital[1]

($ millions)	Line #	2018 Q4	2018 Q3	2018 Q2	2018 Q1	2017 Q4
Common Equity Tier 1						
Balance at beginning of period	1	**$ 50,096**	$ 49,485	$ 46,809	$ 46,628	$ 44,975
New capital issues	2	**28**	28	24	72	27
Redeemed capital[2]	3	**–**	(1,457)	(44)	–	(517)
Gross dividends (deductions)	4	**(1,274)**	(1,281)	(1,291)	(1,154)	(1,155)
Shares issued in lieu of dividends (add back)	5	**94**	89	92	91	82
Profit attributable to shareholders of the parent company[3]	6	**2,942**	3,087	2,898	2,335	2,677
Removal of own credit spread (net of tax)	7	**(6)**	9	(50)	5	30
Movements in other comprehensive income						
Currency translation differences	8	**596**	656	2,028	(2,245)	1,638
Available-for-sale investments	9	**n/a**	n/a	n/a	n/a	36
Financial assets at fair value through other comprehensive income	10	**(113)**	(11)	(156)	34	n/a
Other	11	**(2)**	(2)	8	(98)	(4)
Goodwill and other intangible assets (deduction, net of related tax liability)	12	**(188)**	(203)	(752)	752	(600)
Other, including regulatory adjustments and transitional arrangements						
Deferred tax assets that rely on future profitability (excluding those arising from temporary differences)	13	**(69)**	(127)	1	(9)	7
Prudential valuation adjustments	14	**–**	–	–	–	–
Other	15	**285**	(177)	(82)	398	(568)
Balance at end of period	16	**52,389**	50,096	49,485	46,809	46,628
Additional Tier 1 Capital						
Balance at beginning of period	17	**6,951**	6,949	6,594	7,123	7,271
New additional Tier 1 eligible capital issues	18	**400**	–	350	–	–
Redeemed capital	19	**–**	–	–	–	(600)
Other, including regulatory adjustments and transitional arrangements	20	**(5)**	2	5	(529)	452
Balance at end of period	21	**7,346**	6,951	6,949	6,594	7,123
Total Tier 1 Capital	22	**59,735**	57,047	56,434	53,403	53,751
Tier 2 Capital						
Balance at beginning of period	23	**8,886**	9,536	9,366	11,287	11,384
New Tier 2 eligible capital issues	24	**1,750**	–	–	–	–
Redeemed capital	25	**–**	(650)	–	(1,800)	(270)
Amortization adjustments	26	**–**	–	–	–	–
Allowable collective allowance	27	**69**	(56)	59	(6)	97
Other, including regulatory adjustments and transitional arrangements	28	**(6)**	56	111	(115)	76
Balance at end of period	29	**10,699**	8,886	9,536	9,366	11,287
Total Regulatory Capital	30	**$ 70,434**	$ 65,933	$ 65,970	$ 62,769	$ 65,038

1 The statement is based on the applicable regulatory rules in force at the period end.
2 Represents impact of shares repurchased for cancellation.
3 Profit attributable to shareholders of the parent company reconciles to the income statement.

Reconciliation with Balance Sheet Under Regulatory Scope of Consolidation

($ millions)
As at

	Line #	2018 Q4 Balance Sheet[1]	2018 Q4 Under Regulatory scope of consolidation[2]		Cross Reference[3]
Cash and due from banks	1	$ 4,735	$	$ 4,735	
Interest-bearing deposits with banks	2	30,720		30,585	
Trading loans, securities, and other	3	127,897		127,897	
Non-trading financial assets at fair value through profit or loss	4	4,015		3,554	
Derivatives	5	56,996		57,001	
Financial assets designated at fair value through profit or loss	6	3,618		1,510	
Financial assets at fair value through other comprehensive income	7	130,600		128,824	
Debt securities at amortized cost, net of allowance for credit losses	8	107,171		106,936	
Securities purchased under reverse repurchase agreements	9	127,379		127,379	
Loans	10	649,942		649,942	
Allowance for loan losses	11	(3,549)		(3,549)	
Eligible allowance reflected in Tier 2 regulatory capital	12		(1,734)		V
Shortfall of allowance to expected loss	13		(953)		I
Allowances not reflected in regulatory capital	14		(862)		
Other	15	95,379		93,337	
Investment in TD Ameritrade					
Significant investments exceeding regulatory thresholds	16		914		L1
Significant investments not exceeding regulatory thresholds	17		4,684		
Imputed goodwill	18		2,847		E1
Goodwill	19		16,536		E2
Other intangibles	20		2,420		F1
Other intangibles (Mortgage Servicing Rights)	21		39		
Deferred tax assets					
Deferred tax assets (DTA) excluding those arising from temporary differences	22		317		G
DTA's (net of associated deferred tax liabilities (DTL)) realizable through net operating loss (NOL) carryback	23		885		
DTA's (net of associated DTL's) arising from temporary differences but not realizable through NOL carryback	24		1,063		
DTA's (net of associated DTL's) arising from temporary differences but not realizable through NOL carryback exceeding regulatory thresholds	25		–		
Other DTA/DTL adjustments[4]	26		447		
Significant investments in financials (excluding TD Ameritrade)					
Significant investments exceeding regulatory thresholds	27		13		L2
Significant investments in Additional Tier 1 Capital	28		–		S
Significant investments not exceeding regulatory thresholds	29		63		
Defined pension benefits	30		113		K
Other Assets	31		62,996		
TOTAL ASSETS	32	1,334,903		1,328,151	
LIABILITIES AND EQUITY[5]					
Trading deposits	33	114,704		114,704	
Derivatives	34	48,270		48,270	
Securitization liabilities at fair value	35	12,618		12,618	
Deposits	36	851,439		851,439	
Other	37	219,092		212,340	
Deferred tax liabilities					
Goodwill	38		98		E3
Intangible assets (excluding mortgage servicing rights)	39		184		F2
Other deferred tax liabilities (Cash flow hedges and other DTL's)	40		(554)		
Other DTA/DTL adjustments[4]	41		447		
Gains and losses due to changes in own credit risk on fair value liabilities	42		115		J
Other liabilities	43		212,050		
Subordinated notes and debentures	44	8,740		8,740	
Directly issued qualifying Tier 2 instruments	45		8,927		T
Directly issued capital instruments subject to phase out from Tier 2	46		198		U
Capital instruments not allowed for regulatory capital	47		(385)		
Liabilities	48	1,254,863		1,248,111	
Common Shares	49	21,221		21,221	A1
Preferred Shares	50	5,000		5,000	
Directly issued qualifying Additional Tier 1 instruments	51		5,000		M
Directly issued capital instruments subject to phase out from Additional Tier 1	52		1,358		P1
Preferred shares not allowed for regulatory capital	53		(1,358)		
Treasury Shares – Common	54	(144)		(144)	A2
Treasury Shares – Preferred	55	(7)		(7)	
Treasury Shares – non-viability contingent capital (NVCC) Preferred Shares	56		(7)		N
Treasury Shares – non-NVCC Preferred Shares	57		–		
Contributed Surplus	58	193		193	
Contributed surplus – Common Shares	59		190		B
Contributed surplus – Preferred Shares	60		3		O
Retained Earnings	61	46,145		46,145	C
Accumulated other comprehensive income (AOCI)	62	6,639		6,639	D
Cash flow hedges requiring derecognition	63		(2,568)		H
Net AOCI included as capital	64		9,207		
Non-controlling interests in subsidiaries	65	993		993	
Portion allowed for regulatory capital (directly issued) subject to phase out – additional Tier 1	66		397		P2
Portion allowed for regulatory capital (issued by subsidiaries and held by third parties) subject to phase out – additional Tier 1	67		245		Q
Portion not allowed for regulatory capital subject to phase out	68		351		
TOTAL LIABILITIES AND EQUITY	69	$ 1,334,903		$ 1,328,151	

1 As per Balance Sheet on page 12 in the Supplemental Financial Information Package.
2 Legal entities excluded from the regulatory scope of consolidation included the following insurance subsidiaries: Meloche Monnex Inc. (consolidated), TD Life Insurance Company and TD Reinsurance (Barbados) Inc. which have total assets included in the consolidated Bank of $6.8 billion and total equity of $1.5 billion, of which $161 million is deducted from CET1, $350 million is deducted from additional Tier 1 and $160 million is deducted from Tier 2 Capital. Cross referenced (L3, R, W) respectively, to the Capital Position – Basel III on page 1.
3 Cross referenced to the current period on the Capital Position – Basel III on pages 1 and 2.
4 This adjustment is related to deferred tax assets/liabilities netted for financial accounting purposes.
5 Included in current cap on additional Tier 1 instruments is $1.7 billion related to TD Capital Trust IV (no longer consolidated as the Bank is not the primary beneficiary of the trust). The allowed for regulatory capital is $700 million (P3 – cross referenced to Capital Position – Basel III on page 1).

Leverage Ratio[1]

($ millions, except as noted) *As at*	Line #	2018 Q4	2018 Q3	2018 Q2	2018 Q1	2017 Q4	OSFI Template
Summary comparison of accounting assets vs. leverage ratio exposure measure							
Total consolidated assets as per published financial statements	1	**$ 1,334,903**	$ 1,292,504	$ 1,283,836	$ 1,261,316	$ 1,278,995	1
Adjustment for investments in banking, financial, insurance or commercial entities that are consolidated for accounting purposes but outside the scope of regulatory consolidation	2	**(5,800)**	(5,981)	(5,497)	(5,438)	(5,328)	2
Adjustments for fiduciary assets recognized on the balance sheet pursuant to the operative accounting framework but excluded from the leverage ratio exposure measure	3	**–**	–	–	–	–	3
Adjustments for derivative financial instruments	4	**(7,378)**	594	(6,012)	(19,902)	(11,153)	4
Adjustment for securities financing transactions (SFT)	5	**(19,658)**	(16,893)	(8,397)	(3,668)	(3,559)	5
Adjustment for off-balance sheet items (credit equivalent amounts)	6	**150,910**	137,850	137,238	130,589	130,829	6
Other adjustments	7	**(22,039)**	(22,264)	(21,728)	(21,387)	(22,980)	7
Leverage Ratio Exposure	8	**$ 1,430,938**	$ 1,385,810	$ 1,379,440	$ 1,341,510	$ 1,366,804	8
Leverage Ratio Common Disclosure Template							
On-balance sheet exposures							
On-balance sheet items (excluding derivatives, SFTs and grandfathered securitization exposures but including collateral)	9	**$ 1,144,580**	$ 1,109,661	$ 1,081,918	$ 1,070,252	$ 1,082,418	1
Less: Asset amounts deducted in determining Tier 1 Capital	10	**(21,897)**	(21,989)	(21,319)	(20,918)	(22,355)	2
Total on-balance sheet exposures (excluding derivatives and SFTs)	11	**1,122,683**	1,087,672	1,060,599	1,049,334	1,060,063	3
Derivative exposures							
Replacement cost associated with all derivative transactions (such as net of eligible cash variation margin)	12	**12,381**	13,409	14,524	13,242	12,074	4
Add-on amounts for potential future exposure (PFE) associated with all derivative transactions	13	**42,349**	39,885	39,472	35,850	38,212	5
Gross up for derivatives collateral provided where deducted from the balance sheet assets pursuant to the operative accounting framework	14	**–**	–	–	–	–	6
Deductions of receivables assets for cash variation margin provided in derivative transactions	15	**(5,662)**	(5,663)	(5,383)	(9,003)	(5,852)	7
Exempted central counterparty (CCP)-leg of client cleared trade exposures	16	**–**	–	–	–	–	8
Adjusted effective notional amount of written credit derivatives	17	**1,121**	1,874	903	840	1,694	9
Adjusted effective notional offsets and add-on deductions for written credit derivatives	18	**(566)**	(1,344)	(430)	(274)	(1,085)	10
Total derivative exposures	19	**49,623**	48,161	49,086	40,655	45,043	11
Securities financing transaction exposures							
Gross SFT assets recognized for accounting purposes (with no recognition of netting), after adjusting for sale accounting transactions	20	**127,379**	129,019	140,914	124,600	134,429	12
Netted amounts of cash payables and cash receivables of gross SFT assets	21	**(21,631)**	(19,383)	(11,037)	(5,837)	(4,952)	13
Counterparty credit risk (CCR) exposure for SFTs	22	**1,974**	2,491	2,640	2,169	1,392	14
Agent transaction exposures	23	**–**	–	–	–	–	15
Total securities financing transaction exposures	24	**107,722**	112,127	132,517	120,932	130,869	16
Other off-balance sheet exposures							
Off-balance sheet exposure at gross notional amount	25	**550,977**	529,419	528,197	506,622	504,441	17
Adjustments for conversion to credit equivalent amounts	26	**(400,067)**	(391,569)	(390,959)	(376,033)	(373,612)	18
Off-balance sheet items	27	**150,910**	137,850	137,238	130,589	130,829	19
Capital and Total Exposures – Transitional basis							
Tier 1 Capital	28	**n/a**	n/a	n/a	n/a	54,523	
Total Exposures (sum of lines 11, 19, 24, and 27)	29	**$ n/a**	$ n/a	$ n/a	$ n/a	$ 1,366,804	
Leverage Ratio – Transitional basis (line 28 divided by line 29)	30	**n/a %**	n/a %	n/a %	n/a %	4.0 %	
"All-in" basis (required by OSFI)							
Tier 1 Capital – "All-in" basis (line 24 on page 1)	31	**$ 59,735**	$ 57,047	$ 56,434	$ 53,403	$ 53,751	20
Regulatory adjustments	32	**n/a**	n/a	n/a	n/a	(23,114)	
Total Exposures (sum of lines 11, 19, 24 and 27) – All-in basis	33	**$ 1,430,938**	$ 1,385,810	$ 1,379,440	$ 1,341,510	$ 1,366,045	21
Leverage Ratio – "All-in" basis (line 31 divided by line 33)	34	**4.2 %**	4.1 %	4.1 %	4.0 %	3.9 %	22

