

Supplementary Regulatory Capital Disclosures

Q4 2020

For the period ended: October 31, 2020

For further information, contact Scotiabank Investor Relations:

Philip Smith – philip.smith@scotiabank.com

Sophia Saeed – sophia.saeed@scotiabank.com

Rene Lo – rene.lo@scotiabank.com



Scotiabank

October 31, 2020

Table of Contents

Section/Tab	Description	Frequency	Page #
Overview	Overview	Quarterly	3
Basel III	Basel III Implementation	Quarterly	4
Highlights	Regulatory Capital - Highlights	Quarterly	5
EAD_RWA	Exposure at Default and Risk-weighted Assets for Credit Risk Portfolios	Quarterly	6
Pillar III report			
KM2	Key metrics – TLAC requirements (at resolution group level)	Quarterly	7
Qualitative	Summary of Qualitative Requirements - Pillar III (Cross Referenced)	Annual	8-13
OV1	Overview of RWA	Quarterly	14-15
LI1	Differences between accounting and regulatory scopes of consolidation and mapping of financial statements	Quarterly	16-17
LI2	Main sources of differences between regulatory exposure amounts and carrying values in financial statements	Quarterly	18
CC1	Composition of regulatory capital	Quarterly	19-22
CC2	Reconciliation of regulatory capital to balance sheet	Quarterly	23-26
TLAC1	TLAC composition for G-SIBs (at resolution group level)	Quarterly	27
TLAC3	Resolution entity – creditor ranking at legal entity level	Quarterly	28-29
LR1	Summary comparison of accounting assets vs leverage ratio exposure measure	Quarterly	30
LR2	Leverage ratio common disclosure template	Quarterly	31
CR1	Credit quality of assets	Quarterly	32
CR2	Changes in stock of defaulted loans and debt securities	Quarterly	33
CR3	Credit risk mitigation techniques – overview	Quarterly	34
CR4	Standardized approach – credit risk exposures and credit risk mitigation (CRM) effects	Quarterly	35
CR5	Standardized approach – exposures by asset classes and risk weights	Quarterly	36
CR6 (Retail)	IRB – Retail credit risk exposures by portfolio and probability of default (PD) range	Quarterly	37-42
CR6 (Non-Retail)	IRB – Non-Retail credit risk exposures by portfolio and probability of default (PD) range	Quarterly	43-48
CR7	IRB – effect on RWA of credit derivatives used as CRM techniques	Quarterly	49
CR8	RWA flow statements of credit risk exposures under IRB	Quarterly	50
CR9 (Retail)	IRB – backtesting of PD per portfolio - Retail	Annual	51-52
CR9 (Non-Retail)	IRB – backtesting of PD per portfolio - Non-Retail	Annual	53-54
CR10	IRB (specialized lending and equities under the simple risk weight method)	Quarterly	55-56

October 31, 2020

Table of Contents

Section/Tab	Description	Frequency	Page #
CCR1	Analysis of counterparty credit risk (CCR) exposure by approach	Quarterly	57
CCR2	Credit valuation adjustment (CVA) capital charge	Quarterly	58
CCR3	Standardized approach of CCR exposures by regulatory portfolio and risk weights	Quarterly	59
CCR4	IRB – CCR exposures by portfolio and PD scale	Quarterly	60-62
CCR5	Composition of collateral for CCR exposure	Quarterly	63
CCR6	Credit derivatives exposures	Quarterly	64
CCR7	RWA flow statements of CCR exposures under the Internal Model Method (IMM)	Quarterly	65
CCR8	Exposures to central counterparties	Quarterly	66
SEC1	Securitization exposures in the banking book	Quarterly	67-68
SEC2	Securitization exposures in the trading book	Quarterly	69-70
SEC3	Securitization exposures in the banking book and associated regulatory capital requirements – bank acting as originator or as sponsor	Quarterly	71-72
SEC4	Securitization exposures in the banking book and associated capital requirements – bank acting as investor	Quarterly	73-74
Disclosures provided to address Enhanced Disclosure Task Force (EDTF) recommendations			
Capital_Flow	Flow Statement for Regulatory Capital	Quarterly	75
RWA_Summary	Risk-weighted Assets and Capital Ratios	Quarterly	76
RWA_Flow	Movement of Risk-weighted Assets by Risk Type (All-in Basis)	Quarterly	77
RWA_by_Business	Risk-weighted Assets Arising from the Activities of the Bank's Businesses	Quarterly	78
Geography	Credit Risk Exposures by Geography	Quarterly	79
Maturity	AIRB Credit Risk Exposures by Maturity	Quarterly	80
AIRB_Losses	AIRB Credit Losses	Quarterly	81
BackTest	Estimated and Actual Loss Parameters - Non-Retail and Retail AIRB Portfolios	Quarterly	82
Derivatives	Derivatives - Counterparty Credit Risk	Quarterly	83
Mkt_Risk	Total Market Risk-weighted Assets	Quarterly	84
Impaired by Region	Impaired Loans by Region	Annual	85
Impaired by Industry	Impaired Loans by Industry	Annual	86-87
Glossary	Glossary	Quarterly	88

For further information contact: Phil Smith - (416) 863-2866, Sophia Saeed - (416) 933-8869, or Rene Lo - (416) 866-2870

This Appendix disclosure is based on OSFI's Pillar 3 disclosure requirements (April 2017), including subsequently issued Total Loss Absorbing Capital (May 2018), and Leverage ratio disclosure requirements (November 2018), and are primarily sourced from the BCBS' Revised Pillar 3 disclosure requirements - Phase 1 (2015) and its Technical Amendment to Regulatory Treatment of Accounting Provisions (August 2018). This document is not audited and should be read in conjunction with our 2020 Annual Report.

Effective November 1, 2012, Canadian banks are subject to the revised capital adequacy requirements as published by the Basel Committee on Banking Supervision (BCBS) and commonly referred to as Basel III, as per OSFI's Capital Adequacy Requirements Guideline (CAR). Basel III builds on the "International Convergence of Capital Measurement and Capital Standards: A Revised Framework" (Basel II). Refer to page 4 "Basel III Implementation".

The Basel III Framework is comprised of three Pillars:

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

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

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

Credit Risk

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

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

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

- Under the AIRB approach, credit risk risk-weighted assets (RWA) are calculated by multiplying the capital requirement (K) by EAD times 12.5, where K is a function of the PD, LGD, maturity and prescribed correlation factors. This results in the capital calculations being more sensitive to underlying risks.

- Risk weights for exposures falling under the Securitization Framework are mainly computed under the following approaches: the Internal Ratings Based Approach (IRBA), External Ratings-Based Approach (ERBA), or the OSFI approved Internal Assessments Approach (IAA).
- IRBA risk weights are only applicable to retained exposures to securitizations of Bank originated receivables utilizing the Bank's existing OSFI approved AIRB model parameters.
- ERBA risk weights for other banking book exposures depend on the external ratings provided by the external credit assessment institutions (ECAI): S&P, Moody's and DBRS and are risk-weighted based on prescribed percentages incorporating effective maturity and STC (Simple, Transparent, Comparable) criteria, a mapping process consistent with OSFI's CAR.
- IAA risk weights for exposures to our asset-backed commercial paper conduits are based on a rating methodology similar to the criteria that are published by ECAIs and therefore are similar to the methodologies used by these institutions. Our ratings process includes a comparison of the available credit enhancement in a securitization structure to a stressed level of projected losses. The stress level used is determined by the desired risk profile of the transaction. As a result, we stress the cash flows of a given transaction at a higher level in order to achieve a higher rating. Conversely, transactions that only pass lower stress levels achieve lower ratings. We periodically compare our own ratings to ECAIs ratings to ensure that the ratings provided by ECAIs are reasonable. We have developed asset class specific criteria guidelines which provide the rating methodologies for different asset classes. The guidelines are reviewed periodically and are subject to a model validation process, for compliance with Basel rules. The Bank's Global Risk Management (GRM) is responsible for providing risk assessments for capital purposes. GRM is independent of the business originating the securitization exposures and performs its own analysis, sometimes in conjunction with but always independent of the applicable business.
- A multiplier of 1.25 is applied to the correlation parameter of all exposures to all unregulated Financial Institutions, and regulated Financial Institutions with assets of at least US\$100 billion.
- Exchange-traded derivatives and other exposures to CCPs which previously were excluded from the capital calculation under Basel II are risk-weighted under Basel III.
- An overall scaling factor of 6% is added to the credit risk RWA for all AIRB portfolios. For the remaining portfolios, the Standardized Approach is used to compute credit risk.
- The Standardized Approach applies regulator prescribed risk weight factors to credit exposures based on the external credit assessments (public ratings), where available, and also considers other additional factors (e.g. loan-to-value for retail, eligible collateral, allowances, etc.).

Operational Risk

In January 2020, OSFI revised its capital requirements for operational risk in consideration of the final Basel III revisions published by the BCBS in December 2017. Effective Q1 2023, institutions will be required to use the revised Basel III Standardized Approach for operational risk. OSFI has plans for further consultation related to the 2023 domestic implementation of the final Basel III reforms. In the interim, for fiscal years 2020, 2021 and 2022, institutions previously approved for the Basel II Advanced Measurement Approach (AMA) for operational risk capital are to report using the existing Basel II Standardized Approach (TSA).

Market Risk

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

Regulatory response to COVID-19

During the second quarter of 2020, OSFI introduced changes to regulations to keep the financial system resilient and well capitalized in response to COVID-19. A suite of temporary adjustments to existing capital and leverage requirements were introduced, details of which can be found in the Capital Management section of the MD&A in the 2020 Annual Report to Shareholder.

This "Supplementary Regulatory Capital Disclosure" including the main features template that sets out a summary of information on the terms and conditions of the main features of all capital instruments is posted on the Bank's website as follows: <http://www.scotiabank.com/ca/en/0,,3066,00.htm>

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

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

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

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

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

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

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

In June 2018, in order to provide increased transparency to the market, OSFI clarified its additional requirement for its Domestic Stability Buffer, already held by D-SIBs as a Pillar 2 buffer requirement. The Domestic Stability Buffer will range between 0 and 2.5% of a bank's total RWA. The buffer was set at 2.25%, which OSFI has revised to 1.0% effective March 13, 2020. OSFI reviews this buffer semi-annually.

In December 2013, OSFI announced its decision to implement the phase-in (over 5 years) of the regulatory capital for Credit Valuation Adjustment (CVA) on Bilateral OTC Derivatives effective Q1 2014. In accordance with OSFI's requirements, commencing in Q1, 2019, the CVA risk-weighted assets have been fully phased-in (scalars of 0.80, 0.83 and 0.86, were used to compute the CET1 capital ratio, Tier 1 capital ratio and Total capital ratio, respectively in Fiscal 2018).

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

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

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

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

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

In November 2018, OSFI revised its Leverage Requirements Guideline which outlines the application of the Basel III Leverage ratio in Canada. Institutions are expected to maintain a material operating buffer above the 3% minimum. The Bank meets OSFI's authorized leverage ratio. Commencing Q1 2015, disclosure in accordance with OSFI's September 2018 Public Disclosure Requirements related to the Basel III Leverage ratio has been made in the Supplementary Regulatory Capital Disclosures.

Since the introduction of Basel II in 2008, OSFI has prescribed a minimum capital floor requirement for institutions that use the AIRB approach for credit risk. Effective Q2 2018, OSFI replaced the Basel I regulatory capital floor with a capital floor based on 70% of the Basel II standardized approach for credit risk RWAs (increasing to 72.5% in Q3 2018 and to 75% thereafter). OSFI's COVID-19 relief measures include the reduction of the capital floor based to 70% until Q1 2023. Revised capital floor requirements also include risk-weighted assets for market risk and CVA.

On September 23, 2018, the regulations under the Canada Deposit Insurance Corporation Act (Canada) (the "CDIC Act") and the Bank Act (Canada) (collectively, the "Bail-In Regulations") providing the details of conversion, issuance and compensation regimes for bail-in instruments issued by D-SIBs, including the Bank, came into force. On April 18, 2018, OSFI issued guidelines on Total Loss Absorbing Capacity (TLAC), which will apply to Canada's D-SIBs as part of the Federal Government's bail-in regime. OSFI provided notification requiring systemically important banks to maintain a minimum of 21.5% plus the domestic stability buffer of TLAC eligible instruments relative to their RWAs and 6.75% relative to their leverage exposures, effective Q1 2022. The Bank is required to disclose its TLAC ratios. Please refer to KM2.

REGULATORY CAPITAL HIGHLIGHTS

Formerly Page 3 of Supplementary Regulatory Capital Disclosure



(in \$MM)	Basel III				
	Q4 2020	Q3 2020	Q2 2020	Q1 2020	Q4 2019
Common Equity Tier 1 capital	49,165	48,689	48,543	47,804	46,578
Tier 1 capital	55,362	54,898	53,045	52,437	51,304
Total capital	64,512	64,174	62,523	61,392	59,850
Risk-weighted Assets⁽¹⁾					
Capital Risk-weighted Assets	417,138	430,542	446,173	420,694	421,185
Capital Ratios (%)					
Common Equity Tier 1 (as a percentage of risk-weighted assets)	11.8	11.3	10.9	11.4	11.1
Tier 1 (as a percentage of risk-weighted assets)	13.3	12.8	11.9	12.5	12.2
Total capital (as a percentage of risk-weighted assets)	15.5	14.9	14.0	14.6	14.2
Leverage:					
Leverage Exposures ⁽¹⁾	1,170,290	1,193,840	1,199,022	1,300,001	1,230,648
Leverage Ratio (%)	4.7	4.6	4.4	4.0	4.2
OSFI Pillar 1 Target: All-in Basis (%)					
Common Equity Tier 1 minimum ratio	8.0	8.0	8.0	8.0	8.0
Tier 1 capital minimum ratio	9.5	9.5	9.5	9.5	9.5
Total capital minimum ratio	11.5	11.5	11.5	11.5	11.5
Leverage minimum ratio	3.0	3.0	3.0	3.0	3.0
Capital instruments subject to phase-out arrangements					
Current cap on Additional Tier 1 (AT1) instruments subject to phase-out arrangements (%)	20	20	20	20	30
Amount excluded from AT1 due to cap (excess over cap after redemptions and maturities)	-	-	-	117	-
Current cap on Tier 2 (T2) instruments subject to phase-out arrangements (%)	20	20	20	20	30
Amount excluded from T2 due to cap (excess over cap after redemptions and maturities)	-	-	-	-	-

(1) IFRS 16 was adopted prospectively effective November 1, 2019 (Q1/20), prior period amounts have not been restated and are not comparable.

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

Formerly Page 11 of Supplementary Regulatory Capital Disclosure



(in \$MM)	Sub-type	Q4 2020								Q3 2020	
		AIRB		Standardized		Total		% AIRB		Total	
		EAD ⁽¹⁾	RWA ⁽²⁾	EAD ⁽¹⁾	RWA ⁽²⁾	EAD ⁽¹⁾	RWA ⁽²⁾	EAD ⁽¹⁾	RWA ⁽²⁾	EAD ⁽¹⁾	RWA ⁽²⁾
Non-Retail											
Corporate	Drawn	169,334	83,795	53,013	48,614	222,347	132,409	76%	63%	239,758	142,322
	Undrawn	102,141	35,033	3,482	3,399	105,623	38,432	97%	91%	100,765	36,224
	Other ⁽³⁾	53,085	12,248	2,743	2,722	55,828	14,970	95%	82%	53,891	14,339
	Total	324,560	131,076	59,238	54,735	383,798	185,811	85%	71%	394,414	192,885
Bank	Drawn	18,472	3,294	2,505	1,905	20,977	5,199	88%	63%	23,543	5,700
	Undrawn	8,714	1,083	71	71	8,785	1,154	99%	94%	2,931	464
	Other ⁽³⁾	10,989	1,343	62	62	11,051	1,405	99%	96%	11,635	1,425
	Total	38,175	5,720	2,638	2,038	40,813	7,758	94%	74%	38,109	7,589
Sovereign	Drawn	155,085	5,297	8,315	877	163,400	6,174	95%	86%	154,295	6,642
	Undrawn	1,005	97	7	6	1,012	103	99%	94%	949	101
	Other ⁽³⁾	4,550	52	-	-	4,550	52	100%	100%	4,056	65
	Total	160,640	5,446	8,322	883	168,962	6,329	95%	86%	159,300	6,808
Total Non-Retail	Drawn	342,891	92,386	63,833	51,396	406,724	143,782			417,596	154,664
	Undrawn	111,860	36,213	3,560	3,476	115,420	39,689			104,645	36,789
	Other ⁽³⁾	68,624	13,643	2,805	2,784	71,429	16,427			69,582	15,829
	Total	523,375	142,242	70,198	57,656	593,573	199,898			591,823	207,282
Retail											
Residential Mortgages	Drawn	233,647	20,023	47,715	18,632	281,362	38,655	83%	52%	274,609	38,522
	Undrawn	-	-	-	-	-	-	-	-	-	-
	Total	233,647	20,023	47,715	18,632	281,362	38,655	83%	52%	274,609	38,522
Secured Lines Of Credit	Drawn	20,922	3,834	-	-	20,922	3,834	100%	100%	20,659	3,860
	Undrawn	18,292	1,002	-	-	18,292	1,002	100%	100%	17,905	990
	Total	39,214	4,836	-	-	39,214	4,836	100%	100%	38,564	4,850
Qualifying Revolving Retail Exposures (QRRE)	Drawn	14,598	8,330	-	-	14,598	8,330	100%	100%	14,537	8,802
	Undrawn	31,264	3,530	-	-	31,264	3,530	100%	100%	31,399	3,818
	Total	45,862	11,860	-	-	45,862	11,860	100%	100%	45,936	12,620
Other Retail	Drawn	31,777	15,593	39,683	29,015	71,460	44,608	44%	35%	72,065	46,168
	Undrawn	3,279	1,043	-	-	3,279	1,043	100%	100%	3,081	984
	Total	35,056	16,636	39,683	29,015	74,739	45,651	47%	36%	75,146	47,152
Total Retail	Drawn	300,944	47,780	87,398	47,647	388,342	95,427			381,870	97,352
	Undrawn	52,835	5,575	-	-	52,835	5,575			52,385	5,792
	Total	353,779	53,355	87,398	47,647	441,177	101,002			434,255	103,144
Securitized		19,318	3,497	5,882	2,058	25,200	5,555	77%	63%	26,130	5,678
Trading Derivatives		22,894	5,506	1,380	1,380	24,274	6,886	94%	80%	27,735	7,543
Derivatives - credit valuation adjustment		-	5,330	-	-	-	5,330			-	5,743
Total Credit Risk (Excluding Equities & Other Assets)		919,366	209,930	164,858	108,741	1,084,224	318,671			1,079,943	329,390
Equities		3,109	2,931	-	-	3,109	2,931	100%	100%	2,754	2,603
Other Assets ⁽⁴⁾		-	-	56,401	28,160	56,401	28,160			61,294	29,004
Total Credit Risk (Before Scaling Factor)		922,475	212,861	221,259	136,901	1,143,734	349,762			1,143,991	360,997
Add-on for 6% Scaling Factor ⁽⁵⁾			12,242				12,242				12,685
Total Credit Risk		922,475	225,103	221,259	136,901	1,143,734	362,004			1,143,991	373,682

- (1) Exposure at default, before credit risk mitigation for AIRB exposures, after related IFRS 9 allowances for credit losses for Standardized exposures.
- (2) Risk-Weighted Assets used for calculation of CET1, Tier 1, and Total Capital ratios.
- (3) Includes lending instruments such as letters of credit and letters of guarantee, banking book derivatives and repo-style exposures, net of related collateral.
- (4) Other Assets include amounts related to central counterparties (CCPs).
- (5) The Basel Framework requires an additional 6% scaling factor to AIRB credit risk portfolios (excluding CVA and Securitized).

**KM2: Key metrics – TLAC requirements
(at resolution group level)**



(in \$MM)		a	a ₂	a ₃	a ₄
		Q4 2020	Q3 2020	Q2 2020	Q1 2020
Resolution group 1					
1	Total loss absorbing capacity (TLAC) available	96,101	90,414	86,466	78,835
1a	Total loss-absorbing capacity (TLAC) available with transitional arrangements for ECL provisioning not applied	96,101	90,414	86,466	N/A
2	Total RWA at the level of the resolution group	417,138	430,542	446,173	420,694
3	TLAC as a percentage of RWA (row 1 / row 2) (%)	23.0%	21.0%	19.4%	18.7%
3a	TLAC ratio: TLAC as a percentage of RWA (row 1a / row 2) (%) available with transitional arrangements for ECL provisioning not applied	23.0%	21.0%	19.4%	N/A
4	Leverage exposure measure at the level of the resolution group	1,170,290	1,193,840	1,199,022	1,300,001
5	TLAC as a percentage of leverage exposure measure (row 1 / row 4) (%)	8.2%	7.6%	7.2%	6.1%
5a	TLAC Leverage Ratio: TLAC as a percentage of leverage ratio exposure measure with transitional arrangements for ECL provisioning not applied (row 1a / row 4) (%)	8.2%	7.6%	7.2%	N/A
6a	Does the subordination exemption in the antepenultimate paragraph of Section 11 of the FSB TLAC Term Sheet apply?	Yes	Yes	Yes	Yes
6b	Does the subordination exemption in the penultimate paragraph of Section 11 of the FSB TLAC Term Sheet apply?	No	No	No	No
6c	If the capped subordination exemption applies, the amount of funding issued that ranks pari passu with Excluded Liabilities and that is recognized as external TLAC, divided by funding issued that ranks pari passu with Excluded Liabilities and that would be recognized as external TLAC if no cap was applied (%)	N/A	N/A	N/A	N/A

(1) Commencing Q2 2020, lines 1, 3 and 5 incorporate the ECL transitional adjustment in CET1 capital in accordance with OSFI's COVID-19 relief measures; however, this did not impact the TLAC level of reporting. Lines 1a, 3a, and 5a have been included to reflect the impact of excluding the ECL transitional adjustment to CET1 capital (introduced in Q2 2020 as part of the COVID-19 measures).

