

Supplementary Regulatory Capital and Pillar 3 Disclosure

Second Quarter 2022

(unaudited)

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This document is available via the Bank's web site: nbc.ca

Notes to users

- 1) This *Supplementary Regulatory Capital and Pillar 3 Disclosure* document is unaudited and should be read in conjunction with the *2021 Annual Report*. All amounts are in millions of Canadian dollars, unless otherwise indicated.
- 2) The information provided in this document is subject to the same level of internal review and internal control processes as the information provided by the Bank for its financial reporting.
- 3) Financial information is available through the *Report to Shareholders* for all quarters of 2022 and also in the document entitled *Supplementary Financial Information* which are available on the Bank's website at <u>nbc.ca</u>. Prior reporting periods are also available on the Bank's website.
- 4) The Bank has its own methods for managing capital and liquidity, and IFRS does not prescribe any particular calculation method. These measures are calculated using various OSFI guidelines and advisories, which are based on the standards, recommendations, and best practices of the Basel Committee on Banking Supervision (BCBS), as presented in the following table.

OSFI guideline or advisory	Measure	
Capital Adequacy Requirements	Common Equity Tier 1 (CET1) capital ratio	
	Tier 1 capital ratio	
	Total capital ratio	
	CET1 capital	
	Tier 1 capital	
	Tier 2 capital	
	Total capital	
	Risk-weighted assets	
	Maximum credit risk exposure under the Basel asset classes	
Leverage Requirements	Leverage ratio	
	Total exposure	
Total Loss Absorbing Capacity (TLAC)	Key indicators – TLAC requirements	
	Available TLAC	
	TLAC ratio	
	TLAC leverage ratio	

5) For certain prescribed tables formats where row or column items have zero balances, such items have not been presented.

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This report is unaudited

Location of Pillar 3 Disclosure

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(1) Information available on the Bank's website at <u>nbc.ca</u>.
(2) These pages are included in the document entitled *Supplementary Financial Information – Second Quarter 2022*.
(3) These pages are included in the *Supplementary Regulatory Capital and Pillar 3 Disclosure – Fourth Quarter 2021*.

KM2 – Key Metrics – TLAC Requirements⁽¹⁾

(millions of Canadian dollars)

		2022			20:	21	
		Q2	Q1	Q4	Q3	Q2	Q1
		а	l		а	l	
1	Total loss-absorbing capacity (TLAC) available	29,887	29,462	27,492	26,748	25,576	24,602
1a	TLAC available with transitional arrangements for ECL provisioning not applied	29,887	29,462	27,492	26,748	25,576	24,602
2	Total RWA at the level of the resolution group	107,478	106,168	104,358	103,139	98,705	97,183
3	TLAC ratio: TLAC as a percentage of RWA (row 1 / row 2) (%)	27.8%	27.8%	26.3%	25.9%	25.9%	25.3%
3a	TLAC ratio: TLAC as a percentage of RWA (row 1a / row 2) (%) with transitional arrangements for ECL provisioning not applied	27.8%	27.8%	26.3%	25.9%	25.9%	25.3%
4	Leverage ratio exposure measure at the level of the resolution group	371,977	367,775	351,160	344,930	339,738	334,013
5	TLAC Leverage Ratio: TLAC as a percentage of leverage ratio exposure measure (row 1 / row 4) (%)	8.0%	8.0%	7.8%	7.8%	7.5%	7.4%
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) (%)	8.0%	8.0%	7.8%	7.8%	7.5%	7.4%
6a	Does the subordination exemption in the antepenultimate paragraph of Section 11 of the FSB TLAC Term Sheet apply?	yes	yes	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	no	no
6c	If the capped subordination exemption applies, the amount of funding issued that ranks pari passu with Excluded Liabilities and that is						
	recognised as external TLAC, divided by funding issued that ranks pari passu with Excluded Liabilities and that would be recognised as						
	external TLAC if no cap was applied (%)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

(1) Minimum TLAC ratios is required since November 1, 2021. Rows 1, 3 and 5 incorporate expected credit loss transitional relief provided by OSFI as announced on March 27, 2020. Rows 1a, 3a and 5a represent TLAC available with transitional arrangements for ECL provisioning not applied.

OV1 – Overview of RWA⁽¹⁾

(millions of Canadian dollars)

The following table provides an overview of total RWA forming the denominator of the risk-based capital requirements. Further breakdowns of RWA are presented in subsequent parts.

		Q2 2022	Q1 2022	Q4 2021	Q3 2021	Q2 2021	Q2 2022
		а	b	b	b	b	с
							Minimum
		RWA ⁽¹⁾	RWA ⁽¹⁾	RWA ⁽¹⁾	RWA ⁽¹⁾	RWA ⁽¹⁾	capital requirement ⁽²⁾
1	Credit risk (excluding counterparty credit risk)	75,524	75,604	73,421	71,820	69,232	6,042
2	Of which: standardised approach (SA)	16,353	17,284	15,984	14,788	14,192	1,308
3	Of which: foundation internal ratings-based (F-IRB) approach	10,555	- 17,204	15,504	14,700	14,192	1,500
4	Of which: supervisory slotting approach			_	_	_	_
5	Of which: advanced internal ratings-based (A-IRB) approach	59,171	58,320	57,437	57,032	55,040	4,734
6	Counterparty credit risk (CCR)	7,037	7,270	7,346	7,454	7,006	4,734 563
7	Of which: standardised approach for counterparty credit risk	5,010	5,205	5,495	5,676	5,204	401
8	Of which: internal model method (IMM)	5,010	5,205	5,495	5,070	5,204	401
9	Of which: other CCR	1,591	1,646	1,399	1,346	1,506	127
9a	Of which: exposures to central counterparties	436	419	452	432	296	35
10	Credit valuation adjustment (CVA)	2,304	2,115	2.112	2,046	1.716	184
11	Equity positions under the simple risk weight approach ⁽³⁾	2,304	2,115	945	2,040	1,151	71
12	Equity positions under the simple risk weight approach Equity investments in funds – look-through approach	256	242	945 205	180	1,151	20
13	Equity investments in funds – took-through approach	230	242	205	100		20
14	Equity investments in funds – mandate-based approach		_	_	_	_	
15	Settlement risk	71	76	160	245	143	6
16	Securitization exposures in banking book	963	843	856	698	683	77
16a	Of which: subject to the transitional arrangement	505	- 045		- 050		
17	Of which: securitization IRB approach (SEC-IRBA)	177	181	244	189	171	14
18	Of which: securitization is approach (SEC-IRBA) Of which: securitization external ratings-based approach (SEC-ERBA), including internal assessment approach (IAA)	458	346	370	390	407	37
19	Of which: securitization external range based approach (SEC-SA)	328	316	242	119	105	26
20	Market risk	4,453	3,498	3,770	4,072	3,307	356
21	Of which: standardised approach (SA)	1,220	1,002	929	4,072 924	873	98
21	Of which: internal model approach (IMA)	3,233	2,496	929 2,841	3,148	2,434	258
22	Capital charge for switch between trading book and banking book	5,235	2,490	2,041	5,140	2,434	256
23	Operational risk	14,147	13,781	13,375	13,153	12,884	1,132
24	Amounts below the thresholds for deduction (subject to 250% risk weight)	1,838	1,843	2.168	2,455	2,442	1,132
25	Floor adjustment	1,030	1,043	2,100	2,400	2,442	147
20	Total (1+6+10+11+12+13+14+15+16+20+23+24+25+26)	107,478	- 106,168	104.358	103.139	98.705	8,598
21	IUdal (1+0+1U+11+12+13+14+13+10+2U+23+24+23+20)	107,470	100,100	104,330	103,139	90,709	0,090