[1] Prior to the first quarter of 2018, lines 1 to 27 were measured on the transitional basis. Effective the first quarter of 2018, the transitional period has ended and thus all items are measured on the 'all-in' basis and there is no longer a transitional ratio.

Overview of Risk-Weighted Assets (OV1)[1]

($ millions) *As at*	Line #	Risk-Weighted Assets (RWA)[2] 2018 Q4	Risk-Weighted Assets (RWA)[2] 2018 Q3	Minimum capital requirements[3] 2018 Q4	Minimum capital requirements[3] 2018 Q3	OSFI Template
Credit risk (excluding counterparty credit risk) (CCR)	1	$ **325,936**	$ 319,777	$ **26,075**	$ 25,582	1
Of which standardized approach (SA)[4]	2	***160,732***	*157,319*	***12,859***	*12,586*	2
Of which internal ratings-based (IRB) approach	3	***165,204***	*162,458*	***13,216***	*12,996*	3
Counterparty credit risk	4	**14,267**	13,674	**1,141**	1,094	4
Of which standardized approach for counterparty credit risk (SA-CCR)	5	**–**	–	**–**	–	5
Of which current exposure method (CEM)	6	***5,209***	*5,151*	***417***	*412*	n/a
Of which internal model method (IMM)	7	**–**	–	**–**	–	6
Of which other CCR[5]	8	***9,058***	*8,523*	***724***	*682*	n/a
Equity positions in banking book under market-based approach	9	**–**	–	**–**	–	7
Equity investments in funds – look-through approach	10	**212**	219	**17**	18	8
Equity investments in funds – mandate-based approach	11	**45**	57	**4**	5	9
Equity investments in funds – fall-back approach	12	**260**	217	**21**	17	10
Settlement risk	13	**124**	25	**10**	2	11
Securitization exposures in banking book	14	**13,520**	13,552	**1,082**	1,084	12
Of which IRB ratings-based approach (RBA)[6]	15	***9,205***	*9,526*	***737***	*762*	13
Of which IRB supervisory formula approach (SFA)	16	**–**	–	**–**	–	14
Of which SA/simplified supervisory formula approach (SSFA)	17	***4,315***	*4,026*	***345***	*322*	15
Market risk	18	**13,213**	14,670	**1,057**	1,174	16
Of which standardized approach (SA)	19	***183***	*163*	***15***	*13*	17
Of which internal model approaches (IMM)	20	***13,030***	*14,507*	***1,042***	*1,161*	18
Operational risk	21	**52,375**	51,250	**4,190**	4,100	19
Of which basic indicator approach	22	**–**	–	**–**	–	20
Of which standardized approach	23	***4,249***	*4,090*	***340***	*327*	21
Of which advanced measurement approach	24	***48,126***	*47,160*	***3,850***	*3,773*	22
Amounts below the thresholds for deduction (subject to 250% risk weight)	25	**15,680**	15,502	**1,254**	1,239	23
Floor adjustment	26	**–**	–	**–**	–	24
Total (lines 1+4+9+10+11+12+13+14+18+21+25+26)	27	$ **435,632**	$ 428,943	$ **34,851**	$ 34,315	25

1 Represents CET1 RWA which includes CVA at 80%.
2 RWA include 6% scalar when appropriate.
3 Minimum capital requirements equals 8% of RWA.
4 Includes other assets and equities which use a regulatory prescribed risk weight.
5 Includes qualifying central counterparties (QCCPs), CVA and repo style transactions.
6 Includes internal assessment approach (IAA).

Flow Statements for Risk-Weighted Assets – Credit Risk

($ millions) *As at*	LINE #	2018 Q4 Non-counterparty credit risk[1]	2018 Q4 Of which internal rating-based (IRB) approach[2]	2018 Q4 Counterparty credit risk[3]	2018 Q4 Of which IRB approach
RWA, balance at beginning of period	1	**$ 349,350**	**$ 162,458**	**$ 13,673**	**$ 6,694**
Asset size[4]	2	**3,857**	**2,585**	**535**	**154**
Asset quality[5]	3	**(701)**	**(701)**	**24**	**16**
Model updates[6]	4	**131**	**131**	**–**	**–**
Methodology and policy[7]	5	**–**	**–**	**–**	**–**
Acquisitions and disposals	6	**–**	**–**	**–**	**–**
Foreign exchange movements[8]	7	**2,750**	**731**	**35**	**14**
Other[9]	8	**390**	**–**	**–**	**–**
RWA, balance at end of period	9	**$ 355,777**	**$ 165,204**	**$ 14,267**	**$ 6,878**

		2018 Q3		2018 Q2		2018 Q1		2017 Q4	
		Non-counterparty credit risk[1]	Counterparty credit risk[3]	Non-counterparty credit risk[1]	Counterparty credit risk[3]	Non-counterparty credit risk[1]	Counterparty credit risk[3]	Non-counterparty credit risk[1]	Counterparty credit risk[3]
RWA, balance at beginning of period	10	$ 338,523	$ 13,656	$ 323,071	$ 12,529	$ 328,535	$ 11,258	$ 313,495	$ 12,594
Asset size[4]	11	4,613	177	4,776	859	4,309	1,207	3,612	(1,500)
Asset quality[5]	12	(1,033)	(224)	1,342	(40)	246	(18)	(596)	(95)
Model updates[6]	13	4,784	–	(215)	–	78	–	(601)	–
Methodology and policy[7]	14	–	–	–	–	–	346	–	–
Acquisitions and disposals	15	(447)	–	–	–	6	–	4,637	–
Foreign exchange movements[8]	16	2,922	64	9,281	308	(10,228)	(264)	7,405	259
Other[9]	17	(12)	–	268	–	125	–	583	–
RWA, balance at end of period	18	$ 349,350	$ 13,673	$ 338,523	$ 13,656	$ 323,071	$ 12,529	$ 328,535	$ 11,258

1 Non-counterparty credit risk includes loans and advances to individuals and small business retail customers, wholesale and commercial corporate customers, and banks and governments, as well as holdings of debt, equity securities, and other assets including prepaid expenses, deferred income taxes, land, building, equipment, and other depreciable property.
2 Reflects Pillar 3 requirements for RWA flow statements of credit risk exposures under IRB (CR8) which excludes securitization and equity.
3 Counterparty credit risk is comprised of over-the-counter (OTC) derivatives, repo-style transactions, trades cleared through central counterparties, and CVA RWA which is phased in at 80% for fiscal 2018.
4 The Asset size category consists of organic changes in book size and composition (including new business and maturing loans), and for the fourth quarter of 2018, increased due to growth in various portfolios in the Canadian Retail and U.S. Retail segments.
5 The Asset quality category includes quality of book changes caused by experience such as underlying customer behaviour or demographics, including changes through model calibrations/realignments.
6 The Model updates category relates to model implementation, changes in model scope, or any changes to address model malfunctions.
7 The Methodology and policy category impacts reflect newly adopted methodology changes to the calculations driven by regulatory policy changes, such as new regulations.
8 Foreign exchange movements are mainly due to a change in the U.S. dollar foreign exchange rate for the U.S. portfolios in the U.S. Retail and Wholesale Banking segments.
9 The Other category consists of items not described in the above categories, including changes in exposures not included under advanced or standardized methodologies, such as prepaid expenses, deferred income taxes, land, building, equipment and other

Flow Statements of Risk-Weighted Assets – Market Risk

($ millions) *As at*	LINE #	2018 Q4	2018 Q3	2018 Q2	2018 Q1	2017 Q4
RWA, balance at beginning of period	1	**$ 14,670**	$ 15,248	$ 11,303	$ 14,020	$ 13,842
Movement in risk levels[1]	2	**(1,457)**	(578)	3,945	(1,720)	178
Model updates/changes[2]	3	**–**	–	–	–	–
Methodology and policy[3]	4	**–**	–	–	(997)	–
Acquisitions and disposals	5	**–**	–	–	–	–
Foreign exchange movements and other[4]	6	**n/m[5]**	n/m	n/m	n/m	n/m
RWA, balance at end of period	7	**$ 13,213**	$ 14,670	$ 15,248	$ 11,303	$ 14,020

1 The Movement in risk levels category reflects changes in risk due to position changes and market movements. A decrease in interest rate risk and a decrease in debt specific risk due to reduction in exposure to financial and government bonds contributed to the decrease in RWA.
2 The Model updates category reflects updates to the model to reflect recent experience and change in model scope.
3 The Methodology and policy category reflects newly adopted methodology changes to the calculations driven by regulatory policy changes.
4 Foreign exchange movements and other are deemed not meaningful since RWA exposure measures are calculated in Canadian dollars. Therefore, no foreign exchange translation is required.
5 Not meaningful.

Flow Statement for Risk-Weighted Assets – Operational Risk

($ millions) *As at*	LINE #	2018 Q4	2018 Q3	2018 Q2	2018 Q1	2017 Q4
Disclosure for Operational Risk Risk-Weighted Assets Movement by Key Driver						
RWA, balance at beginning of period	1	**$ 51,250**	$ 50,392	$ 49,416	$ 48,392	$ 47,327
Revenue generation[1]	2	**159**	263	31	152	156
Movement in risk levels[2]	3	**706**	312	14	1,949	73
Model updates[3]	4	**–**	–	–	–	–
Methodology and policy[4]	5	**–**	–	–	–	–
Acquisitions and disposals	6	**–**	–	–	–	–
Foreign exchange movements and other[5]	7	**260**	283	931	(1,077)	836
RWA, balance at end of period	8	**$ 52,375**	$ 51,250	$ 50,392	$ 49,416	$ 48,392

1 The movement in the Revenue generation category is due to a change in gross income.
2 The Movement in risk levels category primarily reflects changes in risk due to operational loss experience, business environment, internal control factors, and scenario analysis.
3 The Model updates category relates to model implementation, changes in model scope, or any changes to address model malfunctions.
4 The Methodology and policy category reflects newly adopted methodology changes to the calculations driven by regulatory policy changes.
5 Foreign exchange movements are mainly due to a change in the U.S. dollar foreign exchange rate for the U.S. portfolios in the U.S. Retail segment.