Summary of Qualitative Requirements - Pillar III (Cross Referenced)



Item #	Pillar III - Requirements - Qualitative	Frequency	2020 Annual Report: MD&A	2020 Annual Report: Financial Statements	Regulatory Capital Supplementary Package	Financial Reporting Supplementary Package
			Page Reference			
	Part 2 - OVA – Bank risk management approach	Annual				
	Banks must describe their risk management objectives and policies, in particular:	Annual				
(a)	How the business model determines and interacts with the overall risk profile (eg the key risks related to the business model and how each of these risks is reflected and described in the risk disclosures) and how the risk profile of the bank interacts with the risk tolerance approved by the board.	Annual	78-119			
(b)	The risk governance structure: responsibilities attributed throughout the bank (eg oversight and delegation of authority; breakdown of responsibilities by type of risk, business unit etc); relationships between the structures involved in risk management processes (eg board of directors, executive management, separate risk committee, risk management structure, compliance function, internal audit function).	Annual	78-84			
(c)	Channels to communicate, decline and enforce the risk culture within the bank (eg code of conduct; manuals containing operating limits or procedures to treat violations or breaches of risk thresholds; procedures to raise and share risk issues between business lines and risk functions).	Annual	78-84			
(d)	The scope and main features of risk measurement systems.	Annual	80-82, 85-86, 92-97, 102-104, 119			
(e)	Description of the process of risk information reporting provided to the board and senior management, in particular the scope and main content of reporting on risk exposure.	Annual	78-82, 102			
(f)	Qualitative information on stress testing (eg portfolios subject to stress testing, scenarios adopted and methodologies used, and use of stress testing in risk management).	Annual	81-82, 91, 102-104, 107	240-241		
(g)	The strategies and processes to manage, hedge and mitigate risks that arise from the bank's business model and the processes for monitoring the continuing effectiveness of hedges and mitigants.	Annual	80-82, 85, 88-93, 102, 104, 107	169, 188-193		
	Part 3 - LIA – Explanations of differences between accounting and regulatory exposures amounts	Annual				
	Banks must explain the origins of the differences between accounting amounts, as reported in financial statements amounts and regulatory exposure amounts, as displayed in templates LI1 and LI2.	Annual				
(a)	Banks must explain the origins of any significant differences between the amounts in columns (a) and (b) in LI1.	Annual			L11	
(b)	Banks must explain the origins of differences between carrying values and amounts considered for regulatory purposes shown in LI2.	Annual			L12	

Summary of Qualitative Requirements - Pillar III (Cross Referenced)



Item #	Pillar III - Requirements - Qualitative	Frequency	2020 Annual Report: MD&A	2020 Annual Report: Financial Statements	Regulatory Capital Supplementary Package	Financial Reporting Supplementary Package
			Page Reference			
	In accordance with the implementation of the guidance on prudent valuation, banks must describe systems and controls to ensure that the valuation estimates are prudent and reliable. Disclosure must include:	Annual				
	<ul style="list-style-type: none"> Valuation methodologies, including an explanation of how far mark-to-market and mark-to-model methodologies are used. 	Annual	92, 121	163-165, 177-182, 240-241		
(c)	<ul style="list-style-type: none"> Description of the independent price verification process. 	Annual	121-122	177-179		
	<ul style="list-style-type: none"> Procedures for valuation adjustments or reserves (including a description of the process and the methodology for valuing trading positions by type of instrument). 	Annual	121-122	163		
	Part 4 - CRA – General qualitative information about credit risk	Annual				
	Banks must describe their risk management objectives and policies for credit risk, focusing in particular on:	Annual				
(a)	How the business model translates into the components of the bank's credit risk profile	Annual	78, 83-86			
(b)	Criteria and approach used for defining credit risk management policy and for setting credit risk limits	Annual	81-84, 88, 99-100			
(c)	Structure and organization of the credit risk management and control function	Annual	78-79, 93-95			
(d)	Relationships between the credit risk management, risk control, compliance and internal audit functions	Annual	78-80			
(e)	Scope and main content of the reporting on credit risk exposure and on the credit risk management function to the executive management and to the board of directors	Annual	78-82, 93-95			
	Part 4 - CRB – Additional disclosure related to the credit quality of assets	Annual				
	Banks must provide the following disclosures:					
	Qualitative disclosures	Annual				
(a)	The scope and definitions of "past due" and "impaired" exposures used for accounting purposes and the differences, if any, between the definition of past due and default for accounting and regulatory purposes.	Annual		163, 165-166	Overview	
(b)	The extent of past-due exposures (more than 90 days) that are not considered to be impaired and the reasons for this.	Annual		163, 165-166, 205		
(c)	Description of methods used for determining accounting provisions for credit losses. In addition, banks that have adopted an ECL accounting model must provide information on the rationale for categorization of ECL accounting provisions in general and specific categories for standardized approach exposures.	Annual		163-164	CR1	
(d)	The bank's own definition of a restructured exposure. (i.e. modified loans not derecognized)	Annual		167		
	Quantitative disclosures	Annual				
(e)	Breakdown of exposures by geographical areas, industry and residual maturity;	Annual				

Summary of Qualitative Requirements - Pillar III (Cross Referenced)



Item #	Pillar III - Requirements - Qualitative	Frequency	2020 Annual Report: MD&A	2020 Annual Report: Financial Statements	Regulatory Capital Supplementary Package	Financial Reporting Supplementary Package
			Page Reference			
	(i) Geography	Annual	130, 135	198		
	(ii) Industry	Annual	132			
	(iii) Residual Maturity	Annual	113, 135	199		
(f)	Amounts of impaired exposures (according to the definition used by the bank for accounting purposes) and related allowances and write-offs, broken down by geographical areas and industry;	Annual				
	(i) Geography	Annual			Impaired by Region	
	(ii) Industry	Annual			Impaired by Industry	
(g)	Ageing analysis of accounting past-due exposures;	Annual		205		
(h)	Breakdown of restructured exposures between impaired and not impaired	Annual		203		
	Part 4 - Table CRC: Qualitative disclosure requirements related to credit risk mitigation techniques	Annual				
	Banks must disclose:	Annual				
(a)	Core features of policies and processes for, and an indication of the extent to which the bank makes use of, on- and off-balance sheet netting.	Annual	93-94	186-188, 193-194		
(b)	Core features of policies and processes for collateral evaluation and management.	Annual	93-94			
(c)	Information about market or credit risk concentrations under the credit risk mitigation instruments used (ie by guarantor type, collateral and credit derivative providers).	Annual	85, 93-94, 97-98	238-239		
	Part 4 - CRD: Qualitative disclosures on banks' use of external credit ratings under the standardized approach for credit risk	Annual				
	A. For portfolios that are risk-weighted under the standardized approach for credit risk, banks must disclose the following information:	Annual				
(a)	Names of the external credit assessment institutions (ECAIs) and export credit agencies (ECAs) used by the bank, and the reasons for any changes over the reporting period;	Annual	69	238		
(b)	The asset classes for which each ECAI or ECA is used;	Annual	69	235, 238	EAD RWA	
(c)	A description of the process used to transfer the issuer to issue credit ratings onto comparable assets in the banking book (see paragraphs 99–101 of the Basel framework); and	Annual	69	238		
(d)	The alignment of the alphanumerical scale of each agency used with risk buckets (except where the relevant supervisor publishes a standard mapping with which the bank has to comply).	Annual	69	238		
	Part 4 - CRE: Qualitative disclosures related to IRB models	Annual				
	Banks must provide the following information on their use of IRB models:	Annual				

Summary of Qualitative Requirements - Pillar III (Cross Referenced)



Item #	Pillar III - Requirements - Qualitative	Frequency	2020 Annual Report: MD&A	2020 Annual Report: Financial Statements	Regulatory Capital Supplementary Package	Financial Reporting Supplementary Package
			Page Reference			
(a)	Internal model development, controls and changes: role of the functions involved in the development, approval and subsequent changes of the credit risk models.	Annual	69-71, 92-84			
(b)	Relationships between risk management function and internal audit function and procedure to ensure the independence of the function in charge of the review of the models from the functions responsible for the development of the models.	Annual	69, 71			
(c)	Scope and main content of the reporting related to credit risk models.	Annual	69-71	235, 238	Overview	
(d)	Scope of the supervisor's acceptance of approach.	Annual	69-71			
(e)	For each of the portfolios, the bank must indicate the part of EAD within the group (in percentage of total EAD) covered by standardized, FIRB and AIRB approach and the part of portfolios that are involved in a roll-out plan.	Annual			Overview EAD_RWA	
(f)	The number of key models used with respect to each portfolio, with a brief discussion of the main differences among the models within the same portfolios.	Annual	69-71	235, 238		
(g)	Description of the main characteristics of the approved models: (i) definitions, methods and data for estimation and validation of PD (eg how PDs are estimated for low default portfolios; if there are regulatory floors; the drivers for differences observed between PD and actual default rates at least for the last three periods); and where applicable: (ii) LGD (eg methods to calculate downturn LGD; how LGDs are estimated for low default portfolio; the time lapse between the default event and the closure of the exposure); (iii) credit conversion factors, including assumptions employed in the derivation of these variables;	Annual	69-71	235, 238		
	Part 5 - CCRA: Qualitative disclosure related to counterparty credit risk	Annual				
	Banks must provide:	Annual				
(a)	Risk management objectives and policies related to counterparty credit risk, including:	Annual				
(b)	The method used to assign the operating limits defined in terms of internal capital for counterparty credit exposures and for CCP exposures;	Annual	79-80, 93-94	186-188		
(c)	Policies relating to guarantees and other risk mitigants and assessments concerning counterparty risk, including exposures towards CCPs;	Annual	81-82, 93-94	186-188, 238-239		
(d)	Policies with respect to wrong-way risk exposures;	Annual	94	240		
(e)	The impact in terms of the amount of collateral that the bank would be required to provide given a credit rating downgrade.	Annual	109			

Summary of Qualitative Requirements - Pillar III (Cross Referenced)



Item #	Pillar III - Requirements - Qualitative	Frequency	2020 Annual Report: MD&A	2020 Annual Report: Financial Statements	Regulatory Capital Supplementary Package	Financial Reporting Supplementary Package
			Page Reference			
	Part 6 - SECA: Qualitative disclosure requirements related to securitization exposures	Annual				
	Qualitative disclosures	Annual				
	Banks must describe their risk management objectives and policies for securitization activities and main features of these activities according to the framework below. If a bank holds securitization positions reflected both in the regulatory banking book and in the regulatory trading book, the bank must describe each of the following points by distinguishing activities in each of the regulatory books.	Annual				
	(a) The bank's objectives in relation to securitization and re-securitization activity, including the extent to which these activities transfer credit risk of the underlying securitized exposures away from the bank to other entities, the type of risks assumed and the types of risks retained.	Annual	72-74, 123	206-208		
	(b) The bank must provide a list of:	Annual				
	<ul style="list-style-type: none"> special purpose entities (SPEs) where the bank acts as sponsor (but not as an originator such as an Asset Backed Commercial Paper (ABCP) conduit), indicating whether the bank consolidates the SPEs into its scope of regulatory consolidation; 	Annual	72-74	206-208		
	<ul style="list-style-type: none"> affiliated entities (i) that the bank manages or advises and (ii) that invest either in the securitization exposures that the bank has securitized or in SPEs that the bank sponsors; and 	Annual	72-74	206-208		
	<ul style="list-style-type: none"> a list of entities to which the bank provides implicit support and the associated capital impact for each of them (as required in paragraphs 551 and 564 of the securitization framework). 	Annual	n/a			
	(c) Summary of the bank's accounting policies for securitization activities.	Annual	123	206-208		
	(d) If applicable, the names of external credit assessment institution (ECAIs) used for securitizations and the types of securitization exposure for which each agency is used.	Annual			Overview	
	(e) If applicable, describe the process for implementing the Basel internal assessment approach (IAA). The description should include:	Annual			Overview	
	<ul style="list-style-type: none"> structure of the internal assessment process and relation between internal assessment and external ratings, including information on ECAIs as referenced in item (d) of this table; 	Annual			Overview	
	<ul style="list-style-type: none"> control mechanisms for the internal assessment process including discussion of independence, accountability, and internal assessment process review; and 	Annual			Overview	
	<ul style="list-style-type: none"> the exposure type to which the internal assessment process is applied; and stress factors used for determining credit enhancement levels, by exposure type. 	Annual			Overview	
	(f) Banks must describe the use of internal assessment other than for IAA capital purposes.	Annual	n/a			

Summary of Qualitative Requirements - Pillar III (Cross Referenced)



Item #	Pillar III - Requirements - Qualitative	Frequency	2020 Annual Report: MD&A	2020 Annual Report: Financial Statements	Regulatory Capital Supplementary Package	Financial Reporting Supplementary Package
			Page Reference			
	Part 7 - Market risk					
	OSFI revised Pillar 3 Market Risk disclosure requirements allow for a continuation of the existing Basel 2.5 Market Risk disclosures until the implementation of the next phase of Pillar 3 disclosures in Canada. As a result, the Bank's Market Risk disclosures continue to be based on Basel 2.5 disclosure requirements. OSFI's requirements for Pillar 3 Requirements may be found in (http://www.osfi-bsif.gc.ca/Eng/fi-if/rg-ro/gdn-ort/gld/Pages/plr3.aspx).		n/a			
	Part 8 - Operational risk					
	(a) In addition to the general qualitative disclosure requirement (paragraph 824), the approach(es) for operational risk capital assessment for which the bank qualifies.	Annual	72, 115			
	(b) Description of the advanced measurement approaches for operational risk (AMA), if used by the bank, including a discussion of relevant internal and external factors considered in the bank's measurement approach. In the case of partial use, the scope and coverage of the different approaches used/applied in regulatory capital.	Annual	n/a	n/a	n/a	
	(c) For banks using the AMA, a description of the use of insurance for the purpose of mitigating operational risk.		n/a			
	Part 9 - Interest rate risk in the banking book (IRRBB)					
	(a) The general qualitative disclosure requirement (paragraph 824), including the nature of IRRBB and key assumptions, including assumptions regarding loan prepayments and behaviour of non-maturity deposits, and frequency of IRRBB measurement.	Annual	103-104	188, 240		

OV1: Overview of RWA


(in \$MM)		a	b	b ₂	b ₃	c
		RWA ⁽¹⁾				Minimum capital requirements ⁽²⁾
		Q4 2020	Q3 2020	Q2 2020	Q1 2020	Q4 2020
1	Credit risk (excluding counterparty credit risk)	324,058	334,416	346,920	326,956	25,925
2	Of which: standardized approach (SA) ⁽³⁾	121,974	124,601	127,212	126,023	9,758
3	Of which: foundation internal ratings-based (F-IRB) approach	-	-	-	-	-
4	Of which: supervisory slotting approach	-	-	-	-	-
5	Of which: advanced internal ratings-based (A-IRB) approach	202,084	209,815	219,708	200,933	16,167
6	Counterparty credit risk (CCR)	13,651	14,115	17,159	14,385	1,092
7	Of which: standardized approach for counterparty credit risk (SA-CCR)	1,054	1,165	1,493	1,257	84
8	Of which: Internal Model Method (IMM)	6,815	7,496	10,350	7,827	545
9	Of which: other CCR ⁽⁴⁾	5,782	5,454	5,316	5,301	463
10	Credit valuation adjustment (CVA)	5,330	5,743	7,488	5,558	426
11	Equity positions under the simple risk weight approach	-	-	-	-	-
12	Equity investments in funds – look-through approach	545	436	377	552	44
13	Equity investments in funds – mandate-based approach	179	177	154	150	14
14	Equity investments in funds – fall-back approach	-	1	1	1	-
15	Settlement risk	-	-	-	-	-

OV1: Overview of RWA



(in \$MM)		a	b	b ₂	b ₃	c
		RWA ⁽¹⁾				Minimum capital requirements ⁽²⁾
		Q4 2020	Q3 2020	Q2 2020	Q1 2020	Q4 2020
16	Securitization exposures in banking book	5,555	5,678	5,094	5,203	444
17	Of which: securitization internal ratings-based approach (SEC-IRBA)	158	175	195	205	13
18	Of which: securitization external ratings-based approach (SEC-ERBA), including internal assessment approach (IAA)	5,047	5,162	4,847	4,940	403
19	Of which: securitization standardized approach (SEC-SA)	350	341	52	58	28
20	Market risk	7,327	9,348	9,477	9,599	586
21	Of which: standardized approach (SA)	1,041	775	715	828	83
22	Of which: internal model approaches (IMA)	6,286	8,573	8,762	8,771	503
23	Capital charge for switch between trading book and banking book	-	-	-	-	-
24	Operational risk	47,807	47,513	47,113	46,411	3,825
25	Amounts below the thresholds for deduction (subject to 250% risk weight)	12,686	13,115	12,390	11,879	1,015
26	Floor adjustment	-	-	-	-	-
27	Total (1 + 6 + 10 + 11 + 12 + 13 + 14 + 15 + 16 + 16a + 20 + 23 + 24 + 25 + 26)	417,138	430,542	446,173	420,694	33,371

(1) RWA: risk-weighted assets according to the Basel framework, including the 1.06 AIRB scaling factor applied to AIRB credit risk portfolios (excluding CVA and Securitizations).

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

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

(4) Includes SFT and CCP Default Fund.

L11: Differences between accounting and regulatory scopes of consolidation and mapping of financial statement categories with regulatory risk categories ⁽¹⁾



Q4 2020 (in \$MM)	a	b	c	d	Carrying values of items: ⁽²⁾			e	f	g
	Carrying values as reported in published financial statements	Carrying values under scope of regulatory consolidation	Subject to credit risk framework	Subject to counterparty credit risk framework	Subject to the securitization framework	Subject to the market risk framework	Subject to the market risk framework	Not subject to capital requirements or subject to deduction from capital ⁽³⁾		
Assets										
Cash and deposits with financial institutions	76,460	76,364	76,364	-	-	-	-	-	-	-
Precious metals	1,181	1,181	1,181	-	-	-	1,181	-	-	-
Trading assets										
Securities	108,331	108,324	-	-	-	-	108,324	-	-	-
Loans	8,352	8,352	1,640	177	-	-	8,005	-	-	-
Other	1,156	1,156	-	-	-	-	1,156	-	-	-
Financial instruments designated at fair value through profit or loss	-	-	-	-	-	-	-	-	-	-
Securities purchased under resale agreements and securities borrowed	119,747	119,747	-	119,747	-	-	-	-	-	-
Derivative financial instruments	45,065	45,065	-	45,065	-	-	39,294	-	-	-
Investment securities	111,389	110,520	110,520	-	-	-	-	-	-	-
Loans										
Residential mortgages ⁽⁴⁾	284,684	284,591	284,591	-	-	-	-	-	-	-
Personal loans	93,758	93,749	91,435	-	2,314	-	-	-	-	-
Credit cards	14,797	14,796	12,345	-	93	-	-	-	2,358	-
Business and government	217,663	217,658	210,579	-	6,974	-	-	-	105	-
Allowance for credit loss	(7,639)	(7,637)	(7,475)	-	-	-	-	-	(162)	-
Customers' liability under acceptances, net of allowance	14,228	14,228	14,228	-	-	-	-	-	-	-
Property and equipment	5,897	5,896	5,896	-	-	-	-	-	-	-
Investments in associates	2,475	2,674	2,674	-	-	-	-	-	-	-
Goodwill and other intangible assets	17,015	17,342	1,837	-	-	-	-	-	-	15,505
Deferred tax assets	2,185	2,184	1,958	-	-	-	-	-	-	226
Other assets	19,722	17,364	11,668	5,524	-	-	-	-	-	172
Total assets	1,136,466	1,133,554	819,441	170,513	9,381	157,960	18,204			

L11: Differences between accounting and regulatory scopes of consolidation and mapping of financial statement categories with regulatory risk categories ⁽¹⁾



Q4 2020 (in \$MM)	a	b	c	d	e	f	g
	Carrying values as reported in published financial statements	Carrying values under scope of regulatory consolidation	Carrying values of items: ⁽²⁾				
Subject to credit risk framework			Subject to counterparty credit risk framework	Subject to the securitization framework	Subject to the market risk framework		
Liabilities							
Deposits							
Personal	246,135	246,135	-	-	-	-	246,135
Business and government	464,619	464,619	-	-	-	-	464,619
Financial institutions	40,084	40,084	-	-	-	-	40,084
Financial instruments designated at fair value through profit or loss	18,899	18,899	-	-	-	-	18,899
Acceptances	14,305	14,305	-	-	-	-	14,305
Obligations related to securities sold short	31,902	31,902	-	-	-	31,902	-
Derivative financial instruments	42,247	42,247	-	42,247	-	36,038	-
Obligations related to securities sold under repurchase agreements and securities lent	137,763	137,763	-	137,763	-	-	-
Subordinated debentures	7,405	7,405	-	-	-	-	7,405
Other liabilities	62,604	59,692	-	-	-	1,112	58,580
Total liabilities	1,065,963	1,063,051	-	180,010	-	69,052	850,027

(1) Based on the Consolidated Statement of Financial Position as reported in the Bank's 2020 Annual Report. Effective Q1 2018, the Bank fully adopted IFRS 9 (Financial Instruments).

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

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

(4) Includes \$85.4 billion in mortgages guaranteed by Canada Mortgage Housing Corporation (CMHC), including 90% of privately insured mortgages.

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



Q4 2020 (in \$MM)		a	b	c	d	e
		Total	Items subject to: ⁽¹⁾			
			Credit risk framework	Securitization framework	Counterparty credit risk framework	Market risk framework
1	Asset carrying value amount under scope of regulatory consolidation (as per template LI1)	1,115,350	819,441	9,381	170,513	157,960
2	Liabilities carrying value amount under regulatory scope of consolidation (as per template LI1)	249,062	-	-	180,010	69,052
3	Total net amount under regulatory scope of consolidation	866,288	819,441	9,381	(9,497)	88,908
4	Off-balance sheet amounts ⁽²⁾	213,623	196,721	15,819	1,083	-
5	Differences in valuations ⁽³⁾	(1,957)	(1,957)	-	-	-
6	Differences due to different netting rules, other than those already included in row 2	144,090	773	-	143,317	-
7	Differences due to considerations of provisions ⁽⁴⁾	5,938	6,274	-	(336)	-
8	Collateral offsetting	(112,569)	-	-	(112,569)	-
9	Differences due to Potential Future Exposures and Collateral Haircut	59,399	-	-	59,399	-
10	Differences due to deconsolidated subsidiaries	-	-	-	-	-
11	Other differences not classified above	(17)	(17)	-	-	-
12	Exposure amounts considered for regulatory purposes ⁽⁵⁾	1,174,795	1,021,235	25,200	81,397	88,908

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

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

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

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

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

CC1: Composition of regulatory capital


(in \$MM)		a	a ₂	a ₃	a ₄	b
		Q4 2020	Q3 2020	Q2 2020	Q1 2020	Source based on reference numbers/letters of the balance sheet under the regulatory scope of consolidation ⁽¹⁾
Common Equity Tier 1 capital: instruments and reserves						
1	Directly issued qualifying common share capital (and equivalent for non-joint stock companies) plus related stock surplus	18,282	18,278	18,273	18,292	u+y
2	Retained earnings	46,345	45,689	45,456	45,418	v
3	Accumulated other comprehensive income (and other reserves)	(2,125)	(1,402)	218	(543)	w
4	<i>Directly issued capital subject to phase-out from CET1 (only applicable to non-joint stock companies)</i>	-	-	-	-	
5	Common share capital issued by subsidiaries and held by third parties (amount allowed in group CET1)	1,769	1,819	1,759	1,698	bb
6	Common Equity Tier 1 capital before regulatory adjustments	64,271	64,384	65,706	64,865	
Common Equity Tier 1 capital: regulatory adjustments						
7	Prudential valuation adjustments	-	-	-	-	
8	Goodwill (net of related tax liability)	(9,605)	(9,735)	(9,737)	(9,723)	g
9	Other intangibles other than mortgage servicing rights (net of related tax liability)	(5,900)	(5,901)	(5,891)	(5,973)	h-q+r
10	Deferred tax assets excluding those arising from temporary differences (net of related tax liability)	(226)	(247)	(267)	(271)	k
11	Cash flow hedge reserve	(639)	(821)	(925)	(725)	x
12	Shortfall of provisions to expected losses	-	-	-	-	ee
13	Securitization gain on sale	-	-	-	-	
14	Gains and losses due to changes in own credit risk on fair valued liabilities	159	35	(542)	(65)	p
15	Defined benefit pension fund net assets (net of related tax liability)	(172)	(188)	(241)	(293)	l-s
16	Investments in own shares (if not already netted off paid-in capital on reported balance sheet)	(23)	(5)	-	(7)	a
17	Reciprocal cross holdings in common equity	-	-	-	-	
18	Non-significant investments in the capital of banking, financial and insurance entities, net of eligible short positions (amount above 10% threshold)	-	-	-	-	
19	Significant investments in the common stock of banking, financial and insurance entities that are outside the scope of regulatory consolidation, net of eligible short positions (amount above 10% threshold)	-	-	-	-	e
20	Mortgage servicing rights (amount above 10% threshold)	-	-	-	-	
21	Deferred tax assets arising from temporary differences (amount above 10% threshold, net of related tax liability)	-	-	-	-	
22	Amount exceeding the 15% threshold	-	-	-	-	
23	of which: significant investments in the common stock of financials	-	-	-	-	f
24	of which: mortgage servicing rights	-	-	-	-	
25	of which: deferred tax assets arising from temporary differences	-	-	-	-	j
26	Other deductions or regulatory adjustments to CET1 as determined by OSFI	1,300	1,167	440	(4)	gg-o
27	Regulatory adjustments applied to Common Equity Tier 1 due to insufficient Additional Tier 1 and Tier 2 to cover deductions	-	-	-	-	
28	Total regulatory adjustments to Common Equity Tier 1	(15,106)	(15,695)	(17,163)	(17,061)	
29	Common Equity Tier 1 capital (CET1)	49,165	48,689	48,543	47,804	
29a	Common Equity Tier 1 capital (CET1) with transitional arrangements for ECL provisioning not applied	47,861	47,517	48,097	N/A	

CC1: Composition of regulatory capital


(in \$MM)		a	a ₂	a ₃	a ₄	b
		Q4 2020	Q3 2020	Q2 2020	Q1 2020	Source based on reference numbers/letters of the balance sheet under the regulatory scope of consolidation ⁽¹⁾
Additional Tier 1 capital: instruments						
30	Directly issued qualifying Additional Tier 1 instruments plus related stock surplus	4,899	4,899	3,211	3,211	<i>z</i>
31	of which: classified as equity under applicable accounting standards	4,899	4,899	3,211	3,211	
32	of which: classified as liabilities under applicable accounting standards	-	-	-	-	
33	<i>Directly issued capital instruments subject to phase out from additional Tier 1</i>	1,159	1,159	1,158	1,306	<i>aa + (2)</i>
34	Additional Tier 1 instruments (and CET1 instruments not included in row 5) issued by subsidiaries and held by third parties (amount allowed in group AT1)	145	151	134	118	<i>cc</i>
35	<i>of which: instruments issued by subsidiaries subject to phase out</i>	-	-	-	-	
36	Additional Tier 1 capital before regulatory adjustments	6,203	6,209	4,503	4,635	
Additional Tier 1 capital: regulatory adjustments						
37	Investments in own Additional Tier 1 instruments	(6)	-	(1)	(2)	
38	Reciprocal cross holdings in Additional Tier 1 instruments	-	-	-	-	
39	Non-significant investments in the capital of banking, financial and insurance entities, net of eligible short positions (amount above 10% threshold)	-	-	-	-	
40	Significant investments in the capital of banking, financial and insurance entities that are outside the scope of regulatory consolidation, net of eligible short positions	-	-	-	-	<i>b</i>
41	Other deductions from Tier 1 capital as determined by OSFI	-	-	-	-	
41a	of which: reverse mortgages	-	-	-	-	
42	Regulatory adjustments applied to Additional Tier 1 due to insufficient Tier 2 to cover deductions	-	-	-	-	
43	Total regulatory adjustments to Additional Tier 1 capital	(6)	-	(1)	(2)	
44	Additional Tier 1 capital (AT1)	6,197	6,209	4,502	4,633	
45	Tier 1 capital (T1 = CET1 + AT1)	55,362	54,898	53,045	52,437	
45a	Tier 1 capital (T1 = CET1 + AT1) with transitional arrangements for ECL provisioning not applied	54,058	53,726	52,599	N/A	