(1) Risk weighted assets including the 1.06 scaling factor.

(2) The capital requirement is equal to 8% of risk weighted assets.

(3) Banking Book Equities that are not equity investments in funds (EIF) are treated under the materiality exemption and consequently reported in OV1 row 11 as the materiality exemption is available for AIRB banks.

LI1 – Differences Between Accounting and Regulatory Scopes of Consolidation and Mapping of Financial Statements with Regulatory Risk Categories⁽¹⁾

(millions of Canadian dollars)

For the following table columns a and b enable users to identify the differences between the scope of accounting consolidation and the scope of regulatory consolidation; and columns c to g break down how the amounts reported in banks' financial statements (rows) correspond to regulatory risk categories.

				Q2 2022			
	a	b	с	d	e	f	g
				•			Carrying values of items ⁽²⁾
	Carrying values as	Carrying values under	Subject to	Subject to	Subject to	Subject to	Not subject to
	reported in published	scope of regulatory	credit risk	counterparty	the securitization	the market risk	capital requirements or
	financial statements	consolidation	framework	credit risk framework	framework	framework	subject to deduction from capital
Assets							
Cash and deposits with financial institutions	30,423	30,423	30,423	-	-	284	-
Securities							
At fair value through profit or loss	78,088	80,998	1,596	-	12	79,390	-
At fair value through other comprehensive income	9,157	18,359	18,357	-	2	-	-
At amortized cost	13,210	13,362	10,947	-	2,415	-	-
	100,455	112,719	30,900	-	2,429	79,390	-
Securities purchased under reverse repurchase agreements							
and securities borrowed	11,741	13,866	-	13,866	-	-	-
Loans and acceptances							
Residential mortgage	75,935	47,355	47,355	-	-	-	-
Personal	43,515	43,515	43,515	-	-	-	-
Credit card	2,252	2,252	856	-	1,271	-	125
Business and government	66,706	66,706	66,706	-	363	471	-
	188,408	159,828	158,432	-	1,634	471	125
Customers' liability under acceptances	6,536	6,536	6,536	-	-	-	-
Allowances for credit losses	(915)	(375)	(375)	-	-	-	-
	194,029	165,989	164,593	-	1,634	471	125
Other							
Derivative financial instruments ⁽³⁾	22,774	23,839	-	23,839	-	21,770	-
Investments in associates and joint ventures	180	419	419	-	-	-	-
Premises and equipment	1,318	1,318	1,318	-	-	-	-
Goodwill	1,510	1,589	-	-	-	-	1,589
Intangible assets	1,556	1,298	-	-	-	-	1,298
Other assets	5,799	5,799	5,187	-	-	-	612
	33,137	34,262	6,924	23,839	-	21,770	3,499
Total assets	369,785	357,259	232,840	37,705	4,063	101,915	3,624
Liabilities							
Deposits	246,684	246,684	-	-	-	13,980	232,704
Other							
Acceptances	6,536	6,536	-	-	-	-	6,536
Obligations related to securities sold short	21,361	21,361	-	-	-	21,361	-
Obligations related to securities sold under repurchase							
agreements and securities loaned	24,292	32,484	-	32,484	-	-	
Derivative financial instruments ⁽³⁾	19,809	20,565	-	20,565	-	19,250	
Liabilities related to transferred receivables	24,647	24,647	-	-	-	-	24,647
Other liabilities	5,268	5,268	-	-	-	-	5,268
	101,913	110,861	-	53,049	-	40,611	36,451
Subordinated debt	764	764	-	-	-	-	764
Total liabilities	349,361	358,309	-	53,049	-	54,591	269,919

(1) The basis of consolidation used for financial accounting purposes, described in Note 1 to the audited annual consolidated financial statements for the year ended October 31, 2021, may differ from regulatory purposes. The regulatory consolidation does not include structured entities, where significant risk has been transferred to third parties nor subsidiaries and associates engaged in insurance activities.

(2) The sum of amounts in columns c to g may not equal the amounts in column b as some items may be subject to regulatory capital charges in more than one risk category.

(3) Derivatives financial instruments are subject to both counterparty credit risk and market risk frameworks.

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

(millions of Canadian dollars)

The following table provides information on the main sources of differences (other than due to different scopes of consolidation which are shown in table L11) between the financial statements' carrying value amounts and the exposure amounts used for regulatory purposes.

				Q2 2022		
		a	b	С	d	е
						Items subject to ⁽¹⁾ :
			Credit risk	Securitization	Counterparty credit	Market risk
	· · · · · · · · · · · · · · · · · · ·	Total	framework	framework	risk framework	framework
1	Asset carrying value amount under scope of regulatory consolidation (as per template LI1)	353,635	232,840	4,063	37,705	101,915
2	Liabilities carrying value amount under scope of regulatory consolidation (as per template LI1)	88,390	-	-	53,049	54,591
3	Total net amount under regulatory scope of consolidation	265,245	232,840	4,063	(15,344)	47,324
4	<i>Gross-up for repo-style transactions</i> ⁽²⁾	64,968	-	-	64,968	-
5	Potential future exposures (PFE) ⁽³⁾	12,551	-	-	12,551	-
6	Off-balance sheet amounts ⁽⁴⁾	217,965	60,619	3,956	121,332	-
7	Differences due to different netting rules, other than those already included in row 2 including collateral	6,551	-	-	6,551	-
8	VaR amounts for Securities Financing Transactions (SFTs)	7,902	-	-	7,902	-
9	Differences in valuations	-	-	-	-	-
10	Collateral for SFTs	(163,306)	-	-	(163,306)	-
11	Exposure amounts considered for regulatory purposes ⁽⁵⁾	411,876	293,459	8,019	34,654	47,324

(1) The sum of amounts in columns b to e may not equal the amounts in column a as some items may be subject to regulatory capital charges in more than one risk category.