Differences Between Accounting and Regulatory Scopes of Consolidation and Mapping of Financial Statements with Regulatory Risk Categories (LI1)

($ millions) *As at*	LINE #	2018 Q4						
				Carrying values of items[1]				
		Carrying values as reported in published financial statements	Carrying values under scope of regulatory consolidation[2]	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
Assets								
Cash and due from banks	1	$ 4,735	$ 4,735	$ 4,735	$ –	$ –	$ –	$ –
Interest-bearing deposits with banks	2	30,720	30,585	29,856	–	–	729	–
Trading loans, securities, and other	3	127,897	127,897	289	–	–	125,437	2,171
Non-trading financial assets at fair value through profit or loss	4	4,015	3,554	625	–	3,019	–	(90)
Derivatives	5	56,996	57,001	–	57,001	–	53,087	–
Financial assets designated at fair value through profit or loss	6	3,618	1,510	1,655	–	–	–	(145)
Financial assets at fair value through other comprehensive income	7	130,600	128,824	106,352	–	22,339	–	133
Debt securities at amortized cost, net of allowance for credit losses	8	107,171	106,936	67,608	–	39,258	–	70
Securities purchased under reverse repurchase agreements	9	127,379	127,379	–	127,379	–	3,920	–
Residential mortgages	10	225,191	225,191	225,524	–	–	–	(333)
Consumer instalment and other personal	11	172,079	172,079	170,565	–	–	–	1,514
Credit card	12	35,018	35,018	31,167	–	–	–	3,851
Business and government	13	217,654	217,654	209,988	–	8,184	–	(518)
Allowance for loan losses	14	(3,549)	(3,549)	(131)	–	–	–	(3,418)
Customers' liability under acceptances	15	17,267	17,267	17,267	–	–	–	–
Investment in TD Ameritrade	16	8,445	8,445	–	–	–	–	8,445
Goodwill	17	16,536	16,536	–	–	–	–	16,536
Other intangibles	18	2,459	2,459	–	–	–	–	2,459
Land, buildings, equipment, and other depreciable assets	19	5,324	5,267	5,267	–	–	–	–
Deferred tax assets	20	2,812	2,712	1,416	–	–	–	1,296
Amounts receivable from brokers, dealers and clients	21	26,940	26,940	1,049	–	–	–	25,891
Other assets	22	15,596	13,711	13,560	–	70	–	81
Total assets	23	$ 1,334,903	$ 1,328,151	$ 886,792	$ 184,380	$ 72,870	$ 183,173	$ 57,943
Liabilities								
Trading deposits	24	$ 114,704	$ 114,704	$ –	$ –	$ –	$ 6,202	$ 108,502
Derivatives	25	48,270	48,270	–	48,270	–	44,119	–
Securitization liabilities at fair value	26	12,618	12,618	–	–	–	12,618	–
Deposits	27	851,439	851,439	–	–	–	–	851,439
Acceptances	28	17,269	17,269	–	–	–	–	17,269
Obligations related to securities sold short	29	39,478	39,478	–	–	–	37,323	2,155
Obligations related to securities sold under repurchase agreements	30	93,389	93,389	–	93,389	–	3,797	–
Securitization liabilities at amortized cost	31	14,683	14,683	–	–	–	–	14,683
Amounts payable to brokers, dealers, and clients	32	28,385	28,385	–	–	–	–	28,385
Insurance-related liabilities	33	6,698	6	–	–	–	–	6
Other liabilities	34	19,190	19,130	–	–	–	2	19,128
Subordinated notes and debentures	35	8,740	8,740	–	–	–	–	8,740
Total liabilities	36	$ 1,254,863	$ 1,248,111	$ –	$ 141,659	$ –	$ 104,061	$ 1,050,307

[1] Certain exposures may be included in more than one column if subject to both credit and market risk.
[2] Excludes assets and liabilities of insurance subsidiaries.

Main Sources of Differences Between Regulatory Exposure Amounts and Carrying Values in Financial Statements (LI2)

($ millions)
As at

2018 Q4

	LINE #	Total	Credit risk framework	Counterparty credit risk framework	Securitization framework	Market risk framework
			Items subject to			
Asset carrying value amount under scope of regulatory consolidation	1	$ 1,327,215	$ 886,792	$ 184,380	$ 72,870	$ 183,173
Liabilities carrying value amount under regulatory scope of consolidation	2	245,720	–	141,659	–	104,061
Total net amount under regulatory scope of consolidation	3	1,081,495	886,792	42,721	72,870	79,112
Off-balance sheet amounts	4	272,689	252,219	–	20,470	–
Differences due to different netting rules, other than those already included in line 2	5	44,003	–	44,003	–	–
Adjustment for derivatives and PFE	6	55,752	–	55,752	–	–
Gross up for repo-style transactions	7	186,779	–	186,779	–	–
Exposure amounts considered for regulatory purposes	8	$ 1,640,718	$ 1,139,011	$ 329,255	$ 93,340	$ 79,112

Credit Quality of Assets (CR1)[1,2]

($ millions)
As at

2018 Q4

	LINE #	Gross carrying values of: Defaulted exposures[3]	Non-defaulted exposures	Allowances/ impairments[4]	Net values
Loans	1	$ 3,154	$ 652,241	$ (3,531)	$ 651,864
Debt securities	2	–	169,461	–	169,461
Off-balance sheet exposures	3	–	478,016	(1,029)	476,987
Total	4	$ 3,154	$ 1,299,718	$ (4,560)	$ 1,298,312

1 Excludes insurance subsidiaries, securitization exposures, and assets at fair value through profit or loss.
2 Restructured exposures as at October 31, 2018 are $1,089 million, of which $342 million is considered impaired.
3 Includes total impaired exposures, of which $1,590 million is in the default category and $1,564 million is in the high risk/watch and classified categories.
4 Includes Stage 1, 2, and 3 allowances.

Credit Risk Mitigation Techniques – Overview (CR3)[1]

($ millions)
As at

2018 Q4

	LINE #	Exposures unsecured carrying amount	Exposures secured	Exposures secured by collateral[2]	Exposures secured by financial guarantees	Exposures secured by credit derivatives[3]
Loans	1	$ 233,061	$ 422,334	$ 299,846	$ 122,488	$ –
Debt securities	2	167,768	1,693	–	91	1,602
Total	3	$ 400,829	$ 424,027	$ 299,846	$ 122,579	$ 1,602
Of which defaulted	4	*1,622*	*1,532*	*1,307*	*225*	–

1 Represent collateral, financial guarantees and credit derivatives only when such result in reduced capital requirements.
2 For retail exposures reflects collateral as at origination and for non-retail only reflects financial collateral.
3 As of fourth quarter of 2018, the impact to RWA from credit derivatives used as credit risk mitigation techniques is a decrease of $1.3 billion (CR7).

Gross Credit Risk Exposure[1]

($ millions) *As at*	LINE #	2018 Q4						2018 Q3					
By Counterparty Type		**Drawn**	**Undrawn[2]**	**Repo-style transactions**	**OTC derivatives**	**Other off-balance sheet**	**Total**	Drawn	Undrawn[2]	Repo-style transactions	OTC derivatives	Other off-balance sheet	Total
Retail													
Residential secured	1	**$ 322,384**	**$ 52,157**	**$ –**	**$ –**	**$ –**	**$ 374,541**	$ 315,828	$ 51,315	$ –	$ –	$ –	$ 367,143
Qualifying revolving retail	2	**30,549**	**81,839**	**–**	**–**	**–**	**112,388**	29,884	79,968	–	–	–	109,852
Other retail	3	**86,488**	**6,821**	**–**	**–**	**39**	**93,348**	85,209	6,648	–	–	43	91,900
	4	**439,421**	**140,817**	**–**	**–**	**39**	**580,277**	430,921	137,931	–	–	43	568,895
Non-retail													
Corporate	5	**206,808**	**81,706**	**160,300**	**12,995**	**16,972**	**478,781**	201,554	80,248	166,020	11,040	16,186	475,048
Sovereign	6	**187,848**	**1,686**	**23,750**	**16,556**	**2,522**	**232,362**	187,923	1,422	28,719	14,698	1,771	234,533
Bank	7	**28,279**	**3,648**	**71,704**	**20,600**	**4,083**	**128,314**	27,737	3,253	64,610	18,210	3,445	117,255
	8	**422,935**	**87,040**	**255,754**	**50,151**	**23,577**	**839,457**	417,214	84,923	259,349	43,948	21,402	826,836
Total	9	**$ 862,356**	**$ 227,857**	**$ 255,754**	**$ 50,151**	**$ 23,616**	**$ 1,419,734**	$ 848,135	$ 222,854	$ 259,349	$ 43,948	$ 21,445	$ 1,395,731
By Country of Risk													
Canada	10	**$ 475,068**	**$ 128,554**	**$ 105,967**	**$ 16,295**	**$ 10,005**	**$ 735,889**	$ 464,056	$ 126,098	$ 102,418	$ 12,540	$ 9,244	$ 714,356
United States	11	**321,669**	**96,228**	**78,277**	**14,869**	**12,491**	**523,534**	321,709	93,217	80,462	14,148	11,278	520,814
Other International													
Europe	12	**42,309**	**2,410**	**59,569**	**15,731**	**772**	**120,791**	42,928	2,900	60,758	14,082	741	121,409
Other	13	**23,310**	**665**	**11,941**	**3,256**	**348**	**39,520**	19,442	639	15,711	3,178	182	39,152
	14	**65,619**	**3,075**	**71,510**	**18,987**	**1,120**	**160,311**	62,370	3,539	76,469	17,260	923	160,561
Total	15	**$ 862,356**	**$ 227,857**	**$ 255,754**	**$ 50,151**	**$ 23,616**	**$ 1,419,734**	$ 848,135	$ 222,854	$ 259,349	$ 43,948	$ 21,445	$ 1,395,731
By Residual Contractual Maturity													
Within 1 year	16	**$ 278,652**	**$ 157,706**	**$ 255,754**	**$ 24,528**	**$ 9,862**	**$ 726,502**	$ 276,203	$ 155,494	$ 259,349	$ 19,808	$ 10,059	$ 720,913
Over 1 year to 5 years	17	**398,292**	**67,372**	**–**	**17,671**	**12,856**	**496,191**	398,881	64,869	–	16,996	10,463	491,209
Over 5 years	18	**185,412**	**2,779**	**–**	**7,952**	**898**	**197,041**	173,051	2,491	–	7,144	923	183,609
Total	19	**$ 862,356**	**$ 227,857**	**$ 255,754**	**$ 50,151**	**$ 23,616**	**$ 1,419,734**	$ 848,135	$ 222,854	$ 259,349	$ 43,948	$ 21,445	$ 1,395,731
Non-Retail Exposures by Industry Sector													
Real estate													
Residential	20	**$ 24,953**	**$ 2,676**	**$ 1**	**$ 27**	**$ 1,510**	**$ 29,167**	$ 24,487	$ 2,668	$ 1	$ 29	$ 1,548	$ 28,733
Non-residential	21	**37,395**	**5,055**	**21**	**197**	**423**	**43,091**	36,888	4,823	16	221	372	42,320
Total real-estate	22	**62,348**	**7,731**	**22**	**224**	**1,933**	**72,258**	61,375	7,491	17	250	1,920	71,053
Agriculture	23	**6,902**	**351**	**2**	**19**	**21**	**7,295**	6,710	342	3	15	21	7,091
Automotive	24	**11,824**	**4,865**	**8**	**758**	**94**	**17,549**	11,360	5,353	2	661	90	17,466
Financial	25	**40,526**	**12,214**	**217,998**	**27,685**	**1,626**	**300,049**	38,293	11,624	217,480	23,503	1,537	292,437
Food, beverage, and tobacco	26	**5,635**	**3,334**	**–**	**435**	**506**	**9,910**	5,653	3,283	–	336	523	9,795
Forestry	27	**1,234**	**852**	**–**	**12**	**46**	**2,144**	1,232	798	–	8	49	2,087
Government, public sector entities, and education	28	**201,188**	**4,268**	**24,164**	**17,338**	**6,443**	**253,401**	201,063	3,653	29,279	15,588	5,077	254,660
Health and social services	29	**18,010**	**1,956**	**312**	**52**	**2,075**	**22,405**	17,439	1,570	316	58	1,979	21,362
Industrial construction and trade contractors	30	**4,163**	**1,478**	**63**	**5**	**540**	**6,249**	4,052	1,498	44	5	778	6,377
Metals and mining	31	**3,988**	**3,363**	**102**	**279**	**969**	**8,701**	3,865	3,248	98	313	1,003	8,527
Pipelines, oil, and gas	32	**6,914**	**11,490**	**85**	**1,084**	**2,115**	**21,688**	6,693	11,368	27	1,231	1,662	20,981
Power and utilities	33	**5,977**	**7,858**	**7**	**291**	**3,693**	**17,826**	5,725	7,401	24	289	3,493	16,932
Professional and other services	34	**14,115**	**5,523**	**183**	**88**	**810**	**20,719**	14,720	5,237	147	95	822	21,021
Retail sector	35	**6,882**	**2,926**	**293**	**40**	**260**	**10,401**	6,142	2,962	307	35	232	9,678
Sundry manufacturing and wholesale	36	**10,160**	**6,678**	**21**	**354**	**643**	**17,856**	9,749	6,481	14	294	603	17,141
Telecommunications, cable, and media	37	**6,302**	**7,622**	**–**	**700**	**424**	**15,048**	6,776	8,290	–	658	425	16,149
Transportation	38	**11,459**	**2,181**	**66**	**508**	**1,107**	**15,321**	11,467	2,073	64	331	1,017	14,952
Other	39	**5,308**	**2,350**	**12,428**	**279**	**272**	**20,637**	4,900	2,251	11,527	278	171	19,127
Total	40	**$ 422,935**	**$ 87,040**	**$ 255,754**	**$ 50,151**	**$ 23,577**	**$ 839,457**	$ 417,214	$ 84,923	$ 259,349	$ 43,948	$ 21,402	$ 826,836

[1] Gross credit risk exposure is before credit risk mitigants. This table excludes securitization, equity, and other credit RWA.
[2] Gross exposure on undrawn commitments is exposure at default which is the amount currently undrawn but expected to be drawn assuming a default on the underlying committed loan agreement.