CC1: Composition of regulatory capital


(in \$MM)		a	a ₂	a ₃	a ₄	b
		Q4 2020	Q3 2020	Q2 2020	Q1 2020	Source based on reference numbers/letters of the balance sheet under the regulatory scope of consolidation ⁽¹⁾
Tier 2 capital: instruments and provisions						
46	Directly issued qualifying Tier 2 instruments plus related stock surplus	7,053	6,979	7,117	6,930	<i>m</i>
47	<i>Directly issued capital instruments subject to phase out from Tier 2</i>	302	307	367	365	
48	Tier 2 instruments (and CET1 and AT1 instruments not included in rows 5 or 34) issued by subsidiaries and held by third parties (amount allowed in group Tier 2)	148	123	79	87	<i>dd</i>
49	<i>of which: instruments issued by subsidiaries subject to phase out</i>	-	-	-	-	
50	General allowances	1,647	1,867	1,915	1,573	<i>c+d</i>
51	Tier 2 capital before regulatory adjustments	9,150	9,276	9,478	8,955	
Tier 2 capital: regulatory adjustments						
52	Investments in own Tier 2 instruments	-	-	-	-	<i>ff</i>
53	Reciprocal cross holdings in Tier 2 instruments and Other TLAC-eligible instruments	-	-	-	-	
54	Non-significant investments in the capital of banking, financial and insurance entities and Other TLAC-eligible instruments issued by G-SIBs and Canadian D-SIBs that are outside the scope of regulatory consolidation, where the institution does not own more than 10% of the issued common share capital of the entity (amount above 10% threshold)	-	-	-	-	
54a	Non-significant investments in the other TLAC-eligible instruments issued by G-SIBs and Canadian D-SIBs, where the institution does not own more than 10% of the issued common share capital of the entity: amount previously designated for the 5% threshold but that no longer meets the conditions.	-	-	-	-	
55	Significant investments in the capital of banking, financial and insurance entities and Other TLAC-eligible instruments issued by G-SIBs and Canadian D-SIBs that are outside the scope of regulatory consolidation.	-	-	-	-	
56	Other deductions from Tier 2 capital	-	-	-	-	
57	Total regulatory adjustments to Tier 2 capital	-	-	-	-	
58	Tier 2 capital (T2)	9,150	9,276	9,478	8,955	
59	Total capital (TC = T1 + T2)	64,512	64,174	62,523	61,392	
59a	Total Capital with transitional arrangements for ECL provisioning not applied	64,512	64,174	62,523	N/A	
60	Total risk-weighted assets	417,138	430,542	446,173	420,694	
60a	Common Equity Tier 1 (CET1) Capital RWA	417,138	430,542	446,173	420,694	
60b	Tier 1 Capital RWA	417,138	430,542	446,173	420,694	
60c	Total Capital RWA	417,138	430,542	446,173	420,694	

CC1: Composition of regulatory capital


(in \$MM)	a	a ₂	a ₃	a ₄	b
	Q4 2020	Q3 2020	Q2 2020	Q1 2020	Source based on reference numbers/letters of the balance sheet under the regulatory scope of consolidation ⁽¹⁾
Capital ratios					
61	Common Equity Tier 1 (as a percentage of risk-weighted assets)	11.8%	11.3%	10.9%	11.4%
61a	CET1 Ratio with transitional arrangements for ECL provisioning not applied	11.5%	11.0%	10.8%	N/A
62	Tier 1 (as a percentage of risk-weighted assets)	13.3%	12.8%	11.9%	12.5%
62a	Tier 1 Capital Ratio with transitional arrangements for ECL provisioning not applied	13.0%	12.5%	11.8%	N/A
63	Total capital (as a percentage of risk-weighted assets)	15.5%	14.9%	14.0%	14.6%
63a	Total Capital Ratio with transitional arrangements for ECL provisioning not applied	15.5%	14.9%	14.0%	N/A
64	Buffer (minimum CET1 requirement plus capital conservation buffer plus G-SIB buffer plus D-SIB buffer expressed as a percentage of risk-weighted assets)	8.0%	8.0%	8.0%	8.0%
65	of which: capital conservation buffer	2.5%	2.5%	2.5%	2.5%
66	of which: bank-specific countercyclical buffer	0.0%	0.0%	0.0%	0.0%
67	of which: G-SIB buffer	0.0%	0.0%	0.0%	0.0%
67a	of which: D-SIB buffer	1.0%	1.0%	1.0%	1.0%
68	Common Equity Tier 1 available to meet buffers (as percentage of risk-weighted assets)	11.8%	11.3%	10.9%	11.4%
OSFI target (minimum + capital conservation buffer + D-SIB buffer (if applicable))⁽³⁾					
69	Common Equity Tier 1 target ratio	8.0%	8.0%	8.0%	8.0%
70	Tier 1 capital target ratio	9.5%	9.5%	9.5%	9.5%
71	Total capital target ratio	11.5%	11.5%	11.5%	11.5%
Amounts below the thresholds for deduction (before risk weighting)					
72	Non-significant investments in the capital and other TLAC-eligible instruments of other financial entities	2,040	2,177	2,310	1,854
73	Significant investments in the common stock of financial entities	2,524	2,682	2,660	2,514
74	Mortgage servicing rights (net of related tax liability)	-	-	-	-
75	Deferred tax assets arising from temporary differences (net of related tax liability)	2,550	2,564	2,296	2,238
Applicable caps on the inclusion of allowances in Tier 2					
76	Allowances eligible for inclusion in Tier 2 in respect of exposures subject to standardized approach (prior to application of cap)	1,498	1,533	1,363	1,162
77	Cap on inclusion of allowances in Tier 2 under standardized approach	1,498	1,533	1,555	1,545
78	Allowances eligible for inclusion in Tier 2 in respect of exposures subject to internal ratings-based approach (prior to application of cap)	1,453	1,506	997	411
79	Cap on inclusion of allowances in Tier 2 under internal ratings-based approach	1,453	1,506	1,591	1,446
Capital instruments subject to phase-out arrangements (only applicable between 1 Jan 2013 and 1 Jan 2022)					
80	<i>Current cap on CET1 instruments subject to phase out arrangements</i>	20%	20%	20%	20%
81	<i>Amounts excluded from CET1 due to cap (excess over cap after redemptions and maturities)</i>	-	-	-	-
82	<i>Current cap on AT1 instruments subject to phase out arrangements</i>	20%	20%	20%	20%
83	<i>Amounts excluded from AT1 due to cap (excess over cap after redemptions and maturities)</i>	-	-	-	117
84	<i>Current cap on T2 instruments subject to phase out arrangements</i>	20%	20%	20%	20%
85	<i>Amounts excluded from T2 due to cap (excess over cap after redemptions and maturities)</i>	-	-	-	-

(1) Cross-referenced to the Consolidated Balance Sheet: Source of Definition of Capital Components on CC2 (refer to column: Under Regulatory Scope of Consolidation).

(2) Line 33 also includes \$750 million as at October 31, 2020 (\$750 million as at July 31, 2020, April 30, 2020, and January 31, 2020) of capital instruments issued by trusts not consolidated under accounting standard IFRS 10, effective Q1 2014.

(3) Reflects Pillar 1 targets and does not include Pillar 2 domestic stability buffer of 1.0% (commencing April 2020).

CC2: Reconciliation of regulatory capital to balance sheet


Condensed balance sheet (in \$MM)	a	b	c
	Balance sheet as in published financial statements ⁽¹⁾	Under regulatory scope of consolidation ⁽²⁾	Cross-reference to Definition of Capital Components
	Q4 2020	Q4 2020	
Assets			
Cash and deposits with financial institutions	76,460	76,364	
Precious metals	1,181	1,181	
Trading assets			
Securities	108,331	108,324	
- <i>Investment in own shares</i>		23	<i>a</i>
- <i>Other trading securities</i>		108,301	
Loans	8,352	8,352	
Other	1,156	1,156	
	117,839	117,832	
Financial instruments designated at fair value through profit and loss	-	-	
Securities purchased under resale agreements and securities borrowed	119,747	119,747	
Derivative financial instruments	45,065	45,065	
Investment securities	111,389	110,520	
- <i>Significant investments in Additional Tier 1 capital and other financial institutions reflected in regulatory capital</i>		-	<i>b</i>
- <i>Other securities</i>		110,520	
Loans			
Residential mortgages	284,684	284,591	
Personal loans	93,758	93,749	
Credit cards	14,797	14,796	
Business and government	217,663	217,658	
	610,902	610,794	
Allowance for credit losses	7,639	7,637	
- <i>General Allowance reflected in Tier 2 capital</i>		1,082	<i>c</i>
- <i>Shortfall of allowances to expected loss</i>		-	<i>ee</i>
- <i>Excess of allowances to expected loss</i>		565	<i>d</i>
- <i>ECL transitional adjustment</i>		1,304	<i>gg</i>
- <i>Allowances not reflected in regulatory capital</i>		4,686	

CC2: Reconciliation of regulatory capital to balance sheet


Condensed balance sheet (in \$MM)	a	b	c
	Balance sheet as in published financial statements ⁽¹⁾	Under regulatory scope of consolidation ⁽²⁾	Cross-reference to Definition of Capital Components
	Q4 2020	Q4 2020	
Other			
Customers' liability under acceptances, net of allowance	14,228	14,228	
Property and equipment	5,897	5,896	
Investments in associates	2,475	2,674	
- Significant Investments in other financial institutions including deconsolidated subsidiaries exceeding 10% regulatory thresholds		-	e
- Significant Investments in other financial institutions including deconsolidated subsidiaries exceeding 15% regulatory thresholds		-	f
- Significant Investments in other financial institutions including deconsolidated subsidiaries within regulatory thresholds		2,674	
Goodwill and other intangible assets	17,015	17,342	
- Goodwill		9,279	g
- Imputed goodwill for Significant Investments		326	g
- Intangibles (excl computer software)		5,327	h
- Computer software intangibles		2,410	i
Deferred tax assets	2,185	2,184	
- Deferred tax assets arising from temporary differences exceeding the regulatory threshold		-	j
- Deferred tax assets that rely on future profitability		226	k
- Deferred tax assets not deducted from regulatory capital		1,958	
Other Assets	19,722	17,364	
- Defined pension fund assets		259	l
- Other assets		17,105	
Total other	61,522	59,688	
Total assets	1,136,466	1,133,554	

CC2: Reconciliation of regulatory capital to balance sheet


Condensed balance sheet (in \$MM)	a	b	c
	Balance sheet as in published financial statements ⁽¹⁾	Under regulatory scope of consolidation ⁽²⁾	Cross-reference to Definition of Capital Components
	Q4 2020	Q4 2020	
Liabilities			
Deposits			
Personal	246,135	246,135	
Business and government	464,619	464,619	
- <i>Investment in own Tier 2 instruments</i>		-	<i>ff</i>
- <i>Other deposits from Business and government</i>		464,619	
Financial institutions	40,084	40,084	
	750,838	750,838	
Financial instruments designated at fair value through profit and loss	18,899	18,899	
Other			
Acceptances	14,305	14,305	
Obligations related to securities sold short	31,902	31,902	
Derivative financial instruments	42,247	42,247	
Obligations related to securities sold under repurchase agreements and securities lent	137,763	137,763	
Subordinated debentures	7,405	7,405	
- <i>Regulatory capital amortization of maturing debentures</i>		50	
- <i>Subordinated debentures used for regulatory capital</i>		7,355	
- <i>of which: are included in Tier 2 capital</i>		7,053	<i>m</i>
- <i>of which: are subject to phase out included in Tier 1 capital (20%)</i>		302	
- <i>of which: are subject to phase out not included in Tier 1 capital</i>		-	
Other liabilities	62,604	59,692	
- <i>Liquidity reserves</i>		4	<i>o</i>
- <i>Gains/losses due to changes in own credit risk including DVA on derivatives</i>		(159)	<i>p</i>
- <i>Deferred tax liabilities</i>		1,073	
- <i>Intangible assets (excl. computer software and mortgage servicing rights)</i>		1,484	<i>q</i>
- <i>Intangible assets - computer software</i>		353	<i>r</i>
- <i>Defined benefit pension fund assets</i>		87	<i>s</i>
- <i>Other deferred tax liabilities</i>		(851)	
- <i>Other liabilities</i>		58,774	
Total other	296,226	293,314	
Total liabilities	1,065,963	1,063,051	

Condensed balance sheet (in \$MM)	a	b	c
	Balance sheet as in published financial statements ⁽¹⁾	Under regulatory scope of consolidation ⁽²⁾	Cross-reference to Definition of Capital Components
	Q4 2020	Q4 2020	
Equity			
Common equity			
Common shares	18,239	18,239	<i>u</i>
- of which: amount eligible for CET1		18,239	
- of which: amount eligible for AT1		-	
Retained earnings	46,345	46,345	<i>v</i>
Accumulated other comprehensive income	(2,125)	(2,125)	<i>w</i>
- Cash flow hedging reserve		639	<i>x</i>
- Other		(2,764)	
Other reserves	360	360	
- portion allowed for inclusion into CET1		43	<i>y</i>
- portion not allowed for regulatory capital		317	
Total common equity	62,819	62,819	
Preferred shares and other equity instruments	5,308	5,308	
- of which: are qualifying Tier 1 capital		4,899	<i>z</i>
- of which: are subject to phase out and included in Tier 1 capital (20%)		409	<i>aa</i>
- of which: are subject to phase out and not included into Tier 1 capital		-	
Total equity attributable to equity holders of the Bank	68,127	68,127	
Non-controlling interests in subsidiaries	2,376	2,376	
- portion allowed for inclusion into CET1		1,769	<i>bb</i>
- portion allowed for inclusion into Tier 1 capital		145	<i>cc</i>
- portion allowed for inclusion into Tier 2 capital		148	<i>dd</i>
- portion not allowed for regulatory capital		314	
Total equity	70,503	70,503	
Total liabilities and equity	1,136,466	1,133,554	

(1) Consolidated Statement of Financial Position as reported in the 2020 Annual Report.

(2) Legal Entities that are within the accounting scope of consolidation but excluded from the regulatory scope of consolidation represent the Bank's insurance subsidiaries whose principle activities include insurance, reinsurance, property and casualty insurance. Key subsidiaries are Scotia Insurance Barbados Ltd (assets: \$237MM, equity: \$226MM), Scotia Life Insurance Company (assets: \$2MM, equity: \$20MM), Scotia Reinsurance Limited (assets: \$21MM, equity: \$67MM), Scotia Jamaica Life Insurance Co. Ltd (assets: \$498MM, equity: \$86MM), Scotia Life Trinidad and Tobago Ltd (assets: \$388MM, equity: \$75MM), Scotia Insurance Caribbean Ltd. (assets: \$0.3MM, equity: \$15MM), and MD Life Insurance Company (assets: \$2,252MM, equity: \$15MM).

TLAC1: TLAC composition for G-SIBs (at resolution group level)


(in \$MM)		a	a ₂	a ₃	a ₄
		Q4 2020 Amounts	Q3 2020 Amounts	Q2 2020 Amounts	Q1 2020 Amounts
Regulatory capital elements of TLAC and adjustments					
1	Common Equity Tier 1 capital (CET1)	49,165	48,689	48,543	47,804
2	Additional Tier 1 capital (AT1) before TLAC adjustments	6,197	6,209	4,502	4,633
3	AT1 ineligible as TLAC as issued out of subsidiaries to third parties	-	-	-	-
4	Other adjustments	-	-	-	-
5	AT1 instruments eligible under the TLAC framework	6,197	6,209	4,502	4,633
6	Tier 2 capital (T2) before TLAC adjustments	9,150	9,276	9,478	8,955
7	Amortized portion of T2 instruments where remaining maturity > 1 year	50	50	-	-
8	T2 capital ineligible as TLAC as issued out of subsidiaries to third parties	-	-	-	-
9	Other adjustments	-	-	-	-
10	T2 instruments eligible under the TLAC framework	9,200	9,326	9,478	8,955
11	TLAC arising from regulatory capital	64,562	64,224	62,523	61,392
Non-regulatory capital elements of TLAC					
12	External TLAC instruments issued directly by the bank and subordinated to excluded liabilities	-	-	-	-
13	External TLAC instruments issued directly by the bank which are not subordinated to excluded liabilities but meet all other TLAC term sheet requirements.	31,743	26,281	24,100	17,578
14	Of which: amount eligible as TLAC after application of the caps	N/A	N/A	N/A	N/A
15	External TLAC instruments issued by funding vehicles prior to 1 January 2022	-	-	-	-
16	Eligible ex ante commitments to recapitalise a G-SIB in resolution	N/A	N/A	N/A	N/A
17	TLAC arising from non-regulatory capital instruments before adjustments	31,743	26,281	24,100	17,578
Non-regulatory capital elements of TLAC: adjustments					
18	TLAC before deductions	96,305	90,505	86,623	78,970
19	Deductions of exposures between MPE resolution groups that correspond to items eligible for TLAC (not applicable to SPE G-SIBs)	N/A	N/A	N/A	N/A
20	Deduction of investments in own other TLAC liabilities	(204)	(91)	(157)	(135)
21	Other adjustments to TLAC	-	-	-	-
22	TLAC after deductions	96,101	90,414	86,466	78,835
Risk-weighted assets and leverage exposure measure for TLAC purposes					
23	Total risk-weighted assets adjusted as permitted under the TLAC regime	417,138	430,542	446,173	420,694
24	Leverage exposure measure	1,170,290	1,193,840	1,199,022	1,300,001
TLAC ratios and buffers					
25	TLAC (as a percentage of risk-weighted assets adjusted as permitted under the TLAC regime)	23.0%	21.0%	19.4%	18.7%
26	TLAC (as a percentage of leverage exposure)	8.2%	7.6%	7.2%	6.1%
27	CET1 (as a percentage of risk-weighted assets) available after meeting the resolution group's minimum capital and TLAC requirements	N/A	N/A	N/A	N/A
28	Institution-specific buffer requirement (capital conservation buffer plus countercyclical buffer requirements plus higher loss absorbency requirement, expressed as a percentage of risk-weighted assets)	3.5%	3.5%	3.5%	3.5%
29	Of which: capital conservation buffer requirement	2.5%	2.5%	2.5%	2.5%
30	Of which: bank specific countercyclical buffer requirement	0.0%	0.0%	0.0%	0.0%
31	Of which: D-SIB / G-SIB buffer	1.0%	1.0%	1.0%	1.0%

Rows 14, 16, 19 and 27 are not applicable to Canadian D-SIBs.

(in \$MM)		Creditor ranking						Sum of 1 to 6
		1 (most junior)	2	3	4	5	6 (most senior)	
Q4 2020								
1	Description of creditor ranking	Common shares Book value	Preferred shares Stated value	Additional Tier 1 Instruments Stated value	Subordinated Debt Par value	Bail-in Debt ⁽¹⁾ Par value	Other Liabilities ⁽²⁾	Total
2	Total capital and liabilities net of credit risk mitigation	18,239	2,059	3,249	7,235	33,413	-	64,195
3	Subset of row 2 that are excluded liabilities	23	6	-	-	204	-	233
4	Total capital and liabilities less excluded liabilities (row 2 minus row 3)	18,216	2,053	3,249	7,235	33,209	-	63,962
5	Subset of row 4 that are <i>potentially</i> eligible as TLAC	18,216	2,053	3,249	7,236	31,847	-	62,601
6	Subset of row 5 with 1 year ≤ residual maturity < 2 years	-	-	-	-	231	-	231
7	Subset of row 5 with 2 years ≤ residual maturity < 5 years	-	-	-	245	21,986	-	22,231
8	Subset of row 5 with 5 years ≤ residual maturity < 10 years	-	-	-	6,889	4,259	-	11,148
9	Subset of row 5 with residual maturity ≥ 10 years, but excluding perpetual securities	-	-	-	102	5,371	-	5,473
10	Subset of row 5 that is perpetual securities	18,216	2,053	3,249	-	-	-	23,518

Q3 2020								
1	Description of creditor ranking	Common shares Book value	Preferred shares Stated value	Additional Tier 1 Instruments Stated value	Subordinated Debt Par value	Bail-in Debt ⁽¹⁾ Par value	Other Liabilities ⁽²⁾	Total
2	Total capital and liabilities net of credit risk mitigation	18,236	2,059	3,249	7,149	27,849	-	58,542
3	Subset of row 2 that are excluded liabilities	5	-	-	-	91	-	96
4	Total capital and liabilities less excluded liabilities (row 2 minus row 3)	18,231	2,059	3,249	7,149	27,758	-	58,446
5	Subset of row 4 that are <i>potentially</i> eligible as TLAC	18,231	2,059	3,249	7,149	26,381	-	57,069
6	Subset of row 5 with 1 year ≤ residual maturity < 2 years	-	-	-	-	232	-	232
7	Subset of row 5 with 2 years ≤ residual maturity < 5 years	-	-	-	245	19,051	-	19,296
8	Subset of row 5 with 5 years ≤ residual maturity < 10 years	-	-	-	6,799	3,106	-	9,905
9	Subset of row 5 with residual maturity ≥ 10 years, but excluding perpetual securities	-	-	-	105	3,992	-	4,097
10	Subset of row 5 that is perpetual securities	18,231	2,059	3,249	-	-	-	23,539

TLAC3: Resolution entity – creditor ranking at legal entity level


(in \$MM)		Creditor ranking						Sum of 1 to 6
		1 (most junior)	2	3	4	5	6 (most senior)	
Q2 2020								
1	Description of creditor ranking	Common shares Book value	Preferred shares Stated value	Additional Tier 1 Instruments Stated value	Subordinated Debt Par value	Bail-in Debt (1) Par value	Other Liabilities (2)	Total
2	Total capital and liabilities net of credit risk mitigation	18,231	2,059	1,560	7,294	25,978	-	55,122
3	Subset of row 2 that are excluded liabilities	-	1	-	-	159	-	160
4	Total capital and liabilities less excluded liabilities (row 2 minus row 3)	18,231	2,058	1,560	7,294	25,819	-	54,962
5	Subset of row 4 that are potentially eligible as TLAC	18,231	2,058	1,560	7,294	24,418	-	53,561
6	Subset of row 5 with 1 year ≤ residual maturity < 2 years	-	-	-	-	224	-	224
7	Subset of row 5 with 2 years ≤ residual maturity < 5 years	-	-	-	-	17,468	-	17,468
8	Subset of row 5 with 5 years ≤ residual maturity < 10 years	-	-	-	7,178	3,186	-	10,364
9	Subset of row 5 with residual maturity ≥ 10 years, but excluding perpetual securities	-	-	-	116	3,540	-	3,656
10	Subset of row 5 that is perpetual securities	18,231	2,058	1,560	-	-	-	21,849

Q1 2020								
1	Description of creditor ranking	Common shares Book value	Preferred shares Stated value	Additional Tier 1 Instruments Stated value	Subordinated Debt Par value	Bail-in Debt (1) Par value	Other Liabilities (2)	Total
2	Total capital and liabilities net of credit risk mitigation	18,248	2,324	1,560	7,254	19,074	-	48,460
3	Subset of row 2 that are excluded liabilities	7	119	-	-	135	-	261
4	Total capital and liabilities less excluded liabilities (row 2 minus row 3)	18,241	2,205	1,560	7,254	18,939	-	48,199
5	Subset of row 4 that are potentially eligible as TLAC	18,241	2,205	1,560	7,254	17,596	-	46,856
6	Subset of row 5 with 1 year ≤ residual maturity < 2 years	-	-	-	-	74	-	74
7	Subset of row 5 with 2 years ≤ residual maturity < 5 years	-	-	-	-	10,219	-	10,219
8	Subset of row 5 with 5 years ≤ residual maturity < 10 years	-	-	-	7,144	6,407	-	13,551
9	Subset of row 5 with residual maturity ≥ 10 years, but excluding perpetual securities	-	-	-	110	896	-	1,006
10	Subset of row 5 that is perpetual securities	18,241	2,205	1,560	-	-	-	22,006

(1) Under the Bank Recapitalization (Bail-In) Regime. Please refer to the Basel III Implementation section for a description of the requirements.

(2) Disclosure not currently required by OSFI.

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


(in \$MM)		a	a ₂	a ₃	a ₄
		Q4 2020	Q3 2020	Q2 2020	Q1 2020
1	Total consolidated assets as per published financial statements	1,136,466	1,169,872	1,247,073	1,154,022
2	Adjustment for investments in banking, financial, insurance or commercial entities that are consolidated for accounting purposes but outside the scope of regulatory consolidation	(2,912)	(2,720)	(2,927)	(3,130)
3	Adjustment for securitized exposures that meet the operational requirements for the recognition of risk transference	(2,463)	(2,959)	(3,217)	(3,478)
4	Adjustment for fiduciary assets recognized on the balance sheet pursuant to the operative accounting framework but excluded from the leverage ratio exposure measure	-	-	-	-
5	Adjustments for derivative financial instruments	7,569	(972)	(11,525)	13,604
6	Adjustment for securities financing transactions (i.e. repos and similar secured lending)	13,050	12,446	12,127	10,589
7	Adjustment for off-balance sheet items (i.e. conversion to credit equivalent amounts of off-balance sheet exposures)	152,117	145,294	140,280	145,393
8	Other adjustments ⁽¹⁾	(133,537)	(127,121)	(182,789)	(16,999)
9	Leverage ratio exposure measure	1,170,290	1,193,840	1,199,022	1,300,001

(1) Commencing Q2 2020, amount includes temporary leverage ratio exposure exemptions (Q4: \$117.0 billion, Q3: \$110.2 billion, Q2: \$165.7 billion) in accordance with OSFI's COVID-19 capital relief measures and asset amounts deducted in determining Basel III Tier 1 capital.