(2) Liabilities for repo-style transactions represent regulatory exposures under the counterparty credit risk framework. As these liabilities are deducted from the carrying value of assets in line 2, a gross-up is required to arrive at the exposure amount considered for regulatory purposes.

(3) The PFE amount is presented after the alpha of 1.4.

(4) Original off-balance sheet amounts are presented in column a while in columns b through e exposures are after application of credit conversion factors (CCFs).

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

CC1 – Composition of Regulatory Capital

(millions of Canadian dollars)

			202) 2		20	21	
			Q2	Q1	Q4	Q3	Q2	Q1
	Let a let	Reference ⁽¹⁾						
	Common Equity Tier 1 capital: instruments and reserves							
1	Directly issued qualifying common share capital plus related contributed surplus ⁽²⁾	a + a'	3,245	3,254	3,207	3,188	3,171	3,139
2	Retained earnings	b	14,473	13,719	13,028	12,492	11,704	10,998
3	Accumulated other comprehensive income and other reserves	с	54	23	(32)	(151)	(169)	(167)
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)	d	-	-	-	-	-	-
6	Common Equity Tier 1 capital before regulatory adjustments		17,772	16,996	16,203	15,529	14,706	13,970
	Regulatory adjustments to Common Equity Tier 1 capital							
	Prudential valuation adjustments		-	-	-	-	-	-
	Goodwill (net of related tax liability)	e -w	(1,589)	(1,592)	(1,587)	(1,500)	(1,497)	(1,508)
	Intangible assets other than mortgage-servicing rights	f-x	(1,298)	(1,264)	(1,251)	(1,245)	(1,240)	(1,222)
	Deferred tax assets excluding those arising from temporary differences (net of related tax liability)	g	(33)	(34)	(34)	(39)	(42)	(41)
	Accumulated other comprehensive income related to cash flow hedges	h	(73)	(39)	(23)	115	114	249
	Shortfall of total provisions to expected losses	i	-	-	-	-	-	-
	Securitisation gain on sale		-	-	-	-	-	-
	Gains (losses) due to changes in own credit risk on fair valued liabilities	j	(377)	(34)	39	56	117	140
	Defined benefit pension plan assets (net of related tax liability)	k - y	(612)	(566)	(481)	(471)	(305)	(196)
16	investments in own shares (if not already netted off contributed surplus on reported balance sheet)		-	-	-	-	-	-
	Reciprocal cross holdings in common equity		-	-	-	-	-	-
18	Non-significant investments in capital of banking, financial and insurance entities, net of eligible short positions							
	(amount above 10% threshold)	l	-	-	-	-	-	-
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)	m	-	-	-	-	-	-
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	n	-	-	-	-	-	-
24	of which: mortgage servicing rights		-	-	-	-	-	-
25	of which: deferred tax assets arising from temporary differences	0	-	-	-	-	-	-
26	Other deductions or regulatory adjustments to CET1 as determined by OSFI (including regulatory adjustments in							
1	respect of own use property)		43	48	107	129	144	171
27	Regulatory adjustments applied to Common Equity Tier 1 due to insufficient Additional Tier 1 and Tier 2 to cover							
	deductions		-	-	-	-	-	-
	Total regulatory adjustments to Common equity Tier 1		(3,939)	(3,481)	(3,230)	(2,955)	(2,709)	(2,407)
	Common Equity Tier 1 capital (CET1)		13,833	13,515	12,973	12,574	11,997	11,563
29a	CET1 with transitional arrangements for ECL provisioning not applied		13,790	13,467	12,866	12,445	11,853	11,392
	Additional Tier 1 capital: instruments							
	Directly issued qualifying Additional Tier 1 instruments plus related contributed surplus ⁽²⁾		2,650	2,650	2,650	2,650	3,050	2,950
31		v + z	2,650	2,650	2,650	2,650	3,050	2,950
32		р	-	-	-	-	-	-
		v' + z' + p '	-	-	-	-	-	-
34	Additional Tier 1 instruments (and CET1 instruments not included in row 5) issued by subsidiaries and held by							
1	third parties (amount allowed in group AT1)	q	-	-	-	-	-	-
35			-	-	-	-	-	-
36	Additional Tier 1 capital before regulatory adjustments		2,650	2,650	2,650	2,650	3,050	2,950

(1) Reconciliation with Balance Sheet is presented on pages 12 and 13.

(2) A complete list of capital instruments and their main features is now available on the Bank's website at nbc.ca under Investor Relations > Capital & Debt Information > Main Features of Regulatory Capital Instruments.

CC1 – Composition of Regulatory Capital (continued)

(millions of Canadian dollars)

