

# Supplementary Regulatory Capital Disclosures

**Q3 2021**

For the period ended: July 31, 2021

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## Table of Contents

Section/Tab	Description	Frequency	Page #
Overview	Overview	Quarterly	3
Highlights	Regulatory Capital - Highlights	Quarterly	4
EAD_RWA	Exposure at Default and Risk-weighted Assets for Credit Risk Portfolios	Quarterly	5
<b>Pillar III report</b>			
KM2	Key metrics – TLAC requirements (at resolution group level)	Quarterly	6
Qualitative	Summary of Qualitative Requirements - Pillar III (Cross Referenced)	Annual	7-12
OV1	Overview of RWA	Quarterly	13-14
LI1	Differences between accounting and regulatory scopes of consolidation and mapping of financial statements	Quarterly	15-16
LI2	Main sources of differences between regulatory exposure amounts and carrying values in financial statements	Quarterly	17
CC1	Composition of regulatory capital	Quarterly	18-21
CC2	Reconciliation of regulatory capital to balance sheet	Quarterly	22-25
TLAC1	TLAC composition for G-SIBs (at resolution group level)	Quarterly	26
TLAC3	Resolution entity – creditor ranking at legal entity level	Quarterly	27-28
LR1	Summary comparison of accounting assets vs leverage ratio exposure measure	Quarterly	29
LR2	Leverage ratio common disclosure template	Quarterly	30
CR1	Credit quality of assets	Quarterly	31
CR2	Changes in stock of defaulted loans and debt securities	Quarterly	32
CR3	Credit risk mitigation techniques – overview	Quarterly	33
CR4	Standardized approach – credit risk exposures and credit risk mitigation (CRM) effects	Quarterly	34
CR5	Standardized approach – exposures by asset classes and risk weights	Quarterly	35
CR6 (Retail)	IRB – Retail credit risk exposures by portfolio and probability of default (PD) range	Quarterly	36-41
CR6 (Non-Retail)	IRB – Non-Retail credit risk exposures by portfolio and probability of default (PD) range	Quarterly	42-47
CR7	IRB – effect on RWA of credit derivatives used as CRM techniques	Quarterly	48
CR8	RWA flow statements of credit risk exposures under IRB	Quarterly	49
CR10	IRB (specialized lending and equities under the simple risk weight method)	Quarterly	50-51

## Table of Contents

Section/Tab	Description	Frequency	Page #
CCR1	Analysis of counterparty credit risk (CCR) exposure by approach	Quarterly	52
CCR2	Credit valuation adjustment (CVA) capital charge	Quarterly	53
CCR3	Standardized approach of CCR exposures by regulatory portfolio and risk weights	Quarterly	54
CCR4	IRB – CCR exposures by portfolio and PD scale	Quarterly	55-57
CCR5	Composition of collateral for CCR exposure	Quarterly	58
CCR6	Credit derivatives exposures	Quarterly	59
CCR7	RWA flow statements of CCR exposures under the Internal Model Method (IMM)	Quarterly	60
CCR8	Exposures to central counterparties	Quarterly	61
SEC1	Securitization exposures in the banking book	Quarterly	62-63
SEC2	Securitization exposures in the trading book	Quarterly	64-65
SEC3	Securitization exposures in the banking book and associated regulatory capital requirements – bank acting as originator or as sponsor	Quarterly	66-67
SEC4	Securitization exposures in the banking book and associated capital requirements – bank acting as investor	Quarterly	68-69
GSIB1	Disclosures of G-SIB Indicators (refer to Quarterly Report to Shareholders)	Annual	Q1/Q3
<b>Disclosures provided to address Enhanced Disclosure Task Force (EDTF) recommendations</b>			
Capital_Flow	Flow Statement for Regulatory Capital	Quarterly	70
RWA_Summary	Risk-weighted Assets and Capital Ratios	Quarterly	71
RWA_Flow	Movement of Risk-weighted Assets by Risk Type	Quarterly	72
RWA_by_Business	Risk-weighted Assets Arising from the Activities of the Bank's Businesses	Quarterly	73
Geography	Credit Risk Exposures by Geography	Quarterly	74
Maturity	AIRB Credit Risk Exposures by Maturity	Quarterly	75
AIRB_Losses	AIRB Credit Losses	Quarterly	76
BackTest	Estimated and Actual Loss Parameters - Non-Retail and Retail AIRB Portfolios	Quarterly	77
Derivatives	Derivatives - Counterparty Credit Risk	Quarterly	78
Mkt_Risk	Total Market Risk-weighted Assets	Quarterly	79
Glossary	Glossary	Quarterly	80

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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).

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 and the Q3 2021 Quarterly Report to Shareholders.

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>

# REGULATORY CAPITAL HIGHLIGHTS

Formerly Page 3 of Supplementary Regulatory Capital Disclosure



(in \$MM)	Q3 2021	Q2 2021	Q1 2021	Q4 2020	Q3 2020
<b>Common Equity Tier 1 capital</b>	<b>50,465</b>	49,697	49,542	49,165	48,689
<b>Tier 1 capital</b>	<b>56,630</b>	55,152	55,293	55,362	54,898
<b>Total capital</b>	<b>65,101</b>	63,686	63,724	64,512	64,174
<b>Risk-weighted Assets</b>					
Capital Risk-weighted Assets	<b>414,169</b>	404,727	406,780	417,138	430,542
<b>Capital Ratios (%)</b>					
Common Equity Tier 1 (as a percentage of risk-weighted assets)	<b>12.2</b>	12.3	12.2	11.8	11.3
Tier 1 (as a percentage of risk-weighted assets)	<b>13.7</b>	13.6	13.6	13.3	12.8
Total capital (as a percentage of risk-weighted assets)	<b>15.7</b>	15.7	15.7	15.5	14.9
<b>Leverage:</b>					
Leverage Exposures	<b>1,191,993</b>	1,180,223	1,179,755	1,170,290	1,193,840
Leverage Ratio (%)	<b>4.8</b>	4.7	4.7	4.7	4.6
<b>OSFI Pillar 1 Target (%)</b>					
Common Equity Tier 1 minimum ratio	<b>8.0</b>	8.0	8.0	8.0	8.0
Tier 1 capital minimum ratio	<b>9.5</b>	9.5	9.5	9.5	9.5
Total capital minimum ratio	<b>11.5</b>	11.5	11.5	11.5	11.5
Leverage minimum ratio	<b>3.0</b>	3.0	3.0	3.0	3.0
<b>Capital instruments subject to phase-out arrangements</b>					
Current cap on Additional Tier 1 (AT1) instruments subject to phase-out arrangements (%)	<b>10</b>	10	10	20	20
Amount excluded from AT1 due to cap (excess over cap after redemptions and maturities)	<b>97</b>	97	505	-	-
Current cap on Tier 2 (T2) instruments subject to phase-out arrangements (%)	<b>10</b>	10	10	20	20
Amount excluded from T2 due to cap (excess over cap after redemptions and maturities)	-	-	-	-	-

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

Formerly Page 11 of Supplementary Regulatory Capital Disclosure



(in \$MM)	Sub-type	Q3 2021								Q2 2021	
		AIRB		Standardized		Total		% AIRB		Total	
Exposure Type		EAD <sup>(1)</sup>	RWA <sup>(2)</sup>	EAD <sup>(1)</sup>	RWA <sup>(2)</sup>	EAD <sup>(1)</sup>	RWA <sup>(2)</sup>	EAD <sup>(1)</sup>	RWA <sup>(2)</sup>	EAD <sup>(1)</sup>	RWA <sup>(2)</sup>
Non-Retail											
Corporate	Drawn	168,550	80,055	52,500	48,959	221,050	129,014	76%	62%	216,560	128,552
	Undrawn	106,179	37,854	3,432	3,378	109,611	41,232	97%	92%	104,428	38,768
	Other <sup>(3)</sup>	60,970	12,468	2,486	2,481	63,456	14,949	96%	83%	70,557	16,316
	Total	335,699	130,377	58,418	54,818	394,117	185,195	85%	70%	391,545	183,636
Bank	Drawn	15,585	2,894	2,753	2,342	18,338	5,236	85%	55%	16,809	4,678
	Undrawn	4,626	1,000	6	6	4,632	1,006	100%	99%	7,935	1,138
	Other <sup>(3)</sup>	10,141	1,142	8	8	10,149	1,150	100%	99%	13,545	1,513
	Total	30,352	5,036	2,767	2,356	33,119	7,392	92%	68%	38,289	7,329
Sovereign	Drawn	130,589	4,156	9,142	775	139,731	4,931	93%	84%	120,363	5,264
	Undrawn	1,037	89	-	-	1,037	89	100%	100%	874	84
	Other <sup>(3)</sup>	981	47	-	-	981	47	100%	100%	1,550	38
	Total	132,607	4,292	9,142	775	141,749	5,067	94%	85%	122,787	5,386
Total Non-Retail	Drawn	314,724	87,105	64,395	52,076	379,119	139,181			353,732	138,494
	Undrawn	111,842	38,943	3,438	3,384	115,280	42,327			113,237	39,990
	Other <sup>(3)</sup>	72,092	13,657	2,494	2,489	74,586	16,146			85,652	17,867
	Total	498,658	139,705	70,327	57,949	568,985	197,651			552,621	196,351
Retail											
Residential Mortgages <sup>(1)</sup>	Drawn	253,853	17,471	53,215	21,070	307,068	38,541	83%	45%	293,328	36,366
	Undrawn	-	-	-	-	-	-	-	-	-	-
	Total	253,853	17,471	53,215	21,070	307,068	38,541	83%	45%	293,328	36,366
Secured Lines Of Credit	Drawn	20,133	2,883	-	-	20,133	2,883	100%	100%	20,131	2,792
	Undrawn	19,355	780	-	-	19,355	780	100%	100%	18,873	765
	Total	39,488	3,663	-	-	39,488	3,663	100%	100%	39,004	3,557
Qualifying Revolving Retail Exposures (QRRE)	Drawn	15,208	8,424	-	-	15,208	8,424	100%	100%	15,401	8,445
	Undrawn	26,760	3,000	-	-	26,760	3,000	100%	100%	26,343	2,996
	Total	41,968	11,424	-	-	41,968	11,424	100%	100%	41,744	11,441
Other Retail	Drawn	32,236	16,759	36,596	26,930	68,832	43,689	47%	38%	68,184	43,066
	Undrawn	3,459	1,458	-	-	3,459	1,458	100%	100%	3,247	1,093
	Total	35,695	18,217	36,596	26,930	72,291	45,147	49%	40%	71,431	44,159
Total Retail	Drawn	321,430	45,537	89,811	48,000	411,241	93,537			397,044	90,669
	Undrawn	49,574	5,238	-	-	49,574	5,238			48,463	4,854
	Total	371,004	50,775	89,811	48,000	460,815	98,775			445,507	95,523
Securitizations		17,178	2,910	4,454	1,418	21,632	4,328	79%	67%	22,914	4,593
Trading Derivatives		26,997	6,250	1,330	1,295	28,327	7,545	95%	83%	26,523	7,074
Derivatives - credit valuation adjustment (CVA)		-	4,835	-	-	-	4,835			-	4,124
Total Credit Risk (Excluding Equities & Other Assets)		913,837	204,475	165,922	108,662	1,079,759	313,137			1,047,565	307,665
Equities		3,838	3,748	-	-	3,838	3,748	100%	100%	3,332	3,222
Other Assets <sup>(4)</sup>		-	-	60,411	28,328	60,411	28,328			62,858	27,246
Total Credit Risk (Before Scaling Factor)		917,675	208,223	226,333	136,990	1,144,008	345,213			1,113,755	338,133
Add-on for 6% Scaling Factor <sup>(5)</sup>			12,029				12,029				11,897
Total Credit Risk		917,675	220,252	226,333	136,990	1,144,008	357,242			1,113,755	350,030

(1) AIRB Exposure at default is post credit risk mitigation. Standardized Exposure at default is after related IFRS 9 (ECL Stage 3) allowances net of for credit losses, and the collateral impact under comprehensive approach. Residential Mortgages include insured mortgages.

(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 Securitizations).

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



(in \$MM)		a	a <sub>2</sub>	a <sub>3</sub>	a <sub>4</sub>
		Q3 2021	Q2 2021	Q1 2021	Q4 2020
Resolution group					
1	Total loss absorbing capacity (TLAC) available	104,759	97,870	94,967	96,101
1a	Total loss-absorbing capacity (TLAC) available with transitional arrangements for ECL provisioning not applied	104,759	97,870	94,967	96,101
2	Total RWA at the level of the resolution group	414,169	404,727	406,780	417,138
3	TLAC as a percentage of RWA (row 1 / row 2) (%)	25.3%	24.2%	23.3%	23.0%
3a	TLAC ratio: TLAC as a percentage of RWA (row 1a / row 2) (%) available with transitional arrangements for ECL provisioning not applied	25.3%	24.2%	23.3%	23.0%
4	Leverage exposure measure at the level of the resolution group	1,191,993	1,180,223	1,179,755	1,170,290
5	TLAC as a percentage of leverage exposure measure (row 1 / row 4) (%)	8.8%	8.3%	8.0%	8.2%
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) (%)	8.8%	8.3%	8.0%	8.2%
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

# 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			
	<b>Part 2 - OVA – Bank risk management approach</b>	<b>Annual</b>				
	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	<a href="#">78-119</a>			
(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	<a href="#">78-84</a>			
(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	<a href="#">78-84</a>			
(d)	The scope and main features of risk measurement systems.	Annual	<a href="#">80-82, 85-86, 92-97, 102-104, 119</a>			
(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	<a href="#">78-82, 102</a>			
(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	<a href="#">81-82, 91, 102-104, 107</a>	<a href="#">240-241</a>		
(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	<a href="#">80-82, 85, 88-93, 102, 104, 107</a>	<a href="#">169, 188-193</a>		
	<b>Part 3 - LIA – Explanations of differences between accounting and regulatory exposures amounts</b>	<b>Annual</b>				
	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			<a href="#">LI1</a>	
(b)	Banks must explain the origins of differences between carrying values and amounts considered for regulatory purposes shown in LI2.	Annual			<a href="#">LI2</a>	
(c)	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				



# 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			
	• Valuation methodologies, including an explanation of how far mark-to-market and mark-to-model methodologies are used.	Annual	<a href="#">92, 121</a>	<a href="#">163-165, 177-182, 240-241</a>		
	• Description of the independent price verification process.	Annual	<a href="#">121-122</a>	<a href="#">177-179</a>		
	• Procedures for valuation adjustments or reserves (including a description of the process and the methodology for valuing trading positions by type of instrument).	Annual	<a href="#">121-122</a>	<a href="#">163</a>		
	<b>Part 4 - CRA – General qualitative information about credit risk</b>	<b>Annual</b>				
	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	<a href="#">78, 83-86</a>			
(b)	Criteria and approach used for defining credit risk management policy and for setting credit risk limits	Annual	<a href="#">81-84, 88, 99-100</a>			
(c)	Structure and organization of the credit risk management and control function	Annual	<a href="#">78-79, 93-95</a>			
(d)	Relationships between the credit risk management, risk control, compliance and internal audit functions	Annual	<a href="#">78-80</a>			
(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	<a href="#">78-82, 93-95</a>			
	<b>Part 4 - CRB – Additional disclosure related to the credit quality of assets</b>	<b>Annual</b>				
	Banks must provide the following disclosures:					
	<b>Qualitative disclosures</b>	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		<a href="#">163, 165-166</a>	<a href="#">Overview</a>	
(b)	The extent of past-due exposures (more than 90 days) that are not considered to be impaired and the reasons for this.	Annual		<a href="#">163, 165-166, 205</a>		
(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		<a href="#">163-164</a>	<a href="#">CR1</a>	
(d)	The bank's own definition of a restructured exposure. (i.e. modified loans not derecognized)	Annual		<a href="#">167</a>		
	<b>Quantitative disclosures</b>	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	<a href="#">130, 135</a>	<a href="#">198</a>		
	(ii) Industry	Annual	<a href="#">132</a>			
	(iii) Residual Maturity	Annual	<a href="#">113, 135</a>	<a href="#">199</a>		
(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			<a href="#">Q4, 2020 - Impaired by Region</a>	
	(ii) Industry	Annual			<a href="#">Q4, 2020 Impaired by Industry</a>	
(g)	Ageing analysis of accounting past-due exposures;	Annual		<a href="#">205</a>		
(h)	Breakdown of restructured exposures between impaired and not impaired	Annual		<a href="#">203</a>		
	<b>Part 4 - Table CRC: Qualitative disclosure requirements related to credit risk mitigation techniques</b>	<b>Annual</b>				
	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	<a href="#">93-94</a>	<a href="#">186-188, 193-194</a>		
(b)	Core features of policies and processes for collateral evaluation and management.	Annual	<a href="#">93-94</a>			
(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	<a href="#">85, 93-94, 97-98</a>	<a href="#">238-239</a>		
	<b>Part 4 - CRD: Qualitative disclosures on banks' use of external credit ratings under the standardized approach for credit risk</b>	<b>Annual</b>				
	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	<a href="#">69</a>	<a href="#">238</a>		
(b)	The asset classes for which each ECAI or ECA is used;	Annual	<a href="#">69</a>	<a href="#">235, 238</a>	<a href="#">EAD_RWA</a>	
(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	<a href="#">69</a>	<a href="#">238</a>		
(d)	The alignment of the alphanumeric 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	<a href="#">69</a>	<a href="#">238</a>		
	<b>Part 4 - CRE: Qualitative disclosures related to IRB models</b>	<b>Annual</b>				
	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	<a href="#">69-71, 92-84</a>			
(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	<a href="#">69, 71</a>			
(c)	Scope and main content of the reporting related to credit risk models.	Annual	<a href="#">69-71</a>	<a href="#">235, 238</a>	<a href="#">Overview</a>	
(d)	Scope of the supervisor's acceptance of approach.	Annual	<a href="#">69-71</a>			
(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			<a href="#">Overview EAD_RWA</a>	
(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	<a href="#">69-71</a>	<a href="#">235, 238</a>		
(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	<a href="#">69-71</a>	<a href="#">235, 238</a>		
	<b>Part 5 - CCRA: Qualitative disclosure related to counterparty credit risk</b>	<b>Annual</b>				
	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	<a href="#">79-80, 93-94</a>	<a href="#">186-188</a>		
(c)	Policies relating to guarantees and other risk mitigants and assessments concerning counterparty risk, including exposures towards CCPs;	Annual	<a href="#">81-82, 93-94</a>	<a href="#">186-188, 238-239</a>		
(d)	Policies with respect to wrong-way risk exposures;	Annual	<a href="#">94</a>	<a href="#">240</a>		
(e)	The impact in terms of the amount of collateral that the bank would be required to provide given a credit rating downgrade.	Annual	<a href="#">109</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			
	<b>Part 6 - SECA: Qualitative disclosure requirements related to securitization exposures</b>	<b>Annual</b>				
	<b>Qualitative disclosures</b>	<b>Annual</b>				
	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	<a href="#">72-74, 123</a>	<a href="#">206-208</a>		
	(b) The bank must provide a list of:	Annual				
	• 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	<a href="#">72-74</a>	<a href="#">206-208</a>		
	• 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	<a href="#">72-74</a>	<a href="#">206-208</a>		
	• 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	<a href="#">123</a>	<a href="#">206-208</a>		
	(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			<a href="#">Overview</a>	
	(e) If applicable, describe the process for implementing the Basel internal assessment approach (IAA). The description should include:	Annual			<a href="#">Overview</a>	
	• 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			<a href="#">Overview</a>	
	• control mechanisms for the internal assessment process including discussion of independence, accountability, and internal assessment process review; and	Annual			<a href="#">Overview</a>	
	• the exposure type to which the internal assessment process is applied; and stress factors used for determining credit enhancement levels, by exposure type.	Annual			<a href="#">Overview</a>	
	(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			
	<b>Part 7 - Market risk</b>					
	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. <b>As a result, the Bank's Market Risk disclosures continue to be based on Basel 2.5 disclosure requirements.</b> OSFI's requirements for Pillar 3 Requirements may be found in ( <a href="http://www.osfi-bsif.gc.ca/Eng/fi-if/rg-ro/gdn-ort/gld/Pages/plr3.aspx">http://www.osfi-bsif.gc.ca/Eng/fi-if/rg-ro/gdn-ort/gld/Pages/plr3.aspx</a> ).		n/a			
	<b>Part 8 - Operational risk</b>					
	(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	<a href="#">72, 115</a>			
	(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			
	<b>Part 9 - Interest rate risk in the banking book (IRRBB)</b>					
	(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	<a href="#">103-104</a>	<a href="#">188, 240</a>		

**OV1: Overview of RWA**


(in \$MM)		a	b	b <sub>2</sub>	b <sub>3</sub>	c
		RWA <sup>(1)</sup>				Minimum capital requirements <sup>(2)</sup>
		Q3 2021	Q2 2021	Q1 2021	Q4 2020	Q3 2021
1	Credit risk (excluding counterparty credit risk)	319,301	311,981	313,962	324,058	25,545
2	Of which: standardized approach (SA) <sup>(3)</sup>	123,407	118,856	121,863	121,974	9,873
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	195,894	193,125	192,099	202,084	15,672
6	Counterparty credit risk (CCR)	15,112	16,171	14,590	13,651	1,209
7	Of which: standardized approach for counterparty credit risk (SA-CCR)	1,446	1,637	1,289	1,054	116
8	Of which: Internal Model Method (IMM)	6,874	6,395	6,703	6,815	550
9	Of which: other CCR <sup>(4)</sup>	6,792	8,139	6,598	5,782	543
10	Credit valuation adjustment (CVA)	4,835	4,124	4,222	5,330	387
11	Equity positions under the simple risk weight approach	-	-	-	-	-
12	Equity investments in funds – look-through approach	807	646	574	545	65
13	Equity investments in funds – mandate-based approach	178	171	174	179	14
14	Equity investments in funds – fall-back approach	117	103	105	-	9
15	Settlement risk	-	-	-	-	-

## OV1: Overview of RWA



(in \$MM)		a	b	b <sub>2</sub>	b <sub>3</sub>	c
		RWA <sup>(1)</sup>				Minimum capital requirements <sup>(2)</sup>
		Q3 2021	Q2 2021	Q1 2021	Q4 2020	Q3 2021
16	Securitization exposures in banking book	4,328	4,593	5,069	5,555	347
17	Of which: securitization internal ratings-based approach (SEC-IRBA)	110	122	143	158	9
18	Of which: securitization external ratings-based approach (SEC-ERBA), including internal assessment approach (IAA)	3,915	4,134	4,572	5,047	313
19	Of which: securitization standardized approach (SEC-SA)	303	337	354	350	25
20	Market risk	7,968	6,180	7,206	7,327	637
21	Of which: standardized approach (SA)	689	707	796	1,041	55
22	Of which: internal model approaches (IMA)	7,279	5,473	6,410	6,286	582
23	Capital charge for switch between trading book and banking book	-	-	-	-	-
24	Operational risk	48,958	48,517	48,273	47,807	3,917
25	Amounts below the thresholds for deduction (subject to 250% risk weight)	12,565	12,241	12,605	12,686	1,005
26	Floor adjustment	-	-	-	-	-
27	<b>Total (1 + 6 + 10 + 11 + 12 + 13 + 14 + 15 + 16 + 20 + 23 + 24 + 25 + 26)</b>	<b>414,169</b>	<b>404,727</b>	<b>406,780</b>	<b>417,138</b>	<b>33,135</b>

(1) RWA: risk-weighted assets according to the Basel framework, including the 6% AIRB scalar 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.