(in \$MM)		a	a ₂	a ₃	a ₄
		Q4 2020	Q3 2020	Q2 2020	Q1 2020
On-balance sheet exposures ⁽¹⁾					
1	On-balance sheet exposures (excluding derivatives and securities financing transactions (SFTs), but including collateral)	849,316	871,881	879,424	957,900
2	Gross-up for derivatives collateral provided where deducted from the balance sheet assets pursuant to the operative accounting framework	-	-	-	-
3	(Deductions of receivables assets for cash variation margin provided in derivatives transactions)	(6,065)	(8,151)	(10,514)	(6,842)
4	(Asset amounts deducted in determining Basel III Tier 1 capital)	(16,573)	(16,901)	(17,068)	(16,999)
5	Total on-balance sheet exposures (excluding derivatives and SFTs) (sum of rows 1 to 4)	826,678	846,829	851,842	934,059
Derivative exposures					
6	Replacement cost associated with <i>all</i> derivatives transactions (where applicable net of eligible cash variation margin and/or with bilateral netting)	29,362	33,376	34,576	32,791
7	Add-on amounts for PFE associated with <i>all</i> derivatives transactions	25,930	26,500	25,878	27,928
8	(Exempted CCP leg of client-cleared trade exposures)	-	-	-	-
9	Adjusted effective notional amount of written credit derivatives	4,487	4,009	4,471	4,354
10	(Adjusted effective notional offsets and add-on deductions for written credit derivatives)	(1,081)	(1,074)	(1,318)	(1,545)
11	Total derivative exposures (sum of rows 6 to 10)	58,698	62,811	63,607	63,528
Securities financing transaction exposures					
12	Gross SFT assets (with no recognition of netting), after adjusting for sale accounting transactions	141,861	146,621	146,650	158,864
13	(Netted amounts of cash payables and cash receivables of gross SFT assets)	(22,114)	(20,161)	(15,484)	(12,432)
14	CCR exposure for SFT assets	13,050	12,446	12,127	10,589
15	Agent transaction exposures	-	-	-	-
16	Total securities financing transaction exposures (sum of rows 12 to 15)	132,797	138,906	143,293	157,021
Other off-balance sheet exposures					
17	Off-balance sheet exposure at gross notional amount	488,310	468,438	465,184	474,224
18	(Adjustments for conversion to credit equivalent amounts)	(336,193)	(323,144)	(324,904)	(328,831)
19	Off-balance sheet items (sum of rows 17 and 18)	152,117	145,294	140,280	145,393
Capital and total exposures					
20	Tier 1 capital	55,362	54,898	53,045	52,437
20a	Tier 1 capital with transitional arrangements for ECL provisioning not applied	54,057	53,726	52,599	52,437
21	Total exposures (sum of rows 5, 11, 16 and 19)	1,170,290	1,193,840	1,199,022	1,300,001
Leverage ratio					
22	Basel III leverage ratio	4.7%	4.6%	4.4%	4.0%
22a	Leverage Ratio with transitional arrangements for ECL provisioning not applied	4.6%	4.5%	4.4%	4.0%

(1) On-balance sheet items exclude securities purchased under resale agreements and securities borrowed (\$119,747MM), derivative financial instruments (\$45,065MM), assets outside the regulatory scope of consolidation (\$2,912MM).

CR1: Credit quality of assets ⁽¹⁾


(in \$MM)		a	b	c	d		e	f	g
		Gross carrying values of ⁽²⁾		Allowances/ impairments ⁽⁴⁾	Of which ECL accounting provisions for credit losses on SA exposures		Of which ECL accounting provisions for credit losses on IRB exposures	Net values (a+b-c)	
		Defaulted exposures ⁽³⁾	Non-defaulted exposures		Allocated in regulatory category of Specific	Allocated in regulatory category of General			
Q4 2020									
1	Loans ⁽⁵⁾	5,083	685,435	7,553	1,514	3,811	2,228	682,965	
2	Debt Securities	221	105,596	-	-	-	-	105,817	
3	Off-balance sheet exposures ⁽⁶⁾	395	253,626	101	-	14	87	253,920	
4	Total	5,699	1,044,657	7,654	1,514	3,825	2,315	1,042,702	
Q3 2020									
1	Loans ⁽⁵⁾	5,196	678,680	7,094	1,425	3,648	2,021	676,782	
2	Debt Securities	222	116,619	-	-	-	-	116,841	
3	Off-balance sheet exposures ⁽⁶⁾	293	235,501	90	-	11	79	235,704	
4	Total	5,711	1,030,800	7,184	1,425	3,659	2,100	1,029,327	
Q2 2020									
1	Loans ⁽⁵⁾	4,887	744,362	5,878	1,257	2,861	1,760	743,371	
2	Debt Securities	231	113,999	-	-	-	-	114,230	
3	Off-balance sheet exposures ⁽⁶⁾	483	222,903	37	-	12	25	223,349	
4	Total	5,601	1,081,264	5,915	1,257	2,873	1,785	1,080,950	
Q1 2020									
1	Loans ⁽⁵⁾	4,663	681,433	4,914	1,224	2,400	1,290	681,182	
2	Debt Securities	220	72,928	-	-	-	-	73,148	
3	Off-balance sheet exposures ⁽⁶⁾	395	233,182	51	5	7	39	233,526	
4	Total	5,278	987,543	4,965	1,229	2,407	1,329	987,856	

(1) As required by OSFI, commencing Q4 2019, this table incorporates the BCBS Technical Amendments to Pillar 3 disclosure requirements - regulatory treatment of accounting provisions (August 2018).

Consistent with the requirements for regulatory capital reporting and in accordance with OSFI Capital Adequacy Requirements (Chapter 2), General Allowances are defined as Stage 1 and Stage 2 allowances under IFRS 9 and Specific Allowances are defined as Stage 3 allowances under IFRS 9.

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

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

(4) Includes all three ECL Stages, net of allowances related to securitizations of bank originated credit card receivables and ECL related to entities outside the scope of regulatory consolidation.

(5) Includes bankers acceptances and deposits with banks.

(6) Excludes all revocable loan commitments.

CR2: Changes in stock of defaulted loans and debt securities⁽¹⁾



(in \$MM)		a	a ₂	a ₃	a ₄
		Q4 2020	Q3 2020	Q2 2020	Q1 2020
1	Defaulted loans and debt securities - Beginning of Quarter ⁽²⁾	5,711	5,601	5,278	5,732
2	Loans and debt securities that have defaulted since the last reporting period	867	1,061	1,268	1,166
3	Returned to non-defaulted status ⁽³⁾	(154)	(141)	(48)	(198)
4	Amounts written off	(759)	(855)	(828)	(963)
5	Other changes ⁽⁴⁾	34	45	(69)	(459)
6	Defaulted loans and debt securities - End of Quarter ⁽²⁾	5,699	5,711	5,601	5,278

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

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

(3) Includes returned to non-defaulted status and payments on defaulted accounts.

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

CR3: Credit risk mitigation techniques – overview


(in \$MM)		a	b1	b	d	f
		Unsecured exposures: carrying amount ⁽¹⁾	Exposures to be secured ⁽¹⁾	Exposures secured by collateral ^{(2) (3)}	Exposures secured by financial guarantees ⁽⁴⁾	Exposures secured by credit derivatives
Q4 2020						
1	Loans ⁽⁵⁾	257,038	425,927	327,650	98,277	-
2	Debt Securities	69,977	35,840	-	35,840	-
3	Total	327,015	461,767	327,650	134,117	-
4	Of which defaulted	1,857	1,494	1,227	267	-

Q3 2020						
1	Loans ⁽⁵⁾	256,557	420,225	321,676	98,549	-
2	Debt Securities	81,922	34,919	-	34,919	-
3	Total	338,479	455,144	321,676	133,468	-
4	Of which defaulted	1,811	1,822	1,505	317	-

Q2 2020						
1	Loans ⁽⁵⁾	325,517	417,854	323,473	94,381	-
2	Debt Securities	81,891	32,339	-	32,339	-
3	Total	407,408	450,193	323,473	126,720	-
4	Of which defaulted	1,559	1,912	1,570	341	-

Q1 2020						
1	Loans ⁽⁵⁾	267,558	413,624	324,174	89,450	-
2	Debt Securities	51,172	21,976	-	21,976	-
3	Total	318,730	435,600	324,174	111,426	-
4	Of which defaulted	1,570	1,778	1,413	365	-

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

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

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

(4) Includes government insured mortgages.

(5) Includes bankers acceptances and deposits with banks.

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



(in \$MM)		a		b		c		d		e		f	
		Exposures before CCF and CRM		Exposures post-CCF and CRM		RWA and RWA density							
Asset classes		On-balance sheet amount	Off-balance sheet amount	On-balance sheet amount	Off-balance sheet amount	RWA	RWA density						
Q4 2020													
1	Bank	2,505	707	2,505	98	2,003	77%						
2	Corporate	53,013	21,779	53,013	5,601	54,111	92%						
3	Sovereign	8,315	98	8,315	7	883	11%						
4	Real Estate Secured	47,715	523	47,715	-	18,632	39%						
5	Other Retail	39,683	30,436	39,683	-	29,015	73%						
6	Equity ⁽¹⁾	2,248	-	2,248	-	2,382	106%						
7	Other Assets ⁽²⁾	54,616	-	54,616	-	14,948	27%						
8	Total	208,095	53,543	208,095	5,706	121,974	57%						

Q3 2020													
1	Bank	2,270	1,967	2,270	114	1,994	84%						
2	Corporate	54,131	22,105	54,131	5,775	55,771	93%						
3	Sovereign	7,692	80	7,692	5	896	12%						
4	Real Estate Secured	46,645	468	46,645	-	18,503	40%						
5	Other Retail	40,748	31,406	40,748	-	29,961	74%						
6	Equity ⁽¹⁾	2,025	-	2,025	-	2,146	106%						
7	Other Assets ⁽²⁾	61,365	-	61,365	-	15,330	25%						
8	Total	214,876	56,026	214,876	5,894	124,601	56%						

Q2 2020													
1	Bank	2,620	836	2,620	186	2,300	82%						
2	Corporate	53,481	22,288	53,481	6,302	56,714	95%						
3	Sovereign	6,629	141	6,629	4	983	15%						
4	Real Estate Secured	45,073	386	45,073	-	18,083	40%						
5	Other Retail	41,762	32,058	41,762	-	31,044	74%						
6	Equity ⁽¹⁾	1,938	-	1,938	-	2,055	106%						
7	Other Assets ⁽²⁾	70,948	-	70,948	-	16,033	23%						
8	Total	222,451	55,709	222,451	6,492	127,212	56%						

Q1 2020													
1	Bank	2,550	750	2,550	157	2,577	95%						
2	Corporate	52,723	22,930	52,723	6,229	55,663	94%						
3	Sovereign	6,383	161	6,383	5	694	11%						
4	Real Estate Secured	44,687	27	44,687	-	18,101	41%						
5	Other Retail	43,255	34,266	43,255	-	32,157	74%						
6	Equity ⁽¹⁾	1,942	-	1,942	-	2,058	106%						
7	Other Assets ⁽²⁾	68,247	-	68,247	-	14,773	22%						
8	Total	219,787	58,134	219,787	6,391	126,023	56%						

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

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

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


(in \$MM)	Risk weight Asset classes	Risk weight									Total credit exposures amount (post-CCF and post-CRM) ⁽¹⁾
		a 0%	b 10%	c 20%	d 35%	e 50%	f 75%	g 100%	h 150%	i Others	
Q4 2020											
1	Bank	-	-	744	-	11	-	1,848	-	-	2,603
2	Corporate	4,189	-	487	-	39	-	53,710	189	-	58,614
3	Sovereign	6,592	-	2	-	1,691	-	37	-	-	8,322
4	Real Estate Secured	6,693	-	-	30,992	-	9,204	716	110	-	47,715
5	Other Retail	696	-	546	-	-	38,226	173	42	-	39,683
6	Equity ⁽²⁾	-	-	-	-	-	-	2,248	-	-	2,248
7	Other Assets ⁽³⁾	41,398	-	-	-	-	-	13,069	-	149	54,616
8	Total	59,568	-	1,779	30,992	1,741	47,430	71,801	341	149	213,801
Q3 2020											
1	Bank	-	-	468	-	31	-	1,885	-	-	2,384
2	Corporate	3,909	-	412	-	35	-	55,306	244	-	59,906
3	Sovereign	5,905	-	2	-	1,788	-	2	-	-	7,697
4	Real Estate Secured	6,220	-	-	30,333	-	9,111	837	144	-	46,645
5	Other Retail	488	-	622	-	-	39,287	310	41	-	40,748
6	Equity ⁽²⁾	-	-	-	-	-	-	2,025	-	-	2,025
7	Other Assets ⁽³⁾	47,718	-	-	-	-	-	13,501	-	146	61,365
8	Total	64,240	-	1,504	30,333	1,854	48,398	73,866	429	146	220,770
Q2 2020											
1	Bank	-	-	629	-	5	-	2,172	-	-	2,806
2	Corporate	2,891	-	313	-	3	-	56,428	148	-	59,783
3	Sovereign	4,667	-	2	-	1,964	-	-	-	-	6,633
4	Real Estate Secured	6,014	-	-	28,828	-	9,261	817	153	-	45,073
5	Other Retail	196	-	480	-	-	40,658	374	54	-	41,762
6	Equity ⁽²⁾	-	-	-	-	-	-	1,938	-	-	1,938
7	Other Assets ⁽³⁾	56,618	-	-	-	-	-	14,182	-	148	70,948
8	Total	70,386	-	1,424	28,828	1,972	49,919	75,911	355	148	228,943
Q1 2020											
1	Bank	-	-	157	-	8	-	2,542	-	-	2,707
2	Corporate	2,575	-	941	-	96	-	55,167	173	-	58,952
3	Sovereign	5,022	-	2	-	1,341	-	23	-	-	6,388
4	Real Estate Secured	5,542	-	-	28,986	-	9,236	710	213	-	44,687
5	Other Retail	201	-	484	-	-	42,165	341	64	-	43,255
6	Equity ⁽²⁾	-	-	-	-	-	-	1,942	-	-	1,942
7	Other Assets ⁽³⁾	54,755	-	317	-	-	-	13,042	-	133	68,247
8	Total	68,095	-	1,901	28,986	1,445	51,401	73,767	450	133	226,178

(1) Exposure amount used for the calculation of capital requirements, including both on- and off-balance sheet amounts, net of allowances (ECL Stage 3) and write-offs.

The amounts are after application of credit risk mitigation (CRM) techniques and credit conversion factors (CCF).

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

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

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



(in \$MM)	PD scale	a	b	c	d	e	f	g	h	i	j	k	l
		Original on-balance sheet gross exposures	Off-balance sheet exposures pre-CCF	Average CCF	EAD post-CRM and post-CCF ⁽¹⁾	Average PD ⁽²⁾	Number of obligors ⁽³⁾	Average LGD ⁽⁴⁾	Average maturity ⁽⁵⁾	RWA ⁽¹⁾⁽⁶⁾⁽⁹⁾	RWA density ⁽⁷⁾	EL ⁽¹⁾	Provisions ⁽⁸⁾
Q4 2020													
Retail - insured exposures secured by residential real estate	0.00 to <0.15	33,039	-		81,750	0.00%	216,170	22.49%		331	0.4%	1	
	0.15 to <0.25	29,553	-		1,902	0.23%	133,989	21.82%		198	10.4%	1	
	0.25 to <0.50	-	-		-		-			-		-	
	0.50 to <0.75	574	-		-		2,996			-		-	
	0.75 to <2.50	19,370	-		255	0.93%	79,336	15.07%		49	19.2%	-	
	2.50 to <10.00	626	-		-		2,984			-		-	
	10.00 to <100.00	482	-		-		2,346			-		-	
	100.00 (Default)	263	-		-		1,564			-		-	
	Sub-total	83,907	-	-	83,907	0.01%	439,385	22.45%			578	0.7%	2
Retail - uninsured exposures secured by residential real estate	0.00 to <0.15	53,562	39,051	38%	68,423	0.06%	616,145	19.42%		2,198	3.2%	8	
	0.15 to <0.25	68,326	8,458	33%	71,123	0.22%	386,248	20.67%		6,535	9.2%	31	
	0.25 to <0.50	23	-		23	0.38%	1,208	55.80%		9	39.1%	-	
	0.50 to <0.75	4,610	1,105	50%	5,164	0.64%	60,870	33.84%		1,717	33.2%	11	
	0.75 to <2.50	42,427	116	56%	42,492	1.22%	131,979	20.29%		12,795	30.1%	107	
	2.50 to <10.00	876	17	59%	886	6.38%	7,813	22.92%		767	86.6%	12	
	10.00 to <100.00	576	5	113%	581	20.09%	3,918	21.02%		670	115.3%	24	
	100.00 (Default)	262	-		262	100.00%	22,782	66.83%		1,357	517.9%	73	
	Sub-total	170,662	48,752	38%	188,954	0.63%	1,230,963	20.57%			26,048	13.8%	266

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



(in \$MM)	PD scale	a	b	c	d	e	f	g	h	i	j	k	l
		Original on-balance sheet gross exposures	Off-balance sheet exposures pre-CCF	Average CCF	EAD post-CRM and post-CCF ⁽¹⁾	Average PD ⁽²⁾	Number of obligors ⁽³⁾	Average LGD ⁽⁴⁾	Average maturity ⁽⁵⁾	RWA ⁽¹⁾⁽⁶⁾⁽⁹⁾	RWA density ⁽⁷⁾	EL ⁽¹⁾	Provisions ⁽⁸⁾
Retail - qualifying revolving (QRRE)	0.00 to <0.15	941	22,036	61%	14,293	0.04%	1,026,556	74.14%		341	2.4%	5	
	0.15 to <0.25	640	14,721	61%	9,565	0.18%	1,831,723	74.92%		757	7.9%	13	
	0.25 to <0.50	3,401	5,066	71%	7,014	0.27%	335,832	81.60%		837	11.9%	16	
	0.50 to <0.75	277	367	105%	664	0.63%	20,663	43.56%		82	12.3%	2	
	0.75 to <2.50	5,216	5,723	71%	9,290	1.29%	1,031,729	83.23%		3,754	40.4%	101	
	2.50 to <10.00	3,295	940	89%	4,134	5.30%	599,685	86.57%		4,653	112.6%	190	
	10.00 to <100.00	738	31	238%	812	27.08%	154,551	83.55%		1,738	214.0%	181	
	100.00 (Default)	90	-		90	100.00%	689,171	86.75%		410	455.6%	49	
	Sub-total	14,598	48,884	64%	45,862	1.52%	5,689,910	78.15%		12,572	27.4%	557	920
Other Retail Exposures	0.00 to <0.15	6,314	954	63%	6,912	0.09%	344,874	52.56%		861	12.5%	3	
	0.15 to <0.25	-	5	61%	4	0.18%	31	80.13%		1	25.0%	-	
	0.25 to <0.50	7,333	195	82%	7,493	0.29%	325,830	56.27%		2,305	30.8%	12	
	0.50 to <0.75	1,200	2,360	105%	3,670	0.63%	12,769	43.56%		1,377	37.5%	10	
	0.75 to <2.50	13,276	49	94%	13,322	1.18%	475,693	60.05%		9,024	67.7%	95	
	2.50 to <10.00	2,857	1	103%	2,858	4.93%	112,472	63.52%		2,835	99.2%	88	
	10.00 to <100.00	626	-	147%	626	27.58%	25,204	57.31%		896	143.1%	99	
	100.00 (Default)	171	-		171	100.00%	17,421	89.63%		335	195.9%	144	
	Sub-total	31,777	3,564	92%	35,056	1.97%	1,314,294	56.42%		17,634	50.3%	451	476
Total	300,944	101,200	52%	353,779	0.73%	8,674,552	32.04%		56,832	16.1%	1,276	1,568	

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



(in \$MM)	PD scale	a	b	c	d	e	f	g	h	i	j	k	l
		Original on-balance sheet gross exposures	Off-balance sheet exposures pre-CCF	Average CCF	EAD post-CRM and post-CCF ⁽¹⁾	Average PD ⁽²⁾	Number of obligors ⁽³⁾	Average LGD ⁽⁴⁾	Average maturity ⁽⁵⁾	RWA ⁽¹⁾⁽⁶⁾⁽⁹⁾	RWA density ⁽⁷⁾	EL ⁽¹⁾	Provisions ⁽⁸⁾
Q3 2020													
Retail - insured exposures secured by residential real estate	0.00 to <0.15	32,087	-	-	82,838	0.00%	208,869	22.37%		323	0.4%	1	
	0.15 to <0.25	30,804	-	-	1,961	0.23%	142,884	21.21%		198	10.1%	1	
	0.25 to <0.50	-	-	-	-	-	-	-		-	-	-	
	0.50 to <0.75	606	-	-	-	-	3,167	-		-	-	-	
	0.75 to <2.50	19,944	-	-	279	0.93%	85,710	14.45%		51	18.3%	-	
	2.50 to <10.00	732	-	-	-	-	3,484	-		-	-	-	
	10.00 to <100.00	609	-	-	-	-	2,942	-		-	-	-	
	100.00 (Default)	296	-	-	-	-	1,750	-		-	-	-	
	Sub-total	85,078	-	-	85,078	0.01%	448,806	22.32%		572	0.7%	2	19
Retail - uninsured exposures secured by residential real estate	0.00 to <0.15	47,993	38,036	38%	62,488	0.06%	587,497	19.74%		2,052	3.3%	7	
	0.15 to <0.25	66,644	8,355	33%	69,400	0.22%	382,148	20.66%		6,379	9.2%	31	
	0.25 to <0.50	22	-	-	22	0.38%	1,117	55.92%		8	36.4%	-	
	0.50 to <0.75	4,664	1,149	48%	5,210	0.64%	62,449	33.25%		1,702	32.7%	11	
	0.75 to <2.50	42,219	160	55%	42,308	1.21%	136,852	20.34%		12,706	30.0%	105	
	2.50 to <10.00	1,012	22	57%	1,025	6.42%	8,783	23.11%		903	88.1%	14	
	10.00 to <100.00	701	6	95%	707	21.07%	4,606	20.57%		800	113.2%	30	
	100.00 (Default)	290	-	-	290	100.00%	22,629	61.71%		1,509	520.3%	65	
	Sub-total	163,545	47,728	38%	181,450	0.68%	1,206,081	20.71%		26,059	14.4%	263	150

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



(in \$MM)	PD scale	a	b	c	d	e	f	g	h	i	j	k	l
		Original on-balance sheet gross exposures	Off-balance sheet exposures pre-CCF	Average CCF	EAD post-CRM and post-CCF ⁽¹⁾	Average PD ⁽²⁾	Number of obligors ⁽³⁾	Average LGD ⁽⁴⁾	Average maturity ⁽⁵⁾	RWA ⁽¹⁾⁽⁶⁾⁽⁹⁾	RWA density ⁽⁷⁾	EL ⁽¹⁾	Provisions ⁽⁸⁾
Retail - qualifying revolving (QRRE)	0.00 to <0.15	837	21,156	61%	13,726	0.04%	987,964	74.53%		330	2.4%	5	
	0.15 to <0.25	495	14,282	61%	9,188	0.18%	1,779,737	74.87%		727	7.9%	13	
	0.25 to <0.50	3,336	5,451	71%	7,201	0.27%	346,283	81.34%		856	11.9%	16	
	0.50 to <0.75	287	352	106%	659	0.63%	20,607	43.56%		81	12.3%	2	
	0.75 to <2.50	5,235	6,309	71%	9,742	1.29%	1,067,867	83.19%		3,939	40.4%	106	
	2.50 to <10.00	3,454	1,114	89%	4,443	5.38%	635,760	86.52%		5,051	113.7%	207	
	10.00 to <100.00	792	35	239%	876	25.68%	168,313	84.02%		1,907	217.7%	187	
	100.00 (Default)	101	-		101	100.00%	673,860	88.30%		486	481.2%	53	
	Sub-total	14,537	48,699	64%	45,936	1.61%	5,680,391	78.43%		13,377	29.1%	589	836
Other Retail Exposures	0.00 to <0.15	6,167	895	63%	6,728	0.09%	342,833	52.41%		838	12.5%	3	
	0.15 to <0.25	-	4	62%	3	0.18%	25	77.96%		1	33.3%	-	
	0.25 to <0.50	7,274	211	80%	7,443	0.29%	327,027	56.10%		2,282	30.7%	12	
	0.50 to <0.75	1,120	2,186	105%	3,409	0.63%	11,890	43.56%		1,279	37.5%	9	
	0.75 to <2.50	12,754	59	95%	12,810	1.18%	472,615	59.61%		8,622	67.3%	91	
	2.50 to <10.00	3,072	1	104%	3,074	5.00%	123,574	63.08%		3,032	98.6%	95	
	10.00 to <100.00	722	1	107%	723	27.22%	29,224	57.29%		1,033	142.9%	113	
	100.00 (Default)	208	-		208	100.00%	19,781	90.56%		1,135	545.7%	103	
	Sub-total	31,317	3,357	92%	34,398	2.21%	1,326,969	56.30%		18,222	53.0%	426	478
Total		294,477	99,784	52%	346,862	0.79%	8,662,247	32.28%		58,230	16.8%	1,280	1,483

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



(in \$MM)	PD scale	a	b	c	d	e	f	g	h	i	j	k	l
		Original on-balance sheet gross exposures	Off-balance sheet exposures pre-CCF	Average CCF	EAD post-CRM and post-CCF ⁽¹⁾	Average PD ⁽²⁾	Number of obligors ⁽³⁾	Average LGD ⁽⁴⁾	Average maturity ⁽⁵⁾	RWA ⁽¹⁾⁽⁶⁾⁽⁹⁾	RWA density ⁽⁷⁾	EL ⁽¹⁾	Provisions ⁽⁸⁾
Q2 2020													
Retail - insured exposures secured by residential real estate	0.00 to <0.15	31,151	-		80,324	0.00%	206,956	22.77%		348	0.4%	1	
	0.15 to <0.25	28,259	-		1,911	0.23%	132,314	21.50%		196	10.3%	1	
	0.25 to <0.50	-	-		-		-			-		-	
	0.50 to <0.75	636	-		-		3,314			-		-	
	0.75 to <2.50	20,361	-		292	0.93%	88,004	14.70%		54	18.5%	-	
	2.50 to <10.00	886	-		-		4,107			-		-	
	10.00 to <100.00	911	-		-		4,231			-		-	
	100.00 (Default)	323	-		-	100.00%	1,870	105.00%		-		-	
	Sub-total	82,527	-	-	82,527	0.01%	440,796	22.71%		598	0.7%	2	16
Retail - uninsured exposures secured by residential real estate	0.00 to <0.15	47,999	36,562	38%	61,928	0.06%	583,536	19.75%		2,035	3.3%	7	
	0.15 to <0.25	63,066	8,113	33%	65,763	0.22%	368,786	21.03%		6,137	9.3%	29	
	0.25 to <0.50	22	-		22	0.38%	1,061	56.04%		8	36.4%	-	
	0.50 to <0.75	4,774	1,365	48%	5,426	0.64%	66,350	33.54%		1,790	33.0%	12	
	0.75 to <2.50	43,972	230	50%	44,086	1.29%	147,022	20.61%		13,974	31.7%	119	
	2.50 to <10.00	1,335	38	49%	1,354	6.44%	10,484	23.35%		1,214	89.7%	19	
	10.00 to <100.00	1,130	18	70%	1,142	22.14%	7,069	21.33%		1,342	117.5%	53	
	100.00 (Default)	304	1,134	0%	304	100.00%	22,361	56.44%		1,531	503.6%	56	
	Sub-total	162,602	47,460	37%	180,025	0.79%	1,206,669	20.95%		28,031	15.6%	295	128

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


(in \$MM)	PD scale	a	b	c	d	e	f	g	h	i	j	k	l
		Original on-balance sheet gross exposures	Off-balance sheet exposures pre-CCF	Average CCF	EAD post-CRM and post-CCF ⁽¹⁾	Average PD ⁽²⁾	Number of obligors ⁽³⁾	Average LGD ⁽⁴⁾	Average maturity ⁽⁵⁾	RWA ⁽¹⁾⁽⁶⁾⁽⁹⁾	RWA density ⁽⁷⁾	EL ⁽¹⁾	Provisions ⁽⁸⁾
Retail - qualifying revolving (QRRE)	0.00 to <0.15	940	20,805	61%	13,671	0.04%	975,415	74.09%		326	2.4%	5	
	0.15 to <0.25	372	14,548	62%	9,345	0.18%	1,772,650	74.80%		739	7.9%	13	
	0.25 to <0.50	3,461	5,237	72%	7,250	0.27%	343,223	81.42%		863	11.9%	16	
	0.50 to <0.75	371	344	106%	736	0.63%	23,032	43.56%		90	12.2%	2	
	0.75 to <2.50	5,368	6,402	73%	10,059	1.30%	1,082,835	83.17%		4,086	40.6%	110	
	2.50 to <10.00	3,560	1,195	91%	4,650	5.38%	655,953	86.46%		5,285	113.7%	217	
	10.00 to <100.00	881	52	207%	987	28.01%	190,417	84.09%		2,146	217.4%	230	
	100.00 (Default)	123	6,897	0%	123	100.00%	662,274	86.60%		544	442.3%	66	
	Sub-total	15,076	55,480	57%	46,821	1.77%	5,705,799	78.31%		14,079	30.1%	659	725
Other Retail Exposures	0.00 to <0.15	6,417	862	63%	6,959	0.09%	358,173	52.25%		869	12.5%	3	
	0.15 to <0.25	-	4	60%	3	0.18%	25	78.39%		1	33.3%	-	
	0.25 to <0.50	7,160	159	81%	7,288	0.29%	328,010	56.02%		2,233	30.6%	12	
	0.50 to <0.75	1,150	1,956	105%	3,203	0.63%	11,486	43.56%		1,202	37.5%	9	
	0.75 to <2.50	12,055	58	93%	12,109	1.18%	460,089	59.92%		8,190	67.6%	87	
	2.50 to <10.00	2,957	2	97%	2,959	5.10%	123,033	63.25%		2,931	99.1%	94	
	10.00 to <100.00	1,088	-	297%	1,088	28.11%	43,378	56.67%		1,547	142.2%	174	
	100.00 (Default)	228	142	0%	228	100.00%	20,729	87.93%		983	431.1%	126	
	Sub-total	31,055	3,183	87%	33,837	2.58%	1,344,923	56.33%		17,956	53.1%	505	384
Total	291,260	106,123	49%	343,210	0.91%	8,698,187	32.69%		60,664	17.7%	1,461	1,253	

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

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

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

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

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

(6) After application of AIRB scalar of 1.06.