Reference**27Investments in own Additional Tier 1 instruments37Investments in own Additional Tier 1 instruments38Coros Additigs in Additional Tier 1 instruments39Non-significant investments in the capital of banking, financial and insurance entities that are outside the scope of regulatory $(anount Jose 10%, threshold)$ $-$ 40Significant investments in the capital of banking, financial and insurance entities that are outside the scope of regulatory $(coros)$ $-$ 41Other deductions for Tier 1 capital as determined by OSH42(c2)(11)43of which: Reverse mortgages44C4(c4)45Tier 1 capital as determined by OSH46C42(11)47Capital (C1)48Tier 1 capital (C1)49Capital (C1)44Additional Tier 1 capital (C1)44Additional Tier 1 capital (C1)45Tier 1 capital (C1)46Tier 1 capital (C1)47-48Tier 2 capital (C1)49040Capital (C1)41Capital (C1)42Capital (C1)43Tier 1 capital (C1)44Additional Tier 1 capital (C1)45Tier 2 capital (C1)46Tier 2 capital (C1)47-48Tier 2 capital (C1)49040Tier 2 instruments and allowances40Tier 2 instruments and allowances <td< th=""><th></th><th></th><th></th><th>20</th><th>22</th><th></th><th>202</th><th>1</th><th></th></td<>				20	22		202	1	
Additional Tier 1 capital regulatory adjustments -				Q2	Q1	Q4	Q3	Q2	Q1
37Investments in own Additional Ter Linstruments $ -$ <th></th> <th>R</th> <th>Reference⁽¹⁾</th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th>		R	Reference ⁽¹⁾						
18Reciprocal cross holdings in Additional Tier 1 instruments100									
39Non-significant investments in the capital of banking, financial and insurance entities, net of eligible short positions (amount above 10% threshold) $ -$				-	-	-	(2)	(4)	-
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40Significant investments in the capital of banking, financial and insurance entities that are outside the scope of regulatory consolidation, net of eligible should be positions	39								
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42 Regulatory adjustments applied to Additional Ter 1 due to insufficient Tier 2 to cover deductions - <	41	Other deductions from Tier 1 capital as determined by OSFI		(2)	(1)	(1)	(1)	(1)	(1)
43Total regulatory adjustments to Additional Tier 1 capital(2)(11)(1)(3)(5)44Additional Tier 1 capital (AT)2,6482,6492,6492,6492,6423,045245Tier 1 capital (T1 - CET1 + AT)16,45116,16415,62215,22115,0421445aTier 1 capital instruments and allowances16,43816,16115,61515,09214,8981446Directly issued qualifying Tier 2 instruments puts related contributed surplus ¹⁰ r75075075075047Directly issued qualifying Tier 2 instruments not included in rows 5 or 34) issued by subsidiaries and held by third parties (amount allowed in group Tie 2)r40of which: instruments issued by subsidiaries subject to phase outs50Allowances for credit lossest33236833736833751Tier 2 capital instruments is used by subsidiaries and Other TLAC-eligible instruments50Allowances for credit lossest33236833736833751Tier 2 capital instruments in own Tier 2) instruments52Investments in own Tier 2) instruments53Reciprocal cross holdings in Tier 2 instruments54Non-significant investments i				(2)	(1)	(1)	(1)	(1)	(1)
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49of which: instruments issued by subsidiaries subject to phase out 50 $ -$ </td <td>48</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	48								
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52 Investments in own Tier 2 instruments -	51			1,082	1,109	1,096	1,127	1,156	1,161
53Reciprocal cross holdings in Tier 2 instruments and Other TLAC-eligible instruments54Non-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)(164)(150)(75)(45)(45)54[Reporting row for G-SIBs and D-SIBs only] 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 no longer meets the conditions issued by G-SIBs and Canadian D-SIBs that are outside the scope of regulatory consolidation the entity: amount previously designated for the 5% threshold but no longer meets the conditions issued by G-SIBs and Canadian D-SIBs that are outside the scope of regulatory consolidation the entity: amount previously designated for the 5% threshold but no longer meets the conditions issued by G-SIBs and Canadian D-SIBs that are outside the scope of regulatory consolidation to the entity: amount previously designated for the scope of regulatory consolidation to sisce by G-SIBs and Canadian D-SIBs that are outside the scope of regulatory consolidation to sisce by G-SIBs and Canadian D-SIBs that are outside the scope of regulatory consolidation to sisce by G-SIBs and Canadian D-SIBs that are outside the scope of regulatory consolidation to sisce by G-SIBs and Canadian D-SIBs that are outside the scope of regulatory consolidation to sisce by G-SIBs and Canadian D-SIBs that are outside the scope of regulatory cons									
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54a[Reporting row for G-SIBs and D-SIBs only] 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 no longer meets the conditions(164)(150)(75)(45)55Significant 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 consolidation56Other deductions from Tier 2 capital(164)(150)(75)(45)(45)57Total regulatory adjustments to Tier 2 capital(164)(150)(75)(45)(45)58Tier 2 capital (T2)9189591,0211,0821,1111									
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55Significant 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 6 Other deductions from Tier 2 capital 6 Tier 2 capital (T2) 6 Tier 2 capital (T2) 6 Other deductions from Tier 2 capital (T2) 7 Total regulatory adjustments to Tier 2 capital (T2)		the entity: amount previously designated for the 5% threshold but no longer meets the conditions		(164)	(150)	(75)	(45)	(45)	(84)
56 Other deductions from Tier 2 capital -	55	Significant investments in the capital of banking, financial and insurance entities and Other TLAC-eligible instruments							
57 Total regulatory adjustments to Tier 2 capital (164) (150) (75) (45) 58 Tier 2 capital (T2) 918 959 1,021 1,082 1,111 1				-	-	-	-	-	-
58 Tier 2 capital (T2) 918 959 1,021 1,082 1,111 1				-	-	-	-	-	-
								· · ·	(84)
59 Total capital (TC = T1 + T2) 17,399 17,123 16.643 16.303 16.153 15						1-		,	1,077
									15,589
59a Total Capital with transitional arrangements for ECL provisioning not applied 17,399 17,123 16,643 16,303 16,153 15	59a	Total Capital with transitional arrangements for ECL provisioning not applied		17,399	17,123	16,643	16,303	16,153	15,589

(1) Reconciliation with Balance Sheet is presented on pages 12 and 13.

(2) A complete list of capital instruments and their main features is now available on the Bank's website at nbc.ca under Investor Relations > Capital & Debt Information > Main Features of Regulatory Capital Instruments.

CC1 – Composition of Regulatory Capital (continued)

(millions of Canadian dollars)

		2022			202	21	
		Q2	Q1	Q4	Q3	Q2	Q1
60	Total risk-weighted assets	107,478	106,168	104,358	103,139	98,705	97,183
60a	Common Equity Tier 1 Capital RWA (CET1)	107,478	106,168	104,358	103,139	98,705	97,183
	Tier 1 Capital RWA	107,478	106,168	104,358	103,139	98,705	97,183
60c	Total capital RWA	107,478	106,168	104,358	103,139	98,705	97,183
	Capital ratios						
	Common Equity Tier 1 (as a percentage of risk weighted assets)	12.9%	12.7%	12.4%	12.2%	12.2%	11.9%
	CET1 Ratio with transitional arrangements for ECL provisioning not applied	12.8%	12.7%	12.3%	12.1%	12.0%	11.7%
	Tier 1 (as a percentage of risk weighted assets)	15.3%	15.2%	15.0%	14.8%	15.2%	14.9%
	Tier 1 Capital Ratio with transitional arrangements for ECL provisioning not applied	15.3%	15.2%	14.9%	14.6%	15.1%	14.8%
	Total capital (as a percentage of risk weighted assets)	16.2%	16.1%	15.9%	15.8%	16.4%	16.0%
	Total Capital Ratio with transitional arrangements for ECL provisioning not applied	16.2%	16.1%	15.9%	15.8%	16.4%	16.0%
64	Institution-specific buffer requirement (minimum CET1 requirement plus capital conservation buffer plus G-SIB buffer requirement						
	plus D-SIB buffer requirement expressed as a percentage of risk weighted assets)	8.0%	8.0%	8.0%	8.0%	8.0%	8.0%
65	of which: capital conservation buffer requirement	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%
66	of which: bank-specific countercyclical buffer	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
67	of which: G-SIB buffer requirement	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
67a	of which: D-SIBs buffer requirement	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
	Common Equity Tier 1 available to meet buffers (as a percentage of risk weighted assets)	12.9%	12.7%	12.4%	12.2%	12.2%	11.9%
	OSFI target (minimum + capital conservation buffer + D-SIB buffer) ⁽¹⁾						
	Common Equity Tier 1 all-in target ratio	8.0%	8.0%	8.0%	8.0%	8.0%	8.0%
	Tier 1 capital all-in target ratio	9.5%	9.5%	9.5%	9.5%	9.5%	9.5%
	Total capital all-in target ratio	11.5%	11.5%	11.5%	11.5%	11.5%	11.5%
	Amounts below the thresholds for deduction (before risk weighting)						
	Non-significant investments in the capital and other TLAC-eligible instruments of other financials entities	705	694	668	696	695	435
	Significant investments in the common stock of financials	419	392	363	381	369	353
	Mortgage servicing rights (net of related tax liability)	-	-	-	-	-	-
	Deferred tax assets arising from temporary differences (net of related tax liabilities)	316	346	505	601	608	563
	Applicable caps on the inclusion of allowances in Tier 2						
	Allowance eligible for inclusion in Tier 2 in respect of exposures subject to standardised approach (prior to application of cap)	134	143	130	131	134	137
	Cap on inclusion of allowances in Tier 2 under standardised approach	194	203	189	177	167	167
78	Allowance eligible for inclusion in Tier 2 in respect of exposures subject to internal ratings-based approach (IRB) (prior to application						
	of cap)	199	216	208	237	263	265
79	Cap on inclusion of allowances in Tier 2 under internal ratings-based approach	440	436	433	431	415	407
	Capital instruments subject to phase-out arrangements (only applicable between January 1, 2013 and January 1, 2022)						
	Current cap on CET1 instruments subject to phase out arrangements			-	-	-	-
	Amount excluded from CET1 due to cap (excess over cap after redemptions and maturities)			-	-	-	-
	Current cap on AT1 instruments subject to phase out arrangements			194	194	194	194
	Amount excluded from AT1 due to cap (excess over cap after redemptions and maturities)			-	-	-	-
	Current cap on T2 instruments subject to phase out arrangements			238	238	238	238
85	Amount excluded from T2 due to cap (excess over cap after redemptions and maturities)			-	-	-	-