Gross Credit Risk Exposure (Continued)[1]

($ millions)
As at

2018 Q2

By Counterparty Type	LINE #	Drawn	Undrawn[2]	Repo-style transactions	OTC derivatives	Other off-balance sheet	Total
Retail							
Residential secured	1	$ 308,413	$ 49,886	$ –	$ –	$ –	$ 358,299
Qualifying revolving retail	2	23,637	68,246	–	–	–	91,883
Other retail	3	89,553	6,476	–	–	43	96,072
	4	421,603	124,608	–	–	43	546,254
Non-retail							
Corporate	5	200,108	76,987	159,375	11,514	15,783	463,767
Sovereign	6	190,424	1,456	29,721	15,100	1,696	238,397
Bank	7	26,912	3,006	62,912	19,720	3,638	116,188
	8	417,444	81,449	252,008	46,334	21,117	818,352
Total	9	$ 839,047	$ 206,057	$ 252,008	$ 46,334	$ 21,160	$ 1,364,606
By Country of Risk							
Canada	10	$ 461,084	$ 127,685	$ 91,852	$ 13,233	$ 9,038	$ 702,892
United States	11	315,556	74,958	81,751	13,520	11,136	496,921
Other International							
Europe	12	42,937	2,804	59,444	15,879	619	121,683
Other	13	19,470	610	18,961	3,702	367	43,110
	14	62,407	3,414	78,405	19,581	986	164,793
Total	15	$ 839,047	$ 206,057	$ 252,008	$ 46,334	$ 21,160	$ 1,364,606
By Residual Contractual Maturity							
Within 1 year	16	$ 271,086	$ 140,912	$ 252,008	$ 22,106	$ 9,758	$ 695,870
Over 1 year to 5 years	17	394,728	62,814	–	16,823	10,508	484,873
Over 5 years	18	173,233	2,331	–	7,405	894	183,863
Total	19	$ 839,047	$ 206,057	$ 252,008	$ 46,334	$ 21,160	$ 1,364,606
Non-Retail Exposures by Industry Sector							
Real estate							
Residential	20	$ 23,833	$ 2,648	$ 1	$ 29	$ 1,556	$ 28,067
Non-residential	21	36,437	4,967	13	227	390	42,034
Total real-estate	22	60,270	7,615	14	256	1,946	70,101
Agriculture	23	6,584	226	7	12	23	6,852
Automotive	24	11,212	5,928	13	689	89	17,931
Financial	25	38,649	11,366	210,795	25,576	1,514	287,900
Food, beverage, and tobacco	26	5,239	3,099	–	367	491	9,196
Forestry	27	1,252	843	–	7	43	2,145
Government, public sector entities, and education	28	203,326	3,485	30,324	16,045	4,978	258,158
Health and social services	29	17,417	1,232	327	60	1,902	20,938
Industrial construction and trade contractors	30	4,032	1,395	58	5	762	6,252
Metals and mining	31	3,653	3,419	71	272	951	8,366
Pipelines, oil, and gas	32	6,551	11,057	85	1,085	1,760	20,538
Power and utilities	33	4,766	7,203	22	266	3,538	15,795
Professional and other services	34	14,366	4,735	154	82	772	20,109
Retail sector	35	6,128	2,205	412	43	242	9,030
Sundry manufacturing and wholesale	36	9,593	6,642	44	345	619	17,243
Telecommunications, cable, and media	37	8,033	6,947	–	618	294	15,892
Transportation	38	11,749	2,083	41	284	1,066	15,223
Other	39	4,624	1,969	9,641	322	127	16,683
Total	40	$ 417,444	$ 81,449	$ 252,008	$ 46,334	$ 21,117	$ 818,352

2018 Q1

By Counterparty Type	LINE #	Drawn	Undrawn[2]	Repo-style transactions	OTC derivatives	Other off-balance sheet	Total
Retail							
Residential secured	1	$ 304,100	$ 49,080	$ –	$ –	$ –	$ 353,180
Qualifying revolving retail	2	22,420	70,258	–	–	–	92,678
Other retail	3	87,882	6,475	–	–	39	94,396
	4	414,402	125,813	–	–	39	540,254
Non-retail							
Corporate	5	189,652	71,356	145,888	11,476	15,462	433,834
Sovereign	6	193,419	1,379	32,556	14,982	1,647	243,983
Bank	7	30,624	2,344	68,185	16,960	3,367	121,480
	8	413,695	75,079	246,629	43,418	20,476	799,297
Total	9	$ 828,097	$ 200,892	$ 246,629	$ 43,418	$ 20,515	$ 1,339,551
By Country of Risk							
Canada	10	$ 453,895	$ 129,455	$ 85,018	$ 11,083	$ 9,274	$ 688,725
United States	11	304,383	68,201	83,675	12,397	10,366	479,022
Other International							
Europe	12	48,246	2,514	56,327	15,338	508	122,933
Other	13	21,573	722	21,609	4,600	367	48,871
	14	69,819	3,236	77,936	19,938	875	171,804
Total	15	$ 828,097	$ 200,892	$ 246,629	$ 43,418	$ 20,515	$ 1,339,551
By Residual Contractual Maturity							
Within 1 year	16	$ 286,323	$ 141,323	$ 246,629	$ 21,483	$ 8,412	$ 704,170
Over 1 year to 5 years	17	375,838	57,279	–	15,224	11,421	459,762
Over 5 years	18	165,936	2,290	–	6,711	682	175,619
Total	19	$ 828,097	$ 200,892	$ 246,629	$ 43,418	$ 20,515	$ 1,339,551
Non-Retail Exposures by Industry Sector							
Real estate							
Residential	20	$ 23,385	$ 2,464	$ 1	$ 28	$ 1,503	$ 27,381
Non-residential	21	35,177	4,409	16	227	361	40,190
Total real-estate	22	58,562	6,873	17	255	1,864	67,571
Agriculture	23	6,303	280	4	10	20	6,617
Automotive	24	10,727	4,594	1	629	81	16,032
Financial	25	41,880	10,503	202,065	22,375	1,220	278,043
Food, beverage, and tobacco	26	4,743	2,940	–	314	465	8,462
Forestry	27	1,270	702	–	7	40	2,019
Government, public sector entities, and education	28	205,985	3,283	33,173	16,592	4,941	263,974
Health and social services	29	16,555	1,180	400	68	1,745	19,948
Industrial construction and trade contractors	30	3,823	1,510	57	7	617	6,014
Metals and mining	31	3,197	3,384	235	265	1,024	8,105
Pipelines, oil, and gas	32	6,262	10,009	87	800	2,074	19,232
Power and utilities	33	5,318	6,489	16	288	3,418	15,529
Professional and other services	34	13,592	4,081	174	125	724	18,696
Retail sector	35	5,854	2,215	389	73	219	8,750
Sundry manufacturing and wholesale	36	9,240	6,072	195	368	553	16,428
Telecommunications, cable, and media	37	4,805	6,857	–	627	275	12,564
Transportation	38	11,298	2,098	110	257	1,086	14,849
Other	39	4,281	2,009	9,706	358	110	16,464
Total	40	$ 413,695	$ 75,079	$ 246,629	$ 43,418	$ 20,476	$ 799,297

[1] Gross credit risk exposure is before credit risk mitigants. This table excludes securitization, equity, and other credit RWA.
[2] Gross exposure on undrawn commitments is exposure at default which is the amount currently undrawn but expected to be drawn assuming a default on the underlying committed loan agreement.

Gross Credit Risk Exposure (Continued)[1]

($ millions) *As at*	LINE #	2017 Q4					
		Drawn	Undrawn[2]	Repo-style transactions	OTC derivatives	Other off-balance sheet	Total
By Counterparty Type							
Retail							
Residential secured	1	$ 307,097	$ 48,514	$ –	$ –	$ –	$ 355,611
Qualifying revolving retail	2	22,385	71,142	–	–	–	93,527
Other retail	3	88,164	6,378	–	–	35	94,577
	4	417,646	126,034	–	–	35	543,715
Non-retail							
Corporate	5	189,523	70,110	143,807	12,218	15,830	431,488
Sovereign	6	205,315	1,314	30,291	11,146	1,448	249,514
Bank	7	24,562	1,808	64,720	17,810	3,476	112,376
	8	419,400	73,232	238,818	41,174	20,754	793,378
Total	9	$ 837,046	$ 199,266	$ 238,818	$ 41,174	$ 20,789	$ 1,337,093
By Country of Risk							
Canada	10	$ 445,745	$ 127,430	$ 80,313	$ 14,456	$ 9,438	$ 677,382
United States	11	325,848	68,344	84,398	10,809	10,526	499,925
Other International							
Europe	12	43,555	2,637	52,937	12,686	440	112,255
Other	13	21,898	855	21,170	3,223	385	47,531
	14	65,453	3,492	74,107	15,909	825	159,786
Total	15	$ 837,046	$ 199,266	$ 238,818	$ 41,174	$ 20,789	$ 1,337,093
By Residual Contractual Maturity							
Within 1 year	16	$ 283,032	$ 139,296	$ 238,818	$ 19,163	$ 8,817	$ 689,126
Over 1 year to 5 years	17	384,192	57,418	–	15,477	11,307	468,394
Over 5 years	18	169,822	2,552	–	6,534	665	179,573
Total	19	$ 837,046	$ 199,266	$ 238,818	$ 41,174	$ 20,789	$ 1,337,093
Non-Retail Exposures by Industry Sector							
Real estate							
Residential	20	$ 22,780	$ 2,401	$ 17	$ 43	$ 1,594	$ 26,835
Non-residential	21	35,677	4,347	30	331	365	40,750
Total real-estate	22	58,457	6,748	47	374	1,959	67,585
Agriculture	23	6,027	349	5	13	53	6,447
Automotive	24	9,775	4,654	16	486	84	15,015
Financial	25	34,905	9,759	196,673	24,849	1,357	267,543
Food, beverage, and tobacco	26	5,147	3,031	–	405	469	9,052
Forestry	27	1,139	705	–	8	46	1,898
Government, public sector entities, and education	28	218,563	3,226	30,802	11,982	5,061	269,634
Health and social services	29	16,134	1,091	404	98	1,937	19,664
Industrial construction and trade contractors	30	3,863	1,452	36	11	650	6,012
Metals and mining	31	3,271	3,336	203	233	987	8,030
Pipelines, oil, and gas	32	6,728	9,831	26	656	1,956	19,197
Power and utilities	33	5,303	6,833	27	346	3,398	15,907
Professional and other services	34	12,951	4,438	361	94	582	18,426
Retail sector	35	6,332	2,026	448	52	221	9,079
Sundry manufacturing and wholesale	36	9,605	6,422	111	228	516	16,882
Telecommunications, cable, and media	37	5,457	5,447	13	526	296	11,739
Transportation	38	11,387	1,962	23	390	1,059	14,821
Other	39	4,356	1,922	9,623	423	123	16,447
Total	40	$ 419,400	$ 73,232	$ 238,818	$ 41,174	$ 20,754	$ 793,378

[1] Gross credit risk exposure is before credit risk mitigants. This table excludes securitization, equity, and other credit RWA.
[2] Gross exposure on undrawn commitments is exposure at default which is the amount currently undrawn but expected to be drawn assuming a default on the underlying committed loan agreement.