**LI1: Differences between accounting and regulatory scopes of consolidation and mapping of financial statement categories with regulatory risk categories <sup>(1)</sup>**



Q3 2021 (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: <sup>(2)</sup>				
			Subject to credit risk framework	Subject to counterparty credit risk framework	Subject to the securitization framework	Subject to the market risk framework	Not subject to capital requirements or subject to deduction from capital <sup>(3)</sup>
<b>Assets</b>							
Cash and deposits with financial institutions	75,881	75,788	75,788	-	-	-	-
Precious metals	759	759	759	-	-	759	-
Trading assets							
Securities	133,575	133,567	2	-	-	133,565	-
Loans	6,793	6,793	418	-	-	6,793	-
Other	752	752	-	-	-	752	-
Financial instruments designated at fair value through profit or loss	-	-	-	-	-	-	-
Securities purchased under resale agreements and securities borrowed	129,013	129,013	-	129,013	-	-	-
Derivative financial instruments	41,904	41,904	-	41,904	-	35,202	-
Investment securities	81,734	80,907	80,907	-	-	-	-
Loans							
Residential mortgages <sup>(4)</sup>	310,370	310,296	310,296	-	-	-	-
Personal loans	91,544	91,537	89,636	-	1,901	-	-
Credit cards	12,194	12,194	11,353	-	181	-	660
Business and government	219,720	219,715	213,580	-	6,106	-	29
Allowance for credit loss	(6,079)	(6,078)	(6,016)	-	-	-	(62)
Customers' liability under acceptances, net of allowance	17,023	17,023	17,023	-	-	-	-
Property and equipment	5,538	5,537	5,537	-	-	-	-
Investments in associates	2,504	2,692	2,692	-	-	-	-
Goodwill and other intangible assets	16,703	17,029	1,765	-	-	-	15,264
Deferred tax assets	2,108	2,108	1,913	-	-	-	195
Other assets	21,393	19,069	12,524	6,361	-	-	184
<b>Total assets</b>	<b>1,163,429</b>	<b>1,160,605</b>	<b>818,177</b>	<b>177,278</b>	<b>8,188</b>	<b>177,071</b>	<b>16,270</b>



**LI1: Differences between accounting and regulatory scopes of consolidation and mapping of financial statement categories with regulatory risk categories <sup>(1)</sup>**



Q3 2021 (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: <sup>(2)</sup>				
			Subject to credit risk framework	Subject to counterparty credit risk framework	Subject to the securitization framework	Subject to the market risk framework	Not subject to capital requirements or subject to deduction from capital <sup>(3)</sup>
<b>Liabilities</b>							
<b>Deposits</b>							
Personal	247,462	247,462	-	-	-	-	247,462
Business and government	503,314	503,314	-	-	-	-	503,314
Financial institutions	43,610	43,610	-	-	-	-	43,610
Financial instruments designated at fair value through profit or loss	21,961	21,961	-	-	-	-	21,961
Acceptances	17,085	17,085	-	-	-	-	17,085
Obligations related to securities sold short	43,276	43,276	-	-	-	43,276	-
Derivative financial instruments	38,894	38,894	-	38,894	-	33,149	-
Obligations related to securities sold under repurchase agreements and securities lent	112,516	112,516	-	112,516	-	-	-
Subordinated debentures	6,418	6,418	-	-	-	-	6,418
Other liabilities	56,732	53,908	-	-	-	439	53,469
<b>Total liabilities</b>	<b>1,091,268</b>	<b>1,088,444</b>	<b>-</b>	<b>151,410</b>	<b>-</b>	<b>76,864</b>	<b>893,319</b>

(1) Based on the Consolidated Statement of Financial Position as reported in the Bank's Q3 2021 Quarterly 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 \$79.9 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



Q3 2021 (in \$MM)		a	b	c	d	e
		Total	Items subject to: <sup>(1)</sup>			
			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)	1,144,335	818,177	8,188	177,278	177,071
2	Liabilities carrying value amount under regulatory scope of consolidation (as per template LI1)	228,274	-	-	151,410	76,864
3	Total net amount under regulatory scope of consolidation	916,061	818,177	8,188	25,868	100,207
4	Off-balance sheet amounts <sup>(2)</sup>	207,445	191,907	13,444	2,094	-
5	Differences in valuations <sup>(3)</sup>	(557)	(557)	-	-	-
6	Differences due to different netting rules, other than those already included in row 2	120,385	734	-	119,651	-
7	Differences due to considerations of provisions <sup>(4)</sup>	4,704	4,909	-	(205)	-
8	Collateral offsetting <sup>(5)</sup>	(123,502)	(2,852)	-	(120,650)	-
9	Differences due to Potential Future Exposures and Collateral Haircut	67,668	-	-	67,668	-
10	Differences due to deconsolidated subsidiaries	-	-	-	-	-
11	Other differences not classified above	(5)	(5)	-	-	-
12	Exposure amounts considered for regulatory purposes <sup>(6)</sup>	1,192,199	1,012,313	21,632	94,426	100,207

(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) Includes adjustments for credit risk mitigation based on the application of the comprehensive approach for collateral under the credit risk framework.

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

**CC1: Composition of regulatory capital**


(in \$MM)		a	a <sub>2</sub>	a <sub>3</sub>	a <sub>4</sub>	b
		Q3 2021	Q2 2021	Q1 2021	Q4 2020	Source based on reference numbers/letters of the balance sheet under the regulatory scope of consolidation <sup>(1)</sup>
<b>Common Equity Tier 1 capital: instruments and reserves</b>						
1	Directly issued qualifying common share capital (and equivalent for non-joint stock companies) plus related stock surplus	18,518	18,407	18,335	18,282	u+y
2	Retained earnings	50,044	48,713	47,519	46,345	v
3	Accumulated other comprehensive income (and other reserves)	(3,986)	(3,979)	(2,785)	(2,125)	w
4	Directly issued capital subject to phase-out from CET1 (only applicable to non-joint stock companies)	-	-	-	-	
5	Common share capital issued by subsidiaries and held by third parties (amount allowed in group CET1)	1,330	1,635	1,709	1,769	bb
6	<b>Common Equity Tier 1 capital before regulatory adjustments</b>	<b>65,906</b>	<b>64,776</b>	<b>64,778</b>	<b>64,271</b>	
<b>Common Equity Tier 1 capital: regulatory adjustments</b>						
7	Prudential valuation adjustments	-	-	-	-	
8	Goodwill (net of related tax liability)	(9,321)	(9,438)	(9,581)	(9,605)	g
9	Other intangibles other than mortgage servicing rights (net of related tax liability)	(5,943)	(5,905)	(5,907)	(5,900)	h-q+i-r
10	Deferred tax assets excluding those arising from temporary differences (net of related tax liability)	(195)	(207)	(251)	(226)	k
11	Cash flow hedge reserve	(466)	(241)	(457)	(639)	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	358	413	322	159	p
15	Defined benefit pension fund net assets (net of related tax liability)	(184)	(212)	(200)	(172)	l-s
16	Investments in own shares (if not already netted off paid-in capital on reported balance sheet)	(70)	(50)	(44)	(23)	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	380	561	882	1,300	gg-o
27	Regulatory adjustments applied to Common Equity Tier 1 due to insufficient Additional Tier 1 and Tier 2 to cover deductions	-	-	-	-	
28	<b>Total regulatory adjustments to Common Equity Tier 1</b>	<b>(15,441)</b>	<b>(15,079)</b>	<b>(15,236)</b>	<b>(15,106)</b>	
29	<b>Common Equity Tier 1 capital (CET1)</b>	<b>50,465</b>	<b>49,697</b>	<b>49,542</b>	<b>49,165</b>	
29a	<b>Common Equity Tier 1 capital (CET1) with transitional arrangements for ECL provisioning not applied</b>	<b>50,083</b>	<b>49,135</b>	<b>48,657</b>	<b>47,861</b>	

**CC1: Composition of regulatory capital**


(in \$MM)		a	a <sub>2</sub>	a <sub>3</sub>	a <sub>4</sub>	b
		Q3 2021	Q2 2021	Q1 2021	Q4 2020	Source based on reference numbers/letters of the balance sheet under the regulatory scope of consolidation <sup>(1)</sup>
<b>Additional Tier 1 capital: instruments</b>						
30	Directly issued qualifying Additional Tier 1 instruments plus related stock surplus	5,299	4,549	4,899	4,899	z
31	of which: classified as equity under applicable accounting standards	5,299	4,549	4,899	4,899	
32	of which: classified as liabilities under applicable accounting standards	-	-	-	-	
33	Directly issued capital instruments subject to phase out from additional Tier 1	653	653	654	1,159	aa + (2)
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)	213	253	198	145	cc
35	of which: instruments issued by subsidiaries subject to phase out	-	-	-	-	
36	Additional Tier 1 capital before regulatory adjustments	6,165	5,455	5,751	6,203	
<b>Additional Tier 1 capital: regulatory adjustments</b>						
37	Investments in own Additional Tier 1 instruments	-	-	-	(6)	
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	-	-	-	-	b
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	<b>Total regulatory adjustments to Additional Tier 1 capital</b>	-	-	-	(6)	
44	<b>Additional Tier 1 capital (AT1)</b>	6,165	5,455	5,751	6,197	
45	<b>Tier 1 capital (T1 = CET1 + AT1)</b>	56,630	55,152	55,293	55,362	
45a	<b>Tier 1 capital (T1 = CET1 + AT1)</b> with transitional arrangements for ECL provisioning not applied	56,248	54,590	54,408	54,058	

**CC1: Composition of regulatory capital**


(in \$MM)		a	a <sub>2</sub>	a <sub>3</sub>	a <sub>4</sub>	b
		Q3 2021	Q2 2021	Q1 2021	Q4 2020	Source based on reference numbers/letters of the balance sheet under the regulatory scope of consolidation <sup>(1)</sup>
<b>Tier 2 capital: instruments and provisions</b>						
46	Directly issued qualifying Tier 2 instruments plus related stock surplus	5,756	5,782	5,927	7,053	<i>m</i>
47	<i>Directly issued capital instruments subject to phase out from Tier 2</i>	248	298	302	302	
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)	165	162	206	148	<i>dd</i>
49	<i>of which: instruments issued by subsidiaries subject to phase out</i>	-	-	-	-	
50	General allowances	2,302	2,292	1,996	1,647	<i>c+d</i>
51	<b>Tier 2 capital before regulatory adjustments</b>	8,471	8,534	8,431	9,150	
<b>Tier 2 capital: regulatory adjustments</b>						
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	<b>Total regulatory adjustments to Tier 2 capital</b>	-	-	-	-	
58	<b>Tier 2 capital (T2)</b>	8,471	8,534	8,431	9,150	
59	<b>Total capital (TC = T1 + T2)</b>	65,101	63,686	63,724	64,512	
59a	<b>Total Capital</b> with transitional arrangements for ECL provisioning not applied	65,101	63,686	63,724	64,512	
60	<b>Total risk-weighted assets</b>	414,169	404,727	406,780	417,138	
60a	<b>Common Equity Tier 1 (CET1) Capital RWA</b>	414,169	404,727	406,780	417,138	
60b	<b>Tier 1 Capital RWA</b>	414,169	404,727	406,780	417,138	
60c	<b>Total Capital RWA</b>	414,169	404,727	406,780	417,138	

**CC1: Composition of regulatory capital**


(in \$MM)		a	a <sub>2</sub>	a <sub>3</sub>	a <sub>4</sub>	b
		Q3 2021	Q2 2021	Q1 2021	Q4 2020	Source based on reference numbers/letters of the balance sheet under the regulatory scope of consolidation <sup>(1)</sup>
<b>Capital ratios</b>						
61	Common Equity Tier 1 (as a percentage of risk-weighted assets)	12.2%	12.3%	12.2%	11.8%	
61a	CET1 Ratio with transitional arrangements for ECL provisioning not applied	12.1%	12.1%	12.0%	11.5%	
62	Tier 1 (as a percentage of risk-weighted assets)	13.7%	13.6%	13.6%	13.3%	
62a	Tier 1 Capital Ratio with transitional arrangements for ECL provisioning not applied	13.6%	13.5%	13.4%	13.0%	
63	Total capital (as a percentage of risk-weighted assets)	15.7%	15.7%	15.7%	15.5%	
63a	Total Capital Ratio with transitional arrangements for ECL provisioning not applied	15.7%	15.7%	15.7%	15.5%	
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)	12.2%	12.3%	12.2%	11.8%	
<b>OSFI target (minimum + capital conservation buffer + D-SIB buffer (if applicable))<sup>(3)</sup></b>						
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%	
<b>Amounts below the thresholds for deduction (before risk weighting)</b>						
72	Non-significant investments in the capital and other TLAC-eligible instruments of other financial entities	3,296	4,289	2,514	2,040	
73	Significant investments in the common stock of financial entities	2,534	2,508	2,653	2,524	
74	Mortgage servicing rights (net of related tax liability)	-	-	-	-	
75	Deferred tax assets arising from temporary differences (net of related tax liability)	2,492	2,389	2,389	2,550	
<b>Applicable caps on the inclusion of allowances in Tier 2</b>						
76	Allowances eligible for inclusion in Tier 2 in respect of exposures subject to standardized approach (prior to application of cap)	1,480	1,450	1,485	1,498	
77	Cap on inclusion of allowances in Tier 2 under standardized approach	1,497	1,450	1,485	1,498	
78	Allowances eligible for inclusion in Tier 2 in respect of exposures subject to internal ratings-based approach (prior to application of cap)	1,204	1,404	1,395	1,453	
79	Cap on inclusion of allowances in Tier 2 under internal ratings-based approach	1,425	1,404	1,395	1,453	
<b>Capital instruments subject to phase-out arrangements (only applicable between 1 Jan 2013 and 1 Jan 2022)</b>						
80	Current cap on CET1 instruments subject to phase out arrangements	10%	10%	10%	20%	
81	Amounts excluded from CET1 due to cap (excess over cap after redemptions and maturities)	-	-	-	-	
82	Current cap on AT1 instruments subject to phase out arrangements	10%	10%	10%	20%	
83	Amounts excluded from AT1 due to cap (excess over cap after redemptions and maturities)	97	97	505	-	
84	Current cap on T2 instruments subject to phase out arrangements	10%	10%	10%	20%	
85	Amounts excluded from T2 due to cap (excess over cap after redemptions and maturities)	-	-	-	-	

(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 July 31, 2021 which is subject to the phase out requirements of capital instruments issued by trusts not consolidated under accounting standard IFRS 10, effective Q1 2014. This amount was fully included in Tier 1 capital in prior years.

(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 <sup>(1)</sup>	Under regulatory scope of consolidation <sup>(2)</sup>	Cross-reference to Definition of Capital Components
	Q3 2021	Q3 2021	
<b>Assets</b>			
Cash and deposits with financial institutions	75,881	75,788	
Precious metals	759	759	
<b>Trading assets</b>			
Securities	133,575	133,567	
- Investment in own shares		70	a
- Other trading securities		133,497	
Loans	6,793	6,793	
Other	752	752	
	141,120	141,112	
Financial instruments designated at fair value through profit and loss	-	-	
Securities purchased under resale agreements and securities borrowed	129,013	129,013	
Derivative financial instruments	41,904	41,904	
Investment securities	81,734	80,907	
- Significant investments in Additional Tier 1 capital and other financial institutions reflected in regulatory capital		-	b
- Other securities		80,907	
<b>Loans</b>			
Residential mortgages	310,370	310,296	
Personal loans	91,544	91,537	
Credit cards	12,194	12,194	
Business and government	219,720	219,715	
	633,828	633,742	
Allowance for credit losses	6,079	6,078	
- General Allowance reflected in Tier 2 capital		1,356	c
- Shortfall of allowances to expected loss		-	ee
- Excess of allowances to expected loss		946	d
- ECL transitional adjustment		382	gg
- Allowances not reflected in regulatory capital		3,394	

**CC2: Reconciliation of regulatory capital to balance sheet**


Condensed balance sheet (in \$MM)	a	b	c
	Balance sheet as in published financial statements <sup>(1)</sup>	Under regulatory scope of consolidation <sup>(2)</sup>	Cross-reference to Definition of Capital Components
	Q3 2021	Q3 2021	
<b>Other</b>			
Customers' liability under acceptances, net of allowance	17,023	17,023	
Property and equipment	5,538	5,537	
Investments in associates	2,504	2,692	
- 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		2,692	
Goodwill and other intangible assets	16,703	17,029	
- Goodwill		8,995	g
- Imputed goodwill for Significant Investments		326	g
- Intangibles (excl computer software)		5,214	h
- Computer software intangibles		2,494	i
Deferred tax assets	2,108	2,108	
- Deferred tax assets arising from temporary differences exceeding the regulatory threshold		-	j
- Deferred tax assets that rely on future profitability		195	k
- Deferred tax assets not deducted from regulatory capital		1,913	
Other Assets	21,393	19,069	
- Defined pension fund assets		280	l
- Other assets		18,789	
Total other	65,269	63,458	
<b>Total assets</b>	<b>1,163,429</b>	<b>1,160,605</b>	



**CC2: Reconciliation of regulatory capital to balance sheet**


Condensed balance sheet (in \$MM)	a	b	c
	Balance sheet as in published financial statements <sup>(1)</sup>	Under regulatory scope of consolidation <sup>(2)</sup>	Cross-reference to Definition of Capital Components
	Q3 2021	Q3 2021	
<b>Liabilities</b>			
<b>Deposits</b>			
Personal	247,462	247,462	
Business and government	503,314	503,314	
- Investment in own Tier 2 instruments		-	ff
- Other deposits from Business and government		503,314	
Financial institutions	43,610	43,610	
	794,386	794,386	
Financial instruments designated at fair value through profit and loss	21,961	21,961	
<b>Other</b>			
Acceptances	17,085	17,085	
Obligations related to securities sold short	43,276	43,276	
Derivative financial instruments	38,894	38,894	
Obligations related to securities sold under repurchase agreements and securities lent	112,516	112,516	
Subordinated debentures	6,418	6,418	
- Regulatory capital amortization of maturing debentures		414	
- Subordinated debentures used for regulatory capital		6,004	
- of which: are included in Tier 2 capital		5,756	m
- of which: are subject to phase out included in Tier 1 capital (10%)		248	
- of which: are subject to phase out not included in Tier 1 capital		-	
Other liabilities	56,732	53,908	
- Liquidity reserves		2	o
- Gains/losses due to changes in own credit risk including DVA on derivatives		(358)	p
- Deferred tax liabilities		1,184	
- Intangible assets (excl. computer software and mortgage servicing rights)		1,437	q
- Intangible assets - computer software		328	r
- Defined benefit pension fund assets		96	s
- Other deferred tax liabilities		(677)	
- Other liabilities		53,080	
Total other	274,921	272,097	
<b>Total liabilities</b>	<b>1,091,268</b>	<b>1,088,444</b>	

## CC2: Reconciliation of regulatory capital to balance sheet



Condensed balance sheet (in \$MM)	a	b	c
	Balance sheet as in published financial statements <sup>(1)</sup>	Under regulatory scope of consolidation <sup>(2)</sup>	Cross-reference to Definition of Capital Components
	Q3 2021	Q3 2021	
<b>Equity</b>			
Common equity			
Common shares	18,493	18,493	u
- of which: amount eligible for CET1		18,493	
- of which: amount eligible for AT1		-	
Retained earnings	50,044	50,044	v
Accumulated other comprehensive income	(3,986)	(3,986)	w
- Cash flow hedging reserve		466	x
- Other		(4,452)	
Other reserves	169	169	
- portion allowed for inclusion into CET1		25	y
- portion not allowed for regulatory capital		144	
Total common equity	64,720	64,720	
Preferred shares and other equity instruments	5,299	5,299	
- of which: are qualifying Tier 1 capital		5,299	z
- of which: are subject to phase out and included in Tier 1 capital (10%) <sup>(3)</sup>		(97)	aa
- of which: are subject to phase out and not included into Tier 1 capital		97	
Total equity attributable to equity holders of the Bank	70,019	70,019	
Non-controlling interests in subsidiaries	2,142	2,142	
- portion allowed for inclusion into CET1		1,330	bb
- portion allowed for inclusion into Tier 1 capital		213	cc
- portion allowed for inclusion into Tier 2 capital		165	dd
- portion not allowed for regulatory capital		434	
Total equity	72,161	72,161	
<b>Total liabilities and equity</b>	<b>1,163,429</b>	<b>1,160,605</b>	

(1) Consolidated Statement of Financial Position as reported in the Third Quarter 2021 Quarterly 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: \$249MM, equity: \$224MM), Scotia Life Insurance Company (assets: \$4MM, equity: \$20MM), Scotia Reinsurance Limited (assets: \$8MM, equity: \$56MM), Scotia Jamaica Life Insurance Co. Ltd (assets: \$434MM, equity: \$80MM), Scotia Life Trinidad and Tobago Ltd (assets: \$375MM, equity: \$79MM), Scotia Insurance Caribbean Ltd. (assets: \$2MM, equity: \$22MM), and MD Life Insurance Company (assets: \$2,233MM, equity: \$16MM).