(1) Does not include the domestic stability buffer.

CC2 – Reconciliation of Regulatory Capital to Balance Sheet⁽¹⁾

(millions of Canadian dollars)

		Q2 2022	
	Cross - Reference to		Under scope of regulatory
	Definition of Capital ⁽²⁾	As in Report to Shareholders	consolidation
Assets			
Cash and deposits with financial institutions		30,423	30,423
Securities		100,455	112,719
Non-significant investments in capital of other financial institutions reflected in regulatory capital	l l	-	-
Other securities		100,455	112,719
Assets purchased under reverse repurchase agreements and securities borrowed		11,741	13,866
Loans			
Residential mortgage		75,935	47,355
Personal		43,515	43,515
Credit card		2,252	2,252
Business and government		66,706	66,706
Customers' liability under acceptances		6,536	6,536
Less: Allowances for credit losses		(915)	(375)
Allowance reflected in Tier 2 regulatory capital	t	-	(375)
Shortfall of allowances to expected loss	i	-	-
Allowances not reflected in regulatory capital		-	(540)
Other assets			
Derivative financial instruments		22,774	23,839
Other		10,363	10,423
Goodwill	е	1,510	1,589
Intangibles assets	f	2,874	1,556
Deferred tax assets		190	668
Deferred tax assets excluding those arising from temporary differences	g	-	33
Deferred tax assets arising from temporary differences exceeding regulatory thresholds	0	-	-
Deferred tax assets - realize through loss carrybacks		-	319
Deferred tax assets - other temporary differences		-	316
Defined-benefit pension fund net assets	k	-	832
Significant investments in other financial institutions		-	419
Significant investments exceeding regulatory thresholds	m + n	-	_
Significant investments not exceeding regulatory thresholds		_	419
Other		5,789	5,359
Total assets		369,785	357,259

(1) The basis of consolidation used for financial accounting purposes, described in Note 1 to the audited annual consolidated financial statements for the year ended October 31, 2021, may differ from regulatory purposes. The regulatory consolidation does not include structured entities, where significant risk has been transferred to third parties nor subsidiaries and associates engaged in insurance activities. Total assets of National Bank Life Insurance Company and other insurance subsidiaries are \$262 million and \$4 million respectively. (2) The references identify balance sheet components which are used in calculation of regulatory capital on pages 9 to 11.

CC2 – Reconciliation of Regulatory Capital to Balance Sheet⁽¹⁾ (continued)

(millions of Canadian dollars)

	Cross - Reference to		Under scope of regulatory
	Definition of Capital ⁽²⁾	As in Report to Shareholders	consolidation
Liabilities			
Deposits		246,684	246,684
Derivatives financials instruments		19,809	20,565
Other liabilities		82,104	90,296
Gains and losses due to changes in own credit risk on fair value liabilities	j	-	377
Deferred tax liabilities		16	16
Related to goodwill	w	-	-
Related to intangibles	x	-	258
Related to pensions	у	-	221
Other deferred tax liabilities		-	(463)
Other		82,088	89,903
Subordinated debt		764	764
Regulatory capital amortization of maturing debentures		-	-
Fair value adjustment and unamortized issuance cost		-	14
Subordinated debentures not allowed for regulatory capital	S	-	-
Subordinated debentures used for regulatory capital		-	750
Allowed for inclusion in Tier 2 capital	r	-	750
Subject to phase out	r	-	-
Total liabilities		349,361	358,309
Equity Attributable to Shareholders and holders of other equity instruments		20,422	20,422
Common shares	a	3,196	3,196
Contributed surplus	a'	49	49
Retained earnings	b	14,473	14,473
Accumulated Other Comprehensive Income (loss)	c	54	54
Net gains (losses) on instruments designated as cash flow hedges	h	73	73
Net foreign currency translation adjustments		(16)	(16)
Other		(3)	(3)
Preferred shares and other equity instruments		2,650	2,650
of which: are qualifying	v	-	2,650
of which: are subject to phase out	v'	-	-
Non-controlling interest		2	2
Innovative instruments		-	-
of which: are qualifying		-	-
of which: are subject to phase out	p'	-	-
Other		-	-
Portion allowed for inclusion into CET1	d	-	-
Portion allowed for inclusion into Tier 1 capital	q	-	-
Portion allowed for inclusion into Tier 2 capital	S	-	-
Portion not allowed for regulatory capital		-	2
Total Equity		20,424	20,424
Total Liabilities and Equity		369,785	378,733

(1) The basis of consolidation used for financial accounting purposes, described in Note 1 to the audited consolidated financial statements for the year ended October 31, 2021, may differ from regulatory purposes. The regulatory consolidation does not include structured entities, where significant risk has been transferred to third parties nor subsidiaries and associates engaged in insurance activities. Total assets of National Bank Life Insurance Company and other insurance subsidiaries are \$262 million and \$4 million respectively. (2) The references identify balance sheet components which are used in calculation of regulatory capital on pages 9 to 11.