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

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

(9) Commencing in Q1 2020, RWA is being calculated on defaulted retail exposures. Previously, the risk impact was reflected in Expected Losses.

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


(in \$MM)	PD scale	a	b	c	d	e	f	g	h	i	j	k	l
		Original on-balance sheet gross exposures	Off-balance sheet exposures pre-CCF	Average CCF	EAD post-CRM and post-CCF	Average PD ⁽²⁾	Number of obligors ⁽³⁾	Average LGD ⁽⁴⁾	Average maturity ⁽⁵⁾	RWA ⁽⁶⁾	RWA density ⁽⁷⁾	EL	Provisions ⁽⁸⁾
Q4 2020													
Sovereign	0.00 to <0.15	146,590	1,850	45%	147,642	0.02%	110	11.42%	1.77	3,228	2.2%	5	
	0.15 to <0.25	2,453	13	11%	2,455	0.20%	3	25.00%	1.74	537	21.9%	1	
	0.25 to <0.50	1,157	404	55%	1,378	0.35%	9	24.52%	1.95	413	30.0%	1	
	0.50 to <0.75	1,962	2	44%	1,963	0.63%	10	20.93%	1.39	637	32.5%	3	
	0.75 to <2.50	1,818	-	100%	1,818	1.33%	4	19.27%	1.64	770	42.3%	5	
	2.50 to <10.00	336	1	50%	336	2.56%	6	7.91%	1.29	73	21.7%	1	
	10.00 to <100.00	403	-	-	403	17.86%	1	3.11%	0.08	61	15.2%	2	
	100.00 (Default)	221	-	-	221	100.00%	2	25.00%	4.16	-	0.0%	55	
Sub-total	154,940	2,270	46%	156,216	0.24%	145	11.95%	1.76	5,719	3.7%	73	1	
Bank	0.00 to <0.15	13,562	15,857	63%	23,858	0.06%	318	28.49%	1.15	2,729	11.4%	5	
	0.15 to <0.25	1,518	1,894	57%	2,592	0.18%	38	34.53%	0.32	602	23.2%	2	
	0.25 to <0.50	1,394	785	54%	1,491	0.35%	82	38.32%	0.72	589	39.5%	2	
	0.50 to <0.75	1,529	215	38%	1,610	0.52%	17	38.92%	0.22	815	50.6%	3	
	0.75 to <2.50	251	6	44%	254	1.33%	11	39.41%	0.94	193	75.9%	1	
	2.50 to <10.00	125	77	44%	159	2.59%	8	39.95%	1.00	156	98.2%	2	
	10.00 to <100.00	38	12	11%	4	17.95%	3	32.83%	0.58	7	164.0%	-	
	100.00 (Default)	40	3	50%	41	100.00%	3	39.70%	2.62	-	0.0%	17	
Sub-total	18,457	18,849	61%	30,009	0.27%	480	30.23%	1.00	5,091	17.0%	32	12	

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


(in \$MM)	PD scale	a	b	c	d	e	f	g	h	i	j	k	l
		Original on-balance sheet gross exposures	Off-balance sheet exposures pre-CCF	Average CCF	EAD post-CRM and post-CCF	Average PD ⁽²⁾	Number of obligors ⁽³⁾	Average LGD ⁽⁴⁾	Average maturity ⁽⁵⁾	RWA ⁽⁶⁾	RWA density ⁽⁷⁾	EL	Provisions ⁽⁸⁾
Corporate - Other ⁽⁹⁾	0.00 to <0.15	50,606	117,496	55%	123,410	0.08%	1,698	39.58%	1.96	27,061	21.9%	38	
	0.15 to <0.25	13,138	27,865	50%	25,028	0.17%	1,192	43.97%	2.12	9,672	38.6%	19	
	0.25 to <0.50	48,361	55,076	44%	69,917	0.37%	4,664	49.15%	2.10	45,296	64.8%	128	
	0.50 to <0.75	23,866	17,233	41%	29,684	0.64%	2,823	45.10%	1.98	21,769	73.3%	85	
	0.75 to <2.50	5,863	5,768	45%	7,590	1.33%	765	41.32%	1.97	6,782	89.4%	42	
	2.50 to <10.00	3,854	3,565	44%	5,003	4.15%	480	38.51%	1.75	5,563	111.2%	77	
	10.00 to <100.00	1,201	2,480	44%	1,654	21.98%	81	37.68%	2.27	3,362	203.3%	141	
	100.00 (Default)	988	274	80%	1,190	100.00%	95	43.45%	1.50	2,582	216.9%	405	
Sub-total	147,877	229,757	50%	263,476	0.93%	11,798	43.19%	2.01	122,087	46.3%	935	926	
Corporate – Specialized Lending	0.00 to <0.15	3,361	5,719	56%	7,285	0.08%	125	40.98%	2.20	1,679	23.1%	2	
	0.15 to <0.25	4,512	3,934	57%	7,202	0.16%	213	39.20%	1.70	2,149	29.8%	5	
	0.25 to <0.50	12,199	7,732	53%	15,250	0.33%	742	38.04%	1.70	6,623	43.4%	20	
	0.50 to <0.75	1,036	683	22%	1,145	0.67%	109	45.45%	1.40	799	69.8%	3	
	0.75 to <2.50	59	25	27%	61	1.33%	15	49.90%	1.24	62	101.0%	-	
	2.50 to <10.00	157	2	49%	125	4.71%	9	41.17%	3.11	180	143.7%	2	
	10.00 to <100.00	216	9	48%	148	27.12%	10	39.12%	1.17	322	217.6%	16	
	100.00 (Default)	77	22	100%	99	100.00%	1	44.43%	2.52	541	547.8%	3	
Sub-total	21,617	18,126	54%	31,315	0.71%	1,224	39.32%	1.81	12,355	39.5%	51	50	
Total	342,891	269,002	51%	481,016	0.65%	13,647	35.23%	1.85	145,252	30.2%	1,091	989	

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


(in \$MM)	PD scale	a Original on- balance sheet gross exposures	b Off- balance sheet exposures pre-CCF	c Average CCF	d EAD post- CRM and post-CCF	e Average PD ⁽²⁾	f Number of obligors ⁽³⁾	g Average LGD ⁽⁴⁾	h Average maturity ⁽⁵⁾	i RWA ⁽⁶⁾	j RWA density ⁽⁷⁾	k EL	l Provisions ⁽⁸⁾
Q3 2020													
Sovereign	0.00 to <0.15	137,970	1,793	44%	138,916	0.02%	104	13.02%	1.96	3,538	2.5%	5	
	0.15 to <0.25	2,603	13	11%	2,604	0.20%	3	25.00%	2.97	745	28.6%	1	
	0.25 to <0.50	1,331	405	55%	1,553	0.36%	10	22.27%	1.82	425	27.3%	1	
	0.50 to <0.75	1,764	2	44%	1,765	0.63%	9	22.18%	1.60	618	35.0%	2	
	0.75 to <2.50	1,883	-	-	1,883	1.33%	4	19.57%	1.06	751	39.9%	5	
	2.50 to <10.00	306	1	50%	306	2.56%	5	7.07%	0.56	57	18.7%	1	
	10.00 to <100.00	419	-	-	419	17.86%	1	3.11%	0.33	64	15.3%	2	
	100.00 (Default)	223	-	-	223	100.00%	2	25.00%	4.20	-	0.0%	57	
Sub-total	146,499	2,214	46%	147,669	0.26%	138	13.50%	1.95	6,198	4.2%	74	1	
Bank	0.00 to <0.15	15,798	9,147	55%	21,242	0.06%	280	31.00%	1.01	2,441	11.5%	4	
	0.15 to <0.25	1,328	522	36%	1,517	0.20%	29	37.43%	0.53	433	28.5%	1	
	0.25 to <0.50	2,016	551	57%	1,992	0.37%	77	38.39%	0.63	779	39.1%	3	
	0.50 to <0.75	1,513	228	39%	1,601	0.52%	16	38.95%	0.45	866	54.1%	3	
	0.75 to <2.50	285	7	43%	288	1.33%	10	39.47%	0.31	197	68.4%	2	
	2.50 to <10.00	163	52	44%	186	2.58%	9	39.96%	1.03	183	98.6%	2	
	10.00 to <100.00	33	17	11%	-	34.44%	3	3.00%	1.00	-	16.6%	-	
	100.00 (Default)	125	3	50%	126	100.00%	5	31.77%	0.53	-	0.0%	41	
Sub-total	21,261	10,527	54%	26,952	0.62%	429	32.54%	0.91	4,899	18.2%	56	7	

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


(in \$MM)	PD scale	a	b	c	d	e	f	g	h	i	j	k	l
		Original on-balance sheet gross exposures	Off-balance sheet exposures pre-CCF	Average CCF	EAD post-CRM and post-CCF	Average PD ⁽²⁾	Number of obligors ⁽³⁾	Average LGD ⁽⁴⁾	Average maturity ⁽⁵⁾	RWA ⁽⁶⁾	RWA density ⁽⁷⁾	EL	Provisions ⁽⁸⁾
Corporate - Other ⁽⁹⁾	0.00 to <0.15	56,804	115,787	55%	129,146	0.08%	1,810	39.34%	2.06	28,960	22.4%	39	
	0.15 to <0.25	14,675	25,346	51%	25,777	0.17%	1,185	44.63%	2.15	10,418	40.4%	20	
	0.25 to <0.50	56,115	52,706	44%	75,554	0.37%	4,630	49.27%	2.14	49,387	65.4%	139	
	0.50 to <0.75	25,428	16,458	42%	31,006	0.64%	2,838	46.39%	2.10	23,836	76.9%	91	
	0.75 to <2.50	5,595	6,401	43%	7,369	1.33%	749	38.98%	1.97	6,159	83.6%	38	
	2.50 to <10.00	4,080	2,439	44%	4,887	4.60%	424	37.05%	2.07	5,545	113.5%	79	
	10.00 to <100.00	702	965	63%	851	26.28%	84	33.20%	1.60	1,488	174.9%	78	
	100.00 (Default)	855	217	71%	964	100.00%	96	42.91%	1.80	2,794	289.8%	272	
Sub-total	164,254	220,319	51%	275,554	0.77%	11,816	43.29%	2.09	128,587	46.7%	756	741	
Corporate – Specialized Lending	0.00 to <0.15	3,434	5,275	56%	7,145	0.08%	120	40.99%	2.26	1,671	23.4%	2	
	0.15 to <0.25	4,648	3,547	57%	7,124	0.16%	206	40.19%	1.77	2,221	31.2%	5	
	0.25 to <0.50	11,914	7,755	52%	14,917	0.33%	718	37.89%	1.73	6,496	43.6%	19	
	0.50 to <0.75	1,027	664	23%	1,130	0.67%	107	44.86%	1.39	778	68.9%	3	
	0.75 to <2.50	50	24	26%	52	1.33%	14	53.73%	1.15	56	107.8%	-	
	2.50 to <10.00	78	24	11%	112	5.16%	6	47.72%	4.12	208	185.0%	2	
	10.00 to <100.00	337	37	74%	239	34.20%	14	37.80%	1.52	471	196.9%	32	
	100.00 (Default)	1	-	-	1	100.00%	1	44.00%	1.00	-	0.0%	1	
Sub-total	21,489	17,326	53%	30,720	0.53%	1,186	39.46%	1.86	11,901	38.7%	64	35	
Total	353,503	250,386	51%	480,895	0.59%	13,569	36.57%	1.97	151,585	31.5%	950	784	

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


(in \$MM)	PD scale	a Original on- balance sheet gross exposures	b Off- balance sheet exposures pre-CCF	c Average CCF	d EAD post- CRM and post-CCF	e Average PD ⁽²⁾	f Number of obligors ⁽³⁾	g Average LGD ⁽⁴⁾	h Average maturity ⁽⁵⁾	i RWA ⁽⁶⁾	j RWA density ⁽⁷⁾	k EL	l Provisions ⁽⁸⁾
Q2 2020													
Sovereign	0.00 to <0.15	180,506	2,619	37%	181,610	0.01%	110	10.60%	1.50	2,893	1.6%	5	
	0.15 to <0.25	4,179	13	11%	4,180	0.20%	3	25.00%	2.34	1,052	25.2%	2	
	0.25 to <0.50	1,730	543	61%	2,063	0.39%	13	22.27%	1.93	597	29.0%	2	
	0.50 to <0.75	1,295	1	44%	1,296	0.67%	7	17.66%	1.59	381	29.4%	1	
	0.75 to <2.50	1,861	-	-	1,861	1.33%	4	14.55%	1.33	613	32.9%	4	
	2.50 to <10.00	232	1	50%	232	2.56%	4	6.49%	0.48	36	15.4%	-	
	10.00 to <100.00	444	-	-	444	17.86%	1	3.10%	0.59	69	15.5%	2	
	100.00 (Default)	231	1	100%	232	100.00%	2	25.00%	4.22	2	1.0%	58	
Sub-total	190,478	3,178	41%	191,918	0.21%	144	11.12%	1.52	5,643	2.9%	74	1	
Bank	0.00 to <0.15	15,440	9,294	52%	20,635	0.06%	298	31.20%	0.91	2,354	11.4%	5	
	0.15 to <0.25	1,848	232	64%	1,996	0.19%	34	37.20%	1.09	649	32.5%	1	
	0.25 to <0.50	2,215	777	54%	2,297	0.38%	88	38.31%	0.65	909	39.6%	3	
	0.50 to <0.75	1,207	198	44%	1,294	0.53%	17	38.96%	0.54	713	55.1%	3	
	0.75 to <2.50	250	6	43%	253	1.33%	10	39.38%	0.55	180	71.0%	1	
	2.50 to <10.00	12	2	44%	12	2.94%	8	39.45%	1.07	13	101.1%	-	
	10.00 to <100.00	36	15	13%	38	18.02%	4	32.89%	0.04	60	160.0%	2	
	100.00 (Default)	11	3	50%	9	100.00%	5	38.57%	1.97	1	11.7%	5	
Sub-total	21,019	10,527	52%	26,534	0.20%	464	32.73%	0.88	4,879	18.4%	20	7	

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


(in \$MM)	PD scale	a	b	c	d	e	f	g	h	i	j	k	l
		Original on-balance sheet gross exposures	Off-balance sheet exposures pre-CCF	Average CCF	EAD post-CRM and post-CCF	Average PD ⁽²⁾	Number of obligors ⁽³⁾	Average LGD ⁽⁴⁾	Average maturity ⁽⁵⁾	RWA ⁽⁶⁾	RWA density ⁽⁷⁾	EL	Provisions ⁽⁸⁾
Corporate - Other ⁽⁹⁾	0.00 to <0.15	68,256	115,104	54%	138,392	0.08%	1,873	39.55%	2.11	31,583	22.8%	43	
	0.15 to <0.25	19,743	25,890	50%	30,737	0.17%	1,261	44.85%	2.37	12,798	41.6%	24	
	0.25 to <0.50	63,449	50,498	43%	81,801	0.37%	4,598	49.16%	2.18	53,348	65.2%	149	
	0.50 to <0.75	25,447	13,611	38%	29,846	0.64%	2,731	46.85%	2.15	23,357	78.3%	88	
	0.75 to <2.50	5,857	5,212	44%	7,367	1.33%	711	37.40%	2.05	5,993	81.4%	37	
	2.50 to <10.00	3,331	2,188	46%	4,003	3.67%	394	39.30%	2.26	4,586	114.6%	57	
	10.00 to <100.00	838	951	64%	990	27.21%	94	33.43%	1.62	1,688	170.5%	98	
	100.00 (Default)	926	422	75%	1,079	100.00%	99	42.50%	1.83	3,125	289.7%	305	
Sub-total	187,847	213,876	50%	294,215	0.76%	11,761	43.45%	2.16	136,478	46.4%	801	662	
Corporate – Specialized Lending	0.00 to <0.15	4,399	4,468	57%	7,701	0.08%	119	41.15%	2.37	1,867	24.2%	3	
	0.15 to <0.25	4,424	3,291	56%	6,910	0.16%	193	40.02%	1.82	2,192	31.7%	5	
	0.25 to <0.50	11,947	7,828	52%	14,767	0.33%	718	38.21%	1.76	6,522	44.2%	18	
	0.50 to <0.75	884	664	21%	981	0.68%	107	42.72%	1.33	638	65.1%	3	
	0.75 to <2.50	42	14	38%	43	1.33%	12	47.99%	1.19	41	95.5%	-	
	2.50 to <10.00	295	21	99%	238	6.26%	6	40.23%	3.44	385	161.9%	6	
	10.00 to <100.00	219	15	44%	198	22.89%	12	36.55%	1.29	390	197.2%	16	
	100.00 (Default)	1	-	-	1	100.00%	1	59.00%	1.00	9	781.8%	-	
Sub-total	22,211	16,301	53%	30,839	0.44%	1,168	39.51%	1.92	12,044	39.1%	51	14	
Total	421,555	243,882	50%	543,506	0.52%	13,537	34.29%	1.86	159,044	29.3%	946	684	

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

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

(3) Represents the number of individual borrowers.

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

(5) Effective remaining maturity in years.

(6) After application of AIRB scalar of 1.06.

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

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

(9) Includes purchased receivables portfolio totaling \$0.9 billion EAD, \$0.1 billion RWA (\$1.3 billion EAD, \$0.2 billion RWA in Q3 2020; and \$1.5 billion EAD, \$0.2 billion RWA in Q2 2020).

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


(in \$MM)		Q4 2020		Q3 2020		Q2 2020		Q1 2020	
		a	b	a ₂	b ₂	a ₃	b ₃	a ₄	b ₄
		Pre-credit derivatives RWA	Actual RWA ⁽¹⁾	Pre-credit derivatives RWA	Actual RWA ⁽¹⁾	Pre-credit derivatives RWA	Actual RWA ⁽¹⁾	Pre-credit derivatives RWA	Actual RWA ⁽¹⁾
1	Sovereign – FIRB	-	-	-	-	-	-	-	-
2	Sovereign – AIRB	5,719	5,719	6,198	6,198	5,643	5,643	3,702	3,702
3	Bank – FIRB	-	-	-	-	-	-	-	-
4	Bank – AIRB	5,091	5,091	4,899	4,899	4,879	4,879	4,659	4,659
5	Corporate – FIRB	-	-	-	-	-	-	-	-
6	Corporate – AIRB	121,938	121,938	128,384	128,384	136,254	136,254	119,900	119,900
7	Specialized lending – FIRB	-	-	-	-	-	-	-	-
8	Specialized lending – AIRB	12,355	12,355	11,901	11,901	12,044	12,044	11,752	11,752
9	Retail – qualifying revolving (QRRE)	12,572	12,572	13,377	13,377	14,079	14,079	15,080	15,080
10	Retail – residential mortgage exposures	26,626	26,626	26,631	26,631	28,629	28,629	27,802	27,802
11	Retail – SME	-	-	-	-	-	-	-	-
12	Other retail exposures	17,634	17,634	18,222	18,222	17,956	17,956	17,901	17,901
13	Equity – FIRB	-	-	-	-	-	-	-	-
14	Equity – AIRB	-	-	-	-	-	-	-	-
15	Purchased receivables – FIRB	-	-	-	-	-	-	-	-
16	Purchased receivables – AIRB	149	149	203	203	224	224	137	137
17	Total	202,084	202,084	209,815	209,815	219,708	219,708	200,933	200,933

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

(in \$MM)		a	a ₂	a ₃	a ₄
		Q4 2020	Q3 2020	Q2 2020	Q1 2020
1	RWA as at end of previous reporting period	209,815	219,708	200,933	199,859
2	Asset size ⁽¹⁾	(5,971)	(6,665)	12,796	1,904
3	Asset quality ⁽²⁾	(909)	418	1,729	(4,928)
4	Model updates ⁽³⁾	-	-	-	-
5	Methodology and policy ⁽⁴⁾	-	-	-	5,946
6	Acquisitions and disposals ⁽⁵⁾	-	(96)	-	(1,197)
7	Foreign exchange movements ⁽⁶⁾	(851)	(3,550)	4,250	148
8	Other ⁽⁷⁾	-	-	-	(799)
9	RWA as at end of reporting period	202,084	209,815	219,708	200,933

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

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

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

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

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

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

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

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



a Portfolio	b PD Range	c External rating equivalent ⁽²⁾	d Weighted average PD ⁽³⁾	e Arithmetic average PD by obligors ⁽⁴⁾	f Number of obligors ⁽⁵⁾		g Defaulted obligors in the year ⁽⁸⁾	h of which: new defaulted obligors in the year	i Average historical annual default rate ⁽⁹⁾
					End of previous year ^{(6) (10)}	End of the year ^{(7) (10)}			
Q4 2020									
Retail - insured exposures secured by residential real estate	0.00 to <0.15		0.05%	0.05%	205,268	216,170	78	-	0.03%
	0.15 to <0.25		0.23%	0.23%	130,703	133,989	154	-	0.13%
	0.25 to <0.50		0.00%	0.00%	3,549	-	11	-	0.00%
	0.50 to <0.75		0.50%	0.50%	-	2,996	1	1	0.22%
	0.75 to <2.50		1.19%	1.17%	73,644	79,336	244	6	0.68%
	2.50 to <10.00		6.82%	6.81%	19,173	2,984	336	1	4.38%
	10.00 to <100.00		20.66%	20.80%	4,448	2,346	750	2	16.05%
Retail - uninsured exposures secured by residential real estate	0.00 to <0.15		0.06%	0.06%	578,685	616,145	142	6	0.03%
	0.15 to <0.25		0.22%	0.19%	366,367	386,248	241	9	0.11%
	0.25 to <0.50		0.38%	0.38%	2,026	1,208	10	1	0.26%
	0.50 to <0.75		0.64%	0.65%	68,528	60,870	164	14	0.36%
	0.75 to <2.50		1.22%	1.26%	119,580	131,979	360	8	0.74%
	2.50 to <10.00		6.38%	5.08%	36,395	7,813	405	8	3.47%
	10.00 to <100.00		20.09%	20.43%	7,091	3,918	1,099	4	15.51%

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


a Portfolio	b PD Range	c External rating equivalent ⁽²⁾	d Weighted average PD ⁽³⁾	e Arithmetic average PD by obligors ⁽⁴⁾	f Number of obligors ⁽⁵⁾		g Defaulted obligors in the year ⁽⁸⁾	h of which: new defaulted obligors in the year	i Average historical annual default rate ⁽⁹⁾
					End of previous year ^{(6) (10)}	End of the year ^{(7) (10)}			
Retail - qualifying revolving (QRRE)	0.00 to <0.15		0.04%	0.04%	936,345	1,026,556	203	8	0.03%
	0.15 to <0.25		0.18%	0.18%	1,683,447	1,831,723	1,555	72	0.13%
	0.25 to <0.50		0.27%	0.27%	349,340	335,832	749	36	0.22%
	0.50 to <0.75		0.63%	0.63%	22,686	20,663	67	3	0.44%
	0.75 to <2.50		1.28%	1.05%	1,080,022	1,031,729	5,886	691	0.76%
	2.50 to <10.00		5.29%	4.75%	699,008	599,685	14,492	439	3.31%
	10.00 to <100.00		27.12%	24.03%	218,351	154,551	31,434	132	19.57%
Other Retail Exposures	0.00 to <0.15		0.09%	0.09%	363,435	344,874	287	8	0.07%
	0.15 to <0.25		0.18%	0.18%	23	31	-	-	0.13%
	0.25 to <0.50		0.29%	0.29%	338,915	325,830	608	39	0.22%
	0.50 to <0.75		0.63%	0.63%	10,608	12,769	16	-	0.44%
	0.75 to <2.50		1.18%	1.15%	475,252	475,693	2,679	291	0.84%
	2.50 to <10.00		4.93%	4.90%	122,231	112,472	2,791	59	3.80%
	10.00 to <100.00		27.58%	27.17%	37,041	25,204	6,960	60	22.68%

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

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

(3) Obligor PD as of Q4 2020 weighted by pre-CRM EAD as of Q4 2020.