(3) Capital Trust Securities are not reported in the preferred shares and other equity instruments balance, but are included as additional Tier 1 regulatory capital and are subject to the phase out requirements.

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


(in \$MM)		a	a <sub>2</sub>	a <sub>3</sub>	a <sub>4</sub>
		Q3 2021 Amounts	Q2 2021 Amounts	Q1 2021 Amounts	Q4 2020 Amounts
<b>Regulatory capital elements of TLAC and adjustments</b>					
1	Common Equity Tier 1 capital (CET1)	50,465	49,697	49,542	49,165
2	Additional Tier 1 capital (AT1) before TLAC adjustments	6,165	5,455	5,751	6,197
3	AT1 ineligible as TLAC as issued out of subsidiaries to third parties	-	-	-	-
4	Other adjustments	-	-	-	-
5	AT1 instruments eligible under the TLAC framework	6,165	5,455	5,751	6,197
6	Tier 2 capital (T2) before TLAC adjustments	8,471	8,534	8,431	9,150
7	Amortized portion of T2 instruments where remaining maturity > 1 year	414	358	371	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	8,885	8,892	8,802	9,200
11	TLAC arising from regulatory capital	65,515	64,044	64,095	64,562
<b>Non-regulatory capital elements of TLAC</b>					
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.	39,451	34,101	31,127	31,743
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	39,451	34,101	31,127	31,743
<b>Non-regulatory capital elements of TLAC: adjustments</b>					
18	TLAC before deductions	104,966	98,145	95,222	96,305
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	(207)	(275)	(255)	(204)
21	Other adjustments to TLAC	-	-	-	-
22	TLAC after deductions	104,759	97,870	94,967	96,101
<b>Risk-weighted assets and leverage exposure measure for TLAC purposes</b>					
23	Total risk-weighted assets adjusted as permitted under the TLAC regime	414,169	404,727	406,780	417,138
24	Leverage exposure measure	1,191,993	1,180,223	1,179,755	1,170,290
<b>TLAC ratios and buffers</b>					
25	TLAC (as a percentage of risk-weighted assets adjusted as permitted under the TLAC regime)	25.3%	24.2%	23.3%	23.0%
26	TLAC (as a percentage of leverage exposure)	8.8%	8.3%	8.0%	8.2%
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.

**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)	
<b>Q3 2021</b>								
1	Description of creditor ranking	Common shares Book value	Preferred shares Stated value	Additional Tier 1 and Limited Recourse Capital Notes Stated value	Subordinated Debt Par value	Bail-in Debt <sup>(1)</sup> Par value	Other Liabilities <sup>(2)</sup>	Total
2	Total capital and liabilities net of credit risk mitigation	18,493	800	4,499	6,315	40,007	-	70,114
3	Subset of row 2 that are excluded liabilities	70	-	-	-	207	-	277
4	Total capital and liabilities less excluded liabilities (row 2 minus row 3)	18,423	800	4,499	6,315	39,800	-	69,837
5	Subset of row 4 that are <i>potentially</i> eligible as TLAC	18,423	800	4,499	6,315	39,584	-	69,621
6	Subset of row 5 with 1 year ≤ residual maturity < 2 years	-	-	-	-	9,557	-	9,557
7	Subset of row 5 with 2 years ≤ residual maturity < 5 years	-	-	-	1,810	17,460	-	19,270
8	Subset of row 5 with 5 years ≤ residual maturity < 10 years	-	-	-	4,410	5,765	-	10,175
9	Subset of row 5 with residual maturity ≥ 10 years, but excluding perpetual securities	-	-	-	95	6,802	-	6,897
10	Subset of row 5 that is perpetual securities	18,423	800	4,499	-	-	-	23,722
<b>Q2 2021</b>								
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 <sup>(1)</sup> Par value	Other Liabilities <sup>(2)</sup>	Total
2	Total capital and liabilities net of credit risk mitigation	18,377	1,300	3,249	6,323	35,050	-	64,299
3	Subset of row 2 that are excluded liabilities	50	-	-	-	275	-	325
4	Total capital and liabilities less excluded liabilities (row 2 minus row 3)	18,327	1,300	3,249	6,323	34,775	-	63,974
5	Subset of row 4 that are potentially eligible as TLAC	18,327	1,300	3,249	6,323	34,564	-	63,763
6	Subset of row 5 with 1 year ≤ residual maturity < 2 years	-	-	-	-	3,120	-	3,120
7	Subset of row 5 with 2 years ≤ residual maturity < 5 years	-	-	-	1,787	21,673	-	23,460
8	Subset of row 5 with 5 years ≤ residual maturity < 10 years	-	-	-	4,442	4,072	-	8,514
9	Subset of row 5 with residual maturity ≥ 10 years, but excluding perpetual securities	-	-	-	94	5,699	-	5,793
10	Subset of row 5 that is perpetual securities	18,327	1,300	3,249	-	-	-	22,876

**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)	
<b>Q1 2021</b>								
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 <sup>(1)</sup> Par value	Other Liabilities <sup>(2)</sup>	Total
2	Total capital and liabilities net of credit risk mitigation	18,297	2,059	3,249	6,445	31,622	-	61,672
3	Subset of row 2 that are excluded liabilities	44	409	-	-	255	-	708
4	Total capital and liabilities less excluded liabilities (row 2 minus row 3)	18,253	1,650	3,249	6,445	31,367	-	60,964
5	Subset of row 4 that are potentially eligible as TLAC	18,253	1,650	3,249	6,445	31,283	-	60,880
6	Subset of row 5 with 1 year ≤ residual maturity < 2 years	-	-	-	-	2,036	-	2,036
7	Subset of row 5 with 2 years ≤ residual maturity < 5 years	-	-	-	1,848	19,582	-	21,430
8	Subset of row 5 with 5 years ≤ residual maturity < 10 years	-	-	-	4,499	4,180	-	8,679
9	Subset of row 5 with residual maturity ≥ 10 years, but excluding perpetual securities	-	-	-	98	5,485	-	5,583
10	Subset of row 5 that is perpetual securities	18,253	1,650	3,249	-	-	-	23,152
<b>Q4 2020</b>								
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 <sup>(1)</sup> Par value	Other Liabilities <sup>(2)</sup>	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 potentially 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

(1) Under the Bank Recapitalization (Bail-In) Regime. Please refer to the Page 62 of the 2020 Annual Report, 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 <sub>2</sub>	a <sub>3</sub>	a <sub>4</sub>
		Q3 2021	Q2 2021	Q1 2021	Q4 2020
1	Total consolidated assets as per published financial statements	1,163,429	1,125,248	1,164,050	1,136,466
2	Adjustment for investments in banking, financial, insurance or commercial entities that are consolidated for accounting purposes but outside the scope of regulatory consolidation	(2,824)	(2,823)	(2,804)	(2,912)
3	Adjustment for securitized exposures that meet the operational requirements for the recognition of risk transference	(689)	(701)	(662)	(2,463)
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	(4,011)	3,338	5,667	7,569
6	Adjustment for securities financing transactions (i.e. repos and similar secured lending)	17,969	13,674	16,239	13,050
7	Adjustment for off-balance sheet items (i.e. conversion to credit equivalent amounts of off-balance sheet exposures)	148,511	147,138	148,638	152,117
8	Other adjustments <sup>(1)</sup>	(130,392)	(105,651)	(151,373)	(133,537)
9	<b>Leverage ratio exposure measure</b>	<b>1,191,993</b>	<b>1,180,223</b>	<b>1,179,755</b>	<b>1,170,290</b>

(1) Commencing Q2 2020, amount includes temporary leverage ratio exposure exemptions (Q3 2021: sovereign-issued securities: \$50.1 billion and central bank reserves: \$64.1 billion; Q2 2021: sovereign-issued securities: \$54.1 billion and central bank reserves: \$35.5 billion) in accordance with OSFI's COVID-19 capital relief measures and asset amounts deducted in determining Basel III Tier 1 capital.

**LR2: Leverage ratio common disclosure**


(in \$MM)		a	a <sub>2</sub>	a <sub>3</sub>	a <sub>4</sub>
		Q3 2021	Q2 2021	Q1 2021	Q4 2020
<b>On-balance sheet exposures<sup>(1)</sup></b>					
1	On-balance sheet exposures (excluding derivatives and securities financing transactions (SFTs), but including collateral)	874,788	860,475	860,556	849,316
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)	(6,523)	(6,442)	(5,442)	(6,065)
4	(Asset amounts deducted in determining Basel III Tier 1 capital)	(16,182)	(16,056)	(16,445)	(16,573)
5	<b>Total on-balance sheet exposures (excluding derivatives and SFTs) (sum of rows 1 to 4)</b>	<b>852,083</b>	<b>837,977</b>	<b>838,669</b>	<b>826,678</b>
<b>Derivative exposures</b>					
6	Replacement cost associated with <i>all</i> derivatives transactions (where applicable net of eligible cash variation margin and/or with bilateral netting)	23,800	24,697	28,250	29,362
7	Add-on amounts for PFE associated with <i>all</i> derivatives transactions	20,617	23,556	25,838	25,930
8	(Exempted CCP leg of client-cleared trade exposures)	-	-	-	-
9	Adjusted effective notional amount of written credit derivatives	-	2,853	4,159	4,487
10	(Adjusted effective notional offsets and add-on deductions for written credit derivatives)	-	(753)	(869)	(1,081)
11	<b>Total derivative exposures (sum of rows 6 to 10)</b>	<b>44,417</b>	<b>50,353</b>	<b>57,378</b>	<b>58,698</b>
<b>Securities financing transaction exposures</b>					
12	Gross SFT assets (with no recognition of netting), after adjusting for sale accounting transactions	159,790	163,608	146,339	141,861
13	(Netted amounts of cash payables and cash receivables of gross SFT assets)	(30,777)	(32,527)	(27,508)	(22,114)
14	CCR exposure for SFT assets	17,969	13,674	16,239	13,050
15	Agent transaction exposures	-	-	-	-
16	<b>Total securities financing transaction exposures (sum of rows 12 to 15)</b>	<b>146,982</b>	<b>144,755</b>	<b>135,070</b>	<b>132,797</b>
<b>Other off-balance sheet exposures</b>					
17	Off-balance sheet exposure at gross notional amount	478,144	469,743	477,434	488,310
18	(Adjustments for conversion to credit equivalent amounts)	(329,633)	(322,605)	(328,796)	(336,193)
19	<b>Off-balance sheet items (sum of rows 17 and 18)</b>	<b>148,511</b>	<b>147,138</b>	<b>148,638</b>	<b>152,117</b>
<b>Capital and total exposures</b>					
20	<b>Tier 1 capital</b>	<b>56,630</b>	<b>55,152</b>	<b>55,293</b>	<b>55,362</b>
20a	<b>Tier 1 capital with transitional arrangements for ECL provisioning not applied</b>	<b>56,248</b>	<b>54,590</b>	<b>54,408</b>	<b>54,057</b>
21	<b>Total exposures (sum of rows 5, 11, 16 and 19)</b>	<b>1,191,993</b>	<b>1,180,223</b>	<b>1,179,755</b>	<b>1,170,290</b>
<b>Leverage ratio</b>					
22	<b>Basel III leverage ratio</b>	<b>4.8%</b>	<b>4.7%</b>	<b>4.7%</b>	<b>4.7%</b>
22a	<b>Leverage Ratio with transitional arrangements for ECL provisioning not applied</b>	<b>4.7%</b>	<b>4.6%</b>	<b>4.6%</b>	<b>4.6%</b>

(1) On-balance sheet items exclude securities purchased under resale agreements and securities borrowed (\$129,013MM), derivative financial instruments (\$41,904MM), assets outside the regulatory scope of consolidation (\$2,824MM).

**CR1: Credit quality of assets <sup>(1)</sup>**


(in \$MM)		a	b	c	d	e	f	g
		Gross carrying values of <sup>(2)</sup>		Allowances/ impairments <sup>(4)</sup>	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 <sup>(3)</sup>	Non-defaulted exposures		Allocated in regulatory category of Specific	Allocated in regulatory category of General		
<b>Q3 2021</b>								
1	Loans <sup>(5)</sup>	4,968	712,164	6,034	1,417	2,604	2,013	711,098
2	Debt Securities	207	76,572	-	-	-	-	76,779
3	Off-balance sheet exposures <sup>(6)</sup>	228	254,088	87	-	8	79	254,229
4	<b>Total</b>	<b>5,403</b>	<b>1,042,824</b>	<b>6,121</b>	<b>1,417</b>	<b>2,612</b>	<b>2,092</b>	<b>1,042,106</b>
<b>Q2 2021</b>								
1	Loans <sup>(5)</sup>	5,192	668,043	6,663	1,537	3,006	2,120	666,572
2	Debt Securities	204	80,320	-	-	-	-	80,524
3	Off-balance sheet exposures <sup>(6)</sup>	450	249,443	101	-	11	90	249,792
4	<b>Total</b>	<b>5,846</b>	<b>997,806</b>	<b>6,764</b>	<b>1,537</b>	<b>3,017</b>	<b>2,210</b>	<b>996,888</b>
<b>Q1 2021</b>								
1	Loans <sup>(5)</sup>	5,272	701,079	7,486	1,593	3,761	2,132	698,865
2	Debt Securities	212	93,696	-	-	-	-	93,908
3	Off-balance sheet exposures <sup>(6)</sup>	651	246,826	136	-	15	121	247,341
4	<b>Total</b>	<b>6,135</b>	<b>1,041,601</b>	<b>7,622</b>	<b>1,593</b>	<b>3,776</b>	<b>2,253</b>	<b>1,040,114</b>
<b>Q4 2020</b>								
1	Loans <sup>(5)</sup>	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 <sup>(6)</sup>	395	253,626	101	-	14	87	253,920
4	<b>Total</b>	<b>5,699</b>	<b>1,044,657</b>	<b>7,654</b>	<b>1,514</b>	<b>3,825</b>	<b>2,315</b>	<b>1,042,702</b>

(1) 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<sup>(1)</sup>



(in \$MM)		a	a <sub>2</sub>	a <sub>3</sub>	a <sub>4</sub>
		Q3 2021	Q2 2021	Q1 2021	Q4 2020
1	Defaulted loans and debt securities - Beginning of Quarter <sup>(2)</sup>	5,846	6,135	5,699	5,711
2	Loans and debt securities that have defaulted since the last reporting period	910	1,376	1,231	867
3	Returned to non-defaulted status <sup>(3)</sup>	(123)	(66)	(145)	(154)
4	Amounts written off	(1,144)	(1,261)	(790)	(759)
5	Other changes <sup>(4)</sup>	(86)	(338)	140	34
6	Defaulted loans and debt securities - End of Quarter <sup>(2)</sup>	5,403	5,846	6,135	5,699

(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 <sup>(1)</sup>	Exposures to be secured <sup>(1)</sup>	Exposures secured by collateral <sup>(2) (3)</sup>	Exposures secured by financial guarantees <sup>(4)</sup>	Exposures secured by credit derivatives
<b>Q3 2021</b>						
1	Loans <sup>(5)</sup>	254,426	456,672	363,128	93,544	-
2	Debt Securities	50,313	26,466	-	26,466	-
3	<b>Total</b>	<b>304,739</b>	<b>483,138</b>	<b>363,128</b>	<b>120,010</b>	-
4	Of which defaulted	1,831	1,574	1,265	309	-

<b>Q2 2021</b>						
1	Loans <sup>(5)</sup>	227,399	439,173	345,796	93,377	-
2	Debt Securities	50,358	30,166	-	30,166	-
3	<b>Total</b>	<b>277,757</b>	<b>469,339</b>	<b>345,796</b>	<b>123,543</b>	-
4	Of which defaulted	1,789	1,659	1,337	322	-

<b>Q1 2021</b>						
1	Loans <sup>(5)</sup>	268,323	430,542	335,675	94,867	-
2	Debt Securities	60,892	33,016	-	33,016	-
3	<b>Total</b>	<b>329,215</b>	<b>463,558</b>	<b>335,675</b>	<b>127,883</b>	-
4	Of which defaulted	1,880	1,579	1,276	303	-

<b>Q4 2020</b>						
1	Loans <sup>(5)</sup>	257,038	425,927	327,650	98,277	-
2	Debt Securities	69,977	35,840	-	35,840	-
3	<b>Total</b>	<b>327,015</b>	<b>461,767</b>	<b>327,650</b>	<b>134,117</b>	-
4	Of which defaulted	1,857	1,494	1,227	267	-

(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
Asset classes		Exposures before CCF and CRM	Exposures post-CCF and CRM <sup>(1)</sup>	RWA and RWA density			
		On-balance sheet amount	Off-balance sheet amount	On-balance sheet amount	Off-balance sheet amount	RWA	RWA density
Q3 2021							
1	Bank	2,753	665	2,753	6	2,348	85%
2	Corporate	54,713	23,908	52,500	5,364	54,264	94%
3	Sovereign	9,142	70	9,142	-	775	8%
4	Real Estate Secured	53,215	733	53,215	-	21,070	40%
5	Other Retail	36,776	29,365	36,596	-	26,930	74%
6	Equity <sup>(2)</sup>	2,708	-	2,708	-	2,871	106%
7	Other Assets <sup>(3)</sup>	48,049	-	48,049	-	15,149	32%
8	<b>Total</b>	<b>207,356</b>	<b>54,741</b>	<b>204,963</b>	<b>5,370</b>	<b>123,407</b>	<b>59%</b>

Q2 2021							
1	Bank	2,206	606	2,206	49	1,809	80%
2	Corporate	53,086	22,415	51,515	5,293	52,881	93%
3	Sovereign	9,321	81	9,321	1	789	8%
4	Real Estate Secured	50,394	657	50,394	-	19,661	39%
5	Other Retail	36,731	29,462	36,572	-	26,909	74%
6	Equity <sup>(2)</sup>	2,355	-	2,355	-	2,496	106%
7	Other Assets <sup>(3)</sup>	62,910	-	62,910	-	14,311	23%
8	<b>Total</b>	<b>217,003</b>	<b>53,221</b>	<b>215,273</b>	<b>5,343</b>	<b>118,856</b>	<b>54%</b>

Q1 2021							
1	Bank	2,415	828	2,415	120	1,733	68%
2	Corporate	53,030	22,319	53,030	5,773	54,355	92%
3	Sovereign	9,834	76	9,834	4	909	9%
4	Real Estate Secured	48,699	584	48,699	-	19,017	39%
5	Other Retail	38,355	29,891	38,355	-	28,090	73%
6	Equity <sup>(2)</sup>	2,366	-	2,366	-	2,508	106%
7	Other Assets <sup>(3)</sup>	61,659	-	61,659	-	15,251	25%
8	<b>Total</b>	<b>216,358</b>	<b>53,698</b>	<b>216,358</b>	<b>5,897</b>	<b>121,863</b>	<b>55%</b>

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 <sup>(2)</sup>	2,248	-	2,248	-	2,382	106%
7	Other Assets <sup>(3)</sup>	54,616	-	54,616	-	14,948	27%
8	<b>Total</b>	<b>208,095</b>	<b>53,543</b>	<b>208,095</b>	<b>5,706</b>	<b>121,974</b>	<b>57%</b>

(1) Commencing Q2, 2021, includes adjustments for credit risk mitigation based on the application of the comprehensive approach for collateral.