TLAC1 – TLAC Composition⁽¹⁾

(millions of Canadian dollars)

		20	22		20	21	
		Q2	Q1	Q4	Q3	Q2	Q1
	Regulatory capital elements of TLAC and adjustments	-					
1	Common Equity Tier 1 capital (CET1)	13,833	13,515	12,973	12,574	11,997	11,563
2	Additional Tier 1 capital (AT1) before TLAC adjustments	2,650	2,650	2,650	2,650	3,050	2,950
3	AT1 ineligible as TLAC as issued out of subsidiaries to third parties ⁽²⁾	-	-	-	-	-	-
4	Other adjustments	(2)	(1)	(1)	(3)	(5)	(1)
5	AT1 instruments eligible under the TLAC framework	2,648	2,649	2,649	2,647	3,045	2,949
6	Tier 2 capital (T2) before TLAC adjustments	1,082	1,109	1,096	1,127	1,156	1,161
7	Amortised portion of T2 instruments where remaining maturity > 1 year	-	-	-	-	-	-
8	T2 capital ineligible as TLAC as issued out of subsidiaries to third parties ⁽²⁾	-	-	-	-	-	-
9	Other adjustments	(164)	(150)	(75)	(45)	(45)	(84)
10	T2 instruments eligible under the TLAC framework	918	959	1,021	1,082	1,111	1,077
11	TLAC arising from regulatory capital	17,399	17,123	16,643	16,303	16,153	15,589
	Non-regulatory capital elements of TLAC						
12	External TLAC instruments issued directly by the bank and subordinated to excluded liabilities	-	-	-	-	-	-
13	External TLAC instruments issued directly by the bank which are not subordinated to excluded liabilities but meet all other TLAC						
	term sheet requirements	12,576	12,400	10,869	10,480	9,442	9,033
14	Of which: amount eligible as TLAC after application of the caps	-	-	-	-	-	-
15	External TLAC instruments issued by funding vehicles prior to January 1, 2022	-	-	-	-	-	-
16	Eligible ex ante commitments to recapitalise a G-SIB in resolution	-	-	-	-	-	-
	TLAC arising from non-regulatory capital instruments before adjustments	12,576	12,400	10,869	10,480	9,442	9,033
	Non-regulatory capital elements of TLAC: adjustments						
	TLAC before deductions	29,975	29,523	27,512	26,783	25,595	24,622
19	Deductions of exposures between MPE resolution groups that correspond to items eligible for TLAC (not applicable to SPE G-SIBs						
	and D-SIBs)	-	-	-	-	-	-
20	Deduction of investments in own other TLAC liabilities	(88)	(61)	(20)	(35)	(19)	(20)
21	Other adjustments to TLAC	-	-	-	-	-	-
22	TLAC available after deductions	29,887	29,462	27,492	26,748	25,576	24,602
	Risk-weighted assets and leverage exposure measure for TLAC purposes						
23	Total risk-weighted assets adjusted as permitted under the TLAC regime	107,478	106,168	104,358	103,139	98,705	97,183
24	Leverage exposure measure	371,977	367,775	351,160	344,930	339,738	334,013
	TLAC ratios and buffers						
25	TLAC ratio (as a percentage of risk-weighted assets adjusted as permitted under the TLAC regime)	27.8%	27.8%	26.3%	25.9%	25.9%	25.3%
	TLAC Leverage ratio (as a percentage of leverage exposure)	8.0%	8.0%	7.8%	7.8%	7.5%	7.4%
27	CET1 (as a percentage of risk-weighted assets) available after meeting the resolution group's minimum capital and						
	TLAC requirements	7.2%	7.1%	n.a.	n.a.	n.a.	n.a.
28	Institution-specific buffer requirement (capital conservation buffer plus countercyclical buffer plus higher loss absorbency, expressed						1
	as a percentage of risk-weighted assets)	3.5%		3.5%	3.5%	3.5%	3.5%
29	Of which: capital conservation buffer	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%
30	Of which: bank specific countercyclical buffer	-	-	-	-	-	-
31	Of which: D-SIB \ G-SIB buffer	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%

(1) Minimum TLAC ratios is required since November 1, 2021.

(2) Additional Tier 1 capital and Tier 2 capital issued out of subsidiaries to third parties were eligible as TLAC up to January 1, 2022.

TLAC3 – Creditor Ranking at Legal Entity Level⁽¹⁾

(millions of Canadian dollars)

				Q2 2	022					Q1 2	022		
			(Creditor ranking	3		Sum (1 to 5)			Creditor rankin	g		Sum (1 to 5)
		1			4 ⁽²⁾	5 ⁽³⁾		1			4 ⁽²⁾	5 ⁽³⁾	
		Most junior	2	3	Most	senior		Most junior	2	3	Most	senior	
	Description of creditor ranking	Common shares	Preferred shares	Subordinated		Other liabilities excluding Bail-in debt		Common shares	Preferred shares	Subordinated	Bail-in debt	Other liabilities excluding Bail-in dobt	
2	Total capital and liabilities net of credit risk mitigation	3,196	2,650	750	14,998	–	21,594	3,208	2,650	750	13,354	Dait-iii uebi	19,962
2		3,190	2,030	750	,		,	· ·	2,000			-	
2	Subset of row 2 that are excluded liabilities	-	-	-	2,510	-	2,510		-	-	1,015	-	1,015
4	Total capital and liabilities less excluded liabilities (row 2 minus row 3)	3,196	2,650	750	12,488	-	19,084	3,208	2,650	750	12,339	-	18,947
5	Subset of row 4 that are potentially eligible as TLAC	3,196	2,650	750	12,488	-	19,084	3,208	2,650	750	12,339	-	18,947
6	Subset of row 5 with 1 year \leq residual maturity < 2 years	-	-	-	2,867	-	2,867	-	-	-	2,650	-	2,650
7	Subset of row 5 with 2 years \leq residual maturity < 5 years	-	-	-	7,150	-	7,150	-	-	-	7,367	-	7,367
8	Subset of row 5 with 5 years \leq residual maturity < 10 years	-	-	750	321	-	1,071	-	-	750	319	-	1,069
9	Subset of row 5 residual maturity \geq 10 years, but excluding perpetual securities	-	-	-	2,150	-	2,150	-	-	-	2,003	-	2,003
10	Subset of row 5 that is perpetual securities	3,196	2,650	-	-	-	5,846	3,208	2,650	-	-	-	5,858