Standardized Approach – Credit Risk Exposure and Credit Risk Mitigation (CRM) Effects (CR4)[1]

($ millions) *As at*	LINE #	2018 Q4					
		Exposures before CCF[2] and CRM		Exposures post-CCF[2] and CRM			
		On-balance sheet amount	Off-balance sheet amount	On-balance sheet amount	Off-balance sheet amount	RWA[3]	RWA density[4]
Asset classes							
Corporate	1	$ 100,373	$ 60,366	$ 100,373	$ 30,189	$ 120,444	92.25 %
Sovereign	2	95,199	423	95,199	212	7,733	8.10
Bank	3	13,367	6,229	13,367	4,648	3,603	20.00
Retail residential mortgages	4	2,716	818	2,716	375	1,630	52.73
Other retail	5	12,576	60,932	12,576	170	9,330	73.20
Equity	6	2,001	1,498	2,001	749	727	26.44
Other assets[5]	7	22,203	–	22,203	–	17,265	77.76
Total	8	$ 248,435	$ 130,266	$ 248,435	$ 36,343	$ 160,732	56.44 %

[1] Excludes securitization and counterparty credit risk.
[2] Credit conversion factor.
[3] Risk-weighted assets calculated on post-CCF and post-CRM exposures.
[4] Total risk-weighted assets as a percentage of post-CCF and post-CRM exposures.
[5] Excludes exposures subject to direct capital deductions and threshold deductions.

Standardized Approach – Exposures by Asset Classes and Risk Weight (CR5)[1]

($ millions) *As at*	LINE #	2018 Q4							
		Risk-weight							Total credit exposures amount (post CCF and post-CRM)
		0%	20%	35%	75%	100%	150%	Other	
Asset classes									
Corporate	1	$ 8,966	$ 1,552	$ –	$ –	$ 119,861	$ 183	$ –	$ 130,562
Sovereign	2	56,747	38,664	–	–	–	–	–	95,411
Bank	3	–	18,015	–	–	–	–	–	18,015
Retail residential mortgages	4	–	10	1,719	1,343	19	–	–	3,091
Other retail	5	427	212	–	11,830	–	277	–	12,746
Equity	6	1,940	155	–	–	655	–	–	2,750
Other assets[2]	7	6,715	–	–	–	15,414	–	74	22,203
Total	8	$ 74,795	$ 58,608	$ 1,719	$ 13,173	$ 135,949	$ 460	$ 74	$ 284,778

[1] Excludes securitization and counterparty credit risk.
[2] Excludes exposures subject to direct capital deductions and threshold deductions.

IRB – Credit Risk Exposures by Portfolio and PD Range (CR6) – Corporate[1]

($ millions, except as noted)
As at

2018 Q4

LINE #	PD scale[2]	External rating	Original on-balance sheet gross exposure[3]	Off-balance sheet exposures pre CCF[3]	Average CCF (%)	EAD post CRM and post-CCF[4]	Average PD (%)	Number of obligors[5]	Average LGD (%)[6]	Average maturity (years)	RWA	RWA density[7]	EL	Provisions
1	0.00 to <0.15 %	AAA to BBB	$ 24,005	$ 62,497	70.15 %	$ 79,278	0.06 %	5,088	38.76 %	2.7	$ 14,559	18.36 %	$ 18	$
2	0.15 to <0.25	BBB- to BB+	29,869	18,157	71.24	36,253	0.18	5,745	25.59	2.9	10,046	27.71	16	
3	0.25 to <0.50	BB to BB-	25,063	9,425	69.29	28,258	0.38	8,451	29.35	2.7	12,402	43.89	31	
4	0.50 to <0.75	B+	7,076	2,596	69.75	8,260	0.72	2,387	30.61	2.3	4,802	58.14	18	
5	0.75 to <2.50	B To B-	18,229	4,098	71.45	20,451	1.83	29,054	31.63	2.3	16,553	80.94	116	
6	2.50 to <10.00[8]	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
7	10.00 to <100.00	CCC+ to CC and below	1,906	716	60.36	2,125	18.74	862	39.80	1.9	4,212	198.21	159	
8	100.00 (Default)	Default	244	33	34.79	254	100.00	276	31.84	1.5	555	218.50	56	
9	Total		$ 106,392	$ 97,522	70.23 %	$ 174,879	0.75 %	40,170	33.29 %	2.6	$ 63,129	36.10 %	$ 414	$ 61

IRB – Credit Risk Exposures by Portfolio and PD Range (CR6) – Sovereign[1]

($ millions, except as noted)
As at

2018 Q4

LINE #	PD scale[2]	External rating	Original on-balance sheet gross exposure[3]	Off-balance sheet exposures pre CCF[3]	Average CCF (%)	EAD post CRM and post-CCF[4]	Average PD (%)	Number of obligors[5]	Average LGD (%)	Average maturity (years)	RWA	RWA density[7]	EL	Provisions
1	0.00 to <0.15 %	AAA to BBB	$ 92,425	$ 4,963	80.53 %	$ 189,744[9]	0.01 %	165	12.37 %	1.7	$ 556	0.29 %	$ 1	$
2	0.15 to <0.25	BBB- to BB+	225	–	–	225	0.16	4	2.74	4.5	7	3.11	–	
3	0.25 to <0.50	BB to BB-	–	–	–	–	–	–	–	–	–	–	–	
4	0.50 to <0.75	B+	–	–	–	–	–	–	–	–	–	–	–	
5	0.75 to <2.50	B To B-	–	–	–	–	2.35	92	34.00	2.5	–	–	–	
6	2.50 to <10.00[8]	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
7	10.00 to <100.00	CCC+ to CC and below	–	–	–	–	–	–	–	–	–	–	–	
8	100.00 (Default)	Default	–	–	–	–	–	–	–	–	–	–	–	
9	Total		$ 92,650	$ 4,963	80.53 %	$ 189,969	0.01 %	215	12.36 %	1.7	$ 563	0.30 %	$ 1	$ –

1 Excludes counterparty credit risk exposures (derivative and repo-style transactions).
2 Prescribed PD bands based on Pillar 3 disclosure requirements by BCBS.
3 Exposures based on obligors prior to credit risk mitigation.
4 Exposures after credit risk mitigation reflecting guarantor.
5 Total number of obligors is total number of unique borrowers and may not equal the sum of lines 1 to 8 as certain borrowers may be represented in more than one PD scale.
6 Loss Given Default.
7 Total risk-weighted assets as a percentage of post-CRM EAD.
8 No internal Borrower Risk Rating (BRR) mapped to the prescribed PD range.
9 Includes residential secured government insured exposures (CMHC). For pre-CRM, these are included under Residential secured – insured.

IRB – Credit Risk Exposures by Portfolio and PD Range (CR6) – Bank[1]

($ millions, except as noted)
As at

2018 Q4

LINE #	PD scale[2]	External rating	Original on-balance sheet gross exposure[3]	Off-balance sheet exposures pre CCF[3]	Average CCF (%)	EAD post CRM and post-CCF[4]	Average PD (%)	Number of obligors[5]	Average LGD (%)	Average maturity (years)	RWA	RWA density[6]	EL	Provisions
1	0.00 to <0.15 %	AAA to BBB	$ 13,691	$ 4,206	72.26 %	$ 17,321	0.05 %	511	27.71 %	2.2	$ 1,597	9.22 %	$ 3	$
2	0.15 to <0.25	BBB- to BB+	574	83	44.25	440	0.17	42	14.22	2.1	58	13.18	–	
3	0.25 to <0.50	BB to BB-	568	7	93.78	157	0.46	19	14.36	1.0	33	21.02	–	
4	0.50 to <0.75	B+	6	1	36.77	3	0.72	8	16.03	2.2	1	33.33	–	
5	0.75 to <2.50	B To B-	72	1	74.72	73	2.35	388	4.05	4.9	10	13.70	–	
6	2.50 to <10.00[7]	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
7	10.00 to <100.00	CCC+ to CC and below	1	–	–	1	19.81	1	55.00	0.3	2	200.00	–	
8	100.00 (Default)	Default	–	–	–	–	–	1	–	–	–	–	–	
9	Total		$ 14,912	$ 4,298	71.74 %	$ 17,995	0.06 %	683	27.17 %	2.2	$ 1,701	9.45 %	$ 3	$ –

[1] Excludes counterparty credit risk exposures (derivative and repo-style transactions).
[2] Prescribed PD bands based on Pillar 3 disclosure requirements by BCBS.
[3] Exposures based on obligors prior to credit risk mitigation.
[4] Exposures after credit risk mitigation reflecting guarantor.
[5] Total number of obligors is total number of unique borrowers and may not equal the sum of lines 1 to 8 as certain borrowers may be represented in more than one PD scale.
[6] Total risk-weighted assets as a percentage of post-CRM EAD.
[7] No internal BRR mapped to the prescribed PD range.

IRB – Credit Risk Exposures by Portfolio and PD Range (CR6) – Residential Secured

($ millions, except as noted) *As at*	LINE #	PD scale[1]	Original on-balance sheet gross exposure[2]	Off-balance sheet exposures pre CCF[2]	Average CCF (%)	EAD post CRM and post-CCF[3]	Average PD (%)	Number of obligors[4]	Average LGD (%)	Average maturity (years)[5]	RWA	RWA density[6]	EL	Provisions
		2018 Q4												
Canadian Retail Insured[7,8]	1	0.00 to <0.15 %	$ 60,013	$ 19,628	46.08 %	$ 7,260	0.07 %	429,856	6.91 %		$ 94	1.29 %	$ –	$
	2	0.15 to <0.25	10,966	404	40.30	2,301	0.19	59,106	8.02		76	3.30	–	
	3	0.25 to <0.50	9,801	256	44.55	2,085	0.32	63,202	8.44		105	5.04	1	
	4	0.50 to <0.75	6,192	121	48.28	1,120	0.51	23,422	8.23		77	6.88	–	
	5	0.75 to <2.50	8,551	57	61.95	1,431	1.21	33,693	7.90		164	11.46	1	
	6	2.50 to <10.00	2,197	4	85.72	366	6.25	13,470	6.49		89	24.32	1	
	7	10.00 to <100.00	683	1	83.83	103	25.16	4,264	5.03		29	28.16	1	
	8	100.00 (Default)	194	–	–	27	100.00	1,124	6.21		22	81.48	–	
	9	Total	98,597	20,471	46.01	14,693	0.78	628,137	7.47		656	4.46	4	7
Canadian Retail Uninsured[7]	10	0.00 to <0.15	117,313	59,982	50.42	147,555	0.05	677,733	23.01		5,141	3.48	18	
	11	0.15 to <0.25	22,812	1,686	100.00	24,498	0.19	91,489	24.54		2,464	10.06	11	
	12	0.25 to <0.50	17,518	1,743	68.19	18,706	0.31	85,807	28.13		3,104	16.59	16	
	13	0.50 to <0.75	8,908	472	64.52	9,213	0.52	25,859	27.91		2,173	23.59	13	
	14	0.75 to <2.50	10,530	273	72.52	10,728	1.24	38,054	27.41		4,369	40.73	36	
	15	2.50 to <10.00	2,178	11	92.34	2,188	5.59	11,841	22.23		1,727	78.93	27	
	16	10.00 to <100.00	636	1	90.19	637	29.15	3,321	17.33		596	93.56	34	
	17	100.00 (Default)	168	–	–	168	100.00	898	19.60		306	182.14	10	
	18	Total	180,063	64,168	52.41	213,693	0.39	935,002	24.04		19,880	9.30	165	22
U.S. Retail Uninsured[7]	19	0.00 to <0.15	15,009	10,850	67.63	22,347	0.06	102,531	23.42		788	3.53	3	
	20	0.15 to <0.25	5,790	556	55.66	6,100	0.19	21,658	19.10		485	7.95	2	
	21	0.25 to <0.50	5,350	383	52.21	5,550	0.32	28,118	20.92		695	12.52	4	
	22	0.50 to <0.75	4,062	294	48.48	4,205	0.52	15,909	23.41		837	19.90	5	
	23	0.75 to <2.50	7,452	1,045	51.90	7,995	1.31	32,024	27.84		3,585	44.84	31	
	24	2.50 to <10.00	1,928	351	45.83	2,089	5.81	13,501	35.73		2,714	129.92	43	
	25	10.00 to <100.00	635	80	47.61	673	23.14	5,868	36.17		1,367	203.12	56	
	26	100.00 (Default)	782	–	–	782	100.00	4,297	27.71		422	53.96	185	
	27	Total	41,008	13,559	64.40	49,741	2.47	223,906	24.08		10,893	21.90	329	106
Total residential secured	28		$ 319,668	$ 98,198	52.73 %	$ 278,127	0.76 %	1,787,045	22.50 %		$ 31,429	11.30 %	$ 498	$ 135

1 Prescribed PD bands based on Pillar 3 disclosure requirements by BCBS.
2 Exposures based on obligors prior to credit risk mitigation.
3 Exposures after credit risk mitigation reflecting guarantor.
4 Number of retail accounts.
5 Average maturity is not used in the calculation of retail exposure risk-weighted assets.
6 Total risk-weighted assets as a percentage of post-CRM EAD.
7 Includes residential mortgages and home equity lines of credit (HELOC). Insured classification reflects when insurance on the exposure is used for credit risk mitigation for reduction of RWA.
8 Includes government insured exposures (CMHC) and exposures insured by corporate entities. For post-CRM, government insured exposures are included in Sovereign.