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

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

(6) Includes non-defaulted accounts at Q4 2019; PD Estimates as of Q4 2019.

(7) Includes all the non-defaulted accounts at Q4 2019 and all new accounts acquired during Q1 -Q4 2020 which did not go into default during Q1-Q4 2020; PD Estimates as of Q4 2020.

(8) Includes accounts not in default at Q4 2019 which went into default during Q1-Q4 2020; PD Estimates as of Q4 2019.

(9) The 15-year average of the defaulted rate.

(10) Obligor migration is attributed to PD parameters update in Q1 2020 and does not reflect true model migration.

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



a Portfolio	b PD Range	c External rating equivalent (S&P) ⁽⁴⁾	d Weighted average PD ⁽²⁾	e Arithmetic average PD by obligors ⁽³⁾	f Number of obligors		g Defaulted obligors in the year ⁽⁶⁾	h of which: new defaulted obligors in the year ⁽⁷⁾	i Average historical annual default rate ⁽⁸⁾
					End of previous year ⁽⁴⁾	End of the year ⁽⁵⁾			
					Q4 2020				
Sovereign									
	0.00 to <0.15	AAA to BBB	0.02%	0.05%	192	198	-	-	0.00%
	0.15 to <0.25	BBB+ to BBB-	0.17%	0.18%	5	5	-	-	0.00%
	0.25 to <0.50	BBB to BB	0.44%	0.43%	18	16	-	-	0.00%
	0.50 to <0.75	BB to BB-	0.72%	0.69%	12	9	-	-	0.00%
	0.75 to <2.50	B+	1.39%	1.39%	2	4	-	-	0.00%
	2.50 to <10.00	B to CCC+	3.10%	3.33%	11	8	-	-	2.97%
	10.00 to <100.00	CCC and lower	18.48%	18.48%	1	1	-	-	17.50%
Bank									
	0.00 to <0.15	AAA to BBB	0.06%	0.07%	508	508	-	-	0.00%
	0.15 to <0.25	BBB+ to BBB-	0.18%	0.18%	83	83	-	-	0.05%
	0.25 to <0.50	BBB to BB	0.40%	0.38%	188	170	-	-	0.00%
	0.50 to <0.75	BB to BB-	0.59%	0.64%	53	40	-	-	0.16%
	0.75 to <2.50	B+	1.39%	1.39%	11	18	-	-	0.00%
	2.50 to <10.00	B to CCC+	2.68%	3.13%	16	11	-	-	0.20%
	10.00 to <100.00	CCC and lower	19.67%	33.34%	9	4	-	-	6.50%

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


a Portfolio	b PD Range	c External rating equivalent (S&P) ⁽¹⁾	d Weighted average PD ⁽²⁾	e Arithmetic average PD by obligors ⁽³⁾	f Number of obligors		g Defaulted obligors in the year ⁽⁶⁾	h of which: new defaulted obligors in the year ⁽⁷⁾	i Average historical annual default rate ⁽⁸⁾
					End of previous year ⁽⁴⁾	End of the year ⁽⁵⁾			
					Corporate - Other⁽⁹⁾	0.00 to <0.15			
	0.15 to <0.25	BBB+ to BBB-	0.17%	0.17%	2,078	1,883	-	-	0.11%
	0.25 to <0.50	BBB to BB	0.37%	0.37%	5,836	6,168	5	-	0.04%
	0.50 to <0.75	BB to BB-	0.67%	0.69%	2,830	3,480	7	-	0.10%
	0.75 to <2.50	B+	1.39%	1.39%	879	940	8	-	0.43%
	2.50 to <10.00	B to CCC+	5.05%	4.53%	480	481	18	1	2.07%
	10.00 to <100.00	CCC and lower	27.96%	29.99%	150	117	25	-	13.50%
Corporate-Specialized Lending	0.00 to <0.15	AAA to BBB	0.09%	0.10%	186	180	-	-	0.00%
	0.15 to <0.25	BBB+ to BBB-	0.16%	0.16%	207	229	-	-	0.00%
	0.25 to <0.50	BBB to BB	0.32%	0.35%	694	778	-	-	0.08%
	0.50 to <0.75	BB to BB-	0.70%	0.70%	109	131	-	-	0.10%
	0.75 to <2.50	B+	1.39%	1.39%	17	15	-	-	0.40%
	2.50 to <10.00	B to CCC+	3.63%	4.62%	11	5	-	-	3.33%
	10.00 to <100.00	CCC and lower	20.75%	27.25%	12	15	-	-	7.58%

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

(2) Obligor PD as of Q3 2019 weighted by pre-CRM EAD as of Q3 2019.

(3) Obligor PD as of Q3 2019 weighted by number of obligors within the PD range as of Q3 2019.

(4) Number of non-defaulted obligors as of Q3 2019.

(5) Number of non-defaulted obligors as of Q3 2020.

(6) Number of defaulted obligors during the year ended Q3 2020.

(7) Number of defaulted obligors out of the new obligors during the year ended Q3 2020.

(8) 10-year average of the annual default rate (number of defaulted obligors during the year out of those non-defaulted obligors existed at the beginning of the year / number of non-defaulted obligors at the beginning of the year). The denominator of annual default rate calculation excludes obligors that were no longer on the book by the end of the year. All of the AIRB models were back-tested.

(9) Includes purchased receivables, excludes specialized lending.

Specialized Lending ⁽¹⁾ - Q4 2020											
Other than HVCRE											
Regulatory Categories	Remaining Maturity	On-balance sheet amount	Off-balance sheet amount	RW	Exposure Amount					RWA	Expected Losses
					PF	OF	CF	IPRE	Total		
Strong	Less than 2.5 years	-	-	50%	-	-	-	-	-	-	-
	Equal to or more than 2.5 years	-	-	70%	-	-	-	-	-	-	-
Good	Less than 2.5 years	-	-	70%	-	-	-	-	-	-	-
	Equal to or more than 2.5 years	-	-	90%	-	-	-	-	-	-	-
Satisfactory		-	-	115%	-	-	-	-	-	-	-
Weak		-	-	250%	-	-	-	-	-	-	-
Default		-	-	-	-	-	-	-	-	-	-
Total		-	-	-	-	-	-	-	-	-	-
HVCRE											
Regulatory Categories	Remaining Maturity	On-balance sheet amount	Off-balance sheet amount	RW	Exposure Amount					RWA	Expected Losses
Strong	Less than 2.5 years	-	-	70%						-	-
	Equal to or more than 2.5 years	-	-	95%						-	-
Good	Less than 2.5 years	-	-	95%						-	-
	Equal to or more than 2.5 years	-	-	120%						-	-
Satisfactory		-	-	140%						-	-
Weak		-	-	250%						-	-
Default		-	-	-						-	-
Total		-	-	-						-	-
Equities under the simple risk-weight approach											
Categories			Off-balance sheet amount	RW	Exposure Amount					RWA	Expected Losses
Exchange-traded equity exposures			-	190%						-	-
Private equity exposures			-	290%						-	-
Other equity exposures			-	370%						-	-
Total			-	-						-	-

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

Specialized Lending ⁽¹⁾ - Q3 2020											
Other than HVCRE											
Regulatory Categories	Remaining Maturity	On-balance sheet amount	Off-balance sheet amount	RW	Exposure Amount					RWA	Expected Losses
					PF	OF	CF	IPRE	Total		
Strong	Less than 2.5 years	-	-	50%	-	-	-	-	-	-	-
	Equal to or more than 2.5 years	-	-	70%	-	-	-	-	-	-	-
Good	Less than 2.5 years	-	-	70%	-	-	-	-	-	-	-
	Equal to or more than 2.5 years	-	-	90%	-	-	-	-	-	-	-
Satisfactory		-	-	115%	-	-	-	-	-	-	-
Weak		-	-	250%	-	-	-	-	-	-	-
Default		-	-	-	-	-	-	-	-	-	-
Total		-	-	-	-	-	-	-	-	-	-
HVCRE											
Regulatory Categories	Remaining Maturity	On-balance sheet amount	Off-balance sheet amount	RW	Exposure Amount					RWA	Expected Losses
Strong	Less than 2.5 Years	-	-	70%						-	-
	Equal to or more than 2.5 years	-	-	95%						-	-
Good	Less than 2.5 Years	-	-	95%						-	-
	Equal to or more than 2.5 years	-	-	120%						-	-
Satisfactory		-	-	140%						-	-
Weak		-	-	250%						-	-
Default		-	-	-						-	-
Total		-	-	-						-	-
Equities under the simple risk-weight approach											
Categories	Off-balance sheet amount		RW	Exposure Amount					RWA	Expected Losses	
Exchange-traded equity exposures	-		190%						-	-	
Private equity exposures	-		290%						-	-	
Other equity exposures	-		370%						-	-	
Total	-		-						-	-	

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

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


(in \$MM)		a	b	c	d	e	f
		Replacement cost	Potential future exposure	EEPE	Alpha used for computing regulatory EAD	EAD post- CRM	RWA
Q4 2020							
1	CEM / SA-CCR (for derivatives)	677	1,222		1.40	2,656	954
2	Internal Model Method (for derivatives and SFTs) ⁽²⁾			16,488	1.40	22,749	6,803
3	Simple Approach for credit risk mitigation (for SFTs)					-	-
4	Comprehensive Approach for credit risk mitigation (for SFTs)					41,886	5,368
5	VaR for SFTs					-	-
6	Total						13,125
Q3 2020							
1	CEM / SA-CCR (for derivatives)	811	1,257		1.40	2,892	1,068
2	Internal Model Method (for derivatives and SFTs) ⁽²⁾			18,860	1.40	26,058	7,484
3	Simple Approach for credit risk mitigation (for SFTs)					-	-
4	Comprehensive Approach for credit risk mitigation (for SFTs)					39,725	5,006
5	VaR for SFTs					-	-
6	Total						13,558
Q2 2020							
1	CEM / SA-CCR (for derivatives)	1,058	1,485		1.40	3,556	1,386
2	Internal Model Method (for derivatives and SFTs) ⁽²⁾			19,484	1.40	26,880	10,342
3	Simple Approach for credit risk mitigation (for SFTs)					-	-
4	Comprehensive Approach for credit risk mitigation (for SFTs)					41,439	4,844
5	VaR for SFTs					-	-
6	Total						16,572
Q1 2020							
1	CEM / SA-CCR (for derivatives)	692	1,344		1.40	2,848	1,139
2	Internal Model Method (for derivatives and SFTs) ⁽²⁾			16,049	1.40	22,240	7,818
3	Simple Approach for credit risk mitigation (for SFTs)					-	-
4	Comprehensive Approach for credit risk mitigation (for SFTs)					37,444	4,708
5	VaR for SFTs					-	-
6	Total						13,665

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

(2) Includes OTC derivatives related transactions only.

CCR2: Credit valuation adjustment (CVA) capital charge


(in \$MM)		Q4 2020		Q3 2020		Q2 2020		Q1 2020	
		a	b	a ₂	b ₂	a ₃	b ₃	a ₄	b ₄
		EAD post-CRM	RWA	EAD post-CRM	RWA	EAD post-CRM	RWA	EAD post-CRM	RWA
	Total portfolios subject to the Advanced CVA capital charge	25,276	5,330	28,802	5,743	30,163	7,488	24,890	5,558
1	(i) VaR component (including the 3x multiplier)		3,438		3,722		5,293		880
2	(ii) Stressed VaR component (including the multiplier) ⁽¹⁾		1,892		2,021		2,195		4,678
3	All portfolios subject to the Standardized CVA capital charge	-	-	-	-	-	-	-	-
4	Total subject to the CVA capital charge	25,276	5,330	28,802	5,743	30,163	7,488	24,890	5,558

(1) Commencing Q2 2020, amount includes the impact on CVA RWA from the decrease in the SVaR multiplier.

(in \$MM)	a	b	c	d	e	f	g	h	i
Risk weight	0%	10%	20%	50%	75%	100%	150%	Others	Total credit exposure ⁽¹⁾
Regulatory portfolio									
Q4 2020									
Sovereigns	-	-	-	-	-	-	-	-	-
Non-central government public sector entities (PSEs)	-	-	-	-	-	-	-	-	-
Multilateral development banks (MDBs)	-	-	-	-	-	-	-	-	-
Banks	-	-	-	-	-	35	-	-	35
Securities firms	-	-	-	-	-	-	-	-	-
Corporates	-	-	-	-	-	2,004	-	-	2,004
Regulatory retail portfolios	-	-	-	-	-	-	-	-	-
Other assets ⁽²⁾	-	-	-	-	-	-	-	-	-
Total	-	-	-	-	-	2,039	-	-	2,039
Q3 2020									
Sovereigns	-	-	-	6	-	-	-	-	6
Non-central government public sector entities (PSEs)	-	-	-	-	-	-	-	-	-
Multilateral development banks (MDBs)	-	-	-	-	-	-	-	-	-
Banks	-	-	-	-	-	62	-	-	62
Securities firms	-	-	-	-	-	-	-	-	-
Corporates	-	-	-	-	-	1,967	-	-	1,967
Regulatory retail portfolios	-	-	-	-	-	-	-	-	-
Other assets ⁽²⁾	-	-	-	-	-	-	-	-	-
Total	-	-	-	6	-	2,029	-	-	2,035
Q2 2020									
Sovereigns	-	-	-	-	-	-	-	-	-
Non-central government public sector entities (PSEs)	-	-	-	-	-	-	-	-	-
Multilateral development banks (MDBs)	-	-	-	-	-	-	-	-	-
Banks	-	-	-	-	-	44	-	-	44
Securities firms	-	-	-	-	-	-	-	-	-
Corporates	-	-	-	-	-	1,994	-	-	1,994
Regulatory retail portfolios	-	-	-	-	-	-	-	-	-
Other assets ⁽²⁾	-	-	-	-	-	-	-	-	-
Total	-	-	-	-	-	2,038	-	-	2,038
Q1 2020									
Sovereigns	-	-	-	17	-	-	-	-	17
Non-central government public sector entities (PSEs)	-	-	-	-	-	-	-	-	-
Multilateral development banks (MDBs)	-	-	-	-	-	-	-	-	-
Banks	-	-	-	-	-	35	-	-	35
Securities firms	-	-	-	-	-	-	-	-	-
Corporates	-	-	-	-	-	1,440	-	-	1,440
Regulatory retail portfolios	-	-	-	-	-	-	-	-	-
Other assets ⁽²⁾	-	-	-	-	-	-	-	-	-
Total	-	-	-	17	-	1,475	-	-	1,492

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

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

CCR4: IRB – CCR exposures by portfolio and PD scale ⁽¹⁾


(in \$MM)	PD scale	a	b	c	d	e	f	g
		EAD post-CRM	Average PD ⁽²⁾	Number of obligors	Average LGD ⁽³⁾	Average maturity ⁽⁴⁾	RWA ⁽⁵⁾	RWA density ⁽⁶⁾
Q4 2020								
Sovereign	0.00 to <0.15	8,340	0.02%	55	15.51%	1.67	124	1.5%
	0.15 to <0.25	34	0.16%	3	19.11%	0.43	4	11.4%
	0.25 to <0.50	39	0.43%	1	25.00%	1.00	11	28.2%
	0.50 to <0.75	19	0.69%	2	25.00%	1.01	7	36.3%
	0.75 to <2.50	-	0.00%	-	0.00%	-	-	0.0%
	2.50 to <10.00	1	2.56%	1	25.00%	2.52	-	61.3%
	10.00 to <100.00	-	0.00%	-	0.00%	-	-	0.0%
	100.00 (Default)	-	0.00%	-	0.00%	-	-	0.0%
	Sub-total	8,433	0.03%	62	15.59%	1.66	146	1.7%
Bank	0.00 to <0.15	8,995	0.06%	168	30.59%	1.24	876	9.7%
	0.15 to <0.25	3,639	0.16%	29	30.43%	0.17	600	16.5%
	0.25 to <0.50	437	0.33%	53	34.76%	1.89	162	37.2%
	0.50 to <0.75	40	0.59%	4	36.11%	0.44	20	49.8%
	0.75 to <2.50	-	0.00%	-	0.00%	-	-	0.0%
	2.50 to <10.00	-	2.56%	2	40.00%	1.79	-	98.1%
	10.00 to <100.00	-	0.00%	-	0.00%	-	-	0.0%
	100.00 (Default)	-	0.00%	-	0.00%	-	-	0.0%
	Sub-total	13,111	0.10%	256	30.70%	0.96	1,658	12.6%
Corporate	0.00 to <0.15	34,157	0.07%	3,376	45.98%	0.53	4,491	13.1%
	0.15 to <0.25	3,055	0.17%	405	45.12%	1.34	878	28.7%
	0.25 to <0.50	3,938	0.35%	747	46.84%	2.11	1,874	47.6%
	0.50 to <0.75	1,587	0.67%	321	45.34%	1.64	1,036	65.3%
	0.75 to <2.50	603	1.33%	89	38.72%	2.57	450	74.7%
	2.50 to <10.00	157	3.28%	53	40.24%	2.12	162	103.7%
	10.00 to <100.00	208	21.00%	16	35.59%	1.78	391	187.8%
	100.00 (Default)	4	100.00%	2	25.26%	1.73	-	0.0%
	Sub-total	43,709	0.26%	5,009	45.80%	0.81	9,282	21.2%
Total	65,253	0.20%	5,327	38.86%	0.95	11,086	17.0%	

CCR4: IRB – CCR exposures by portfolio and PD scale ⁽¹⁾


(in \$MM)	PD scale	a	b	c	d	e	f	g
		EAD post-CRM	Average PD ⁽²⁾	Number of obligors	Average LGD ⁽³⁾	Average maturity ⁽⁴⁾	RWA ⁽⁵⁾	RWA density ⁽⁶⁾
Q3 2020								
Sovereign	0.00 to <0.15	7,988	0.02%	53	15.66%	1.83	129	1.6%
	0.15 to <0.25	86	0.16%	3	24.21%	0.93	13	14.9%
	0.25 to <0.50	159	0.46%	2	25.00%	0.49	41	25.7%
	0.50 to <0.75	30	0.69%	2	25.00%	1.00	11	36.3%
	0.75 to <2.50	-	0.00%	-	0.00%	-	-	0.0%
	2.50 to <10.00	1	2.56%	1	25.00%	3.84	-	61.3%
	10.00 to <100.00	-	0.00%	-	0.00%	-	-	0.0%
	100.00 (Default)	-	0.00%	-	0.00%	-	-	0.0%
	Sub-total	8,264	0.03%	61	15.96%	1.79	194	2.3%
Bank	0.00 to <0.15	10,845	0.06%	178	30.69%	1.22	1,073	9.9%
	0.15 to <0.25	3,801	0.16%	27	30.36%	0.20	613	16.1%
	0.25 to <0.50	512	0.32%	59	33.60%	1.57	192	37.5%
	0.50 to <0.75	53	0.56%	5	37.48%	0.37	27	51.3%
	0.75 to <2.50	-	0.00%	-	0.00%	-	-	0.0%
	2.50 to <10.00	-	2.56%	1	40.00%	1.00	-	98.1%
	10.00 to <100.00	-	0.00%	-	0.00%	-	-	0.0%
	100.00 (Default)	-	0.00%	-	0.00%	-	-	0.0%
	Sub-total	15,211	0.10%	270	30.73%	0.98	1,905	12.5%
Corporate	0.00 to <0.15	32,593	0.07%	3,408	45.75%	0.59	4,266	13.1%
	0.15 to <0.25	3,333	0.17%	425	45.68%	1.31	956	28.7%
	0.25 to <0.50	4,286	0.34%	771	47.25%	2.40	2,036	47.5%
	0.50 to <0.75	1,853	0.67%	345	45.37%	1.75	1,218	65.7%
	0.75 to <2.50	700	1.33%	102	37.58%	2.45	507	72.5%
	2.50 to <10.00	302	4.27%	53	40.85%	1.91	333	110.1%
	10.00 to <100.00	98	18.07%	9	22.10%	2.38	111	113.0%
	100.00 (Default)	-	100.00%	1	44.00%	1.03	-	0.0%
	Sub-total	43,165	0.22%	5,114	45.65%	0.92	9,427	21.8%
Total	66,640	0.17%	5,445	38.56%	1.04	11,526	17.3%	

CCR4: IRB – CCR exposures by portfolio and PD scale ⁽¹⁾


(in \$MM)	PD scale	a	b	c	d	e	f	g
		EAD post-CRM	Average PD ⁽²⁾	Number of obligors	Average LGD ⁽³⁾	Average maturity ⁽⁴⁾	RWA ⁽⁵⁾	RWA density ⁽⁶⁾
Q2 2020								
Sovereign	0.00 to <0.15	8,811	0.02%	51	15.33%	1.73	221	2.5%
	0.15 to <0.25	159	0.16%	4	20.66%	0.57	20	12.5%
	0.25 to <0.50	143	0.46%	2	25.00%	0.55	38	26.1%
	0.50 to <0.75	4	0.69%	2	25.00%	1.20	1	37.7%
	0.75 to <2.50	-	0.00%	-	0.00%	-	-	0.0%
	2.50 to <10.00	1	2.56%	1	25.00%	5.00	1	90.9%
	10.00 to <100.00	-	0.00%	-	0.00%	-	-	0.0%
	100.00 (Default)	-	0.00%	-	0.00%	-	-	0.0%
Sub-total	9,118	0.03%	60	15.58%	1.69	281	3.1%	
Bank	0.00 to <0.15	12,181	0.06%	172	31.00%	1.05	1,595	13.1%
	0.15 to <0.25	2,678	0.17%	30	30.55%	0.25	464	17.4%
	0.25 to <0.50	485	0.32%	62	34.24%	2.51	259	53.4%
	0.50 to <0.75	14	0.69%	3	30.00%	1.45	8	60.1%
	0.75 to <2.50	-	0.00%	-	0.00%	-	-	0.0%
	2.50 to <10.00	-	2.56%	2	40.00%	1.62	-	105.4%
	10.00 to <100.00	-	0.00%	-	0.00%	-	-	0.0%
	100.00 (Default)	-	0.00%	-	0.00%	-	-	0.0%
Sub-total	15,358	0.09%	269	31.02%	0.96	2,326	15.2%	
Corporate	0.00 to <0.15	34,242	0.07%	3,489	45.73%	0.54	5,244	15.3%
	0.15 to <0.25	4,329	0.17%	493	45.70%	1.53	1,587	36.7%
	0.25 to <0.50	4,347	0.34%	739	47.25%	2.32	2,838	65.3%
	0.50 to <0.75	1,555	0.67%	350	48.97%	1.53	1,270	81.7%
	0.75 to <2.50	594	1.33%	109	41.85%	2.46	591	99.4%
	2.50 to <10.00	189	2.62%	38	48.16%	2.51	275	145.4%
	10.00 to <100.00	104	18.12%	12	21.69%	2.06	122	117.0%
	100.00 (Default)	1	100.00%	2	42.29%	1.02	-	0.0%
Sub-total	45,361	0.20%	5,232	45.88%	0.87	11,927	26.3%	
Total	69,837	0.15%	5,561	38.66%	1.00	14,534	20.8%	

(1) Represents AIRB exposures for Derivatives and SFT.

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

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

(4) Effective remaining maturity in years.

(5) After application of AIRB scalar of 1.06.