(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.

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


(in \$MM)	Risk weight	a	b	c	d	e	f	g	h	i	j
		0%	10%	20%	35%	50%	75%	100%	150%	Others	Total credit exposures amount (post-CCF and post-CRM) <sup>(1)</sup>
	Asset classes										
Q3 2021											
1	Bank	-	-	510	-	6	-	2,243	-	-	2,759
2	Corporate	3,662	-	110	-	60	-	53,673	359	-	57,864
3	Sovereign	7,884	-	2	-	962	-	294	-	-	9,142
4	Real Estate Secured	5,361	-	-	37,586	-	9,423	842	3	-	53,215
5	Other Retail	419	-	587	-	-	35,203	340	47	-	36,596
6	Equity <sup>(2)</sup>	-	-	-	-	-	-	2,708	-	-	2,708
7	Other Assets <sup>(3)</sup>	34,409	-	-	-	-	-	13,509	-	131	48,049
8	Total	51,735	-	1,209	37,586	1,028	44,626	73,609	409	131	210,333
Q2 2021											
1	Bank	-	-	588	-	12	-	1,596	59	-	2,255
2	Corporate	3,895	-	110	-	24	-	52,641	138	-	56,808
3	Sovereign	8,020	-	2	-	1,024	-	276	-	-	9,322
4	Real Estate Secured	5,891	-	-	34,825	-	8,829	846	3	-	50,394
5	Other Retail	462	-	583	-	-	35,107	336	84	-	36,572
6	Equity <sup>(2)</sup>	-	-	-	-	-	-	2,355	-	-	2,355
7	Other Assets <sup>(3)</sup>	50,276	-	-	-	-	-	12,489	-	145	62,910
8	Total	68,544	-	1,283	34,825	1,060	43,936	70,539	284	145	220,616
Q1 2021											
1	Bank	-	-	996	-	12	-	1,526	1	-	2,535
2	Corporate	4,149	-	459	-	38	-	53,985	172	-	58,803
3	Sovereign	8,289	-	2	-	1,278	-	269	-	-	9,838
4	Real Estate Secured	6,342	-	-	32,437	-	9,033	883	4	-	48,699
5	Other Retail	673	-	580	-	-	36,685	330	87	-	38,355
6	Equity <sup>(2)</sup>	-	-	-	-	-	-	2,366	-	-	2,366
7	Other Assets <sup>(3)</sup>	48,107	-	-	-	-	-	13,404	-	148	61,659
8	Total	67,560	-	2,037	32,437	1,328	45,718	72,763	264	148	222,255
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 <sup>(2)</sup>	-	-	-	-	-	-	2,248	-	-	2,248
7	Other Assets <sup>(3)</sup>	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

(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). Commencing Q2, 2021 this also includes CRM adjustments to exposures based on the application of the comprehensive approach for collateral.

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

(3) Exposures to CCPs and risk-weighted threshold deduction amounts are excluded.

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


(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 <sup>(1)</sup>	e Average PD <sup>(2)</sup>	f Number of obligors <sup>(3)</sup>	g Average LGD <sup>(4)</sup>	h Average maturity <sup>(5)</sup>	i RWA <sup>(1)(6)</sup>	j RWA density <sup>(7)</sup>	k EL <sup>(1)</sup>	l Provisions <sup>(8)</sup>
<b>Q3 2021</b>													
<b>Retail - insured exposures secured by residential real estate</b>													
	0.00 to <0.15	31,439	-		77,291	0.00%	203,444	21.40%		249	0.3%	-	
	0.15 to <0.25	27,963	-		1,893	0.18%	123,126	20.83%		158	8.3%	1	
	0.25 to <0.50	698	-		-		3,998			-		-	
	0.50 to <0.75	15,592	-		520	0.75%	60,504	18.28%		104	20.0%	1	
	0.75 to <2.50	2,818	-		6	1.95%	11,104	10.61%		1	16.7%	-	
	2.50 to <10.00	467	-		-		2,277			-		-	
	10.00 to <100.00	479	-		-		2,301			-		-	
	100.00 (Default)	254	-		-	100.00%	1,383	105.00%		-		-	
	<b>Sub-total</b>	<b>79,710</b>	<b>-</b>	<b>-</b>	<b>79,710</b>	<b>0.01%</b>	<b>408,137</b>	<b>21.37%</b>		<b>512</b>	<b>0.6%</b>	<b>2</b>	<b>20</b>
<b>Retail - uninsured exposures secured by residential real estate</b>													
	0.00 to <0.15	71,736	52,274	36%	90,810	0.06%	857,535	18.25%		2,958	3.3%	11	
	0.15 to <0.25	69,195	-		69,195	0.18%	215,832	17.23%		4,778	6.9%	22	
	0.25 to <0.50	824	-		824	0.44%	3,044	40.93%		256	31.1%	1	
	0.50 to <0.75	39,906	-		39,905	0.75%	107,290	18.14%		7,897	19.8%	54	
	0.75 to <2.50	11,005	411	61%	11,255	1.54%	66,754	22.49%		4,081	36.3%	36	
	2.50 to <10.00	859	37	79%	888	5.14%	8,255	22.64%		679	76.5%	10	
	10.00 to <100.00	527	3	113%	530	22.16%	3,184	17.45%		504	95.1%	20	
	100.00 (Default)	224	-		224	100.00%	24,417	58.29%		944	421.4%	69	
	<b>Sub-total</b>	<b>194,276</b>	<b>52,725</b>	<b>37%</b>	<b>213,631</b>	<b>0.49%</b>	<b>1,286,311</b>	<b>18.27%</b>		<b>22,097</b>	<b>10.3%</b>	<b>223</b>	<b>153</b>

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


(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 <sup>(1)</sup>	e Average PD <sup>(2)</sup>	f Number of obligors <sup>(3)</sup>	g Average LGD <sup>(4)</sup>	h Average maturity <sup>(5)</sup>	i RWA <sup>(1)(6)</sup>	j RWA density <sup>(7)</sup>	k EL <sup>(1)</sup>	l Provisions <sup>(8)</sup>
Retail - qualifying revolving (QRRE)	0.00 to <0.15	955	18,305	57%	11,362	0.05%	784,556	72.44%		270	2.4%	4	
	0.15 to <0.25	1,224	14,828	58%	9,765	0.19%	1,787,988	76.68%		817	8.4%	14	
	0.25 to <0.50	3,352	5,171	67%	6,810	0.33%	340,671	81.06%		932	13.7%	18	
	0.50 to <0.75	213	332	103%	556	0.61%	17,873	60.27%		93	16.7%	2	
	0.75 to <2.50	5,368	5,228	66%	8,827	1.27%	993,181	83.78%		3,551	40.2%	95	
	2.50 to <10.00	3,418	593	86%	3,928	5.61%	529,938	87.10%		4,609	117.3%	192	
	10.00 to <100.00	591	15	278%	633	27.54%	111,254	84.25%		1,415	223.5%	145	
	100.00 (Default)	87	-		87	100.00%	730,453	85.01%		422	485.1%	51	
	<b>Sub-total</b>	<b>15,208</b>	<b>44,472</b>	<b>60%</b>	<b>41,968</b>	<b>1.53%</b>	<b>5,295,914</b>	<b>78.63%</b>		<b>12,109</b>	<b>28.9%</b>	<b>521</b>	<b>990</b>
Other Retail Exposures	0.00 to <0.15	6,116	1,025	59%	6,725	0.09%	328,575	53.19%		840	12.5%	3	
	0.15 to <0.25	1	5	59%	4	0.19%	33	81.54%		1	25.0%	-	
	0.25 to <0.50	7,491	251	75%	7,679	0.32%	315,368	56.65%		2,519	32.8%	14	
	0.50 to <0.75	1,215	2,529	103%	3,820	0.61%	13,132	60.27%		1,961	51.3%	14	
	0.75 to <2.50	13,816	52	89%	13,863	1.17%	475,578	61.12%		9,542	68.8%	100	
	2.50 to <10.00	2,822	1	89%	2,824	4.85%	101,957	63.78%		2,812	99.6%	87	
	10.00 to <100.00	635	5	105%	640	27.35%	25,955	57.96%		921	143.9%	102	
	100.00 (Default)	140	-		140	100.00%	13,017	86.32%		714	510.0%	138	
	<b>Sub-total</b>	<b>32,236</b>	<b>3,868</b>	<b>89%</b>	<b>35,695</b>	<b>1.87%</b>	<b>1,273,615</b>	<b>58.83%</b>		<b>19,310</b>	<b>54.1%</b>	<b>458</b>	<b>469</b>
<b>Total</b>		<b>321,430</b>	<b>101,065</b>	<b>49%</b>	<b>371,004</b>	<b>0.64%</b>	<b>8,263,977</b>	<b>29.66%</b>		<b>54,028</b>	<b>14.6%</b>	<b>1,204</b>	<b>1,632</b>

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


(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 <sup>(1)</sup>	e Average PD <sup>(2)</sup>	f Number of obligors <sup>(3)</sup>	g Average LGD <sup>(4)</sup>	h Average maturity <sup>(5)</sup>	i RWA <sup>(1)(6)</sup>	j RWA density <sup>(7)</sup>	k EL <sup>(1)</sup>	l Provisions <sup>(8)</sup>
<b>Q2 2021</b>													
<b>Retail - insured exposures secured by residential real estate</b>													
	0.00 to <0.15	32,093	-		78,049	0.00%	208,648	21.14%		239	0.3%	-	
	0.15 to <0.25	28,033	-		1,853	0.18%	125,672	20.41%		152	8.2%	1	
	0.25 to <0.50	736	-		-		4,179			-		-	
	0.50 to <0.75	15,100	-		535	0.75%	60,693	17.88%		104	19.4%	1	
	0.75 to <2.50	3,240	-		7	1.95%	12,462	10.60%		2	28.6%	-	
	2.50 to <10.00	489	-		-		2,407			-		-	
	10.00 to <100.00	473	-		-		2,237			-		-	
	100.00 (Default)	280	-		-	100.00%	1,526	105.00%		-		-	
<b>Sub-total</b>		<b>80,444</b>	<b>-</b>	<b>-</b>	<b>80,444</b>	<b>0.01%</b>	<b>417,824</b>	<b>21.10%</b>		<b>497</b>	<b>0.6%</b>	<b>2</b>	<b>20</b>
<b>Retail - uninsured exposures secured by residential real estate</b>													
	0.00 to <0.15	68,249	50,031	37%	86,563	0.06%	834,035	18.29%		2,695	3.1%	10	
	0.15 to <0.25	63,656	-		63,656	0.18%	203,469	17.19%		4,383	6.9%	20	
	0.25 to <0.50	739	-		739	0.44%	2,813	40.93%		230	31.1%	1	
	0.50 to <0.75	39,448	926	53%	39,937	0.73%	153,381	19.48%		8,228	20.6%	56	
	0.75 to <2.50	9,087	105	58%	9,148	1.93%	33,948	19.95%		3,679	40.2%	35	
	2.50 to <10.00	688	9	69%	694	5.75%	5,242	20.36%		519	74.8%	8	
	10.00 to <100.00	514	3	112%	517	21.11%	3,095	18.03%		507	98.1%	19	
	100.00 (Default)	240	-		240	100.00%	23,926	58.03%		939	391.3%	69	
<b>Sub-total</b>		<b>182,621</b>	<b>51,074</b>	<b>37%</b>	<b>201,494</b>	<b>0.51%</b>	<b>1,259,909</b>	<b>18.39%</b>		<b>21,180</b>	<b>10.5%</b>	<b>218</b>	<b>153</b>

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


(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 <sup>(1)</sup>	e Average PD <sup>(2)</sup>	f Number of obligors <sup>(3)</sup>	g Average LGD <sup>(4)</sup>	h Average maturity <sup>(5)</sup>	i RWA <sup>(1)(6)</sup>	j RWA density <sup>(7)</sup>	k EL <sup>(1)</sup>	l Provisions <sup>(8)</sup>
Retail - qualifying revolving (QRRE)													
	0.00 to <0.15	963	17,743	57%	11,034	0.04%	759,320	72.06%		253	2.3%	3	
	0.15 to <0.25	1,051	14,303	58%	9,285	0.18%	1,715,251	77.62%		757	8.2%	13	
	0.25 to <0.50	3,333	5,020	66%	6,668	0.31%	334,039	80.54%		860	12.9%	16	
	0.50 to <0.75	286	339	104%	637	0.61%	20,259	46.31%		82	12.9%	2	
	0.75 to <2.50	5,361	5,552	66%	9,018	1.18%	1,006,074	83.82%		3,435	38.1%	90	
	2.50 to <10.00	3,586	787	82%	4,229	5.13%	557,070	87.08%		4,686	110.8%	189	
	10.00 to <100.00	718	22	233%	770	25.25%	126,728	84.17%		1,641	213.1%	161	
	100.00 (Default)	103	-		103	100.00%	722,268	83.15%		413	401.0%	74	
	<b>Sub-total</b>	<b>15,401</b>	<b>43,766</b>	<b>60%</b>	<b>41,744</b>	<b>1.60%</b>	<b>5,241,009</b>	<b>78.57%</b>		<b>12,127</b>	<b>29.1%</b>	<b>548</b>	<b>1,015</b>
Other Retail Exposures													
	0.00 to <0.15	6,153	957	59%	6,719	0.09%	337,770	53.01%		839	12.5%	3	
	0.15 to <0.25	-	6	60%	4	0.18%	33	82.23%		1	25.0%	-	
	0.25 to <0.50	7,483	230	76%	7,657	0.31%	320,465	56.51%		2,497	32.6%	14	
	0.50 to <0.75	1,288	2,375	103%	3,738	0.61%	13,046	46.31%		1,474	39.4%	11	
	0.75 to <2.50	13,253	58	90%	13,305	1.16%	472,993	60.86%		9,097	68.4%	95	
	2.50 to <10.00	2,709	1	95%	2,710	4.88%	101,659	63.50%		2,689	99.2%	84	
	10.00 to <100.00	555	-	634%	555	27.00%	21,966	57.93%		799	144.0%	87	
	100.00 (Default)	171	-		171	100.00%	15,099	84.51%		887	518.7%	153	
	<b>Sub-total</b>	<b>31,612</b>	<b>3,627</b>	<b>90%</b>	<b>34,859</b>	<b>1.89%</b>	<b>1,283,031</b>	<b>57.11%</b>		<b>18,283</b>	<b>52.4%</b>	<b>447</b>	<b>483</b>
<b>Total</b>		<b>310,078</b>	<b>98,467</b>	<b>49%</b>	<b>358,541</b>	<b>0.66%</b>	<b>8,201,773</b>	<b>29.77%</b>		<b>52,087</b>	<b>14.5%</b>	<b>1,215</b>	<b>1,671</b>



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


(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 <sup>(1)</sup>	e Average PD <sup>(2)</sup>	f Number of obligors <sup>(3)</sup>	g Average LGD <sup>(4)</sup>	h Average maturity <sup>(5)</sup>	i RWA <sup>(1)(6)</sup>	j RWA density <sup>(7)</sup>	k EL <sup>(1)</sup>	l Provisions <sup>(8)</sup>
<b>Q1 2021</b>													
<b>Retail - insured exposures secured by residential real estate</b>	0.00 to <0.15	32,070	-		79,230	0.00%	209,255	21.04%		232	0.3%	-	
	0.15 to <0.25	28,803	-		1,880	0.18%	129,720	20.28%		153	8.1%	1	
	0.25 to <0.50	787	-		-		4,443			-		-	
	0.50 to <0.75	15,684	-		563	0.75%	63,471	17.68%		109	19.4%	1	
	0.75 to <2.50	2,979	-		7	1.95%	12,231	10.62%		2	28.6%	-	
	2.50 to <10.00	529	-		-		2,570			-		-	
	10.00 to <100.00	542	-		-		2,599			-		-	
	100.00 (Default)	286	-		-		1,617			-		-	
	<b>Sub-total</b>	<b>81,680</b>	<b>-</b>	<b>-</b>	<b>81,680</b>	<b>0.01%</b>	<b>425,906</b>	<b>21.00%</b>		<b>496</b>	<b>0.6%</b>	<b>2</b>	<b>29</b>
<b>Retail - uninsured exposures secured by residential real estate</b>	0.00 to <0.15	65,289	49,025	37%	83,250	0.06%	819,443	18.37%		2,624	3.2%	10	
	0.15 to <0.25	62,434	-		62,434	0.18%	199,954	17.28%		4,322	6.9%	20	
	0.25 to <0.50	720	-		720	0.44%	2,781	40.93%		223	31.0%	1	
	0.50 to <0.75	39,377	837	48%	39,778	0.73%	155,452	19.52%		8,215	20.7%	56	
	0.75 to <2.50	7,408	88	56%	7,458	1.93%	31,173	19.30%		2,894	38.8%	27	
	2.50 to <10.00	732	13	60%	739	5.73%	5,806	19.94%		541	73.2%	8	
	10.00 to <100.00	595	6	86%	600	21.28%	3,640	18.24%		596	99.3%	23	
	100.00 (Default)	265	-		265	100.00%	23,358	56.95%		1,066	402.3%	72	
	<b>Sub-total</b>	<b>176,820</b>	<b>49,969</b>	<b>37%</b>	<b>195,244</b>	<b>0.53%</b>	<b>1,241,607</b>	<b>18.43%</b>		<b>20,481</b>	<b>10.5%</b>	<b>217</b>	<b>143</b>

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


(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 <sup>(1)</sup>	e Average PD <sup>(2)</sup>	f Number of obligors <sup>(3)</sup>	g Average LGD <sup>(4)</sup>	h Average maturity <sup>(5)</sup>	i RWA <sup>(1)(6)</sup>	j RWA density <sup>(7)</sup>	k EL <sup>(1)</sup>	l Provisions <sup>(8)</sup>
Retail - qualifying revolving (QRRE)	0.00 to <0.15	934	22,494	56%	13,615	0.04%	1,041,685	73.40%		318	2.3%	4	
	0.15 to <0.25	965	15,121	58%	9,766	0.18%	1,862,074	77.59%		795	8.1%	14	
	0.25 to <0.50	3,329	5,142	66%	6,736	0.31%	338,051	80.91%		873	13.0%	17	
	0.50 to <0.75	280	351	104%	644	0.61%	20,511	46.31%		83	12.9%	2	
	0.75 to <2.50	5,486	5,689	66%	9,267	1.19%	1,021,295	83.86%		3,544	38.2%	93	
	2.50 to <10.00	3,803	837	83%	4,496	5.16%	577,733	87.15%		5,006	111.3%	202	
	10.00 to <100.00	801	24	247%	860	25.46%	140,060	84.45%		1,834	213.3%	182	
	100.00 (Default)	118	-		118	100.00%	709,810	81.22%		434	367.8%	68	
	<b>Sub-total</b>	<b>15,716</b>	<b>49,658</b>	<b>60%</b>	<b>45,502</b>	<b>1.60%</b>	<b>5,711,219</b>	<b>78.74%</b>		<b>12,887</b>	<b>28.3%</b>	<b>582</b>	<b>990</b>
Other Retail Exposures	0.00 to <0.15	6,351	992	59%	6,932	0.09%	346,357	52.98%		866	12.5%	3	
	0.15 to <0.25	-	5	59%	4	0.18%	32	81.73%		1	25.0%	-	
	0.25 to <0.50	7,377	210	77%	7,540	0.31%	323,019	56.48%		2,458	32.6%	13	
	0.50 to <0.75	1,255	2,405	103%	3,735	0.61%	13,057	46.31%		1,473	39.4%	11	
	0.75 to <2.50	13,012	53	90%	13,059	1.16%	473,454	60.76%		8,912	68.2%	93	
	2.50 to <10.00	2,713	2	92%	2,714	4.87%	102,977	63.50%		2,692	99.2%	83	
	10.00 to <100.00	623	-	287%	623	27.04%	24,612	57.60%		893	143.3%	98	
	100.00 (Default)	174	-		174	100.00%	15,334	84.47%		904	519.5%	143	
	<b>Sub-total</b>	<b>31,505</b>	<b>3,667</b>	<b>89%</b>	<b>34,781</b>	<b>1.95%</b>	<b>1,298,842</b>	<b>57.00%</b>		<b>18,199</b>	<b>52.3%</b>	<b>444</b>	<b>475</b>
<b>Total</b>		<b>305,721</b>	<b>103,294</b>	<b>50%</b>	<b>357,207</b>	<b>0.69%</b>	<b>8,677,574</b>	<b>30.46%</b>		<b>52,063</b>	<b>14.6%</b>	<b>1,245</b>	<b>1,637</b>

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

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

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

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

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

(6) After application of AIRB scalar of 1.06.