IRB – Credit Risk Exposures by Portfolio and PD Range (CR6) – Qualifying Revolving Retail (QRR)

($ millions, except as noted)
As at

2018 Q4

LINE #	PD scale[1]	Original on-balance sheet gross exposure[2]	Off-balance sheet exposures pre CCF[2]	Average CCF (%)	EAD post CRM and post-CCF[3]	Average PD (%)	Number of obligors[4]	Average LGD (%)	Average maturity (years)[5]	RWA	RWA density[6]	EL	Provisions
1	0.00 to <0.15 %	$ 4,777	$ 91,661	62.48 %	$ 62,045	0.04 %	7,549,790	88.06 %		$ 1,716	2.77 %	$ 24	$
2	0.15 to <0.25	1,547	9,744	61.05	7,495	0.19	991,944	89.52		738	9.85	13	
3	0.25 to <0.50	1,946	7,630	61.60	6,646	0.32	1,179,209	89.55		983	14.79	19	
4	0.50 to <0.75	2,413	6,365	59.96	6,230	0.52	697,296	89.53		1,370	21.99	29	
5	0.75 to <2.50	10,022	12,262	60.04	17,384	1.49	2,098,211	89.65		8,403	48.34	233	
6	2.50 to <10.00	7,616	3,262	72.85	9,992	5.60	1,696,735	89.40		12,110	121.20	500	
7	10.00 to <100.00	2,118	433	84.98	2,486	26.71	618,537	85.20		5,688	228.80	572	
8	100.00 (Default)	110	–	–	110	100.00	51,104	72.69		25	22.73	78	
9	Total	$ 30,549	$ 131,357	62.30 %	$ 112,388	1.50 %	14,882,826	88.61 %		$ 31,033	27.61 %	$ 1,468	$ 273

IRB – Credit Risk Exposures by Portfolio and PD Range (CR6) – Other Retail

($ millions, except as noted)
As at

2018 Q4

LINE #	PD scale[1]	Original on-balance sheet gross exposure[2]	Off-balance sheet exposures pre CCF	Average CCF (%)	EAD post CRM and post-CCF[3]	Average PD (%)	Number of obligors[4]	Average LGD (%)	Average maturity (years)[5]	RWA	RWA density[6]	EL	Provisions
1	0.00 to <0.15 %	$ 10,335	$ 4,168	64.75 %	$ 13,034	0.07 %	756,080	45.16 %		$ 1,203	9.23 %	$ 4	$
2	0.15 to <0.25	5,723	2,525	41.91	6,781	0.20	362,403	46.67		1,341	19.78	6	
3	0.25 to <0.50	12,122	1,778	60.58	13,199	0.35	505,388	38.62		3,122	23.65	18	
4	0.50 to <0.75	6,321	695	77.09	6,857	0.53	255,005	47.71		2,573	37.52	17	
5	0.75 to <2.50	22,316	1,678	61.16	23,342	1.49	843,607	49.86		14,090	60.36	174	
6	2.50 to <10.00	12,735	498	51.24	12,990	5.70	500,255	50.35		10,420	80.22	372	
7	10.00 to <100.00	3,847	64	53.92	3,882	26.41	180,379	48.78		4,328	111.49	498	
8	100.00 (Default)	425	4	100.00	428	100.00	16,454	47.39		272	63.55	183	
9	Total	$ 73,824	$ 11,410	58.63 %	$ 80,513	3.29 %	3,419,571	46.82 %		$ 37,349	46.39 %	$ 1,272	$ 103

[1] Prescribed PD bands based on Pillar 3 disclosure requirements by BCBS.
[2] Exposures based on obligors prior to credit risk mitigation.
[3] Exposures after credit risk mitigation reflecting guarantor.
[4] Number of retail accounts.
[5] Average maturity is not used in the calculation of retail exposure risk-weighted assets.
[6] Total risk-weighted assets as a percentage of post-CRM EAD.

Analysis of Counterparty Credit Risk (CCR) Exposure by Approach (CCR1)[1]

($ millions, except as noted) *As at*	LINE #	2018 Q4					
		Replacement cost	Potential future exposure	Effective expected positive exposure (EEPE)	Alpha used computing regulatory EAD	EAD post-CRM	RWA
SA-CCR (for derivatives)	1	$ –	$ –	$	1.4	$ –	$ –
Current exposure method (for derivatives)	2	21,986	28,171		–	50,151	5,209
Internal model method (for derivatives and SFTs)	3			–	–	–	–
Simple approach for credit risk mitigation (for SFTs)	4					1,345	13
Comprehensive approach for credit risk mitigation (for SFTs)	5					254,409	1,750
VaR for SFTs	6					–	–
Total	7					$ 305,905	$ 6,972

[1] Excludes exposures and RWA for QCCPs and credit valuation adjustment (CVA).

Credit Valuation Adjustment (CVA) Capital Charge (CCR2)

($ millions) *As at*	LINE #	2018 Q4	
		EAD post-CRM	RWA
Total portfolios subject to the Advanced CVA capital charge			
(i) VaR component (including the 3x multiplier)	1	$ –	$ –
(ii) Stressed VaR component (including the 3x multiplier)	2		–
All portfolios subject to the standardized CVA capital charge	3	38,358	4,916
Total subject to the CVA capital charge[1]	4	$ 38,358	$ 4,916

[1] Reflects CVA RWA prior to CET1 RWA, Tier 1 Capital RWA, and Total Capital RWA scalars of 80%, 83%, and 86% respectively.

Standardized Approach – CCR Exposures by Regulatory Portfolio and Risk Weights (CCR3)

($ millions) *As at*	LINE #	2018 Q4								
										Risk-weight
		0%	10%	20%	50%	75%	100%	150%	Other	Total credit exposure
Regulatory portfolio[1]										
Corporate	1	$ 1,331	$ –	$ –	$ –	$ –	$ 93	$ –	$ –	$ 1,424
Sovereign	2	–	–	–	–	–	–	–	–	–
Bank	3	–	–	4	–	–	–	–	–	4
Total	4	$ 1,331	$ –	$ 4	$ –	$ –	$ 93	$ –	$ –	$ 1,428

[1] Excludes any exposures cleared through a qualified central counterparty.

CCR Exposures by Portfolio and PD Scale (CCR4) – Corporate

($ millions, except as noted)
As at

2018 Q4

LINE #	PD scale[1]	EAD post-CRM	Average PD	Number of obligors[2]	Average LGD	Average maturity (years)	RWA	RWA density[3]
1	0.00 to <0.15 %	$ 128,548	0.05 %	3,034	2.97 %	0.4	$ 1,541	1.20 %
2	0.15 to <0.25	23,996	0.19	1,601	2.11	0.3	380	1.58
3	0.25 to <0.50	3,418	0.41	825	6.20	0.3	232	6.79
4	0.50 to <0.75	832	0.72	246	5.42	0.8	89	10.70
5	0.75 to <2.50	15,056	2.18	478	1.35	0.5	484	3.21
6	2.50 to <10.00[4]	n/a	n/a	n/a	n/a	n/a	n/a	n/a
7	10.00 to <100.00	22	24.07	34	17.51	1.9	20	90.91
8	100.00 (Default)	–	–	2	–	–	–	–
9	Total	$ 171,872	0.27 %	6,220	2.79 %	0.4	$ 2,746	1.60 %

CCR Exposures by Portfolio and PD Scale (CCR4) – Sovereign

($ millions, except as noted)
As at

2018 Q4

LINE #	PD scale[1]	EAD post-CRM	Average PD	Number of obligors[2]	Average LGD	Average maturity (years)	RWA	RWA density[3]
1	0.00 to <0.15 %	$ 39,576	0.02 %	179	4.47 %	1.2	$ 107	0.27 %
2	0.15 to <0.25	645	0.16	15	1.29	0.1	4	0.62
3	0.25 to <0.50	83	0.47	5	1.23	0.0	1	1.20
4	0.50 to <0.75	–	0.72	1	55.00	1.0	–	–
5	0.75 to <2.50	1	2.16	4	11.57	1.0	–	–
6	2.50 to <10.00[4]	n/a	n/a	n/a	n/a	n/a	n/a	n/a
7	10.00 to <100.00	–	–	–	–	–	–	–
8	100.00 (Default)	–	–	–	–	–	–	–
9	Total	$ 40,305	0.02 %	204	4.41 %	1.2	$ 112	0.28 %

CCR Exposures by Portfolio and PD Scale (CCR4) – Bank

($ millions, except as noted)
As at

2018 Q4

LINE #	PD scale[1]	EAD post-CRM	Average PD	Number of obligors[2]	Average LGD	Average maturity (years)	RWA	RWA density[3]
1	0.00 to <0.15 %	$ 90,392	0.05 %	364	12.87 %	0.5	$ 3,603	3.99 %
2	0.15 to <0.25	1,544	0.16	66	9.66	0.7	119	7.71
3	0.25 to <0.50	89	0.35	17	12.54	0.8	13	14.61
4	0.50 to <0.75	–	0.72	8	21.44	4.0	–	–
5	0.75 to <2.50	275	2.32	11	49.13	0.1	284	103.27
6	2.50 to <10.00[4]	n/a	n/a	n/a	n/a	n/a	n/a	n/a
7	10.00 to <100.00	–	10.63	1	55.00	4.3	1	–
8	100.00 (Default)	–	–	–	–	–	–	–
9	Total	$ 92,300	0.06 %	467	12.92 %	0.5	$ 4,020	4.36 %

[1] Prescribed PD bands based on Pillar 3 disclosure requirements by BCBS.
[2] Total number of obligors is total number of unique borrowers and may not equal the sum of lines 1 to 8 as certain borrowers may be represented in more than one PD scale.
[3] Total risk-weighted assets as a percentage of post-CRM EAD.
[4] No internal BRR mapped to the prescribed PD range.