				Q4 2	021					Q3 2	021		
				Creditor ranking	5		Sum (1 to 5)		(Creditor ranking	3		Sum (1 to 5)
		1			4 ⁽²⁾	5 ⁽³⁾		1			4 ⁽²⁾	5 ⁽³⁾	
		Most junior	2	3	Most	senior		Most junior	2	3	Most	senior	
						Other liabilities						Other liabilities	
		Common	Preferred	Subordinated		excluding		Common	Preferred	Subordinated		excluding	1
1	Description of creditor ranking	shares	shares	debt	Bail-in debt	Bail-in debt		shares	shares	debt	Bail-in debt	Bail-in debt	
2	Total capital and liabilities net of credit risk mitigation	3,160	2,650	759	11,798	-	18,367	3,141	2,650	759	10,776	-	17,326
3	Subset of row 2 that are excluded liabilities	-	-	-	949	-	949	-	-	-	331	-	331
4	Total capital and liabilities less excluded liabilities (row 2 minus row 3)	3,160	2,650	759	10,849	-	17,418	3,141	2,650	759	10,445	1	16,995
5	Subset of row 4 that are potentially eligible as TLAC	3,160	2,650	759	10,849	-	17,418	3,141	2,650	759	10,445	-	16,995
6	Subset of row 5 with 1 year \leq residual maturity < 2 years	-	-	-	2,582	-	2,582	-	-	-	2,913	-	2,913
7	Subset of row 5 with 2 years \leq residual maturity < 5 years	-	-	-	6,227	-	6,227	-	-	-	5,112	-	5,112
8	Subset of row 5 with 5 years \leq residual maturity < 10 years	-	-	750	311	-	1,061	-	-	750	1,012	-	1,762
9	Subset of row 5 residual maturity \geq 10 years, but excluding perpetual securities	-	-	9	1,729	-	1,738	-	-	9	1,408	-	1,417
10	Subset of row 5 that is perpetual securities	3,160	2,650	-	-	-	5,810	3,141	2,650	-	-	-	5,791

(1) This table provides creditors of the legal entity National Bank of Canada with information regarding their ranking in its liabilities structure.

(2) Bail-in Debt is reflected as subordinated to Other Liabilities. Under the Bail-in Regime, Bail-in Debt which would ordinarily rank equally to Other Liabilities in liquidation, is subject to conversion under statutory resolution powers whereas Other Liabilities are not subject to such conversion.

(3) OSFI doesn't require to complete this column at this time.

LR1 – Summary Comparison of Accounting Assets vs Leverage Ratio Exposure Measure

(millions of Canadian dollars)

		20	22		20	21	
		Q2	Q1	Q4	Q3	Q2	Q1
	Accounting assets vs. leverage ratio exposure						
1	Total consolidated assets as per published financial statements	369,785	366,888	355,795	354,040	350,742	343,637
2	Adjustment for investments in banking, financial, insurance or commercial entities that are consolidated for accounting						
	purposes but outside the scope of regulatory consolidation	33	9	(2)	22	20	14
	Adjustment for securitized exposures that meet the operational requirements for the recognition of risk transference ⁽¹⁾	(78)	(78)	(114)	(65)	(65)	(65)
4	Adjustment for fiduciary assets recognised on the balance sheet pursuant to the operative accounting framework but excluded						1
	from the leverage ratio exposure measure	-	-	-	-	-	-
5	Adjustment for derivative financial instruments ⁽²⁾	(1,559)	3,217	2,252	3,420	5	3,859
6	Adjustment for securities financing transactions (i.e. repos and similar secured lending) ⁽²⁾	3,969	6,416	3,936	4,752	5,157	3,754
7	Adjustment for off-balance sheet items (i.e. conversion to credit equivalent amounts of off-balance sheet exposures)	30,463	30,971	30,477	30,357	29,568	27,716
8	Other adjustments	(30,636)	(39,648)	(41,184)	(47,596)	(45,689)	(44,902)
9	Leverage Ratio Exposure	371,977	367,775	351,160	344,930	339,738	334,013

(1) OSFI's October 2018 Leverage Requirements Guideline now allows for the exclusion of securitized exposures that meet the operational requirements for risk transference.

(2) Adjustments due to differences between accounting and regulatory netting standards.

LR2 – Leverage Ratio Common Disclosure Template

(millions of Canadian dollars)

		20	22		20	21	
		Q2	Q1	Q4	g	Q2	Q1
	Leverage ratio common disclosure						
	On-balance sheet exposures						
1	On-balance sheet items (excluding derivatives, SFTs and grandfathered securitization exposures but including collateral)	312,588	303,578	298,494	289,192	285,293	281,196
2	Gross-up for derivatives collateral provided where deducted from balance sheet assets pursuant to the operative						
	accounting framework	-	-	-	-	-	-
	(Deductions of receivables assets for cash variation margin provided in derivative transactions)	(4,390)	(3,422)		(3,696)		(3,088)
	(Asset amounts deducted in determining Basel III Tier 1 capital)	(3,609)	(3,497)		(3,143)		(2,721)
	Total on-balance sheet exposures (excluding derivatives and SFTs) (sum of rows 1 to 4)	304,589	296,659	290,495	282,353	278,369	275,387
	Derivative exposures	I					
6	Replacement cost associated with all derivative transactions (where applicable net of eligible cash variation margin						1 1
	and/or with bilateral netting)	9,375	5,867	6,437	5,898	3,998	4,811
7	Add-on amounts for PFE associated with all derivative transactions	11,790	12,666	12,282	12,767	11,278	11,913
8	(Exempted CCP leg of client-cleared trade exposures)	-	-	-	-	-	-
	Adjusted effective notional amount of written credit derivatives	50	18	17	12	12	13
	(Adjusted effective notional offsets and add-on deductions for written credit derivatives)	-	-	-	-	-	
	Total derivative exposures (sum of rows 6 to 10)	21,215	18,551	18,736	18,677	15,288	16,737
	Securities financing transaction exposures						
	Gross SFT assets (with no recognition of netting), after adjusting for sale accounting transactions	11,741	15,178	7,516	8,791	11,356	10,419
	(Netted amounts of cash payables and cash receivables of gross SFT assets)	(1,423)	(1,918)		(600)		(1,272)
	CCR exposure for SFTs assets	5,392	8,334	5,881	5,352	5,909	5,026
	Agent transaction exposures	-	-	-	-	-	
	Total securities financing transaction exposures (sum of rows 12 to 15)	15,710	21,594	11,452	13,543	16,513	14,173
	Other off-balance sheet exposures	I					
	Off-balance sheet exposure at gross notional amount	95,471	95,272	93,926	92,825	90,948	87,397
	(Adjustments for conversion to credit equivalent amounts)	(65,008)			(62,468)		(59,681)
19	Off-balance sheet items (sum of rows 17 and 18)	30,463	30,971	30,477	30,357	29,568	27,716
	Capital and Total Exposures	I					
	Tier 1 capital	16,481	16,164	15,622	15,221	15,042	14,512
	Tier 1 Capital with transitional arrangements for ECL provisioning not applied	16,438	16,116	15,514	15,092	14,898	14,341
21	Total Exposures (sum of rows 5, 11, 16 and 19)	371,977	367,775	351,160	344,930	339,738	334,013
	Leverage Ratio						
	Basel III leverage ratio	4.4%	4.4%	4.4%	4.4%	4.4%	4.3%
22a	Basel III leverage ratio with transitional arrangements for ECL provisioning not applied	4.4%	4.4%	4.4%	4.4%	4.4%	4.3%

CR1 – Credit Quality of Assets⁽¹⁾

(millions of Canadian dollars)

The following tables provide a comprehensive picture of the credit quality of a bank's (on- and off-balance sheet) assets.