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

CCR5: Composition of collateral for CCR exposure ⁽¹⁾


(in \$MM)	Collateral used in derivative transactions				Collateral used in SFTs	
	Fair value of collateral received		Fair value of posted collateral		Fair value of collateral received	Fair value of posted collateral
	Segregated ^{(2) (3)}	Unsegregated ⁽²⁾	Segregated ⁽²⁾	Unsegregated ⁽²⁾		
Q4 2020						
Cash – domestic currency	31	1,875	-	1,404	6,258	1,939
Cash – other currencies	41	8,497	49	10,595	37,836	18,927
Domestic sovereign debt	-	266	-	1,654	746	3,422
Other sovereign debt	319	694	684	3,894	2,881	3,924
Government agency debt	88	644	-	3,141	2,004	7,329
Corporate bonds	136	29	-	791	21,833	34,708
Equity securities	-	-	4	-	26,073	17,201
Other collateral	-	-	-	-	29	-
Total	615	12,005	737	21,479	97,660	87,450
Q3 2020						
Cash – domestic currency	11	2,213	-	1,732	6,756	3,058
Cash – other currencies	59	9,191	28	13,109	33,372	19,983
Domestic sovereign debt	19	196	-	2,273	663	3,696
Other sovereign debt	276	689	771	10,165	4,773	4,395
Government agency debt	-	703	198	3,606	2,254	7,919
Corporate bonds	125	64	-	728	20,013	28,891
Equity securities	-	-	4	-	25,506	16,627
Other collateral	-	-	-	-	19	-
Total	490	13,056	1,001	31,613	93,356	84,569
Q2 2020						
Cash – domestic currency	-	3,334	-	1,694	6,046	2,879
Cash – other currencies	-	9,606	132	15,261	37,014	24,985
Domestic sovereign debt	-	617	-	2,692	868	3,376
Other sovereign debt	-	967	826	30,412	4,757	4,573
Government agency debt	-	1,488	-	3,714	3,025	10,436
Corporate bonds	-	278	-	1,022	15,118	31,731
Equity securities	-	-	4	-	24,618	21,077
Other collateral	-	-	-	-	8	-
Total	-	16,290	962	54,795	91,454	99,057
Q1 2020						
Cash – domestic currency	-	1,652	-	558	5,267	4,471
Cash – other currencies	-	7,084	35	10,580	33,808	21,670
Domestic sovereign debt	-	134	-	1,527	796	3,231
Other sovereign debt	-	837	520	25,873	4,976	4,605
Government agency debt	-	677	-	3,158	3,311	6,560
Corporate bonds	-	234	-	457	14,749	29,729
Equity securities	-	-	5	-	30,025	20,147
Other collateral	-	-	-	-	20	-
Total	-	10,618	560	42,153	92,952	90,413

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

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

(3) Commencing Q3 2020, certain fair values of collateral received were identified as segregated. In prior periods, unsegregated collateral included both segregated and unsegregated collateral.

CCR6: Credit derivatives exposures


(in \$MM)	a	b
	Protection bought	Protection sold
Q4 2020		
Notionals		
Single-name credit default swaps	10,428	3,089
Index credit default swaps	-	-
Credit default swaps	10,428	3,089
Total return swaps	19,236	1,398
Credit options	-	-
Other credit derivatives	-	-
Total notionals	29,664	4,487
Fair values		
Positive fair value (asset)	453	26
Negative fair value (liability)	-	(53)
Q3 2020		
Notionals		
Single-name credit default swaps	11,590	3,352
Index credit default swaps	-	-
Credit default swaps	11,590	3,352
Total return swaps	18,097	657
Credit options	-	-
Other credit derivatives	-	-
Total notionals	29,687	4,009
Fair values		
Positive fair value (asset)	472	28
Negative fair value (liability)	-	(38)
Q2 2020		
Notionals		
Single-name credit default swaps	11,533	3,949
Index credit default swaps	-	-
Credit default swaps	11,533	3,949
Total return swaps	17,600	522
Credit options	-	-
Other credit derivatives	-	-
Total notionals	29,133	4,471
Fair values		
Positive fair value (asset)	1,223	18
Negative fair value (liability)	-	(26)
Q1 2020		
Notionals		
Single-name credit default swaps	10,078	4,071
Index credit default swaps	-	-
Credit default swaps	10,078	4,071
Total return swaps	16,755	283
Credit options	-	-
Other credit derivatives	-	-
Total notionals	26,833	4,354
Fair values		
Positive fair value (asset)	237	14
Negative fair value (liability)	-	(37)

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



(in \$MM) ⁽¹⁾		a	a ₂	a ₃	a ₄
		Q4 2020	Q3 2020	Q2 2020	Q1 2020
1	RWA as at end of previous reporting period	7,496	10,350	7,827	7,727
2	Asset size ⁽²⁾	(916)	17	2,007	284
3	Asset quality ⁽³⁾	217	212	137	(220)
4	Model updates ⁽⁴⁾	62	-	-	(5)
5	Methodology and policy ⁽⁵⁾	-	(2,731)	-	-
6	Acquisitions and disposals ⁽⁶⁾	-	-	-	-
7	Foreign exchange movements ⁽⁷⁾	(44)	(352)	379	41
8	Other ⁽⁸⁾	-	-	-	-
9	RWA as at end of current reporting period	6,815	7,496	10,350	7,827

(1) Includes exposures under IMM cleared through a CCP.

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

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

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

(5) Changes due to methodological changes in calculations driven by changes in regulatory policy and/or regulatory oversight including interpretation. For Q3 2020, the amount includes the impact from the implementation of regulatory guidance for the maturity used within the calculation of counterparty credit default risk under IMM.

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

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

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

CCR8: Exposures to central counterparties



(in \$MM)		a	b	a ₂	b ₂	a ₃	b ₃	a ₄	b ₄
		EAD (post-CRM)	RWA	EAD (post-CRM)	RWA	EAD (post-CRM)	RWA	EAD (post-CRM)	RWA
		Q4 2020		Q3 2020		Q2 2020		Q1 2020	
1	Exposures to QCCPs (total)		526		539		570		703
2	Exposures for trades at QCCPs (excluding initial margin and default fund contributions); of which	7,507	161	7,214	151	9,137	188	8,675	185
3	(i) OTC derivatives	872	17	505	10	736	15	517	10
4	(ii) Exchange-traded derivatives	4,194	95	4,623	99	4,779	101	5,247	117
5	(iii) Securities financing transactions	2,441	49	2,086	42	3,622	72	2,911	58
6	(iv) Netting sets where cross-product netting has been approved	-	-	-	-	-	-	-	-
7	Segregated initial margin	4,866	-	7,211	-	9,202	-	6,128	-
8	Non-segregated initial margin	-	-	-	-	-	-	-	-
9	Pre-funded default fund contributions	649	365	687	388	745	382	622	518
10	Unfunded default fund contributions ⁽¹⁾	1,083	-	725	-	673	-	640	-
11	Exposures to non-QCCPs (total)		-		18		17		17
12	Exposures for trades at non-QCCPs (excluding initial margin and default fund contributions); of which	-	-	-	-	-	-	-	-
13	(i) OTC derivatives	-	-	-	-	-	-	-	-
14	(ii) Exchange-traded derivatives	-	-	-	-	-	-	-	-
15	(iii) Securities financing transactions	-	-	-	-	-	-	-	-
16	(iv) Netting sets where cross-product netting has been approved	-	-	-	-	-	-	-	-
17	Segregated initial margin	-	-	-	-	-	-	-	-
18	Non-segregated initial margin	-	-	-	-	-	-	-	-
19	Pre-funded default fund contributions	-	-	1	18	1	17	1	17
20	Unfunded default fund contributions	-	-	-	-	-	-	-	-

(1) Unfunded default fund contributions are risk weighted at 0%.

SEC1: Securitization exposures in the banking book



(in \$MM)		a ⁽¹⁾	a ⁽²⁾	b	c	e	f	g	i	j	k
		Bank acts as Originator				Bank acts as Sponsor ⁽³⁾			Bank acts as Investor ⁽⁴⁾		
		Traditional	Traditional	Synthetic	Sub-total	Traditional	Synthetic	Sub-total	Traditional	Synthetic	Sub-total
Q4 2020											
1	Retail (total)	766	206	-	972	11,010	-	11,010	4,273	-	4,273
	– of which										
2	Residential Mortgage ⁽⁵⁾	-	-	-	-	510	-	510	80	-	80
3	Credit Card	-	-	-	-	1,073	-	1,073	2,075	-	2,075
4	Consumer Receivables	-	-	-	-	2,348	-	2,348	976	-	976
5	Auto Loans/Leases	766	206	-	972	7,079	-	7,079	1,142	-	1,142
6	Wholesale (total)	-	-	-	-	7,542	-	7,542	1,609	-	1,609
	– of which										
7	Trade Receivables	-	-	-	-	4,575	-	4,575	-	-	-
8	Diversified Asset-Backed Securities	-	-	-	-	-	-	-	-	-	-
9	Auto Wholesale/Rentals	-	-	-	-	1,487	-	1,487	573	-	573
10	Other Wholesale	-	-	-	-	1,480	-	1,480	987	-	987
11	Re-Securitization	-	-	-	-	-	-	-	49	-	49
Q3 2020											
1	Retail (total)	945	213	-	1,158	11,403	-	11,403	4,252	-	4,252
	– of which										
2	Residential Mortgage ⁽⁵⁾	-	-	-	-	510	-	510	80	-	80
3	Credit Card	67	-	-	67	1,271	-	1,271	2,075	-	2,075
4	Consumer Receivables	-	-	-	-	2,227	-	2,227	980	-	980
5	Auto Loans/Leases	878	213	-	1,091	7,395	-	7,395	1,117	-	1,117
6	Wholesale (total)	-	-	-	-	7,823	-	7,823	1,707	-	1,707
	– of which										
7	Trade Receivables	-	-	-	-	4,624	-	4,624	-	-	-
8	Diversified Asset-Backed Securities	-	-	-	-	-	-	-	-	-	-
9	Auto Wholesale/Rentals	-	-	-	-	1,602	-	1,602	719	-	719
10	Other Wholesale	-	-	-	-	1,597	-	1,597	938	-	938
11	Re-Securitization	-	-	-	-	-	-	-	50	-	50

SEC1: Securitization exposures in the banking book



(in \$MM)		a ⁽¹⁾	a ⁽²⁾	b	c	e	f	g	i	j	k
		Bank acts as Originator				Bank acts as Sponsor ⁽³⁾			Bank acts as Investor ⁽⁴⁾		
		Traditional	Traditional	Synthetic	Sub-total	Traditional	Synthetic	Sub-total	Traditional	Synthetic	Sub-total
Q2 2020											
1	Retail (total)	1,081	290	-	1,371	10,874	-	10,874	4,206	-	4,206
	– of which										
2	Residential Mortgage ⁽⁵⁾	-	-	-	-	510	-	510	80	-	80
3	Credit Card	67	-	-	67	1,320	-	1,320	2,075	-	2,075
4	Consumer Receivables	-	-	-	-	1,796	-	1,796	964	-	964
5	Auto Loans/Leases	1,014	290	-	1,304	7,248	-	7,248	1,087	-	1,087
6	Wholesale (total)	-	-	-	-	8,419	-	8,419	706	-	706
	– of which										
7	Trade Receivables	-	-	-	-	5,144	-	5,144	-	-	-
8	Diversified Asset-Backed Securities	-	-	-	-	-	-	-	-	-	-
9	Auto Wholesale/Rentals	-	-	-	-	2,275	-	2,275	461	-	461
10	Other Wholesale	-	-	-	-	1,000	-	1,000	193	-	193
11	Re-Securitization	-	-	-	-	-	-	-	52	-	52

Q1 2020											
1	Retail (total)	1,212	336	-	1,548	10,732	-	10,732	4,325	-	4,325
	– of which										
2	Residential Mortgage ⁽⁵⁾	-	-	-	-	510	-	510	80	-	80
3	Credit Card	134	-	-	134	1,310	-	1,310	2,075	-	2,075
4	Consumer Receivables	-	102	-	102	1,768	-	1,768	936	-	936
5	Auto Loans/Leases	1,078	234	-	1,312	7,144	-	7,144	1,234	-	1,234
6	Wholesale (total)	-	-	-	-	8,054	-	8,054	823	-	823
	– of which										
7	Trade Receivables	-	-	-	-	4,803	-	4,803	-	-	-
8	Diversified Asset-Backed Securities	-	-	-	-	-	-	-	-	-	-
9	Auto Wholesale/Rentals	-	-	-	-	2,211	-	2,211	530	-	530
10	Other Wholesale	-	-	-	-	1,040	-	1,040	235	-	235
11	Re-Securitization	-	-	-	-	-	-	-	58	-	58

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

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

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

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

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

SEC2: Securitization exposures in the trading book



(in \$MM)		a ⁽¹⁾	a ⁽²⁾	b	c	e	f	g	i	j	k
		Bank acts as Originator				Bank acts as Sponsor ⁽³⁾			Bank acts as Investor ⁽⁴⁾		
		Traditional	Traditional	Synthetic	Sub-total	Traditional	Synthetic	Sub-total	Traditional	Synthetic	Sub-total
Q4 2020											
1	Retail (total) ⁽⁵⁾ – of which	-	-	-	-	-	-	-	84	-	84
2	Residential Mortgage ⁽⁶⁾	-	-	-	-	-	-	-	-	-	-
3	Credit Card	-	-	-	-	-	-	-	43	-	43
4	Consumer Receivables	-	-	-	-	-	-	-	1	-	1
5	Auto Loans/Leases	-	-	-	-	-	-	-	40	-	40
6	Wholesale (total) ⁽⁵⁾ – of which	-	-	-	-	-	-	-	37	-	37
7	Trade Receivables	-	-	-	-	-	-	-	-	-	-
8	Diversified Asset-Backed Securities	-	-	-	-	-	-	-	-	-	-
9	Auto Wholesale/Rentals	-	-	-	-	-	-	-	29	-	29
10	Other Wholesale	-	-	-	-	-	-	-	8	-	8
11	Re-Securitization	-	-	-	-	-	-	-	-	-	-
Q3 2020											
1	Retail (total) ⁽⁵⁾ – of which	-	-	-	-	-	-	-	62	-	62
2	Residential Mortgage ⁽⁶⁾	-	-	-	-	-	-	-	-	-	-
3	Credit Card	-	-	-	-	-	-	-	5	-	5
4	Consumer Receivables	-	-	-	-	-	-	-	1	-	1
5	Auto Loans/Leases	-	-	-	-	-	-	-	56	-	56
6	Wholesale (total) ⁽⁵⁾ – of which	-	-	-	-	-	-	-	40	-	40
7	Trade Receivables	-	-	-	-	-	-	-	-	-	-
8	Diversified Asset-Backed Securities	-	-	-	-	-	-	-	-	-	-
9	Auto Wholesale/Rentals	-	-	-	-	-	-	-	32	-	32
10	Other Wholesale	-	-	-	-	-	-	-	8	-	8
11	Re-Securitization	-	-	-	-	-	-	-	-	-	-

SEC2: Securitization exposures in the trading book



(in \$MM)		a ⁽¹⁾	a ⁽²⁾	b	c	e	f	g	i	j	k
		Bank acts as Originator				Bank acts as Sponsor ⁽³⁾			Bank acts as Investor ⁽⁴⁾		
		Traditional	Traditional	Synthetic	Sub-total	Traditional	Synthetic	Sub-total	Traditional	Synthetic	Sub-total
Q2 2020											
1	Retail (total) ⁽⁵⁾	-	-	-	-	-	-	-	203	-	203
	– of which										
2	Residential Mortgage ⁽⁶⁾	-	-	-	-	-	-	-	-	-	-
3	Credit Card	-	-	-	-	-	-	-	124	-	124
4	Consumer Receivables	-	-	-	-	-	-	-	-	-	-
5	Auto Loans/Leases	-	-	-	-	-	-	-	79	-	79
6	Wholesale (total) ⁽⁵⁾	-	-	-	-	-	-	-	61	-	61
	– of which										
7	Trade Receivables	-	-	-	-	-	-	-	-	-	-
8	Diversified Asset-Backed Securities	-	-	-	-	-	-	-	-	-	-
9	Auto Wholesale/Rentals	-	-	-	-	-	-	-	53	-	53
10	Other Wholesale	-	-	-	-	-	-	-	8	-	8
11	Re-Securitization	-	-	-	-	-	-	-	-	-	-
Q1 2020											
1	Retail (total) ⁽⁵⁾	-	-	-	-	-	-	-	72	-	72
	– of which										
2	Residential Mortgage ⁽⁶⁾	-	-	-	-	-	-	-	-	-	-
3	Credit Card	-	-	-	-	-	-	-	67	-	67
4	Consumer Receivables	-	-	-	-	-	-	-	-	-	-
5	Auto Loans/Leases	-	-	-	-	-	-	-	5	-	5
6	Wholesale (total) ⁽⁵⁾	-	-	-	-	-	-	-	27	-	27
	– of which										
7	Trade Receivables	-	-	-	-	-	-	-	-	-	-
8	Diversified Asset-Backed Securities	-	-	-	-	-	-	-	-	-	-
9	Auto Wholesale/Rentals	-	-	-	-	-	-	-	18	-	18
10	Other Wholesale	-	-	-	-	-	-	-	9	-	9
11	Re-Securitization	-	-	-	-	-	-	-	-	-	-

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

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

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

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

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

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

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



(in \$MM)	a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	p	q
	Exposure values (by RW bands)					Exposure values (by regulatory approach)				RWA (by regulatory approach)				Capital charge after cap			
	≤20% RW	>20% to 50% RW	>50% to 100% RW	>100% to <1250% RW	1250% RW	IRBA	ERBA / IAA	SA	1250%	IRBA	ERBA / IAA	SA	1250%	IRBA	ERBA / IAA	SA	1250%
Q4 2020																	
1 Total exposures⁽¹⁾⁽²⁾	15,620	2,494	1,201	-	3	766	18,552	-	-	158	3,339	-	-	13	267	-	-
2 Traditional securitization	15,620	2,494	1,201	-	3	766	18,552	-	-	158	3,339	-	-	13	267	-	-
3 Of which securitization	15,620	2,494	1,201	-	3	766	18,552	-	-	158	3,339	-	-	13	267	-	-
4 Of which retail underlying	11,148	547	78	-	3	766	11,010	-	-	158	1,498	-	-	13	120	-	-
5 Of which wholesale	4,472	1,947	1,123	-	-	-	7,542	-	-	-	1,841	-	-	-	147	-	-
6 Of which re-securitization	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7 Of which senior	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8 Of which non-senior	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9 Synthetic securitization	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10 Of which securitization	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11 Of which retail underlying	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12 Of which wholesale	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13 Of which re-securitization	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14 Of which senior	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15 Of which non-senior	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Q3 2020																	
1 Total exposures⁽¹⁾⁽²⁾	16,346	2,626	1,196	-	3	878	19,293	-	-	175	3,515	-	-	14	281	-	-
2 Traditional securitization	16,346	2,626	1,196	-	3	878	19,293	-	-	175	3,515	-	-	14	281	-	-
3 Of which securitization	16,346	2,626	1,196	-	3	878	19,293	-	-	175	3,515	-	-	14	281	-	-
4 Of which retail underlying	11,780	498	67	-	3	878	11,470	-	-	175	1,556	-	-	14	124	-	-
5 Of which wholesale	4,566	2,128	1,129	-	-	-	7,823	-	-	-	1,959	-	-	-	157	-	-
6 Of which re-securitization	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7 Of which senior	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8 Of which non-senior	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9 Synthetic securitization	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10 Of which securitization	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11 Of which retail underlying	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12 Of which wholesale	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13 Of which re-securitization	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14 Of which senior	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15 Of which non-senior	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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



(in \$MM)	a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	p	q
	Exposure values (by RW bands)					Exposure values (by regulatory approach)				RWA (by regulatory approach)				Capital charge after cap			
	≤20% RW	>20% to 50% RW	>50% to 100% RW	>100% to <1250% RW	1250% RW	IRBA	ERBA / IAA	SA	1250%	IRBA	ERBA / IAA	SA	1250%	IRBA	ERBA / IAA	SA	1250%
Q2 2020																	
1 Total exposures⁽¹⁾⁽²⁾	16,834	2,779	758	-	3	1,014	19,360	-	-	195	3,341	-	-	16	268	-	-
2 Traditional securitization	16,834	2,779	758	-	3	1,014	19,360	-	-	195	3,341	-	-	16	268	-	-
3 Of which securitization	16,834	2,779	758	-	3	1,014	19,360	-	-	195	3,341	-	-	16	268	-	-
4 Of which retail underlying	11,190	695	67	-	3	1,014	10,941	-	-	195	1,547	-	-	16	124	-	-
5 Of which wholesale	5,644	2,084	691	-	-	-	8,419	-	-	-	1,794	-	-	-	144	-	-
6 Of which re-securitization	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7 Of which senior	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8 Of which non-senior	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9 Synthetic securitization	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10 Of which securitization	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11 Of which retail underlying	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12 Of which wholesale	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13 Of which re-securitization	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14 Of which senior	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15 Of which non-senior	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Q1 2020																	
1 Total exposures⁽¹⁾⁽²⁾	16,614	2,500	881	-	3	1,078	18,920	-	-	205	3,341	-	-	16	267	-	-
2 Traditional securitization	16,614	2,500	881	-	3	1,078	18,920	-	-	205	3,341	-	-	16	267	-	-
3 Of which securitization	16,614	2,500	881	-	3	1,078	18,920	-	-	205	3,341	-	-	16	267	-	-
4 Of which retail underlying	11,181	608	152	-	3	1,078	10,866	-	-	205	1,591	-	-	16	127	-	-
5 Of which wholesale	5,433	1,892	729	-	-	-	8,054	-	-	-	1,750	-	-	-	140	-	-
6 Of which re-securitization	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7 Of which senior	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8 Of which non-senior	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9 Synthetic securitization	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10 Of which securitization	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11 Of which retail underlying	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12 Of which wholesale	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13 Of which re-securitization	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14 Of which senior	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15 Of which non-senior	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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

(2) Includes retained positions in securitizations where the Bank acts as an originator and has achieved significant and effective risk transfer.

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



(in \$MM)	a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	p	q
	Exposure values (by RW bands)					Exposure values (by regulatory approach)				RWA (by regulatory approach)				Capital charge after cap			
	≤20% RW	>20% to 50% RW	>50% to 100% RW	>100% to <1250% RW	1250% RW	IRBA	ERBA / IAA	SA	1250%	IRBA	ERBA / IAA	SA	1250%	IRBA	ERBA / IAA	SA	1250%
Q4 2020																	
1 Total exposures⁽¹⁾	3,196	1,129	1,387	146	24	-	5,046	836	-	-	1,708	350	-	-	136	28	-
2 Traditional securitization	3,196	1,129	1,387	146	24	-	5,046	836	-	-	1,708	350	-	-	136	28	-
3 Of which securitization	3,196	1,129	1,338	146	24	-	5,046	787	-	-	1,708	301	-	-	136	24	-
4 Of which retail underlying	2,433	958	799	83	-	-	4,273	-	-	-	1,206	-	-	-	96	-	-
5 Of which wholesale	763	171	539	63	24	-	773	787	-	-	502	301	-	-	40	24	-
6 Of which re-securitization	-	-	49	-	-	-	-	49	-	-	-	49	-	-	-	4	-
7 Of which senior	-	-	49	-	-	-	-	49	-	-	-	49	-	-	-	4	-
8 Of which non-senior	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9 Synthetic securitization	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10 Of which securitization	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11 Of which retail underlying	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12 Of which wholesale	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13 Of which re-securitization	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14 Of which senior	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15 Of which non-senior	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Q3 2020																	
1 Total exposures⁽¹⁾	3,157	1,295	1,396	88	23	-	5,168	791	-	-	1,647	341	-	-	131	27	-
2 Traditional securitization	3,157	1,295	1,396	88	23	-	5,168	791	-	-	1,647	341	-	-	131	27	-
3 Of which securitization	3,157	1,295	1,346	88	23	-	5,168	741	-	-	1,647	291	-	-	131	23	-
4 Of which retail underlying	2,439	963	822	28	-	-	4,252	-	-	-	1,129	-	-	-	90	-	-
5 Of which wholesale	718	332	524	60	23	-	916	741	-	-	518	291	-	-	41	23	-
6 Of which re-securitization	-	-	50	-	-	-	-	50	-	-	-	50	-	-	-	4	-
7 Of which senior	-	-	50	-	-	-	-	50	-	-	-	50	-	-	-	4	-
8 Of which non-senior	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9 Synthetic securitization	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10 Of which securitization	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11 Of which retail underlying	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12 Of which wholesale	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13 Of which re-securitization	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14 Of which senior	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15 Of which non-senior	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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



(in \$MM)	a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	p	q
	Exposure values (by RW bands)					Exposure values (by regulatory approach)				RWA (by regulatory approach)				Capital charge after cap			
	≤20% RW	>20% to 50% RW	>50% to 100% RW	>100% to <1250% RW	1250% RW	IRBA	ERBA / IAA	SA	1250%	IRBA	ERBA / IAA	SA	1250%	IRBA	ERBA / IAA	SA	1250%
Q2 2020																	
1 Total exposures⁽¹⁾	2,568	932	1,244	168	-	-	4,860	52	-	-	1,506	52	-	-	120	4	-
2 Traditional securitization	2,568	932	1,244	168	-	-	4,860	52	-	-	1,506	52	-	-	120	4	-
3 Of which securitization	2,568	932	1,192	168	-	-	4,860	-	-	-	1,506	-	-	-	120	-	-
4 Of which retail underlying	2,568	818	710	110	-	-	4,206	-	-	-	1,112	-	-	-	89	-	-
5 Of which wholesale	-	114	482	58	-	-	654	-	-	-	394	-	-	-	31	-	-
6 Of which re-securitization	-	-	52	-	-	-	-	52	-	-	-	52	-	-	-	4	-
7 Of which senior	-	-	52	-	-	-	-	52	-	-	-	52	-	-	-	4	-
8 Of which non-senior	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9 Synthetic securitization	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10 Of which securitization	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11 Of which retail underlying	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12 Of which wholesale	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13 Of which re-securitization	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14 Of which senior	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15 Of which non-senior	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Q1 2020																	
1 Total exposures⁽¹⁾	2,613	931	1,604	-	-	-	5,090	58	-	-	1,599	58	-	-	128	5	-
2 Traditional securitization	2,613	931	1,604	-	-	-	5,090	58	-	-	1,599	58	-	-	128	5	-
3 Of which securitization	2,613	931	1,546	-	-	-	5,090	-	-	-	1,599	-	-	-	128	-	-
4 Of which retail underlying	2,613	761	951	-	-	-	4,325	-	-	-	1,163	-	-	-	93	-	-
5 Of which wholesale	-	170	595	-	-	-	765	-	-	-	436	-	-	-	35	-	-
6 Of which re-securitization	-	-	58	-	-	-	-	58	-	-	-	58	-	-	-	5	-
7 Of which senior	-	-	58	-	-	-	-	58	-	-	-	58	-	-	-	5	-
8 Of which non-senior	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9 Synthetic securitization	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10 Of which securitization	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11 Of which retail underlying	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12 Of which wholesale	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13 Of which re-securitization	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14 Of which senior	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15 Of which non-senior	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

(1) Includes banking book investments in asset backed securities (ABS), collateralized loan obligations (CLOs), collateralized debt obligations (CDOs).