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

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

**CR6: IRB – Credit risk exposures by portfolio and PD range - Non-Retail <sup>(1)</sup>**


(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 <sup>(2)</sup>	f Number of obligors <sup>(3)</sup>	g Average LGD <sup>(4)</sup>	h Average maturity <sup>(5)</sup>	i RWA <sup>(6)</sup>	j RWA density <sup>(7)</sup>	k EL	l Provisions <sup>(8)</sup>
<b>Q3 2021</b>													
<b>Sovereign</b>													
	0.00 to <0.15	124,160	2,100	44%	125,331	0.02%	105	10.49%	1.63	2,511	2.0%	4	
	0.15 to <0.25	1,018	7	26%	1,020	0.20%	3	25.00%	3.24	307	30.1%	1	
	0.25 to <0.50	1,480	248	45%	1,592	0.33%	11	24.55%	2.70	538	33.8%	1	
	0.50 to <0.75	1,105	116	44%	1,157	0.67%	10	21.70%	1.34	389	33.6%	2	
	0.75 to <2.50	1,837	-	-	1,837	1.33%	5	17.23%	0.91	640	34.8%	4	
	2.50 to <10.00	146	-	-	146	2.56%	4	9.63%	0.98	40	27.7%	-	
	10.00 to <100.00	465	-	-	465	17.86%	1	3.12%	0.33	72	15.4%	3	
	100.00 (Default)	208	-	-	208	100.00%	1	25.00%	4.04	2	0.8%	51	
	<b>Sub-total</b>	<b>130,419</b>	<b>2,471</b>	<b>44%</b>	<b>131,756</b>	<b>0.27%</b>	<b>140</b>	<b>10.96%</b>	<b>1.65</b>	<b>4,499</b>	<b>3.4%</b>	<b>66</b>	<b>-</b>
<b>Bank</b>													
	0.00 to <0.15	11,027	9,797	63%	17,579	0.06%	318	31.54%	1.43	2,495	14.2%	3	
	0.15 to <0.25	1,283	507	44%	1,508	0.20%	41	38.02%	0.67	453	30.0%	1	
	0.25 to <0.50	1,345	578	54%	1,275	0.37%	64	38.31%	0.94	530	41.6%	2	
	0.50 to <0.75	1,553	208	35%	1,626	0.53%	21	38.85%	0.46	885	54.4%	3	
	0.75 to <2.50	192	8	72%	198	1.33%	12	39.29%	0.75	145	73.5%	1	
	2.50 to <10.00	-	-	-	-	0.00%	-	0.00%	-	-	0.0%	-	
	10.00 to <100.00	15	-	100%	-	34.44%	3	3.00%	1.00	-	16.6%	-	
	100.00 (Default)	166	3	53%	168	100.00%	5	36.67%	2.17	-	0.3%	63	
	<b>Sub-total</b>	<b>15,581</b>	<b>11,101</b>	<b>61%</b>	<b>22,354</b>	<b>0.88%</b>	<b>464</b>	<b>33.00%</b>	<b>1.28</b>	<b>4,508</b>	<b>20.2%</b>	<b>73</b>	<b>9</b>

**CR6: IRB – Credit risk exposures by portfolio and PD range - Non-Retail <sup>(1)</sup>**


(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 <sup>(2)</sup>	f Number of obligors <sup>(3)</sup>	g Average LGD <sup>(4)</sup>	h Average maturity <sup>(5)</sup>	i RWA <sup>(6)</sup>	j RWA density <sup>(7)</sup>	k EL	l Provisions <sup>(8)</sup>
Corporate - Other <sup>(9)</sup>													
	0.00 to <0.15	48,758	112,808	55%	119,708	0.08%	1,711	39.37%	2.13	27,630	23.1%	37	
	0.15 to <0.25	15,360	34,215	51%	30,674	0.17%	1,384	44.70%	2.20	12,271	40.0%	23	
	0.25 to <0.50	49,883	53,284	46%	70,902	0.37%	4,950	47.20%	2.07	43,699	61.6%	126	
	0.50 to <0.75	20,059	18,002	41%	26,366	0.64%	2,789	44.34%	1.91	18,604	70.6%	74	
	0.75 to <2.50	4,833	5,498	45%	6,397	1.33%	734	39.88%	1.88	5,400	84.4%	34	
	2.50 to <10.00	3,285	2,884	46%	3,684	4.49%	506	40.46%	1.69	4,392	119.2%	69	
	10.00 to <100.00	1,092	2,435	45%	1,712	23.94%	77	43.42%	2.25	4,033	235.6%	184	
	100.00 (Default)	756	134	77%	826	100.00%	69	44.93%	1.31	1,803	218.4%	317	
	<b>Sub-total</b>	<b>144,026</b>	<b>229,260</b>	<b>51%</b>	<b>260,269</b>	<b>0.79%</b>	<b>12,220</b>	<b>42.71%</b>	<b>2.09</b>	<b>117,832</b>	<b>45.3%</b>	<b>864</b>	<b>701</b>
Corporate – Specialized Lending													
	0.00 to <0.15	3,850	6,466	57%	8,539	0.09%	147	41.17%	2.16	2,044	23.9%	3	
	0.15 to <0.25	4,771	4,226	57%	7,284	0.16%	218	38.96%	1.70	2,166	29.7%	5	
	0.25 to <0.50	14,150	10,839	53%	18,949	0.32%	862	37.63%	1.71	7,966	42.0%	22	
	0.50 to <0.75	1,377	571	27%	1,449	0.65%	108	45.20%	1.98	1,106	76.3%	4	
	0.75 to <2.50	69	115	40%	111	1.33%	18	43.21%	2.65	117	105.6%	1	
	2.50 to <10.00	143	-	46%	113	4.28%	7	42.37%	2.58	155	137.1%	2	
	10.00 to <100.00	161	11	47%	167	20.81%	9	39.62%	1.63	356	213.9%	14	
	100.00 (Default)	177	23	100%	175	100.00%	3	51.19%	1.53	1,117	638.4%	5	
	<b>Sub-total</b>	<b>24,698</b>	<b>22,251</b>	<b>54%</b>	<b>36,787</b>	<b>0.83%</b>	<b>1,372</b>	<b>39.12%</b>	<b>1.83</b>	<b>15,027</b>	<b>40.8%</b>	<b>56</b>	<b>45</b>
<b>Total</b>		<b>314,724</b>	<b>265,083</b>	<b>51%</b>	<b>451,166</b>	<b>0.65%</b>	<b>14,196</b>	<b>32.66%</b>	<b>1.90</b>	<b>141,866</b>	<b>31.4%</b>	<b>1,059</b>	<b>755</b>

**CR6: IRB – Credit risk exposures by portfolio and PD range - Non-Retail <sup>(1)</sup>**


(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 <sup>(2)</sup>	f Number of obligors <sup>(3)</sup>	g Average LGD <sup>(4)</sup>	h Average maturity <sup>(5)</sup>	i RWA <sup>(6)</sup>	j RWA density <sup>(7)</sup>	k EL	l Provisions <sup>(8)</sup>
<b>Q2 2021</b>													
<b>Sovereign</b>													
	0.00 to <0.15	104,729	1,797	41%	105,723	0.02%	106	12.22%	1.81	2,839	2.7%	4	
	0.15 to <0.25	1,422	7	26%	1,424	0.20%	3	25.00%	2.79	393	27.6%	1	
	0.25 to <0.50	1,323	241	50%	1,443	0.33%	11	24.64%	2.75	495	34.3%	1	
	0.50 to <0.75	987	130	44%	1,044	0.67%	10	21.91%	1.43	359	34.4%	2	
	0.75 to <2.50	1,650	-	100%	1,650	1.33%	5	18.55%	1.18	637	38.6%	4	
	2.50 to <10.00	132	-	-	132	2.56%	4	10.26%	1.25	40	30.0%	-	
	10.00 to <100.00	428	-	-	428	17.86%	1	3.13%	0.59	67	15.6%	2	
	100.00 (Default)	205	-	-	205	100.00%	1	25.00%	4.08	3	1.3%	51	
	<b>Sub-total</b>	<b>110,876</b>	<b>2,175</b>	<b>42%</b>	<b>112,049</b>	<b>0.31%</b>	<b>141</b>	<b>12.71%</b>	<b>1.82</b>	<b>4,833</b>	<b>4.3%</b>	<b>65</b>	<b>1</b>
<b>Bank</b>													
	0.00 to <0.15	10,092	14,136	62%	19,214	0.06%	336	28.77%	1.22	2,464	12.8%	3	
	0.15 to <0.25	1,340	1,310	53%	2,037	0.19%	47	35.67%	0.66	570	28.0%	1	
	0.25 to <0.50	1,318	803	54%	1,398	0.36%	72	38.28%	1.07	604	43.2%	2	
	0.50 to <0.75	1,519	202	39%	1,598	0.53%	21	38.90%	0.59	896	56.1%	3	
	0.75 to <2.50	170	12	53%	176	1.33%	12	39.22%	0.56	125	70.9%	1	
	2.50 to <10.00	-	-	-	-	0.00%	-	0.00%	-	-	0.0%	-	
	10.00 to <100.00	28	-	100%	-	34.44%	3	3.00%	1.00	-	16.6%	-	
	100.00 (Default)	133	2	52%	134	100.00%	5	38.32%	2.83	-	0.2%	54	
	<b>Sub-total</b>	<b>14,600</b>	<b>16,465</b>	<b>60%</b>	<b>24,557</b>	<b>0.67%</b>	<b>496</b>	<b>30.67%</b>	<b>1.13</b>	<b>4,659</b>	<b>19.0%</b>	<b>64</b>	<b>11</b>

**CR6: IRB – Credit risk exposures by portfolio and PD range - Non-Retail <sup>(1)</sup>**


(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 <sup>(2)</sup>	f Number of obligors <sup>(3)</sup>	g Average LGD <sup>(4)</sup>	h Average maturity <sup>(5)</sup>	i RWA <sup>(6)</sup>	j RWA density <sup>(7)</sup>	k EL	l Provisions <sup>(8)</sup>
Corporate - Other <sup>(9)</sup>													
	0.00 to <0.15	46,579	110,097	55%	115,263	0.08%	1,679	39.43%	2.05	25,980	22.5%	36	
	0.15 to <0.25	14,106	29,741	51%	27,123	0.17%	1,296	44.07%	2.15	10,590	39.0%	20	
	0.25 to <0.50	49,472	52,234	45%	70,359	0.37%	4,806	47.35%	2.06	43,757	62.2%	126	
	0.50 to <0.75	21,219	18,290	41%	27,940	0.64%	2,809	44.37%	1.92	19,865	71.1%	78	
	0.75 to <2.50	4,991	4,971	45%	6,339	1.33%	773	40.45%	1.86	5,392	85.1%	34	
	2.50 to <10.00	3,665	2,867	44%	4,177	4.58%	539	39.14%	1.69	4,849	116.1%	76	
	10.00 to <100.00	1,241	2,518	46%	1,879	23.85%	71	43.65%	2.31	4,445	236.6%	203	
	100.00 (Default)	903	331	79%	1,001	100.00%	82	42.76%	1.36	2,201	219.8%	371	
	<b>Sub-total</b>	<b>142,176</b>	<b>221,049</b>	<b>51%</b>	<b>254,081</b>	<b>0.91%</b>	<b>12,055</b>	<b>42.73%</b>	<b>2.04</b>	<b>117,079</b>	<b>46.1%</b>	<b>944</b>	<b>809</b>
Corporate – Specialized Lending													
	0.00 to <0.15	3,248	6,321	56%	7,599	0.09%	139	41.09%	2.20	1,817	23.9%	3	
	0.15 to <0.25	4,353	4,168	56%	6,814	0.16%	206	38.95%	1.76	2,058	30.2%	4	
	0.25 to <0.50	13,553	10,137	53%	18,200	0.32%	832	37.75%	1.73	7,840	43.1%	23	
	0.50 to <0.75	1,320	724	31%	1,425	0.66%	112	45.06%	1.74	1,042	73.2%	4	
	0.75 to <2.50	34	35	21%	37	1.33%	13	49.35%	1.60	40	107.1%	-	
	2.50 to <10.00	149	5	24%	120	4.34%	9	42.53%	2.59	166	138.2%	2	
	10.00 to <100.00	205	9	49%	192	21.72%	10	39.00%	1.69	407	212.6%	16	
	100.00 (Default)	176	20	100%	172	100.00%	3	51.17%	1.62	1,097	637.1%	5	
	<b>Sub-total</b>	<b>23,038</b>	<b>21,419</b>	<b>54%</b>	<b>34,559</b>	<b>0.88%</b>	<b>1,324</b>	<b>39.13%</b>	<b>1.84</b>	<b>14,467</b>	<b>41.9%</b>	<b>57</b>	<b>51</b>
<b>Total</b>		<b>290,690</b>	<b>261,108</b>	<b>52%</b>	<b>425,246</b>	<b>0.73%</b>	<b>14,016</b>	<b>33.83%</b>	<b>1.91</b>	<b>141,038</b>	<b>33.2%</b>	<b>1,130</b>	<b>872</b>

**CR6: IRB – Credit risk exposures by portfolio and PD range - Non-Retail <sup>(1)</sup>**


(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 <sup>(2)</sup>	f Number of obligors <sup>(3)</sup>	g Average LGD <sup>(4)</sup>	h Average maturity <sup>(5)</sup>	i RWA <sup>(6)</sup>	j RWA density <sup>(7)</sup>	k EL	l Provisions <sup>(8)</sup>
<b>Q1 2021</b>													
<b>Sovereign</b>													
	0.00 to <0.15	153,612	1,567	48%	154,606	0.02%	106	10.56%	1.56	3,126	2.0%	5	
	0.15 to <0.25	1,222	8	11%	1,222	0.20%	3	25.00%	1.91	279	22.8%	1	
	0.25 to <0.50	1,479	210	52%	1,588	0.34%	10	24.62%	2.52	528	33.3%	1	
	0.50 to <0.75	974	2	44%	974	0.57%	8	20.89%	1.51	303	31.1%	1	
	0.75 to <2.50	1,671	-	-	1,672	1.33%	4	18.61%	1.40	667	39.9%	4	
	2.50 to <10.00	337	1	50%	338	2.56%	6	6.83%	0.75	62	18.4%	1	
	10.00 to <100.00	412	-	-	412	17.86%	1	3.00%	0.83	63	15.2%	2	
	100.00 (Default)	216	-	-	216	100.00%	2	25.00%	4.08	4	1.7%	54	
	<b>Sub-total</b>	<b>159,923</b>	<b>1,788</b>	<b>48%</b>	<b>161,028</b>	<b>0.23%</b>	<b>140</b>	<b>10.95%</b>	<b>1.57</b>	<b>5,032</b>	<b>3.1%</b>	<b>69</b>	<b>1</b>
<b>Bank</b>													
	0.00 to <0.15	10,671	11,880	62%	18,423	0.06%	311	30.13%	1.14	2,289	12.4%	4	
	0.15 to <0.25	1,420	993	51%	1,930	0.19%	38	35.90%	0.77	570	29.5%	1	
	0.25 to <0.50	1,413	848	54%	1,576	0.37%	77	38.60%	0.92	668	42.4%	2	
	0.50 to <0.75	1,439	204	38%	1,517	0.52%	20	38.82%	0.67	867	57.1%	3	
	0.75 to <2.50	215	1	44%	215	1.33%	11	39.33%	0.72	157	73.0%	1	
	2.50 to <10.00	-	1	35%	-	2.56%	7	4.96%	0.94	-	12.1%	-	
	10.00 to <100.00	28	-	100%	-	34.44%	3	3.00%	1.00	-	16.6%	-	
	100.00 (Default)	115	2	50%	116	100.00%	3	39.90%	3.57	-	0.0%	48	
	<b>Sub-total</b>	<b>15,301</b>	<b>13,929</b>	<b>61%</b>	<b>23,777</b>	<b>0.62%</b>	<b>470</b>	<b>31.85%</b>	<b>1.07</b>	<b>4,551</b>	<b>19.1%</b>	<b>59</b>	<b>11</b>

**CR6: IRB – Credit risk exposures by portfolio and PD range - Non-Retail <sup>(1)</sup>**


(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 <sup>(2)</sup>	f Number of obligors <sup>(3)</sup>	g Average LGD <sup>(4)</sup>	h Average maturity <sup>(5)</sup>	i RWA <sup>(6)</sup>	j RWA density <sup>(7)</sup>	k EL	l Provisions <sup>(8)</sup>
<b>Corporate - Other <sup>(9)</sup></b>													
	0.00 to <0.15	46,401	113,886	55%	117,117	0.08%	1,678	39.21%	1.92	25,183	21.5%	36	
	0.15 to <0.25	13,652	29,117	51%	26,272	0.17%	1,229	43.32%	2.03	9,720	37.0%	19	
	0.25 to <0.50	49,409	52,764	45%	70,778	0.37%	4,730	47.60%	2.03	43,706	61.8%	126	
	0.50 to <0.75	21,725	17,786	41%	28,162	0.64%	2,803	45.31%	1.92	20,583	73.1%	81	
	0.75 to <2.50	5,356	5,402	45%	6,890	1.33%	778	39.97%	1.89	5,863	85.1%	37	
	2.50 to <10.00	4,050	3,763	44%	4,962	4.44%	521	38.90%	1.75	5,761	116.1%	87	
	10.00 to <100.00	1,335	2,095	47%	1,782	22.67%	78	43.60%	2.20	4,142	232.4%	173	
	100.00 (Default)	828	534	80%	949	100.00%	81	42.89%	1.42	2,261	238.3%	329	
	<b>Sub-total</b>	<b>142,756</b>	<b>225,347</b>	<b>51%</b>	<b>256,912</b>	<b>0.87%</b>	<b>11,898</b>	<b>42.67%</b>	<b>1.96</b>	<b>117,219</b>	<b>45.6%</b>	<b>888</b>	<b>845</b>
<b>Corporate – Specialized Lending</b>													
	0.00 to <0.15	3,727	5,550	56%	7,505	0.08%	129	41.13%	2.09	1,701	22.7%	3	
	0.15 to <0.25	4,595	3,654	57%	6,872	0.16%	205	39.01%	1.70	2,044	29.7%	4	
	0.25 to <0.50	12,625	8,955	53%	16,657	0.33%	783	38.07%	1.72	7,290	43.8%	21	
	0.50 to <0.75	1,310	722	27%	1,390	0.67%	111	44.61%	1.60	986	70.9%	4	
	0.75 to <2.50	167	36	21%	170	1.33%	16	40.98%	2.14	159	93.7%	1	
	2.50 to <10.00	146	6	26%	116	4.67%	8	42.11%	2.93	166	143.7%	2	
	10.00 to <100.00	206	9	49%	166	27.12%	10	38.92%	1.06	357	215.7%	17	
	100.00 (Default)	75	21	100%	96	100.00%	2	44.66%	2.30	531	550.9%	3	
	<b>Sub-total</b>	<b>22,851</b>	<b>18,953</b>	<b>53%</b>	<b>32,972</b>	<b>0.70%</b>	<b>1,264</b>	<b>39.29%</b>	<b>1.80</b>	<b>13,234</b>	<b>40.1%</b>	<b>55</b>	<b>51</b>
<b>Total</b>		<b>340,831</b>	<b>260,017</b>	<b>51%</b>	<b>474,689</b>	<b>0.63%</b>	<b>13,772</b>	<b>31.13%</b>	<b>1.77</b>	<b>140,036</b>	<b>29.5%</b>	<b>1,071</b>	<b>908</b>

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

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

(3) Represents the number of individual borrowers.

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

(5) Effective remaining maturity in years.

(6) After application of AIRB scalar of 1.06.

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

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

(9) Includes purchased receivables portfolio totaling \$1.3 billion EAD, \$0.2 billion RWA (\$0.9 billion EAD, \$0.2 billion RWA in Q2 2021; and \$0.9 billion EAD, \$0.1 billion RWA in Q1 2021).