Composition of Collateral for CCR Exposure (CCR5)

($ millions) *As at*	LINE #	2018 Q4					
		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	Unsegregated	Segregated	Unsegregated		
Cash – domestic currency	1	$ 373	$ 2,543	$ –	$ 448	$ 32,184	$ 47,566
Cash – other currencies	2	320	6,708	3	6,165	64,131	102,988
Domestic sovereign debt	3	–	393	18	421	60,390	41,941
Other sovereign debt	4	466	569	761	4,077	72,186	68,111
Corporate bonds	5	39	334	–	–	5,188	7,113
Equity securities	6	30	5	–	–	27,819	47,777
Other collateral	7	1	482	–	76	22,569	36,869
Total	8	$ 1,229	$ 11,034	$ 782	$ 11,187	$ 284,467	$ 352,365

Credit Derivatives Exposures (CCR6)

($ millions) *As at*	LINE #	2018 Q4	
		Protection bought	Protection sold
Notionals			
Single-name credit default swaps	1	$ 5,316	$ 698
Index credit default swaps	2	6,723	423
Total return swaps	3	–	–
Credit options	4	–	–
Other credit derivatives	5	3,179	–
Total notionals	6	15,218	1,121
Fair values			
Positive fair value (asset)	7	12	35
Negative fair value (liability)	8	(408)	(1)

Exposures to Central Counterparties (CCR8)[1]

($ millions) *As at*	LINE #	2018 Q4	
		EAD post-CRM	RWA
Exposures to QCCPs (total)	1	$	$ 3,362
Exposures for trades at QCCPs (excluding initial margin and default fund contributions) – of which:	2	19,029	1,490
(i) OTC derivatives	3	*12,181*	*608*
(ii) Exchange-traded derivatives	4	*2,151*	*102*
(iii) Securities financing transactions	5	*4,697*	*780*
(iv) Netting sets where cross-product netting has been approved	6	–	–
Segregated initial margin	7	–	
Non-segregated initial margin	8	3,540	441
Pre-funded default fund contributions	9	781	1,431
Unfunded default fund contributions	10	–	–

[1] The Bank does not have any exposure to non-qualifying central counterparties.

Securitization Exposures in the Banking Book (SEC1)[1]

($ millions) *As at*	LINE #	2018 Q4 Bank acts as originator/sponsor Traditional	 Bank acts as investor Traditional	 Total
Retail (total) – of which:	1	$ 22,858	$ 41,927	$ 64,785
Residential mortgage	2	9,775	889	10,664
Credit card	3	1,524	18,212	19,736
Other retail exposures	4	11,559	22,819	34,378
Re-securitization	5	–	7	7
Wholesale (total) – of which:	6	6,979	21,576	28,555
Loans to corporates	7	–	2,785	2,785
Commercial mortgage	8	–	17,265	17,265
Lease and receivables	9	6,979	1,526	8,505
Other wholesale	10	–	–	–
Re-securitization	11	–	–	–

Securitization Exposures in the Trading Book (SEC2)[1]

($ millions) *As at*	LINE #	2018 Q4 Bank acts as originator/sponsor Traditional	 Bank acts as investor Traditional	 Total
Retail (total) – of which:	1	$ –	$ 636	$ 636
Residential mortgage	2	–	–	–
Credit card	3	–	53	53
Other retail exposures	4	–	583	583
Re-securitization	5	–	–	–
Wholesale (total) – of which:	6	–	146	146
Loans to corporates	7	–	–	–
Commercial mortgage	8	–	1	1
Lease and receivables	9	–	–	–
Other wholesale	10	–	145	145
Re-securitization	11	–	–	–

[1] The Bank does not have any synthetic securitization exposures.

Securitization Exposures in the Banking Book and Associated Regulatory Capital Requirements – Bank Acting as Originator or as Sponsor (SEC3)[1]

($ millions) *As at*	LINE #	2018 Q4																
		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/ SSFA	1250%	IRB RBA including IAA	IRB SFA	SA/ SSFA	1250%	IRB RBA including IAA	IRB SFA	SA/ SSFA	1250%
Total exposures																		
Traditional securitization	1	$ 29,725	$ –	$ 103	$ –	$ 9	$ 29,837	$ –	$ –	$ –	$ 2,313	$ –	$ –	$ –	$ 185	$ –	$ –	$ –
of which securitization	2	*29,725*	–	*103*	–	*9*	*29,837*	–	–	–	*2,313*	–	–	–	*185*	–	–	–
of which retail underlying	3	*22,746*	–	*103*	–	*9*	*22,858*	–	–	–	*1,735*	–	–	–	*139*	–	–	–
of which wholesale	4	*6,979*	–	–	–	–	*6,979*	–	–	–	*578*	–	–	–	*46*	–	–	–
of which re-securitization	5	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
of which senior	6	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
of which non-senior	7	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Total	8	$ 29,725	$ –	$ 103	$ –	$ 9	$ 29,837	$ –	$ –	$ –	$ 2,313	$ –	$ –	$ –	$ 185	$ –	$ –	$ –

Securitization Exposures in the Banking Book and Associated Regulatory Capital Requirements – Bank Acting as Investor (SEC4)[1]

($ millions) *As at*	LINE #	2018 Q4																
		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/ SSFA	1250%	IRB RBA including IAA	IRB SFA	SA/ SSFA	1250%	IRB RBA including IAA	IRB SFA	SA/ SSFA	1250%
Total exposures																		
Traditional securitization	1	$ 62,465	$ –	$ 694	$ 151	$ 193	$ 41,927	$ –	$ 21,576	$ –	$ 6,892	$ –	$ 4,315	$ –	$ 551	$ –	$ 345	$ –
of which securitization	2	*62,465*	–	*694*	*144*	*193*	*41,920*	–	*21,576*	–	*6,841*	–	*4,315*	–	*547*	–	*345*	–
of which retail underlying	3	*40,889*	–	*694*	*144*	*193*	*41,920*	–	–	–	*6,841*	–	–	–	*547*	–	–	–
of which wholesale	4	*21,576*	–	–	–	–	–	–	*21,576*	–	–	–	*4,315*	–	–	–	*345*	–
of which re-securitization	5	–	–	–	*7*	–	*7*	–	–	–	*51*	–	–	–	*4*	–	–	–
of which senior	6	–	–	–	*7*	–	*7*	–	–	–	*51*	–	–	–	*4*	–	–	–
of which non-senior	7	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Total	8	$ 62,465	$ –	$ 694	$ 151	$ 193	$ 41,927	$ –	$ 21,576	$ –	$ 6,892	$ –	$ 4,315	$ –	$ 551	$ –	$ 345	$ –

[1] The Bank does not have any synthetic securitization exposures.

AIRB Credit Risk Exposures: Actual and Estimated Parameters

(Percentage) *As at*	LINE #	2018 Q4 Average Estimated PD[1]	2018 Q4 Actual Default Rate	2018 Q4 Average Estimated LGD[2]	2018 Q4 Actual LGD[3]	2018 Q4 Average Estimated EAD	2018 Q4 Actual EAD	2018 Q3 Average Estimated PD[1]	2018 Q3 Actual Default Rate	2018 Q3 Average Estimated LGD[2]	2018 Q3 Actual LGD[3]	2018 Q3 Average Estimated EAD	2018 Q3 Actual EAD
Retail													
Residential secured uninsured	1	**0.60 %**	**0.35 %**	**28.94 %**	**11.82 %**	**95.95 %**	**100.95 %**	0.62 %	0.38 %	28.83 %	12.73 %	95.94 %	100.68 %
Residential secured insured[4]	2	**0.43**	**0.26**	**n/a**	**n/a**	**99.33**	**99.36**	0.43	0.26	n/a	n/a	99.34	99.36
Qualifying revolving retail	3	**2.50**	**3.02**	**88.70**	**80.14**	**97.91**	**94.79**	2.51	3.02	88.53	80.33	97.95	94.68
Other retail	4	**2.52**	**1.99**	**54.87**	**46.10**	**99.32**	**91.44**	2.47	1.98	53.39	45.08	99.30	91.35
Non-Retail													
Corporate	5	**1.27**	**0.32**	**18.17**	**24.36**	**90.76**	**57.40**	1.21	0.31	17.91	24.35	90.65	56.36
Sovereign	6	**0.09**	**–**	**10.95**	**n/a**	**99.63**	**n/a**	0.09	–	10.88	n/a	99.71	n/a
Bank	7	**0.23**	**–**	**15.25**	**n/a**	**96.87**	**n/a**	0.21	–	16.00	n/a	96.94	n/a

		2018 Q2 Average Estimated PD[1]	2018 Q2 Actual Default Rate	2018 Q2 Average Estimated LGD[2]	2018 Q2 Actual LGD[3]	2018 Q2 Average Estimated EAD	2018 Q2 Actual EAD	2018 Q1 Average Estimated PD[1]	2018 Q1 Actual Default Rate	2018 Q1 Average Estimated LGD[2]	2018 Q1 Actual LGD[3]	2018 Q1 Average Estimated EAD	2018 Q1 Actual EAD
Retail													
Residential secured uninsured	8	0.64 %	0.39 %	29.47 %	14.29 %	96.28 %	98.38 %	0.66 %	0.40 %	29.42 %	15.48 %	96.41 %	97.45 %
Residential secured insured[4]	9	0.45	0.26	n/a	n/a	99.40	99.34	0.60	0.29	n/a	n/a	99.37	99.34
Qualifying revolving retail	10	1.54	1.47	87.17	79.89	92.53	90.09	1.60	1.49	86.69	80.15	92.96	90.58
Other retail	11	2.47	2.01	53.21	45.38	99.28	91.01	2.44	2.06	50.98	43.51	99.28	90.72
Non-Retail													
Corporate	12	1.24	0.32	17.64	24.06	91.27	53.33	1.22	0.35	17.84	23.97	91.35	81.20
Sovereign	13	0.11	–	10.86	n/a	99.72	n/a	0.11	–	12.04	–	99.74	n/a
Bank	14	0.19	–	16.05	n/a	97.49	n/a	0.18	–	14.36	–	98.43	n/a

		2017 Q4 Average Estimated PD[1]	2017 Q4 Actual Default Rate	2017 Q4 Average Estimated LGD[2]	2017 Q4 Actual LGD[3]	2017 Q4 Average Estimated EAD	2017 Q4 Actual EAD
Retail							
Residential secured uninsured	15	0.66 %	0.41 %	29.38 %	15.35 %	96.49 %	96.92 %
Residential secured insured[4]	16	0.59	0.31	n/a	n/a	99.35	99.29
Qualifying revolving retail	17	1.55	1.47	86.56	78.38	93.05	91.12
Other retail	18	2.35	2.12	50.56	42.07	99.22	91.05
Non-Retail							
Corporate	19	1.19	0.41	17.56	21.54	91.53	54.65
Sovereign	20	0.08	–	12.08	n/a	99.78	n/a
Bank	21	0.17	–	13.94	n/a	98.78	n/a

[1] Estimated PD reflects a one-year through-the-cycle time horizon and is based on long run economic conditions.
[2] Estimated LGD reflects loss estimates for the full portfolio under a severe downturn economic scenario.
[3] Represents average LGD of the impaired portfolio over trailing 12 months.
[4] LGD for the residential secured insured portfolio is n/a due to the effect of credit risk mitigation from government backed entities.

IRB – Backtesting of Probability of Default (PD) per Portfolio – Non-Retail (CR9)

($ millions, except as noted)
As at

2018 Q4

	LINE #	PD range	External rating equivalent	Weighted average PD	Arithmetic PD average by Obligors	Number of obligors: End of previous	Number of obligors: End of the year	Defaulted obligors in the year[1]	of which: new defaulted obligors in the year	Average historical annual default rate
Corporate	1	0.00 to <0.15 %	AAA to BBB	0.06 %	0.09 %	4,222	4,709	–	–	0.01 %
	2	0.15 to <0.25	BBB- to BB+	0.19	0.19	5,738	6,480	3	–	0.02
	3	0.25 to <0.50	BB to BB-	0.39	0.39	8,152	9,299	5	–	0.10
	4	0.50 to <0.75	B+	0.74	0.74	2,319	2,742	2	–	0.14
	5	0.75 to <2.50	B to B-	1.81	1.91	12,305	14,741	54	1	0.44
	6	2.50 to <10.00	n/a[2]	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	7	10.00 to <100.00	CCC+ to CC and below	18.85	20.31	667	732	45	1	10.18
	8	Total		0.73	1.30	33,403	38,703	109	2	1.68
Sovereign	9	0.00 to <0.15 %	AAA to BBB	0.01	0.04	237	257	–	–	–
	10	0.15 to <0.25	BBB- to BB+	0.16	0.18	18	20	–	–	–
	11	0.25 to <0.50	BB to BB-	0.32	0.38	3	3	–	–	–
	12	0.50 to <0.75	B+	–	–	–	–	–	–	–
	13	0.75 to <2.50	B to B-	2.40	2.40	3	3	–	–	–
	14	2.50 to <10.00	n/a[2]	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	15	10.00 to <100.00	CCC+ to CC and below	–	–	–	–	–	–	–
	16	Total		0.01	0.08	261	283	–	–	–
Bank	17	0.00 to <0.15 %	AAA to BBB	0.05	0.07	703	776	–	–	–
	18	0.15 to <0.25	BBB- to BB+	0.18	0.19	123	142	–	–	–
	19	0.25 to <0.50	BB to BB-	0.33	0.39	57	60	–	–	–
	20	0.50 to <0.75	B+	0.74	0.74	12	14	–	–	–
	21	0.75 to <2.50	B to B-	2.08	2.06	38	54	–	–	–
	22	2.50 to <10.00	n/a[2]	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	23	10.00 to <100.00	CCC+ to CC and below	20.32	20.32	2	3	–	–	8.33
	24	Total		0.06 %	0.24 %	935	1,049	–	–	1.01 %

[1] The Bank defines default as delinquency of 90 days or more for most retail products and BRR 9 for non-retail exposures.
[2] No internal BRR mapped to the prescribed PD range.