FLOW STATEMENT FOR REGULATORY CAPITAL



(in \$MM)	Basel III All-in							
	Q4 2020	Q3 2020	Q2 2020	Q1 2020	Q4 2019	Q3 2019	Q2 2019	Q1 2019
Common Equity Tier 1 (CET1) capital								
Opening amount	48,689	48,543	47,804	46,578	46,565	46,193	45,344	44,443
Net income attributable to equity holders of the Bank	1,827	1,355	1,309	2,287	2,201	1,864	2,189	2,136
Dividends paid to equity holders of the Bank	(1,173)	(1,113)	(1,156)	(1,117)	(1,158)	(1,087)	(1,127)	(1,070)
Shares issued	3	5	13	38	51	46	48	110
Shared repurchased/redeemed	-	-	(146)	(268)	(356)	(196)	(289)	(234)
Removal of own credit spread (net of tax)	124	577	(477)	123	(6)	(20)	29	(40)
ECL transitional adjustment	132	726	446					
Movements in other comprehensive income (OCI), excluding cash flow hedges	(541)	(1,516)	561	(1,188)	(734)	(1,044)	247	338
Currency translation differences	(512)	(1,036)	361	(941)	(805)	(778)	380	562
Debt and equity investments fair valued through OCI	(97)	293	(75)	64	(2)	51	50	77
Employee Benefits	218	(353)	(30)	(268)	46	(347)	(190)	(339)
Other	(150)	(420)	305	(43)	27	30	7	38
Goodwill and other intangible assets (deduction, net of related tax liability)	131	(8)	68	448	134	482	(150)	(182)
Other, including regulatory adjustments and transitional arrangements	(27)	120	121	903	(119)	327	(98)	(157)
Deferred tax assets that rely on future probability	21	20	4	15	9	15	12	13
IFRS 15 (2019) ⁽¹⁾	-	-	-	-	-	-	-	(58)
Threshold deductions	-	-	-	907	(84)	277	(112)	(125)
Other	(48)	100	117	(19)	(44)	35	2	13
Closing Amount	49,165	48,689	48,543	47,804	46,578	46,565	46,193	45,344
Other Additional Tier 1 capital								
Opening amount	6,209	4,502	4,633	4,726	4,806	5,516	5,525	5,744
Capital issuances	-	1,688	-	-	-	-	-	-
Redeemed capital	-	-	(265)	-	-	(650)	-	(300)
Other, capital including regulatory adjustments and transitional arrangements (NVCC)	(12)	19	134	(93)	(80)	(60)	(9)	81
Closing Amount	6,197	6,209	4,502	4,633	4,726	4,806	5,516	5,525
Total Tier 1 capital	55,362	54,898	53,045	52,437	51,304	51,371	51,709	50,869
Tier 2 capital								
Opening amount	9,276	9,478	8,955	8,546	10,175	9,146	8,927	7,177
Capital issuances	-	-	-	-	-	1,500	-	1,750
Redeemed capital	(1)	(8)	-	-	(1,750)	(4)	(17)	-
Amortization adjustments	-	-	-	-	-	-	-	-
Other, including regulatory adjustments and transitional adjustments (NVCC)	(125)	(194)	523	409	121	(467)	236	-
Closing Amount	9,150	9,276	9,478	8,955	8,546	10,175	9,146	8,927
Total regulatory capital	64,512	64,174	62,523	61,392	59,850	61,546	60,855	59,796

(1) Represents the full transitional impact on retained earnings from the Bank's adoption of IFRS 15 (Revenue Contracts) on November 1, 2018.

RISK-WEIGHTED ASSETS AND CAPITAL RATIOS



(in \$billions)	Basel III - All-in ⁽¹⁾							
	Q4 2020	Q3 2020	Q2 2020	Q1 2020	Q4 2019	Q3 2019	Q2 2019	Q1 2019
RISK-WEIGHTED ASSETS: ⁽²⁾								
On-Balance Sheet Assets								
Cash Resources	2.9	3.0	3.1	2.9	2.9	3.5	3.4	3.6
Securities	12.0	12.6	11.3	9.5	7.4	7.7	7.8	7.7
Residential Mortgages	38.7	38.5	39.5	38.8	40.5	39.3	38.2	37.7
Loans								
- Personal Loans	56.8	58.8	60.6	62.8	62.4	62.5	60.5	60.9
- Non-Personal Loans	134.6	145.0	155.9	136.3	136.2	136.5	137.3	131.7
All Other	33.1	33.6	33.5	31.7	33.0	33.7	35.0	33.5
	278.1	291.5	303.9	282.0	282.4	283.2	282.2	275.1
Off-Balance Sheet Assets								
Indirect Credit Instruments	58.8	55.5	53.5	56.3	55.6	53.7	54.5	53.9
Derivative Instruments	12.9	14.0	18.8	14.2	15.3	13.9	13.6	13.9
	71.7	69.5	72.3	70.5	70.9	67.6	68.1	67.8
Total Credit Risk before AIRB scaling factor	349.8	361.0	376.2	352.5	353.3	350.8	350.3	342.9
AIRB Scaling factor ⁽³⁾	12.2	12.7	13.4	12.2	12.1	11.8	11.4	11.0
Total Credit Risk after AIRB scaling factor	362.0	373.7	389.6	364.7	365.4	362.6	361.7	353.9
Market Risk - Risk Assets Equivalent	7.3	9.3	9.5	9.6	8.7	7.8	7.0	9.0
Operational Risk - Risk Assets Equivalent	47.8	47.5	47.1	46.4	47.1	46.7	46.5	45.7
Regulatory Capital Floor Adjustment to RWA ⁽⁴⁾	-	-	-	-	-	-	-	-
Risk-Weighted Assets ⁽⁴⁾	417.1	430.5	446.2	420.7	421.2	417.1	415.2	408.6
REGULATORY CAPITAL RATIOS (%):								
Common Equity Tier 1	11.8	11.3	10.9	11.4	11.1	11.2	11.1	11.1
Tier 1	13.3	12.8	11.9	12.5	12.2	12.3	12.5	12.5
Total	15.5	14.9	14.0	14.6	14.2	14.8	14.7	14.6

(1) Effective Q1 2018, the Bank fully adopted IFRS 9 (Financial Instruments).

(2) For purposes of this presentation only, Risk-Weighted Assets (RWA) are shown by balance sheet categories. Details by Basel III exposure type are shown on tab EAD_RWA (page 6), "Exposure at Default and Risk-Weighted Assets for Credit Risk Portfolios".

(3) The Basel Framework requires an additional 6% scaling factor to AIRB credit risk portfolios (excluding CVA and Securitizations).

(4) The Bank did not have a regulatory capital floor add-on for CET1, Tier 1 and Total capital risk-weighted assets from April 30, 2018 onwards.

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


Credit Risk RWA ⁽¹⁾ (in \$MM)	Q4 2020		Q3 2020	
	Credit Risk	Of which Counterparty Credit Risk	Credit Risk	Of which Counterparty Credit Risk
Credit risk-weighted assets as at beginning of Quarter	373,682	19,858	389,584	24,647
Book size ⁽²⁾	(9,453)	(1,030)	(8,859)	(1,494)
Book quality ⁽³⁾	(707)	202	643	224
Model updates ⁽⁴⁾	62	62	-	-
Methodology and policy ⁽⁵⁾⁽⁶⁾	-	-	(2,731)	(2,731)
Acquisitions and disposals	-	-	(312)	-
Foreign exchange movements	(1,580)	(111)	(4,643)	(788)
Other	-	-	-	-
Credit risk-weighted assets as at end of Quarter	362,004	18,981	373,682	19,858

(1) In accordance with OSFI's requirements, in Q1 2019, the CVA risk-weighted assets have been fully phased-in.

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

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

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

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

(6) The amount includes the impact from the implementation of regulatory guidance for the maturity used within the calculation of counterparty credit default risk under IMM.

Market Risk RWA (in \$MM)	Q4 2020	Q3 2020
Market risk-weighted assets as at beginning of Quarter	9,348	9,477
Movement in risk levels ⁽¹⁾	(2,051)	(182)
Model updates ⁽²⁾	30	53
Methodology and policy ⁽³⁾	-	-
Acquisitions and disposals	-	-
Other	-	-
Market risk-weighted assets as at end of Quarter	7,327	9,348

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

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

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

Operational Risk RWA (in \$MM)	Q4 2020	Q3 2020
Operational risk-weighted assets as at beginning of Quarter	47,513	47,113
Acquisitions and disposals	-	(59)
Higher Revenue	294	459
Operational risk-weighted assets as at end of Quarter	47,807	47,513

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


(in \$billions)	Q4 2020					
	Canadian Banking	International Banking	Global Banking & Markets	Global Wealth Management	Other	All Bank
Risk-weighted Assets (RWA)						
RWA	\$126.0	\$158.6	\$101.6	\$17.6	\$13.3	\$417.1
Proportion of Bank	30%	38%	24%	4%	4%	100%
Comprised of:						
Credit risk	88%	88%	86%	65%	95%	87%
Market risk	- %	1%	5%	- %	9%	2%
Operational risk	12%	11%	9%	35%	-4%	11%

(in \$billions)	Q3 2020					
	Canadian Banking	International Banking	Global Banking & Markets	Global Wealth Management	Other	All Bank
Risk-weighted Assets (RWA)						
RWA	\$127.4	\$166.9	\$105.6	\$17.1	\$13.5	\$430.5
Proportion of Bank	30%	39%	25%	4%	2%	100%
Comprised of:						
Credit risk	88%	88%	86%	64%	97%	87%
Market risk	- %	2%	5%	- %	8%	2%
Operational risk	12%	10%	9%	36%	-5%	11%

CREDIT RISK EXPOSURES BY GEOGRAPHY⁽¹⁾⁽²⁾



Exposure at Default

(in \$MM)	Q4 2020					Q3 2020				
	Non-Retail			Retail	Total	Non-Retail			Retail	Total
	Drawn	Undrawn	Other ⁽³⁾			Drawn	Undrawn	Other ⁽³⁾		
Canada	155,326	52,851	37,653	375,579	621,409	166,775	50,249	37,910	367,333	622,267
USA	103,091	40,036	45,083	-	188,210	95,022	37,275	45,762	-	178,059
Chile	26,441	1,418	4,202	24,677	56,738	27,685	1,424	4,385	25,610	59,104
Mexico	22,800	1,175	3,005	12,207	39,187	23,555	1,063	3,104	11,582	39,304
Peru	20,233	949	3,459	9,290	33,931	21,236	849	3,278	9,569	34,932
Colombia	5,615	348	981	6,179	13,123	6,744	274	990	6,532	14,540
Other International										
Europe	22,871	11,200	17,699	-	51,770	23,607	6,495	18,852	-	48,954
Caribbean	15,924	1,720	1,160	12,616	31,420	17,017	1,631	1,506	12,974	33,128
Latin America (other)	11,588	1,077	392	590	13,647	13,413	519	407	617	14,956
All Other	22,835	4,646	7,269	39	34,789	22,542	4,866	7,253	38	34,699
Total	406,724	115,420	120,903	441,177	1,084,224	417,596	104,645	123,447	434,255	1,079,943

(in \$MM)	Q2 2020	Q1 2020	Q4 2019	Q3 2019	Q2 2019
Canada	621,264	554,841	549,233	537,512	523,215
USA	230,083	198,504	176,036	172,432	182,903
Chile	58,814	53,464	53,521	54,741	56,720
Mexico	39,230	40,643	37,969	37,128	38,005
Peru	36,183	33,345	32,954	32,317	33,737
Colombia	14,613	14,078	13,673	14,256	14,242
Other International					
Europe	52,053	55,036	45,885	42,202	41,874
Caribbean	35,639	32,702	38,636	39,151	40,825
Latin America (other)	15,932	13,517	12,402	12,747	12,601
All Other	36,122	33,371	33,215	32,791	31,894
Total	1,139,933	1,029,501	993,524	975,277	976,016

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

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

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

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



Exposure at Default

(in \$MM)	Q4 2020				Q3 2020			
	Drawn	Undrawn	Other ⁽³⁾	Total	Drawn	Undrawn	Other ⁽³⁾	Total
Non-Retail								
Less than 1 year	175,335	42,177	77,660	295,172	169,438	35,586	73,117	278,141
1 to 5 years	145,976	67,858	24,237	238,071	158,768	63,835	29,713	252,316
Over 5 Years	21,580	1,825	8,939	32,344	25,297	1,572	10,314	37,183
Total Non-Retail	342,891	111,860	110,836	565,587	353,503	100,993	113,144	567,640
Retail								
Less than 1 year	33,067	21,571	-	54,638	33,700	20,985	-	54,685
1 to 5 years	215,271	-	-	215,271	208,029	-	-	208,029
Over 5 Years	14,892	-	-	14,892	15,441	-	-	15,441
Revolving Credits ⁽⁴⁾	37,714	31,264	-	68,978	37,308	31,399	-	68,707
Total Retail	300,944	52,835	-	353,779	294,478	52,384	-	346,862
Total	643,835	164,695	110,836	919,366	647,981	153,377	113,144	914,502

(in \$MM)	Q2 2020	Q1 2020	Q4 2019	Q3 2019
Non-Retail				
Less than 1 year	328,187	272,021	240,217	230,979
1 to 5 years	264,659	218,770	212,909	212,331
Over 5 Years	40,804	36,538	34,307	28,482
Total Non-Retail	633,650	527,329	487,433	471,792
Retail				
Less than 1 year	56,720	59,747	61,736	60,038
1 to 5 years	201,676	195,007	192,344	188,817
Over 5 Years	15,214	15,100	15,488	15,493
Revolving Credits ⁽⁴⁾	69,600	69,526	68,923	68,223
Total Retail	343,210	339,380	338,491	332,571
Total	976,860	866,709	825,924	804,363

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

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

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

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

AIRB CREDIT LOSSES



Exposure Type	Q4 2020		Q3 2020		Q2 2020		Q1 2020		Q4 2019	
	Actual Loss Rate	Expected Loss Rate	Actual Loss Rate	Expected Loss Rate	Actual Loss Rate	Expected Loss Rate	Actual Loss Rate	Expected Loss Rate	Actual Loss Rate	Expected Loss Rate
	%	%	%	%	%	%	%	%	%	%
Non-Retail ⁽¹⁾⁽³⁾										
Corporate	0.14	0.36	0.13	0.36	0.09	0.37	0.06	0.38	0.03	0.45
Sovereign	-	0.07	-	0.07	-	0.07	-	0.07	-	0.06
Bank	-	0.13	-	0.14	-	0.13	-	0.10	-	0.08
Retail ⁽²⁾⁽³⁾										
Real Estate Secured	0.01	0.16	0.01	0.16	0.01	0.15	0.01	0.15	0.01	0.15
QRRE	3.15	3.80	3.35	3.76	3.46	3.71	3.32	3.98	3.18	3.83
Other Retail	0.63	1.60	0.63	1.64	0.63	1.57	0.63	1.64	0.62	1.55

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

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

(3) Expected losses are calculated using "through the business cycle" Basel risk parameters (PD, LGD, and EAD) on AIRB portfolio, which are estimated to include a long term time horizon. Actual losses are a "point in time" representation and reflect the current economic conditions. During an economic downturn PCL on impaired loans may exceed expected losses, and may fall below expected losses during times of economic growth.

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



Exposure Type	Q4 2020						Q3 2020					
	Average estimated PD %	Actual default rate %	Average estimated LGD %	Actual LGD %	Average estimated CCF ⁽²⁾ %	Actual CCF ⁽²⁾ %	Average estimated PD %	Actual default rate %	Average estimated LGD %	Actual LGD %	Average estimated CCF ⁽²⁾ %	Actual CCF ⁽²⁾ %
Non-Retail ⁽¹⁾	0.70	0.44	40.16	38.54	48.61	11.47	0.66	0.24	40.31	28.38	48.85	17.61

(1) Reporting is on a one quarter lag basis. For reporting as of Q4/20, estimated parameters are based on portfolio averages at Q3/19 whereas actual parameters are based on averages of realized parameters during the subsequent four quarters (Q4/19 – Q3/20).

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

(in \$MM) ⁽¹⁾	Four-quarter period ending Q4 2020						Four-quarter period ending Q3 2020					
	Average estimated PD ⁽²⁾⁽⁷⁾ %	Actual default rate ⁽²⁾⁽⁵⁾ %	Average estimated LGD ⁽³⁾⁽⁷⁾ %	Actual LGD ⁽³⁾⁽⁶⁾ %	Estimated EAD ⁽⁴⁾⁽⁷⁾ \$	Actual EAD ⁽⁴⁾⁽⁵⁾ \$	Average estimated PD ⁽²⁾⁽⁷⁾ %	Actual default rate ⁽²⁾⁽⁵⁾ %	Average estimated LGD ⁽³⁾⁽⁷⁾ %	Actual LGD ⁽³⁾⁽⁶⁾ %	Estimated EAD ⁽⁴⁾⁽⁷⁾ \$	Actual EAD ⁽⁴⁾⁽⁵⁾ \$
Residential real estate secured												
Residential mortgages												
Insured mortgages ⁽⁸⁾	0.71	0.43	-	-	-	-	0.71	0.47	-	-	-	-
Uninsured mortgages	0.57	0.27	19.00	13.48	-	-	0.56	0.32	19.07	10.82	-	-
Secured lines of credit	0.37	0.20	28.74	17.66	83	76	0.36	0.21	28.32	17.10	87	78
Qualifying revolving retail exposures	2.02	1.38	79.33	72.90	705	613	1.97	1.45	79.21	72.17	734	639
Other retail	1.86	1.29	61.23	55.00	7	7	1.75	1.14	60.96	54.31	6	6

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

(2) Account weighted aggregation.

(3) Default weighted aggregation.

(4) EAD is estimated for revolving products only.

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

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

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

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

DERIVATIVES - COUNTERPARTY CREDIT RISK ⁽¹⁾


(in \$MM)	Q4 2020				Q3 2020				Q2 2020				Q1 2020				
	Contract Types	Notional Amount	Credit Risk Amount	Credit Risk Equivalent Amount	Risk-weighted Amount ⁽²⁾	Notional Amount	Credit Risk Amount	Credit Risk Equivalent Amount	Risk-weighted Amount ⁽²⁾	Notional Amount	Credit Risk Amount	Credit Risk Equivalent Amount	Risk-weighted Amount ⁽²⁾	Notional Amount	Credit Risk Amount	Credit Risk Equivalent Amount	Risk-weighted Amount ⁽²⁾
Interest Rate Contracts:																	
Futures and Forward Rate Agreements	717,291	52	175	45	618,501	122	182	59	547,530	158	303	133	627,059	26	273	101	
Swaps	3,605,486	7,418	8,343	2,610	4,160,586	8,575	9,522	2,966	4,350,506	7,485	9,455	3,919	4,060,298	5,603	6,544	2,295	
Options Purchased	28,214	78	46	13	34,944	101	58	16	38,763	88	59	25	29,999	40	41	17	
Options Written	29,343	-	21	6	38,315	-	37	10	40,352	-	29	13	30,562	-	21	9	
Total	4,380,334	7,548	8,585	2,674	4,852,346	8,798	9,799	3,051	4,977,151	7,731	9,846	4,090	4,747,918	5,669	6,879	2,422	
Foreign Exchange Contracts:																	
Futures and Forwards	410,475	1,492	3,863	1,170	436,333	2,158	4,677	1,402	493,811	5,478	6,328	2,252	542,190	5,588	4,267	1,739	
Swaps	538,892	775	6,361	1,728	531,972	1,388	7,143	1,832	515,196	1,318	6,904	2,622	469,233	3,562	6,703	2,609	
Options Purchased	34,012	933	467	242	45,971	1,165	602	286	49,498	1,285	770	391	38,928	660	277	150	
Options Written	32,800	-	18	2	45,430	-	29	4	49,755	-	32	6	38,985	-	35	9	
Total	1,016,179	3,200	10,709	3,142	1,059,706	4,711	12,451	3,524	1,108,260	8,081	14,034	5,271	1,089,336	9,810	11,282	4,507	
Other Derivatives Contracts:																	
Equity	128,024	1,098	7,091	1,004	123,310	993	7,185	963	131,133	1,412	6,876	994	144,520	652	8,010	1,145	
Credit	34,151	270	458	116	33,696	199	415	119	33,604	377	657	215	31,187	124	251	66	
Other	65,204	868	3,629	592	89,962	2,137	4,229	622	131,953	2,511	4,538	719	116,730	1,205	4,428	519	
Total	227,379	2,236	11,178	1,712	246,968	3,329	11,829	1,704	296,690	4,300	12,071	1,928	292,437	1,981	12,689	1,730	
Credit Valuation Adjustment				5,330				5,743				7,488				5,558	
Total Derivatives after Netting and Collateral	5,623,892	12,984	30,472	12,858	6,159,020	16,838	34,079	14,022	6,382,101	20,112	35,951	18,777	6,129,691	17,460	30,850	14,217	

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

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

TOTAL MARKET RISK-WEIGHTED ASSETS



(in \$MM)	Q4 2020	Q3 2020	Q2 2020	Q1 2020	Q4 2019
All Bank VaR	1,966	3,517	4,216	1,665	1,595
All Bank stressed VaR ⁽¹⁾	1,486	1,406	1,683	5,728	5,378
Incremental risk charge	2,833	3,650	2,863	1,378	1,086
Comprehensive risk measure	-	-	-	-	-
Standardized approach	1,042	775	715	828	615
Market risk-weighted assets as at end of Quarter	7,327	9,348	9,477	9,599	8,674

(1) Commencing Q2 2020, amount includes the impact on market risk RWA from the decrease in the stressed VaR multiplier.

IMPAIRED LOANS BY REGION⁽¹⁾



(in \$MM)	Gross impaired loans	Allowance for credit losses	Net impaired loans	Net write-offs ⁽²⁾
Q4 2020				
Residential mortgages ⁽³⁾	1,490	392	1,098	(79)
Personal loans ⁽³⁾	1,032	820	212	(1,381)
Credit cards ⁽³⁾	-	-	-	(975)
Business and government ⁽⁴⁾	2,531	745	1,786	(506)
Total	5,053	1,957	3,096	(2,941)
By geography:				
Canada	1,127	487	640	(1,079)
United States	116	4	112	(4)
Mexico	570	222	348	(341)
Peru	824	498	326	(284)
Chile	775	233	542	(534)
Colombia	459	102	357	(335)
Other International	1,182	411	771	(364)
Total	5,053	1,957	3,096	(2,941)
Q4 2019				
Residential mortgages ⁽³⁾	1,830	325	1,505	(73)
Personal loans ⁽³⁾	1,094	591	503	(1,534)
Credit cards ⁽³⁾	-	-	-	(1,106)
Business and government ⁽⁴⁾	2,211	679	1,532	(229)
Total	5,135	1,595	3,540	(2,942)
By geography:				
Canada	1,133	375	758	(999)
United States	94	5	89	(10)
Mexico	485	178	307	(267)
Peru	642	332	310	(467)
Chile	844	180	664	(382)
Colombia	505	151	354	(397)
Other International	1,432	374	1,058	(420)
Total	5,135	1,595	3,540	(2,942)

(1) Amounts have been prepared in accordance with IFRS 9.

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

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

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

IMPAIRED LOANS BY INDUSTRY⁽¹⁾



(in \$MM)	Gross impaired loans	Allowance for credit losses	Net impaired loans	Net write-offs ⁽²⁾
Q4 2020				
Residential mortgages ⁽³⁾	1,490	392	1,098	(79)
Personal loans ⁽³⁾	1,032	820	212	(1,381)
Credit cards ⁽³⁾	-	-	-	(975)
Personal loans	2,522	1,212	1,310	(2,435)
Financial services				
Non-bank	44	9	35	(4)
Bank	2	2	-	-
Wholesale and retail	516	229	287	(115)
Real estate and construction	268	62	206	(62)
Energy	279	49	230	(62)
Transportation	183	53	130	(47)
Automotive	47	25	22	(11)
Agriculture	263	98	165	(14)
Hospitality and leisure	20	2	18	(1)
Mining	30	3	27	(2)
Metals	120	39	81	(12)
Utilities	110	4	106	(26)
Health care	68	22	46	(42)
Technology and media	34	10	24	(22)
Chemicals	6	2	4	(2)
Food and beverage	112	45	67	(33)
Forest products	28	11	17	(14)
Other	162	75	87	(36)
Sovereign	239	5	234	(1)
Business and government loans⁽⁴⁾	2,531	745	1,786	(506)
Total	5,053	1,957	3,096	(2,941)

IMPAIRED LOANS BY INDUSTRY⁽¹⁾



Q4 2019				
Residential mortgages ⁽³⁾	1,830	325	1,505	(73)
Personal loans ⁽³⁾	1,094	591	503	(1,534)
Credit cards ⁽³⁾	-	-	-	(1,106)
Personal loans	2,924	916	2,008	(2,713)
Financial services				
Non-bank	42	11	31	(1)
Bank	2	2	-	(6)
Wholesale and retail	370	182	188	(42)
Real estate and construction	344	84	260	(47)
Energy	155	13	142	(10)
Transportation	150	45	105	(17)
Automotive	49	25	24	(4)
Agriculture	250	69	181	(21)
Hospitality and leisure	2	1	1	-
Mining	39	7	32	-
Metals	56	28	28	(3)
Utilities	35	21	14	(13)
Health care	92	22	70	(13)
Technology and media	33	11	22	(7)
Chemicals	14	5	9	-
Food and beverage	154	63	91	(23)
Forest products	47	11	36	(1)
Other	137	75	62	(15)
Sovereign	240	4	236	(6)
Business and government loans⁽⁴⁾	2,211	679	1,532	(229)
Total	5,135	1,595	3,540	(2,942)

(1) Amounts have been prepared in accordance with IFRS 9.

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

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

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

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