(in \$MM)		Q3 2021		Q2 2021		Q1 2021		Q4 2020	
		a	b	a <sub>2</sub>	b <sub>2</sub>	a <sub>3</sub>	b <sub>3</sub>	a <sub>4</sub>	b <sub>4</sub>
		Pre-credit derivatives RWA	Actual RWA <sup>(1)</sup>	Pre-credit derivatives RWA	Actual RWA <sup>(1)</sup>	Pre-credit derivatives RWA	Actual RWA <sup>(1)</sup>	Pre-credit derivatives RWA	Actual RWA <sup>(1)</sup>
1	Sovereign – FIRB	-	-	-	-	-	-	-	-
2	Sovereign – AIRB	4,499	4,499	4,833	4,833	5,032	5,032	5,719	5,719
3	Bank – FIRB	-	-	-	-	-	-	-	-
4	Bank – AIRB	4,508	4,508	4,659	4,659	4,551	4,551	5,091	5,091
5	Corporate – FIRB	-	-	-	-	-	-	-	-
6	Corporate – AIRB	117,621	117,621	116,925	116,925	117,071	117,071	121,938	121,938
7	Specialized lending – FIRB	-	-	-	-	-	-	-	-
8	Specialized lending – AIRB	15,027	15,027	14,467	14,467	13,234	13,234	12,355	12,355
9	Retail – qualifying revolving (QRRE)	12,109	12,109	12,127	12,127	12,887	12,887	12,572	12,572
10	Retail – residential mortgage exposures	22,609	22,609	21,677	21,677	20,977	20,977	26,626	26,626
11	Retail – SME	-	-	-	-	-	-	-	-
12	Other retail exposures	19,310	19,310	18,283	18,283	18,199	18,199	17,634	17,634
13	Equity – FIRB	-	-	-	-	-	-	-	-
14	Equity – AIRB	-	-	-	-	-	-	-	-
15	Purchased receivables – FIRB	-	-	-	-	-	-	-	-
16	Purchased receivables – AIRB	211	211	154	154	148	148	149	149
17	<b>Total</b>	<b>195,894</b>	<b>195,894</b>	<b>193,125</b>	<b>193,125</b>	<b>192,099</b>	<b>192,099</b>	<b>202,084</b>	<b>202,084</b>

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

**CR8: RWA flow statements of credit risk exposures under IRB**


(in \$MM)		a	a <sub>2</sub>	a <sub>3</sub>	a <sub>4</sub>
		Q3 2021	Q2 2021	Q1 2021	Q4 2020
<b>1</b>	<b>RWA as at end of previous reporting period</b>	193,125	192,099	202,084	209,815
2	Asset size <sup>(1)</sup>	4,086	5,110	(1,065)	(5,971)
3	Asset quality <sup>(2)</sup>	(2,946)	(62)	(5,590)	(909)
4	Model updates <sup>(3)</sup>	856	-	-	-
5	Methodology and policy <sup>(4)</sup>	-	-	-	-
6	Acquisitions and disposals <sup>(5)</sup>	-	(14)	-	-
7	Foreign exchange movements <sup>(6)</sup>	773	(4,008)	(3,330)	(851)
8	Other <sup>(7)</sup>	-	-	-	-
<b>9</b>	<b>RWA as at end of reporting period</b>	<b>195,894</b>	<b>193,125</b>	<b>192,099</b>	<b>202,084</b>

(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.

Specialized Lending <sup>(1)</sup> - Q3 2021											
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		On-balance sheet amount	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 <sup>(1)</sup> - Q2 2021											
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		On-balance sheet amount	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 <sup>(1)</sup>**


(in \$MM)		a	b	c	d	e	f
		Replacement cost	Potential future exposure	EEPE	Alpha used for computing regulatory EAD	EAD post- CRM	RWA
<b>Q3 2021</b>							
1	CEM / SA-CCR (for derivatives)	756	1,572		1.40	3,258	1,341
2	Internal Model Method (for derivatives and SFTs) <sup>(2)</sup>			18,578	1.40	25,804	6,860
3	Simple Approach for credit risk mitigation (for SFTs)					-	-
4	Comprehensive Approach for credit risk mitigation (for SFTs)					31,500	4,463
5	VaR for SFTs <sup>(3)</sup>					15,819	1,833
6	<b>Total</b>						<b>14,497</b>
<b>Q2 2021</b>							
1	CEM / SA-CCR (for derivatives)	697	2,244		1.40	4,115	1,473
2	Internal Model Method (for derivatives and SFTs) <sup>(2)</sup>			16,835	1.40	23,353	6,383
3	Simple Approach for credit risk mitigation (for SFTs)					-	-
4	Comprehensive Approach for credit risk mitigation (for SFTs)					58,045	7,622
5	VaR for SFTs					-	-
6	<b>Total</b>						<b>15,478</b>
<b>Q1 2021</b>							
1	CEM / SA-CCR (for derivatives)	648	1,637		1.40	3,196	1,197
2	Internal Model Method (for derivatives and SFTs) <sup>(2)</sup>			16,761	1.40	23,180	6,687
3	Simple Approach for credit risk mitigation (for SFTs)					-	-
4	Comprehensive Approach for credit risk mitigation (for SFTs)					50,013	6,078
5	VaR for SFTs					-	-
6	<b>Total</b>						<b>13,962</b>
<b>Q4 2020</b>							
1	CEM / SA-CCR (for derivatives)	677	1,222		1.40	2,656	954
2	Internal Model Method (for derivatives and SFTs) <sup>(2)</sup>			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	<b>Total</b>						<b>13,125</b>

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

(2) Includes OTC derivatives related transactions only.

(3) Commencing Q3 2021, includes SFT exposures risk-weighted using a VaR model.

**CCR2: Credit valuation adjustment (CVA) capital charge**


(in \$MM)		Q3 2021		Q2 2021		Q1 2021		Q4 2020	
		a	b	a <sub>2</sub>	b <sub>2</sub>	a <sub>3</sub>	b <sub>3</sub>	a <sub>4</sub>	b <sub>4</sub>
		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	28,930	4,835	27,345	4,124	26,225	4,222	25,276	5,330
1	(i) VaR component (including the 3x multiplier)		962		2,854		2,772		3,438
2	(ii) Stressed VaR component (including the multiplier) <sup>(1)</sup>		3,873		1,270		1,450		1,892
3	All portfolios subject to the Standardized CVA capital charge	-	-	-	-	-	-	-	-
4	Total subject to the CVA capital charge	28,930	4,835	27,345	4,124	26,225	4,222	25,276	5,330

(1) For Q3 2021, amount includes the impact on CVA RWA from OSFI's announced increase to 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 <sup>(1)</sup>
<b>Regulatory portfolio</b>									
<b>Q3 2021</b>									
Sovereigns	-	-	-	69	-	24	-	-	93
Non-central government public sector entities (PSEs)	-	-	-	-	-	-	-	-	-
Multilateral development banks (MDBs)	-	-	-	-	-	-	-	-	-
Banks	-	-	-	-	-	9	-	-	9
Securities firms	-	-	-	-	-	-	-	-	-
Corporates	-	-	-	-	-	1,791	-	-	1,791
Regulatory retail portfolios	-	-	-	-	-	-	-	-	-
Other assets <sup>(2)</sup>	-	-	-	-	-	-	-	-	-
<b>Total</b>	-	-	-	69	-	1,824	-	-	1,893
<b>Q2 2021</b>									
Sovereigns	-	-	-	95	-	6	-	-	101
Non-central government public sector entities (PSEs)	-	-	-	-	-	-	-	-	-
Multilateral development banks (MDBs)	-	-	-	-	-	-	-	-	-
Banks	-	-	-	-	-	36	-	-	36
Securities firms	-	-	-	-	-	-	-	-	-
Corporates	-	-	-	-	-	1,743	-	-	1,743
Regulatory retail portfolios	-	-	-	-	-	-	-	-	-
Other assets <sup>(2)</sup>	-	-	-	-	-	-	-	-	-
<b>Total</b>	-	-	-	95	-	1,785	-	-	1,880
<b>Q1 2021</b>									
Sovereigns	-	-	-	38	-	26	-	-	64
Non-central government public sector entities (PSEs)	-	-	-	-	-	-	-	-	-
Multilateral development banks (MDBs)	-	-	-	-	-	-	-	-	-
Banks	-	-	-	-	-	41	-	-	41
Securities firms	-	-	-	-	-	-	-	-	-
Corporates	-	-	-	-	-	1,791	-	-	1,791
Regulatory retail portfolios	-	-	-	-	-	-	-	-	-
Other assets <sup>(2)</sup>	-	-	-	-	-	-	-	-	-
<b>Total</b>	-	-	-	38	-	1,858	-	-	1,896
<b>Q4 2020</b>									
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 <sup>(2)</sup>	-	-	-	-	-	-	-	-	-
<b>Total</b>	-	-	-	-	-	2,039	-	-	2,039

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

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

**CCR4: IRB – CCR exposures by portfolio and PD scale <sup>(1)</sup>**


(in \$MM)	PD scale	a	b	c	d	e	f	g
		EAD post-CRM	Average PD <sup>(2)</sup>	Number of obligors	Average LGD <sup>(3)</sup>	Average maturity <sup>(4)</sup>	RWA <sup>(5)</sup>	RWA density <sup>(6)</sup>
<b>Q3 2021</b>								
<b>Sovereign</b>								
	0.00 to <0.15	4,520	0.03%	52	15.80%	3.16	108	2.4%
	0.15 to <0.25	14	0.18%	2	25.00%	1.01	2	16.3%
	0.25 to <0.50	268	0.45%	3	25.00%	0.34	66	24.4%
	0.50 to <0.75	-	0.69%	1	25.00%	1.32	-	36.3%
	0.75 to <2.50	-	0.00%	-	0.00%	-	-	0.0%
	2.50 to <10.00	1	2.56%	1	25.00%	1.00	-	61.3%
	10.00 to <100.00	-	0.00%	-	0.00%	-	-	0.0%
	100.00 (Default)	-	0.00%	-	0.00%	-	-	0.0%
	<b>Sub-total</b>	<b>4,803</b>	<b>0.05%</b>	<b>59</b>	<b>16.35%</b>	<b>2.99</b>	<b>176</b>	<b>3.7%</b>
<b>Bank</b>								
	0.00 to <0.15	11,601	0.06%	168	30.58%	1.14	1,110	9.6%
	0.15 to <0.25	2,268	0.16%	22	30.33%	0.15	400	17.7%
	0.25 to <0.50	635	0.31%	54	33.07%	1.73	228	36.0%
	0.50 to <0.75	9	0.68%	3	30.81%	1.37	4	44.6%
	0.75 to <2.50	-	0.00%	-	0.00%	-	-	0.0%
	2.50 to <10.00	-	2.56%	2	40.00%	1.97	-	98.1%
	10.00 to <100.00	-	34.44%	1	40.00%	3.37	1	221.6%
	100.00 (Default)	-	0.00%	-	0.00%	-	-	0.0%
	<b>Sub-total</b>	<b>14,513</b>	<b>0.09%</b>	<b>250</b>	<b>30.65%</b>	<b>1.02</b>	<b>1,743</b>	<b>12.0%</b>
<b>Corporate</b>								
	0.00 to <0.15	44,104	0.07%	3,584	45.16%	0.47	5,535	12.6%
	0.15 to <0.25	3,818	0.17%	404	44.63%	1.20	1,065	27.9%
	0.25 to <0.50	4,218	0.35%	706	45.60%	1.88	1,958	46.4%
	0.50 to <0.75	1,991	0.68%	299	42.12%	1.55	1,237	62.1%
	0.75 to <2.50	524	1.33%	71	32.57%	2.19	330	63.0%
	2.50 to <10.00	350	7.51%	53	26.91%	1.65	324	92.6%
	10.00 to <100.00	167	18.69%	15	31.62%	1.18	271	161.7%
	100.00 (Default)	-	0.00%	-	0.00%	-	-	0.0%
	<b>Sub-total</b>	<b>55,172</b>	<b>0.24%</b>	<b>5,132</b>	<b>44.77%</b>	<b>0.69</b>	<b>10,720</b>	<b>19.4%</b>
<b>Total</b>		<b>74,488</b>	<b>0.19%</b>	<b>5,441</b>	<b>40.18%</b>	<b>0.90</b>	<b>12,639</b>	<b>17.0%</b>



**CCR4: IRB – CCR exposures by portfolio and PD scale <sup>(1)</sup>**


(in \$MM)	PD scale	a	b	c	d	e	f	g
		EAD post-CRM	Average PD <sup>(2)</sup>	Number of obligors	Average LGD <sup>(3)</sup>	Average maturity <sup>(4)</sup>	RWA <sup>(5)</sup>	RWA density <sup>(6)</sup>
<b>Q2 2021</b>								
<b>Sovereign</b>								
	0.00 to <0.15	4,764	0.02%	54	15.61%	2.30	92	1.9%
	0.15 to <0.25	9	0.17%	3	22.01%	0.72	1	13.6%
	0.25 to <0.50	216	0.43%	2	25.00%	0.35	52	23.9%
	0.50 to <0.75	-	0.69%	1	25.00%	1.48	-	36.3%
	0.75 to <2.50	-	0.00%	-	0.00%	-	-	0.0%
	2.50 to <10.00	1	2.56%	1	25.00%	1.00	1	61.3%
	10.00 to <100.00	-	0.00%	-	0.00%	-	-	0.0%
	100.00 (Default)	-	0.00%	-	0.00%	-	-	0.0%
	<b>Sub-total</b>	<b>4,990</b>	<b>0.04%</b>	<b>61</b>	<b>16.03%</b>	<b>2.21</b>	<b>146</b>	<b>2.9%</b>
<b>Bank</b>								
	0.00 to <0.15	14,707	0.06%	166	30.45%	0.89	1,361	9.3%
	0.15 to <0.25	2,927	0.17%	26	30.52%	0.12	513	17.5%
	0.25 to <0.50	466	0.33%	57	34.90%	2.08	172	36.8%
	0.50 to <0.75	11	0.69%	3	30.21%	1.31	5	45.5%
	0.75 to <2.50	-	0.00%	-	0.00%	-	-	0.0%
	2.50 to <10.00	-	2.56%	2	40.00%	1.90	-	98.1%
	10.00 to <100.00	-	34.44%	1	40.00%	3.56	1	244.7%
	100.00 (Default)	-	0.00%	-	0.00%	-	-	0.0%
	<b>Sub-total</b>	<b>18,111</b>	<b>0.09%</b>	<b>255</b>	<b>30.58%</b>	<b>0.79</b>	<b>2,052</b>	<b>11.3%</b>
<b>Corporate</b>								
	0.00 to <0.15	49,186	0.07%	3,531	45.31%	0.40	6,073	12.3%
	0.15 to <0.25	4,018	0.17%	391	44.46%	1.03	1,124	28.0%
	0.25 to <0.50	3,979	0.36%	720	46.42%	1.76	1,909	48.0%
	0.50 to <0.75	2,441	0.68%	303	44.09%	1.51	1,579	64.7%
	0.75 to <2.50	465	1.33%	77	32.50%	2.33	292	62.8%
	2.50 to <10.00	237	4.29%	57	32.50%	1.80	225	95.0%
	10.00 to <100.00	141	18.21%	18	34.26%	1.26	247	174.4%
	100.00 (Default)	65	100.00%	2	19.48%	1.84	-	0.0%
	<b>Sub-total</b>	<b>60,532</b>	<b>0.30%</b>	<b>5,099</b>	<b>45.08%</b>	<b>0.60</b>	<b>11,449</b>	<b>18.9%</b>
<b>Total</b>		<b>83,633</b>	<b>0.24%</b>	<b>5,415</b>	<b>40.20%</b>	<b>0.74</b>	<b>13,647</b>	<b>16.3%</b>

**CCR4: IRB – CCR exposures by portfolio and PD scale <sup>(1)</sup>**


(in \$MM)	PD scale	a	b	c	d	e	f	g
		EAD post-CRM	Average PD <sup>(2)</sup>	Number of obligors	Average LGD <sup>(3)</sup>	Average maturity <sup>(4)</sup>	RWA <sup>(5)</sup>	RWA density <sup>(6)</sup>
<b>Q1 2021</b>								
<b>Sovereign</b>								
	0.00 to <0.15	7,582	0.02%	50	15.76%	1.55	124	1.6%
	0.15 to <0.25	34	0.16%	3	18.83%	0.40	4	11.1%
	0.25 to <0.50	59	0.43%	1	25.00%	1.00	17	28.2%
	0.50 to <0.75	124	0.69%	2	25.00%	1.00	45	36.3%
	0.75 to <2.50	-	0.00%	-	0.00%	-	-	0.0%
	2.50 to <10.00	1	2.56%	1	25.00%	1.45	-	61.3%
	10.00 to <100.00	-	0.00%	-	0.00%	-	-	0.0%
	100.00 (Default)	-	0.00%	-	0.00%	-	-	0.0%
	<b>Sub-total</b>	<b>7,800</b>	<b>0.04%</b>	<b>57</b>	<b>15.99%</b>	<b>1.53</b>	<b>190</b>	<b>2.4%</b>
<b>Bank</b>								
	0.00 to <0.15	10,929	0.06%	163	30.59%	1.12	1,030	9.4%
	0.15 to <0.25	3,616	0.17%	33	30.47%	0.13	617	17.1%
	0.25 to <0.50	401	0.33%	52	35.09%	2.02	150	37.5%
	0.50 to <0.75	15	0.69%	3	30.00%	1.19	7	47.6%
	0.75 to <2.50	-	0.00%	-	0.00%	-	-	0.0%
	2.50 to <10.00	-	2.56%	2	40.00%	1.69	-	98.1%
	10.00 to <100.00	-	34.44%	1	40.00%	3.48	1	244.7%
	100.00 (Default)	-	0.00%	-	0.00%	-	-	0.0%
	<b>Sub-total</b>	<b>14,961</b>	<b>0.09%</b>	<b>254</b>	<b>30.68%</b>	<b>0.91</b>	<b>1,805</b>	<b>12.1%</b>
<b>Corporate</b>								
	0.00 to <0.15	41,330	0.07%	3,378	45.31%	0.48	5,211	12.6%
	0.15 to <0.25	3,832	0.17%	387	44.50%	1.08	1,080	28.2%
	0.25 to <0.50	3,720	0.34%	719	46.32%	1.98	1,726	46.4%
	0.50 to <0.75	1,850	0.67%	308	44.72%	2.00	1,192	64.4%
	0.75 to <2.50	593	1.33%	83	37.50%	2.51	429	72.3%
	2.50 to <10.00	252	4.08%	59	37.59%	2.07	270	107.0%
	10.00 to <100.00	106	18.14%	15	33.83%	1.41	182	171.8%
	100.00 (Default)	49	100.00%	3	21.73%	2.34	-	0.0%
	<b>Sub-total</b>	<b>51,732</b>	<b>0.28%</b>	<b>4,952</b>	<b>45.13%</b>	<b>0.72</b>	<b>10,090</b>	<b>19.5%</b>
<b>Total</b>		<b>74,493</b>	<b>0.22%</b>	<b>5,263</b>	<b>39.18%</b>	<b>0.85</b>	<b>12,085</b>	<b>16.2%</b>

(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 <sup>(1)</sup>**


(in \$MM)	a	b	c	d	e	f
	Collateral used in derivative transactions				Collateral used in SFTs	
	Fair value of collateral received		Fair value of posted collateral		Fair value of collateral received	Fair value of posted collateral
	Segregated <sup>(2)</sup>	Unsegregated <sup>(2)</sup>	Segregated <sup>(2)</sup>	Unsegregated <sup>(2)</sup>		
<b>Q3 2021</b>						
Cash – domestic currency	51	690	-	1,296	7,257	1,301
Cash – other currencies	34	6,524	190	8,254	44,608	24,529
Domestic sovereign debt	30	83	311	2,133	1,022	3,864
Other sovereign debt	1,599	342	927	13,759	2,424	5,454
Government agency debt	797	438	1,520	2,084	927	8,049
Corporate bonds	1,560	131	95	409	26,158	42,417
Equity securities	1,294	-	2,952	323	37,221	22,944
Other collateral	-	-	-	-	27	-
<b>Total</b>	<b>5,365</b>	<b>8,208</b>	<b>5,995</b>	<b>28,258</b>	<b>119,644</b>	<b>108,558</b>
<b>Q2 2021</b>						
Cash – domestic currency	48	626	-	1,385	8,027	1,627
Cash – other currencies	19	7,131	113	8,603	41,280	25,422
Domestic sovereign debt	-	411	-	1,890	504	4,704
Other sovereign debt	255	361	799	11,540	3,376	4,400
Government agency debt	-	552	400	2,253	1,514	11,813
Corporate bonds	136	130	-	526	25,740	39,975
Equity securities	-	-	4	374	34,232	23,007
Other collateral	-	-	-	-	19	-
<b>Total</b>	<b>458</b>	<b>9,211</b>	<b>1,316</b>	<b>26,571</b>	<b>114,692</b>	<b>110,948</b>
<b>Q1 2021</b>						
Cash – domestic currency	49	1,496	-	1,062	6,651	1,136
Cash – other currencies	42	8,702	130	9,627	41,937	20,639
Domestic sovereign debt	-	87	-	1,516	782	3,399
Other sovereign debt	334	671	737	28,854	3,117	6,103
Government agency debt	-	528	40	2,734	2,817	13,604
Corporate bonds	138	65	-	718	24,469	42,291
Equity securities	-	-	4	-	31,810	21,285
Other collateral	-	-	-	-	18	-
<b>Total</b>	<b>563</b>	<b>11,549</b>	<b>911</b>	<b>44,511</b>	<b>111,601</b>	<b>108,457</b>
<b>Q4 2020</b>						
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	-
<b>Total</b>	<b>615</b>	<b>12,005</b>	<b>737</b>	<b>21,479</b>	<b>97,660</b>	<b>87,450</b>

(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. Commencing Q3, 2021, standardized SA-CCR EAD calculation recognized regulatory initial margin.