IRB – Backtesting of Probability of Default (PD) per Portfolio – Retail (CR9)

($ millions, except as noted)
As at

	LINE #	2018 Q4							
Residential Secured		PD range	Weighted average PD	Arithmetic PD average by Obligors	Number of obligors: End of previous	Number of obligors: End of the year	Defaulted obligors in the year[1]	of which: new defaulted obligors in the year	Average historical annual default rate
Canadian Retail Insured	1	0.00 to <0.15 %	0.06 %	0.05 %	432,307	428,258	96	–	0.02 %
	2	0.15 to <0.25	0.19	0.19	76,390	61,342	80	–	0.09
	3	0.25 to <0.50	0.32	0.35	83,052	61,702	178	2	0.21
	4	0.50 to <0.75	0.52	0.61	32,951	22,860	97	1	0.34
	5	0.75 to <2.50	1.28	1.29	50,284	31,972	353	1	0.71
	6	2.50 to <10.00	5.71	4.81	16,521	12,054	385	–	2.64
	7	10.00 to <100.00	26.56	22.62	3,989	2,748	379	–	11.03
	8	Total	0.75	0.68	695,494	620,936	1,568	4	0.28
Canadian Retail Uninsured	9	0.00 to <0.15 %	0.05	0.04	613,686	677,583	117	3	0.02
	10	0.15 to <0.25	0.19	0.19	77,531	93,125	97	1	0.11
	11	0.25 to <0.50	0.31	0.34	86,235	83,842	125	14	0.18
	12	0.50 to <0.75	0.52	0.61	29,561	26,904	76	2	0.33
	13	0.75 to <2.50	1.24	1.27	39,620	36,302	298	3	0.76
	14	2.50 to <10.00	5.67	4.69	9,956	10,966	323	1	3.73
	15	10.00 to <100.00	28.39	24.72	2,023	2,116	260	–	14.70
	16	Total	0.42	0.41	858,612	930,838	1,296	24	0.21
U.S. Retail Uninsured	17	0.00 to <0.15 %	0.06	0.06	103,275	102,531	49	–	0.05
	18	0.15 to <0.25	0.19	0.19	21,017	21,658	21	1	0.12
	19	0.25 to <0.50	0.32	0.36	28,146	28,118	58	–	0.17
	20	0.50 to <0.75	0.52	0.61	16,727	15,909	53	2	0.29
	21	0.75 to <2.50	1.37	1.31	34,583	32,024	175	5	0.62
	22	2.50 to <10.00	5.75	4.76	14,443	13,501	249	–	2.05
	23	10.00 to <100.00	23.03	20.57	5,261	5,868	451	10	8.98
	24	Total	2.71 %	3.07 %	223,452	219,609	1,056	18	0.58 %

[1] The Bank defines default as delinquency of 90 days or more for most retail products and BRR 9 for non-retail exposures.

IRB – Backtesting of Probability of Default (PD) per Portfolio – Retail (CR9) (Continued)

($ millions, except as noted)
As at

2018 Q4

Qualifying Revolving Retail (QRR)	LINE #	PD range	Weighted average PD	Arithmetic PD average by Obligors	Number of obligors: End of previous	Number of obligors: End of the year	Defaulted obligors in the year[1]	of which: new defaulted obligors in the year	Average historical annual default rate
	1	0.00 to <0.15 %	0.04 %	0.04 %	7,723,823	7,532,868	3,404	3	0.04 %
	2	0.15 to <0.25	0.19	0.20	986,581	988,785	1,777	1	0.18
	3	0.25 to <0.50	0.32	0.36	1,209,575	1,175,008	3,862	123	0.31
	4	0.50 to <0.75	0.53	0.62	726,828	694,038	3,629	63	0.50
	5	0.75 to <2.50	1.45	1.44	2,081,740	2,073,485	24,284	1,072	1.14
	6	2.50 to <10.00	5.53	4.77	1,701,585	1,681,821	86,543	11,886	4.34
	7	10.00 to <100.00	27.56	27.77	438,862	424,177	82,777	58	17.99
	8	Total	1.20	2.27	14,868,994	14,570,182	206,276	13,206	1.35
Other Retail	9	0.00 to <0.15 %	0.07	0.07	765,189	755,120	567	1	0.08
	10	0.15 to <0.25	0.20	0.20	344,829	361,979	595	19	0.17
	11	0.25 to <0.50	0.35	0.37	502,089	504,765	1,295	59	0.28
	12	0.50 to <0.75	0.53	0.62	231,028	254,705	1,168	34	0.50
	13	0.75 to <2.50	1.48	1.37	806,023	845,975	9,361	611	1.09
	14	2.50 to <10.00	5.68	4.87	440,531	494,268	16,893	738	3.90
	15	10.00 to <100.00	25.98	24.44	152,086	171,696	24,079	829	15.75
	16	Total	3.06 %	2.99 %	3,241,775	3,388,508	53,958	2,291	1.70 %

[1] The Bank defines default as delinquency of 90 days or more for most retail products and BRR 9 for non-retail exposures.

Glossary – Basel

Risk-weighted assets (RWA)	• Used in the calculation of risk-based capital ratios, total risk-weighted assets are calculated for credit, operational, and market risks using the approaches described below. There are three different measures of RWA used for each capital ratio due to the different scalars used for the phase-in of the CVA. For fiscal 2017, the scalars inclusion of CVA for CET1, Tier 1, and Total Capital RWA were 72%, 77%, and 81%, respectively. For fiscal 2018, the corresponding scalars are 80%, 83%, and 86%, respectively.
Approaches used by the Bank to calculate RWA	
For Credit Risk	
Standardized Approach	• Under this approach, banks apply a standardized set of risk-weights to exposures, as prescribed by the regulator, to calculate credit risk capital requirements. Standardized risk-weights are based on external credit assessments, where available, and other risk-related factors, including exposure asset class and collateral.
Advanced Internal Ratings Based (AIRB) Approach	• Under this approach, banks use their own internal historical experience of PD, LGD, EAD, and other key risk assumptions to calculate credit risk capital requirements. Use of the AIRB approach is subject to supervisory approval.
For Operational Risk	
Advanced Measurement Approach (AMA)	• Under this approach, banks use their own internal operational risk measurement system with quantitative and qualitative criteria to calculate operational risk capital.
The Standardized Approach (TSA)	• Under this approach, banks apply prescribed factors to a three-year average of annual gross income for each of eight different business lines representing the different activities of the institution (such as, Corporate Finance, Retail Banking, Asset Management).
For Market Risk	
Standardized Approach	• Under this approach, banks use standardized capital charges prescribed by the regulator to calculate general and specific risk components of market risk.
Internal Models Approach	• Under this approach, banks use their own internal risk management models to calculate specific risk and general market risk charges.
Credit Risk Terminology	
Gross credit risk exposure	• The total amount the Bank is exposed to at the time of default measured before counterparty-specific provisions or write-offs. Includes exposures under both the Standardized and AIRB approaches to credit risk.
Counterparty Type / Exposure Classes:	
Retail	
Residential Secured	• Includes residential mortgages and home equity lines of credit extended to individuals.
Qualifying Revolving Retail (QRR)	• Includes credit cards, unsecured lines of credit, and overdraft protection products extended to individuals (in the case of the Standardized approach to credit risk, credit card exposures are included in the "Other Retail" category).
Other Retail	• Includes all other loans (such as personal loans, student lines of credit, and small business loans) extended to individuals and small businesses.
Non-retail	
Corporate	• Includes exposures to corporations, partnerships, or proprietorships.
Sovereign	• Includes exposures to central governments, central banks, multilateral development banks, and certain public sector entities.
Bank	• Includes exposures to deposit-taking institutions, securities firms, and certain public sector entities.
Equities	• Equities exposures in the banking book comprise mainly of exposures held with the objective of earning profits or to meet regulatory requirements in the United States (including Federal Reserve Bank and Federal Home Loan Bank equities). A small portfolio is held for strategic and other reasons.
Exposure Types:	
Drawn	• The amount of funds advanced to a borrower.
Undrawn (commitment)	• The difference between the authorized and drawn amounts (for instance, the unused portion of a line of credit/committed credit facility).
Repo-style transactions	• Repurchase and reverse repurchase agreements, securities borrowing and lending.
OTC derivatives	• Privately negotiated derivative contracts.
Other off-balance sheet	• All off-balance sheet arrangements other than derivatives and undrawn commitments (such as letters of credit, letters of guarantee).
AIRB Credit Risk Parameters:	
Probability of Default (PD)	• The likelihood that the borrower will not be able to meet its scheduled repayments within a one year time horizon.
Exposure at Default (EAD)	• The total amount the Bank is exposed to at the time of default.
Loss Given Default (LGD)	• The amount of the loss when a borrower defaults on a loan, which is expressed as a percentage of EAD.
Credit Valuation Adjustment (CVA)	• CVA represents a capital charge that measures credit risk due to default of derivative counterparties. This charge requires banks to capitalize for the potential changes in counterparty credit spread for the derivative portfolios. As per OSFI's final Capital Adequacy Requirements (CAR) guideline, the CVA capital charge has been implemented for 2014 and will be fully phased in by 2019.
Common Equity Tier 1 (CET1)	• This is a primary Basel III capital measure comprised mainly of common equity, retained earnings and accumulated other comprehensive income (loss). Regulatory deductions made to arrive at the CET1 Capital include, goodwill and intangibles, unconsolidated investments in banking, financial, and insurance entities, deferred tax assets, defined benefit pension fund assets, and shortfalls in allowances.
CET1 Ratio	• CET1 ratio represents the predominant measure of capital adequacy under Basel III and equals CET1 Capital divided by CET1 Capital RWA.
Return on Common Equity Tier 1 (CET1) Capital risk-weighted assets	• Net income available to common shareholders as a percentage of average CET1 Capital RWA.
Liquidity Coverage Ratio (LCR)	• LCR is calculated by dividing the total stock of unencumbered high quality liquid assets by the expected next 30-day stressed cash outflow.
Countercyclical Capital Buffer (CCB)	• CCB is an extension of the capital conservation buffer which takes into account the macro-financial environment in which the banks operate and aims to protect the banking sector against future potential losses during periods of excess aggregate credit growth from a build-up of system-wide risk. The Bank's CCB will be a weighted average of the buffers deployed across jurisdictions to which the institution has private sector credit exposures.

Acronyms

Acronym	Definition	Acronym	Definition
ABCP	Asset-Backed Commercial Paper	**IFRS**	International Financial Reporting Standards
AOCI	Accumulated Other Comprehensive Income	**IRB**	Internal Ratings Based
BRR	Borrower Risk Rating	**MBS**	Mortgage-Backed Security
CCF	Credit Conversion Factor	**N/A**	Not Applicable
CCP	Central Counterparty	**NHA**	National Housing Act
CCR	Counterparty Credit Risk	**N/M**	Not Meaningful
CDS	Credit Default Swaps	**OCC**	Office of the Comptroller of the Currency
CMHC	Canada Mortgage and Housing Corporation	**OCI**	Other Comprehensive Income
CRM	Credit Risk Mitigation	**OSFI**	Office of the Superintendent of Financial Institutions Canada
D-SIBs	Domestic Systemically Important Banks	**PFE**	Potential Future Exposure
FVOCI	Fair Value Through Other Comprehensive Income	**QCCP**	Qualifying Central Counterparty
G-SIBs	Global Systemically Important Banks	**SA-CCR**	Standardized Approach Counterparty Credit Risk
HELOC	Home Equity Line of Credit	**SFTs**	Securities Financing Transactions