**CCR6: Credit derivatives exposures**


(in \$MM)	a	b
	Protection bought	Protection sold
<b>Q3 2021</b>		
<b>Notionals</b>		
Single-name credit default swaps	7,240	2,314
Index credit default swaps	-	-
Credit default swaps	7,240	2,314
Total return swaps	17,585	440
Credit options	-	-
Other credit derivatives	-	-
<b>Total notionals</b>	<b>24,825</b>	<b>2,754</b>
<b>Fair values</b>		
Positive fair value (asset)	162	10
Negative fair value (liability)	-	(33)
<b>Q2 2021</b>		
<b>Notionals</b>		
Single-name credit default swaps	6,176	2,423
Index credit default swaps	-	-
Credit default swaps	6,176	2,423
Total return swaps	17,436	430
Credit options	-	-
Other credit derivatives	-	-
<b>Total notionals</b>	<b>23,612</b>	<b>2,853</b>
<b>Fair values</b>		
Positive fair value (asset)	174	12
Negative fair value (liability)	-	(37)
<b>Q1 2021</b>		
<b>Notionals</b>		
Single-name credit default swaps	8,581	2,594
Index credit default swaps	-	-
Credit default swaps	8,581	2,594
Total return swaps	20,702	1,565
Credit options	-	-
Other credit derivatives	-	-
<b>Total notionals</b>	<b>29,283</b>	<b>4,159</b>
<b>Fair values</b>		
Positive fair value (asset)	222	17
Negative fair value (liability)	-	(47)
<b>Q4 2020</b>		
<b>Notionals</b>		
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	-	-
<b>Total notionals</b>	<b>29,664</b>	<b>4,487</b>
<b>Fair values</b>		
Positive fair value (asset)	453	26
Negative fair value (liability)	-	(53)

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



(in \$MM) <sup>(1)</sup>		a	a <sub>2</sub>	a <sub>3</sub>	a <sub>4</sub>
		Q3 2021	Q2 2021	Q1 2021	Q4 2020
1	RWA as at end of previous reporting period	6,395	6,703	6,815	7,496
2	Asset size <sup>(2)</sup>	336	(250)	145	(916)
3	Asset quality <sup>(3)</sup>	42	(29)	(104)	217
4	Model updates <sup>(4)</sup>	-	-	-	62
5	Methodology and policy <sup>(5)</sup>	-	-	-	-
6	Acquisitions and disposals <sup>(6)</sup>	-	-	-	-
7	Foreign exchange movements <sup>(7)</sup>	101	(29)	(153)	(44)
8	Other <sup>(8)</sup>	-	-	-	-
9	RWA as at end of current reporting period	6,874	6,395	6,703	6,815

(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.

(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 <sub>2</sub>		b <sub>2</sub>		a <sub>3</sub>		b <sub>3</sub>		a <sub>4</sub>		b <sub>4</sub>	
		EAD (post-CRM)		RWA		EAD (post-CRM)		RWA		EAD (post-CRM)		RWA		EAD (post-CRM)		RWA	
		Q3 2021		Q2 2021		Q1 2021		Q4 2020									
1	<b>Exposures to QCCPs (total)</b>			<b>615</b>		<b>693</b>		<b>628</b>								<b>526</b>	
2	Exposures for trades at QCCPs (excluding initial margin and default fund contributions); of which	9,592		205		13,068		273		8,607		185		7,507		161	
3	(i) OTC derivatives	709		14		589		12		807		16		872		17	
4	(ii) Exchange-traded derivatives	4,621		106		7,592		164		3,925		92		4,194		95	
5	(iii) Securities financing transactions	4,262		85		4,887		97		3,875		77		2,441		49	
6	(iv) Netting sets where cross-product netting has been approved	-		-		-		-		-		-		-		-	
7	Segregated initial margin	5,602		-		6,078		-		4,934		-		4,866		-	
8	Non-segregated initial margin	-		-		-		-		-		-		-		-	
9	Pre-funded default fund contributions	756		410		758		420		740		443		649		365	
10	Unfunded default fund contributions <sup>(1)</sup>	2,094		-		1,878		-		1,823		-		1,083		-	
11	<b>Exposures to non-QCCPs (total)</b>			-		-		-				-				-	
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	-		-		-		-		-		-		-		-	
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 <sup>(1)</sup>	a <sup>(2)</sup>	b	c	e	f	g	i	j	k
		Bank acts as Originator				Bank acts as Sponsor <sup>(3)</sup>			Bank acts as Investor <sup>(4)</sup>		
		Traditional	Traditional	Synthetic	Sub-total	Traditional	Synthetic	Sub-total	Traditional	Synthetic	Sub-total
<b>Q3 2021</b>											
1	<b>Retail (total)</b>	<b>446</b>	<b>131</b>	-	<b>578</b>	<b>10,645</b>	-	<b>10,645</b>	<b>3,273</b>	-	<b>3,273</b>
	– of which										
2	Residential Mortgage <sup>(5)</sup>	-	-	-	-	510	-	510	-	-	-
3	Credit Card	-	-	-	-	255	-	255	1,826	-	1,826
4	Consumer Receivables	-	-	-	-	2,169	-	2,169	399	-	399
5	Auto Loans/Leases	446	131	-	578	7,711	-	7,711	1,048	-	1,048
6	<b>Wholesale (total)</b>	-	-	-	-	<b>6,087</b>	-	<b>6,087</b>	<b>1,181</b>	-	<b>1,181</b>
	– of which										
7	Trade Receivables	-	-	-	-	3,327	-	3,327	-	-	-
8	Diversified Asset-Backed Securities	-	-	-	-	-	-	-	-	-	-
9	Auto Wholesale/Rentals	-	-	-	-	1,279	-	1,279	309	-	309
10	Other Wholesale	-	-	-	-	1,481	-	1,481	826	-	826
11	Re-Securitization	-	-	-	-	-	-	-	46	-	46
<b>Q2 2021</b>											
1	<b>Retail (total)</b>	<b>528</b>	<b>129</b>	-	<b>657</b>	<b>10,460</b>	-	<b>10,460</b>	<b>3,792</b>	-	<b>3,792</b>
	– of which										
2	Residential Mortgage <sup>(5)</sup>	-	-	-	-	510	-	510	-	-	-
3	Credit Card	-	-	-	-	364	-	364	2,075	-	2,075
4	Consumer Receivables	-	-	-	-	2,309	-	2,309	699	-	699
5	Auto Loans/Leases	528	129	-	657	7,277	-	7,277	1,018	-	1,018
6	<b>Wholesale (total)</b>	-	-	-	-	<b>6,786</b>	-	<b>6,786</b>	<b>1,348</b>	-	<b>1,348</b>
	– of which										
7	Trade Receivables	-	-	-	-	4,218	-	4,218	-	-	-
8	Diversified Asset-Backed Securities	-	-	-	-	-	-	-	-	-	-
9	Auto Wholesale/Rentals	-	-	-	-	1,278	-	1,278	396	-	396
10	Other Wholesale	-	-	-	-	1,290	-	1,290	907	-	907
11	Re-Securitization	-	-	-	-	-	-	-	45	-	45

**SEC1: Securitization exposures in the banking book**


(in \$MM)		a <sup>(1)</sup>	a <sup>(2)</sup>	b	c	e	f	g	i	j	k
		Bank acts as Originator				Bank acts as Sponsor <sup>(3)</sup>			Bank acts as Investor <sup>(4)</sup>		
		Traditional	Traditional	Synthetic	Sub-total	Traditional	Synthetic	Sub-total	Traditional	Synthetic	Sub-total
<b>Q1 2021</b>											
1	<b>Retail (total)</b> – of which	669	105	-	774	10,660	-	10,660	4,069	-	4,069
2	Residential Mortgage <sup>(5)</sup>	-	-	-	-	510	-	510	-	-	-
3	Credit Card	-	-	-	-	1,031	-	1,031	2,075	-	2,075
4	Consumer Receivables	-	-	-	-	2,375	-	2,375	945	-	945
5	Auto Loans/Leases	669	105	-	774	6,744	-	6,744	1,049	-	1,049
6	<b>Wholesale (total)</b> – of which	-	-	-	-	7,120	-	7,120	1,424	-	1,424
7	Trade Receivables	-	-	-	-	4,383	-	4,383	1	-	1
8	Diversified Asset-Backed Securities	-	-	-	-	-	-	-	-	-	-
9	Auto Wholesale/Rentals	-	-	-	-	1,316	-	1,316	366	-	366
10	Other Wholesale	-	-	-	-	1,421	-	1,421	1,010	-	1,010
11	Re-Securitization	-	-	-	-	-	-	-	47	-	47
<b>Q4 2020</b>											
1	<b>Retail (total)</b> – of which	766	206	-	972	11,010	-	11,010	4,273	-	4,273
2	Residential Mortgage <sup>(5)</sup>	-	-	-	-	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	<b>Wholesale (total)</b> – of which	-	-	-	-	7,542	-	7,542	1,609	-	1,609
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

(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 <sup>(1)</sup>	a <sup>(2)</sup>	b	c	e	f	g	i	j	k
		Bank acts as Originator				Bank acts as Sponsor <sup>(3)</sup>			Bank acts as Investor <sup>(4)</sup>		
		Traditional	Traditional	Synthetic	Sub-total	Traditional	Synthetic	Sub-total	Traditional	Synthetic	Sub-total
<b>Q3 2021</b>											
1	<b>Retail (total)</b> <sup>(5)</sup> – of which	-	-	-	-	-	-	-	200	-	200
2	Residential Mortgage <sup>(6)</sup>	-	-	-	-	-	-	-	-	-	-
3	Credit Card	-	-	-	-	-	-	-	110	-	110
4	Consumer Receivables	-	-	-	-	-	-	-	-	-	-
5	Auto Loans/Leases	-	-	-	-	-	-	-	90	-	90
6	<b>Wholesale (total)</b> <sup>(5)</sup> – of which	-	-	-	-	-	-	-	9	-	9
7	Trade Receivables	-	-	-	-	-	-	-	-	-	-
8	Diversified Asset-Backed Securities	-	-	-	-	-	-	-	-	-	-
9	Auto Wholesale/Rentals	-	-	-	-	-	-	-	9	-	9
10	Other Wholesale	-	-	-	-	-	-	-	-	-	-
11	Re-Securitization	-	-	-	-	-	-	-	-	-	-
<b>Q2 2021</b>											
1	<b>Retail (total)</b> <sup>(5)</sup> – of which	-	-	-	-	-	-	-	58	-	58
2	Residential Mortgage <sup>(6)</sup>	-	-	-	-	-	-	-	-	-	-
3	Credit Card	-	-	-	-	-	-	-	36	-	36
4	Consumer Receivables	-	-	-	-	-	-	-	-	-	-
5	Auto Loans/Leases	-	-	-	-	-	-	-	22	-	22
6	<b>Wholesale (total)</b> <sup>(5)</sup> – of which	-	-	-	-	-	-	-	31	-	31
7	Trade Receivables	-	-	-	-	-	-	-	-	-	-
8	Diversified Asset-Backed Securities	-	-	-	-	-	-	-	-	-	-
9	Auto Wholesale/Rentals	-	-	-	-	-	-	-	31	-	31
10	Other Wholesale	-	-	-	-	-	-	-	-	-	-
11	Re-Securitization	-	-	-	-	-	-	-	-	-	-

## SEC2: Securitization exposures in the trading book



(in \$MM)		a <sup>(1)</sup>	a <sup>(2)</sup>	b	c	e	f	g	i	j	k
		Bank acts as Originator				Bank acts as Sponsor <sup>(3)</sup>			Bank acts as Investor <sup>(4)</sup>		
		Traditional	Traditional	Synthetic	Sub-total	Traditional	Synthetic	Sub-total	Traditional	Synthetic	Sub-total
<b>Q1 2021</b>											
1	<b>Retail (total)</b> <sup>(5)</sup> – of which	-	-	-	-	-	-	-	65	-	65
2	Residential Mortgage <sup>(6)</sup>	-	-	-	-	-	-	-	1	-	1
3	Credit Card	-	-	-	-	-	-	-	45	-	45
4	Consumer Receivables	-	-	-	-	-	-	-	-	-	-
5	Auto Loans/Leases	-	-	-	-	-	-	-	19	-	19
6	<b>Wholesale (total)</b> <sup>(5)</sup> – of which	-	-	-	-	-	-	-	33	-	33
7	Trade Receivables	-	-	-	-	-	-	-	-	-	-
8	Diversified Asset-Backed Securities	-	-	-	-	-	-	-	-	-	-
9	Auto Wholesale/Rentals	-	-	-	-	-	-	-	31	-	31
10	Other Wholesale	-	-	-	-	-	-	-	2	-	2
11	Re-Securitization	-	-	-	-	-	-	-	-	-	-

<b>Q4 2020</b>											
1	<b>Retail (total)</b> <sup>(5)</sup> – of which	-	-	-	-	-	-	-	84	-	84
2	Residential Mortgage <sup>(6)</sup>	-	-	-	-	-	-	-	-	-	-
3	Credit Card	-	-	-	-	-	-	-	43	-	43
4	Consumer Receivables	-	-	-	-	-	-	-	1	-	1
5	Auto Loans/Leases	-	-	-	-	-	-	-	40	-	40
6	<b>Wholesale (total)</b> <sup>(5)</sup> – 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	-	-	-	-	-	-	-	-	-	-

(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%
<b>Q3 2021</b>																	
<b>1 Total exposures<sup>(1)(2)</sup></b>	<b>14,468</b>	<b>1,778</b>	<b>929</b>	<b>-</b>	<b>3</b>	<b>446</b>	<b>16,732</b>	<b>-</b>	<b>-</b>	<b>110</b>	<b>2,800</b>	<b>-</b>	<b>-</b>	<b>9</b>	<b>224</b>	<b>-</b>	<b>-</b>
2 Traditional securitization	14,468	1,778	929	-	3	446	16,732	-	-	110	2,800	-	-	9	224	-	-
3 Of which securitization	14,468	1,778	929	-	3	446	16,732	-	-	110	2,800	-	-	9	224	-	-
4 Of which retail underlying	10,573	442	73	-	3	446	10,645	-	-	110	1,409	-	-	9	113	-	-
5 Of which wholesale	3,895	1,336	856	-	-	-	6,087	-	-	-	1,391	-	-	-	111	-	-
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	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Q2 2021</b>																	
<b>1 Total exposures<sup>(1)(2)</sup></b>	<b>14,583</b>	<b>3,188</b>	<b>-</b>	<b>-</b>	<b>3</b>	<b>528</b>	<b>17,246</b>	<b>-</b>	<b>-</b>	<b>122</b>	<b>2,764</b>	<b>-</b>	<b>-</b>	<b>10</b>	<b>221</b>	<b>-</b>	<b>-</b>
2 Traditional securitization	14,583	3,188	-	-	3	528	17,246	-	-	122	2,764	-	-	10	221	-	-
3 Of which securitization	14,583	3,188	-	-	3	528	17,246	-	-	122	2,764	-	-	10	221	-	-
4 Of which retail underlying	10,372	613	-	-	3	528	10,460	-	-	122	1,290	-	-	10	103	-	-
5 Of which wholesale	4,211	2,575	-	-	-	-	6,786	-	-	-	1,474	-	-	-	118	-	-
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%
<b>Q1 2021</b>																	
<b>1 Total exposures<sup>(1)(2)</sup></b>	<b>15,045</b>	<b>2,247</b>	<b>1,154</b>	<b>-</b>	<b>3</b>	<b>669</b>	<b>17,780</b>	<b>-</b>	<b>-</b>	<b>143</b>	<b>3,132</b>	<b>-</b>	<b>-</b>	<b>11</b>	<b>251</b>	<b>-</b>	<b>-</b>
2 Traditional securitization	15,045	2,247	1,154	-	3	669	17,780	-	-	143	3,132	-	-	11	251	-	-
3 Of which securitization	15,045	2,247	1,154	-	3	669	17,780	-	-	143	3,132	-	-	11	251	-	-
4 Of which retail underlying	10,726	525	75	-	3	669	10,660	-	-	143	1,427	-	-	11	114	-	-
5 Of which wholesale	4,319	1,722	1,079	-	-	-	7,120	-	-	-	1,705	-	-	-	137	-	-
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	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Q4 2020</b>																	
<b>1 Total exposures<sup>(1)(2)</sup></b>	<b>15,620</b>	<b>2,494</b>	<b>1,201</b>	<b>-</b>	<b>3</b>	<b>766</b>	<b>18,552</b>	<b>-</b>	<b>-</b>	<b>158</b>	<b>3,339</b>	<b>-</b>	<b>-</b>	<b>13</b>	<b>267</b>	<b>-</b>	<b>-</b>
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	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

(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%
<b>Q3 2021</b>																	
1 <b>Total exposures<sup>(1)</sup></b>	<b>2,736</b>	<b>232</b>	<b>1,396</b>	<b>69</b>	<b>21</b>	-	<b>3,770</b>	<b>684</b>	-	-	<b>1,115</b>	<b>303</b>	-	-	<b>89</b>	<b>25</b>	-
2 Traditional securitization	2,736	232	1,396	69	21	-	3,770	684	-	-	1,115	303	-	-	89	25	-
3 Of which securitization	2,736	232	1,350	69	21	-	3,770	638	-	-	1,115	257	-	-	89	21	-
4 Of which retail underlying	2,119	232	853	69	-	-	3,273	-	-	-	850	-	-	-	68	-	-
5 Of which wholesale	617	-	497	-	21	-	497	638	-	-	265	257	-	-	21	21	-
6 Of which re-securitization	-	-	46	-	-	-	-	46	-	-	-	46	-	-	-	4	-
7 Of which senior	-	-	46	-	-	-	-	46	-	-	-	46	-	-	-	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	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Q2 2021</b>																	
1 <b>Total exposures<sup>(1)</sup></b>	<b>3,078</b>	<b>1,118</b>	<b>881</b>	<b>40</b>	<b>23</b>	-	<b>4,340</b>	<b>800</b>	-	-	<b>1,370</b>	<b>337</b>	-	-	<b>110</b>	<b>27</b>	-
2 Traditional securitization	3,078	1,118	881	40	23	-	4,340	800	-	-	1,370	337	-	-	110	27	-
3 Of which securitization	3,078	1,118	836	40	23	-	4,340	755	-	-	1,370	292	-	-	110	23	-
4 Of which retail underlying	2,347	1,063	382	-	-	-	3,792	-	-	-	938	-	-	-	75	-	-
5 Of which wholesale	731	55	454	40	23	-	548	755	-	-	432	292	-	-	35	23	-
6 Of which re-securitization	-	-	45	-	-	-	-	45	-	-	-	45	-	-	-	4	-
7 Of which senior	-	-	45	-	-	-	-	45	-	-	-	45	-	-	-	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%
<b>Q1 2021</b>																	
1 <b>Total exposures<sup>(1)</sup></b>	<b>3,150</b>	<b>1,020</b>	<b>1,215</b>	<b>83</b>	<b>25</b>	-	<b>4,631</b>	<b>862</b>	-	-	<b>1,440</b>	<b>354</b>	-	-	<b>115</b>	<b>28</b>	-
2 Traditional securitization	3,150	1,020	1,215	83	25	-	4,631	862	-	-	1,440	354	-	-	115	28	-
3 Of which securitization	3,150	1,020	1,168	83	25	-	4,631	815	-	-	1,440	307	-	-	115	24	-
4 Of which retail underlying	2,359	927	700	83	-	-	4,069	-	-	-	1,066	-	-	-	85	-	-
5 Of which wholesale	791	93	468	-	25	-	562	815	-	-	374	307	-	-	30	24	-
6 Of which re-securitization	-	-	47	-	-	-	-	47	-	-	-	47	-	-	-	4	-
7 Of which senior	-	-	47	-	-	-	-	47	-	-	-	47	-	-	-	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	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Q4 2020</b>																	
1 <b>Total exposures<sup>(1)</sup></b>	<b>3,196</b>	<b>1,129</b>	<b>1,387</b>	<b>146</b>	<b>24</b>	-	<b>5,046</b>	<b>836</b>	-	-	<b>1,708</b>	<b>350</b>	-	-	<b>136</b>	<b>28</b>	-
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	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

(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)	Q3 2021	Q2 2021	Q1 2021	Q4 2020	Q3 2020
<b>Common Equity Tier 1 (CET1) capital</b>					
<b>Opening amount</b>	49,697	49,542	49,165	48,689	48,543
Net income attributable to equity holders of the Bank	2,461	2,366	2,308	1,827	1,355
Dividends paid to equity holders of the Bank	(1,128)	(1,169)	(1,134)	(1,173)	(1,113)
Shares issued	116	80	58	3	5
Shared repurchased/redeemed	-	-	-	-	-
Removal of own credit spread (net of tax)	(55)	91	163	124	577
ECL transitional adjustment	(180)	(323)	(419)	132	726
Movements in other comprehensive income (OCI), excluding cash flow hedges	(232)	(978)	(478)	(541)	(1,516)
Currency translation differences	(166)	(1,382)	(1,030)	(512)	(1,036)
Debt and equity investments fair valued through OCI	(51)	(136)	186	(97)	293
Employee Benefits	(72)	643	466	218	(353)
Other	57	(103)	(100)	(150)	(420)
Goodwill and other intangible assets (deduction, net of related tax liability)	79	145	17	131	(8)
Other, including regulatory adjustments and transitional arrangements	(293)	(57)	(138)	(27)	120
Deferred tax assets that rely on future probability	12	44	(25)	21	20
Threshold deductions	-	-	-	-	-
Other	(305)	(101)	(113)	(48)	100
<b>Closing Amount</b>	<b>50,465</b>	<b>49,697</b>	<b>49,542</b>	<b>49,165</b>	<b>48,689</b>
<b>Other Additional Tier 1 capital</b>					
<b>Opening amount</b>	5,455	5,751	6,197	6,209	4,502
Capital issuances	1,250	-	-	-	1,688
Redeemed capital (Qualifying and Non-Qualifying)	(500)	(759)	-	-	-
Other, capital including regulatory adjustments and transitional arrangements (NVCC)	(40)	463	(446)	(12)	19
<b>Closing Amount</b>	<b>6,165</b>	<b>5,455</b>	<b>5,751</b>	<b>6,197</b>	<b>6,209</b>
<b>Total Tier 1 capital</b>	<b>56,630</b>	<b>55,152</b>	<b>55,293</b>	<b>55,362</b>	<b>54,898</b>
<b>Tier 2 capital</b>					
<b>Opening amount</b>	8,534	8,431	9,150	9,276	9,478
Capital issuances	-	-	-	-	-
Redeemed capital	-	-	(750)	(1)	(8)
Amortization adjustments	(5)	13	(270)	-	-
Other, including regulatory adjustments and transitional adjustments (NVCC)	(58)	90	301	(125)	(194)
<b>Closing Amount</b>	<b>8,471</b>	<b>8,534</b>	<b>8,431</b>	<b>9,150</b>	<b>9,276</b>
<b>Total regulatory capital</b>	<b>65,101</b>	<b>63,686</b>	<b>63,724</b>	<b>64,512</b>	<b>64,174</b>

# RISK-WEIGHTED ASSETS AND CAPITAL RATIOS



(in \$billions)	Q3 2021	Q2 2021	Q1 2021	Q4 2020	Q3 2020
<b>RISK-WEIGHTED ASSETS: <sup>(1)</sup></b>					
<b>On-Balance Sheet Assets</b>					
Cash Resources	2.4	2.6	2.7	2.9	3.0
Securities	10.1	10.2	10.8	12.0	12.6
Residential Mortgages	38.5	36.3	35.1	38.7	38.5
Loans					
- Personal Loans	55.0	54.3	55.9	56.8	58.8
- Non-Personal Loans	132.7	131.3	132.3	134.6	145.0
All Other	34.2	34.3	34.1	33.1	33.6
	<b>272.9</b>	<b>269.0</b>	<b>270.9</b>	<b>278.1</b>	<b>291.5</b>
<b>Off-Balance Sheet Assets</b>					
Indirect Credit Instruments	59.5	57.3	56.8	58.8	55.5
Derivative Instruments	12.8	11.8	11.9	12.9	14.0
	<b>72.3</b>	<b>69.1</b>	<b>68.7</b>	<b>71.7</b>	<b>69.5</b>
<b>Total Credit Risk before AIRB scaling factor</b>	<b>345.2</b>	<b>338.1</b>	<b>339.6</b>	<b>349.8</b>	<b>361.0</b>
AIRB Scaling factor <sup>(2)</sup>	12.0	11.9	11.7	12.2	12.7
<b>Total Credit Risk after AIRB scaling factor</b>	<b>357.2</b>	<b>350.0</b>	<b>351.3</b>	<b>362.0</b>	<b>373.7</b>
Market Risk - Risk Assets Equivalent	8.0	6.2	7.2	7.3	9.3
Operational Risk - Risk Assets Equivalent	49.0	48.5	48.3	47.8	47.5
Regulatory Capital Floor Adjustment to RWA <sup>(3)</sup>	-	-	-	-	-
<b>Risk-Weighted Assets <sup>(3)</sup></b>	<b>414.2</b>	<b>404.7</b>	<b>406.8</b>	<b>417.1</b>	<b>430.5</b>
<b>REGULATORY CAPITAL RATIOS (%):</b>					
Common Equity Tier 1	12.2	12.3	12.2	11.8	11.3
Tier 1	13.7	13.6	13.6	13.3	12.8
Total	15.7	15.7	15.7	15.5	14.9

(1) 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 5), "Exposure at Default and Risk-Weighted Assets for Credit Risk Portfolios".

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

(3) 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**


Credit Risk RWA (in \$MM)	Q3 2021		Q2 2021	
	Credit Risk	Of which Counterparty Credit Risk <sup>(5)</sup>	Credit Risk	Of which Counterparty Credit Risk
Credit risk-weighted assets as at beginning of Quarter	350,030	20,295	351,301	18,812
Book size <sup>(1)</sup>	7,645	(2,029)	7,340	893
Book quality <sup>(2)</sup>	(3,099)	(152)	(46)	17
Model updates <sup>(3)</sup>	(127)	(983)	-	-
Methodology and policy <sup>(4)</sup>	2,540	2,540	(225)	1,230
Acquisitions and disposals	-	-	(235)	-
Foreign exchange movements	253	276	(8,105)	(657)
Other	-	-	-	-
<b>Credit risk-weighted assets as at end of Quarter</b>	<b>357,242</b>	<b>19,947</b>	<b>350,030</b>	<b>20,295</b>

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

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

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

(5) For Q3, 2021, model updates include RWA changes arising from the implementation of a VaR model for SFTs and methodology and policy includes the impact on CVA RWA from OSFI's announced increase to the stressed VaR multiplier.

Market Risk RWA (in \$MM)	Q3 2021	Q2 2021
Market risk-weighted assets as at beginning of Quarter	6,180	7,206
Movement in risk levels <sup>(1)</sup>	(450)	(1,038)
Model updates <sup>(2)</sup>	(896)	19
Methodology and policy <sup>(3) (4)</sup>	3,134	-
Acquisitions and disposals	-	(7)
Other	-	-
<b>Market risk-weighted assets as at end of Quarter</b>	<b>7,968</b>	<b>6,180</b>

(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).

(4) Represents the impact on market risk RWA from OSFI's announced increase to the stressed VaR multiplier.

Operational Risk RWA (in \$MM)	Q3 2021	Q2 2021
Operational risk-weighted assets as at beginning of Quarter	48,517	48,273
Acquisitions and disposals	-	(66)
Higher Revenue	441	310
<b>Operational risk-weighted assets as at end of Quarter</b>	<b>48,958</b>	<b>48,517</b>

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



(in \$billions)	Q3 2021					
Risk-weighted Assets (RWA)	Canadian Banking	International Banking	Global Banking & Markets	Global Wealth Management	Other	All Bank
RWA	\$128.4	\$150.8	\$103.4	\$18.2	\$13.4	\$414.2
Proportion of Bank	31%	36%	25%	4%	4%	100%
Comprised of:						
Credit risk	88%	88%	86%	63%	93%	86%
Market risk	- %	1%	5%	- %	10%	2%
Operational risk	12%	11%	9%	37%	-3%	12%

(in \$billions)	Q2 2021					
Risk-weighted Assets (RWA)	Canadian Banking	International Banking	Global Banking & Markets	Global Wealth Management	Other	All Bank
RWA	\$125.1	\$150.2	\$100.2	\$17.7	\$11.5	\$404.7
Proportion of Bank	31%	37%	25%	4%	3%	100%
Comprised of:						
Credit risk	87%	88%	86%	63%	99%	86%
Market risk	- %	1%	4%	- %	6%	2%
Operational risk	13%	11%	10%	37%	-5%	12%

# CREDIT RISK EXPOSURES BY GEOGRAPHY<sup>(1)(2)</sup>



## Exposure at Default

(in \$MM)	Q3 2021					Q2 2021				
	Non-Retail			Retail	Total	Non-Retail			Retail	Total
	Drawn	Undrawn	Other <sup>(3)</sup>			Drawn	Undrawn	Other <sup>(3)</sup>		
Canada	142,742	57,295	38,702	399,066	637,805	139,376	54,223	40,285	383,236	617,120
USA	92,163	38,988	46,293	-	177,444	75,247	37,363	50,478	-	163,088
Chile	25,892	1,419	3,958	25,088	56,357	26,976	1,610	4,282	25,830	58,698
Mexico	22,871	1,837	2,503	12,187	39,398	22,677	1,346	2,655	11,620	38,298
Peru	16,139	1,055	3,570	7,517	28,281	16,534	784	3,528	7,911	28,757
Colombia	5,850	547	1,069	5,394	12,860	5,440	385	1,086	5,439	12,350
Other International										
Europe	22,594	6,826	20,506	-	49,926	20,485	10,185	23,297	-	53,967
Caribbean	14,640	1,397	1,078	10,963	28,078	14,750	1,394	979	10,895	28,018
Latin America (other)	12,370	1,208	722	566	14,866	11,740	1,506	520	542	14,308
All Other	23,858	4,708	6,144	34	34,744	20,507	4,441	7,979	34	32,961
<b>Total</b>	<b>379,119</b>	<b>115,280</b>	<b>124,545</b>	<b>460,815</b>	<b>1,079,759</b>	<b>353,732</b>	<b>113,237</b>	<b>135,089</b>	<b>445,507</b>	<b>1,047,565</b>

(in \$MM)	Q1 2021	Q4 2020	Q3 2020	Q2 2020	Q1 2020
Canada	632,303	621,409	622,267	621,264	554,841
USA	184,650	188,210	178,059	230,083	198,504
Chile	57,225	56,738	59,104	58,814	53,464
Mexico	38,540	39,187	39,304	39,230	40,643
Peru	33,229	33,931	34,932	36,183	33,345
Colombia	14,091	13,123	14,540	14,613	14,078
Other International					
Europe	50,765	51,770	48,954	52,053	55,036
Caribbean	30,182	31,420	33,128	35,639	32,702
Latin America (other)	13,569	13,647	14,956	15,932	13,517
All Other	35,902	34,789	34,699	36,122	33,371
<b>Total</b>	<b>1,090,456</b>	<b>1,084,224</b>	<b>1,079,943</b>	<b>1,139,933</b>	<b>1,029,501</b>

(1) AIRB Exposure at default is after credit risk mitigation. Standardized Exposure at default is after related IFRS 9 (Stage 3) allowances for credit losses, and commencing Q2, 2021, also includes the collateral impact under the comprehensive approach. This excludes equity investment securities and other assets. Residential Mortgages include insured mortgages.

(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 <sup>(1)(2)</sup>



## Exposure at Default

(in \$MM)	Q3 2021				Q2 2021			
	Drawn	Undrawn	Other <sup>(3)</sup>	Total	Drawn	Undrawn	Other <sup>(3)</sup>	Total
<b>Non-Retail</b>								
Less than 1 year	170,173	35,639	82,467	288,279	135,454	36,689	95,355	267,498
1 to 5 years	125,886	72,906	27,220	226,012	136,628	68,163	24,853	229,644
Over 5 Years	18,665	3,297	6,580	28,542	18,608	5,122	5,781	29,511
<b>Total Non-Retail</b>	<b>314,724</b>	<b>111,842</b>	<b>116,267</b>	<b>542,833</b>	<b>290,690</b>	<b>109,974</b>	<b>125,989</b>	<b>526,653</b>
<b>Retail</b>								
Less than 1 year	25,332	22,815	-	48,147	25,788	22,121	-	47,909
1 to 5 years	242,214	-	-	242,214	229,994	-	-	229,994
Over 5 Years	16,163	-	-	16,163	16,494	-	-	16,494
Revolving Credits <sup>(4)</sup>	37,720	26,760	-	64,480	37,801	26,343	-	64,144
<b>Total Retail</b>	<b>321,429</b>	<b>49,575</b>	<b>-</b>	<b>371,004</b>	<b>310,077</b>	<b>48,464</b>	<b>-</b>	<b>358,541</b>
<b>Total</b>	<b>636,153</b>	<b>161,417</b>	<b>116,267</b>	<b>913,837</b>	<b>600,767</b>	<b>158,438</b>	<b>125,989</b>	<b>885,194</b>

(in \$MM)	Q1 2021	Q4 2020	Q3 2020	Q2 2020
<b>Non-Retail</b>				
Less than 1 year	310,970	295,172	278,141	328,187
1 to 5 years	228,208	238,071	252,316	264,659
Over 5 Years	28,453	32,344	37,183	40,804
<b>Total Non-Retail</b>	<b>567,631</b>	<b>565,587</b>	<b>567,640</b>	<b>633,650</b>
<b>Retail</b>				
Less than 1 year	52,913	54,638	54,685	56,720
1 to 5 years	221,586	215,271	208,029	201,676
Over 5 Years	14,944	14,892	15,441	15,214
Revolving Credits <sup>(4)</sup>	67,764	68,978	68,707	69,600
<b>Total Retail</b>	<b>357,207</b>	<b>353,779</b>	<b>346,862</b>	<b>343,210</b>
<b>Total</b>	<b>924,838</b>	<b>919,366</b>	<b>914,502</b>	<b>976,860</b>

(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	Q3 2021		Q2 2021		Q1 2021		Q4 2020		Q3 2020	
	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
	%	%	%	%	%	%	%	%	%	%
<b>Non-Retail</b> <sup>(1)(3)</sup>										
Corporate	<b>0.10</b>	<b>0.37</b>	0.12	0.34	0.12	0.32	0.14	0.36	0.13	0.36
Sovereign	-	<b>0.05</b>	-	0.04	-	0.06	-	0.07	-	0.07
Bank	-	<b>0.25</b>	-	0.08	-	0.06	-	0.13	-	0.14
<b>Retail</b> <sup>(2)(3)</sup>										
Real Estate Secured	<b>0.01</b>	<b>0.10</b>	0.01	0.11	0.01	0.10	0.01	0.16	0.01	0.16
QRRE	<b>2.26</b>	<b>3.28</b>	2.56	3.56	2.84	3.65	3.15	3.80	3.35	3.76
Other Retail	<b>0.59</b>	<b>1.34</b>	0.63	1.60	0.64	1.48	0.63	1.60	0.63	1.64

- (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	Q3 2021						Q2 2021					
	Average estimated PD %	Actual default rate %	Average estimated LGD %	Actual LGD %	Average estimated CCF <sup>(2)</sup> %	Actual CCF <sup>(2)</sup> %	Average estimated PD %	Actual default rate %	Average estimated LGD %	Actual LGD %	Average estimated CCF <sup>(2)</sup> %	Actual CCF <sup>(2)</sup> %
Non-Retail <sup>(1)</sup>	0.59	0.33	39.88	46.85	48.84	15.06	0.59	0.38	39.93	46.78	49.13	13.70

(1) Reporting is on a one quarter lag basis. For reporting as of Q3/21, estimated parameters are based on portfolio averages at Q2/20 whereas actual parameters are based on averages of realized parameters during the subsequent four quarters (Q3/20 – Q2/21).

(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) <sup>(1)</sup>	Four-quarter period ending Q3 2021						Four-quarter period ending Q2 2021					
	Average estimated PD <sup>(2)(7)</sup> %	Actual default rate <sup>(2)(5)</sup> %	Average estimated LGD <sup>(3)(7)</sup> %	Actual LGD <sup>(3)(6)</sup> %	Estimated EAD <sup>(4)(7)</sup> \$	Actual EAD <sup>(4)(5)</sup> \$	Average estimated PD <sup>(2)(7)</sup> %	Actual default rate <sup>(2)(5)</sup> %	Average estimated LGD <sup>(3)(7)</sup> %	Actual LGD <sup>(3)(6)</sup> %	Estimated EAD <sup>(4)(7)</sup> \$	Actual EAD <sup>(4)(5)</sup> \$
Residential real estate secured												
Residential mortgages												
Insured mortgages <sup>(8)</sup>	0.62	0.31	-	-	-	-	0.69	0.36	-	-	-	-
Uninsured mortgages	0.52	0.18	16.88	17.54	-	-	0.52	0.20	16.90	16.51	-	-
Secured lines of credit	0.34	0.13	30.68	19.25	57	53	0.36	0.16	30.72	20.50	68	63
Qualifying revolving retail exposures	1.90	0.95	82.50	76.05	532	466	2.07	1.08	82.32	75.15	595	524
Other retail	1.99	1.03	60.28	59.39	4	4	1.83	1.11	59.87	58.46	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 <sup>(1)</sup>**


(in \$MM)	Q3 2021				Q2 2021				Q1 2021				Q4 2020			
Contract Types	Notional Amount	Credit Risk Amount	Credit Risk Equivalent Amount	Risk-weighted Amount <sup>(2)</sup>	Notional Amount	Credit Risk Amount	Credit Risk Equivalent Amount	Risk-weighted Amount <sup>(2)</sup>	Notional Amount	Credit Risk Amount	Credit Risk Equivalent Amount	Risk-weighted Amount <sup>(2)</sup>	Notional Amount	Credit Risk Amount	Credit Risk Equivalent Amount	Risk-weighted Amount <sup>(2)</sup>
<b>Interest Rate Contracts:</b>																
Futures and Forward Rate Agreements	317,766	-	132	52	423,110	-	218	65	537,518	-	279	71	717,291	52	175	45
Swaps	3,820,001	4,784	6,141	1,698	3,667,429	4,684	5,569	1,702	3,585,261	6,431	7,539	2,359	3,605,486	7,418	8,343	2,610
Options Purchased	40,051	61	41	11	35,678	65	46	12	30,079	108	48	15	28,214	78	46	13
Options Written	40,876	-	26	7	36,016	-	18	3	32,529	-	18	5	29,343	-	21	6
<b>Total</b>	<b>4,218,694</b>	<b>4,845</b>	<b>6,340</b>	<b>1,768</b>	<b>4,162,233</b>	<b>4,749</b>	<b>5,851</b>	<b>1,782</b>	<b>4,185,387</b>	<b>6,539</b>	<b>7,884</b>	<b>2,450</b>	<b>4,380,334</b>	<b>7,548</b>	<b>8,585</b>	<b>2,674</b>
<b>Foreign Exchange Contracts:</b>																
Futures and Forwards	407,962	1,814	4,988	1,459	363,982	1,564	4,397	1,250	421,525	1,539	3,542	1,208	410,475	1,492	3,863	1,170
Swaps	567,138	1,200	7,379	2,032	547,520	1,367	7,079	2,104	545,770	916	6,989	1,977	538,892	775	6,361	1,728
Options Purchased	20,131	402	267	125	21,723	544	304	159	28,113	680	347	174	34,012	933	467	242
Options Written	21,165	-	17	3	22,218	-	13	2	27,391	-	18	3	32,800	-	18	2
<b>Total</b>	<b>1,016,396</b>	<b>3,416</b>	<b>12,651</b>	<b>3,619</b>	<b>955,443</b>	<b>3,475</b>	<b>11,793</b>	<b>3,515</b>	<b>1,022,799</b>	<b>3,135</b>	<b>10,896</b>	<b>3,362</b>	<b>1,016,179</b>	<b>3,200</b>	<b>10,709</b>	<b>3,142</b>
<b>Other Derivatives Contracts:</b>																
Equity	136,376	1,569	9,414	1,381	132,704	1,536	9,751	1,446	131,022	1,029	8,423	1,235	128,024	1,098	7,091	1,004
Credit	27,579	124	308	58	26,464	82	380	61	33,442	112	363	81	34,151	270	458	116
Other	58,933	3,877	5,678	1,112	57,595	3,675	7,873	866	59,684	3,255	3,542	512	65,204	868	3,629	592
<b>Total</b>	<b>222,888</b>	<b>5,570</b>	<b>15,400</b>	<b>2,551</b>	<b>216,763</b>	<b>5,293</b>	<b>18,004</b>	<b>2,373</b>	<b>224,148</b>	<b>4,396</b>	<b>12,328</b>	<b>1,828</b>	<b>227,379</b>	<b>2,236</b>	<b>11,178</b>	<b>1,712</b>
<b>Credit Valuation Adjustment</b>				<b>4,835</b>				<b>4,124</b>				<b>4,222</b>				<b>5,330</b>
<b>Total Derivatives after Netting and Collateral</b>	<b>5,457,978</b>	<b>13,831</b>	<b>34,391</b>	<b>12,773</b>	<b>5,334,439</b>	<b>13,517</b>	<b>35,648</b>	<b>11,794</b>	<b>5,432,334</b>	<b>14,070</b>	<b>31,108</b>	<b>11,862</b>	<b>5,623,892</b>	<b>12,984</b>	<b>30,472</b>	<b>12,858</b>

(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)	Q3 2021	Q2 2021	Q1 2021	Q4 2020	Q3 2020
All Bank VaR	1,422	1,981	2,100	1,966	3,517
All Bank stressed VaR <sup>(1)</sup>	4,142	1,591	1,775	1,486	1,406
Incremental risk charge	1,715	1,901	2,535	2,833	3,650
Comprehensive risk measure	-	-	-	-	-
Standardized approach	689	707	796	1,042	775
<b>Market risk-weighted assets as at end of Quarter</b>	<b>7,968</b>	<b>6,180</b>	<b>7,206</b>	<b>7,327</b>	<b>9,348</b>

(1) Commencing Q3 2021, amount includes the impact on market risk RWA from OSFI's announced increase to the stressed VaR multiplier.



<b>Credit Risk Parameters</b>	
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.
<b>Exposure Types</b>	
<b>Non-retail</b>	
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.
<b>Retail</b>	
<b>Real Estate Secured</b>	
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.
<b>Exposure Sub-types</b>	
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.
<b>Other</b>	
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. 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. The capital floor add-on is determined by comparing capital requirement calculated by reference to Basel II standardized approach against the Basel III calculation, as prescribed by OSFI. A shortfall in the Basel III capital requirement compared with the Basel II standardized capital floor added to RWAs. Revised capital floor requirements also include risk-weighted assets for market risk and CVA, but excludes operational risk.
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.