					Q2 2022							Q1 2022			
		а	b	с	d	e	f	g	а	b	С	d	e	f	g
						counting provisions	Of which ECL						counting provisions	Of which ECL	
		Gross carryir	ng values ⁽²⁾ of		for credit loss	es on SA exposures	accounting		Gross carryir	ıg values ⁽²⁾ of		for credit loss	es on SA exposures	accounting	
				Allowances	Allocated in	provisions				Allowances	Allocated in	Allocated in	provisions		
				for	regulatory	regulatory	for credit				for	regulatory	regulatory	for credit	
		Default	Non-default	credit	category	category	losses on IRB	Net values	Default	Non-default	credit	category	category	losses on IRB	Net values
		exposures ⁽³⁾	exposures	losses ⁽⁴⁾	of Specific	of General	exposures	(a+b-c)	exposures ⁽³⁾	exposures	losses ⁽⁴⁾	of Specific	of General	exposures	(a+b-c)
1	Loans ⁽⁵⁾	603	195,192	920	39	39	842	194,875	596	197,853	935	30	22	883	197,514
2	Debt Securities	-	31,122	7	-	2	5	31,115	-	27,061	6	-	2	4	27,055
3	Off-balance-sheet commitments ⁽⁶⁾	13	92,538	131	-	5	126	92,420	12	92,247	145	-	6	139	92,114
4	Total	616	318,852	1,058	39	46	973	318,410	608	317,161	1,086	30	30	1,026	316,683

					Q4 2021							Q3 2021			
		a	b	С	d	e	f	g	а	b	с	d	e	f	g
					Of which ECL ac	counting provisions	Of which ECL					Of which ECL ac	counting provisions	Of which ECL	
		Gross carryin	ng values ⁽²⁾ of		for credit loss	es on SA exposures	accounting		Gross carryir	ng values ⁽²⁾ of		for credit loss	es on SA exposures	accounting	
				Allowances	Allocated in	Allocated in	provisions				Allowances	Allocated in	Allocated in	provisions	
				for	regulatory	regulatory	for credit				for	regulatory	regulatory	for credit	
		Default	Non-default	credit	category	category	losses on IRB	Net values	Default	Non-default	credit	category	category	losses on IRB	Net values
		exposures ⁽³⁾	exposures	losses ⁽⁴⁾	of Specific	of General	exposures	(a+b-c)	exposures ⁽³⁾	exposures	losses ⁽⁴⁾	of Specific	of General	exposures	(a+b-c)
1	Loans ⁽⁵⁾	653	188,199	1,003	25	10	968	187,849	684	186,622	1,059	23	11	1,025	186,247
2	Debt Securities	-	28,868	4	-	1	3	28,864	-	30,523	3	-	1	2	30,520
3	Off-balance-sheet commitments ⁽⁶⁾	12	91,049	162	-	6	156	90,899	14	89,759	177	-	3	174	89,596
4	Total	665	308,116	1,169	25	17	1,127	307,612	698	306,904	1,239	23	15	1,201	306,363

(1) Excluding insurances subsidiaries and securitization exposures.

(2) Gross carrying values of on- and off-balance sheet items that give rise to a credit risk exposure according to the Basel framework (gross of CCF or CRM techniques).

(3) Definition of default as per the Capital Adequacy Requirements (CAR) guideline.

(4) Represent allowances for credit losses according to IFRS 9.

(5) Including deposits with financial institutions.

(6) For completeness purposes, revocable commitments are included.

CR2 – Changes in Stock of Defaulted Loans and Debt Securities

(millions of Canadian dollars)

The following table identifies the change in a bank's stock of defaulted exposures, the flows between non-defaulted and defaulted exposure categories and reductions in the stock of defaulted exposures due to write-offs.

		Q2 2022	Q1 2022	Q4 2021	Q3 2021	Q2 2021
		a	а	a	а	a
1	Defaulted loans ⁽¹⁾ and debt securities at beginning	596	653	684	713	734
2	Loans and debt securities that have defaulted since the last reporting period	136	132	106	139	178
3	Returned to non-defaulted status since the last reporting period	(21)	(23)	(19)	(23)	(37)
4	Amounts written off	(42)	(94)	(38)	(39)	(48)
5	Other changes ⁽²⁾	(66)	(72)	(80)	(106)	(114)
6	Defaulted loans ⁽¹⁾ and debt securities at end	603	596	653	684	713

(1) Including deposits with financial institutions.

(2) Including net repayments and foreign exchange movements.

CR3 – Credit Risk Mitigation Techniques – Overview

(millions of Canadian dollars)

The following tables disclose the extent of use of credit risk mitigation techniques.

				Q2 2022					Q1 2022		
		а	b1	b	d	f	а	b1	b	d	f
		Exposures	Exposures subject		Exposures secured	Exposures secured	Exposures	Exposures subject		Exposures secured	Exposures secured
		unsecured:	to risk mitigation	Exposures secured	by financial	by credit	unsecured:	to risk mitigation	Exposures secured	by financial	by credit
_		carrying amount ⁽¹⁾	techniques ⁽¹⁾	by collateral	guarantees	derivatives	carrying amount ⁽¹⁾	techniques ⁽¹⁾	by collateral	guarantees	derivatives
1	Loans ⁽²⁾	116,196	79,562	72,134	7,082	-	121,524	76,895	69,858	6,801	-
2	Debt securities	31,122	-	-	-	-	27,061	-	-	-	-
3	Total	147,318	79,562	72,134	7,082	-	148,585	76,895	69,858	6,801	-
4	Of which defaulted	436	125	93	30	-	425	152	102	46	-

				Q4 2021					Q3 2021		
			b1	b	d	f	а	b1	b	d	f
		Exposures	Exposures subject		Exposures secured	Exposures secured	Exposures	Exposures subject		Exposures secured	Exposures secured
		unsecured:	to risk mitigation	Exposures secured	by financial	by credit	unsecured:	to risk mitigation	Exposures secured	by financial	by credit
		carrying amount ⁽¹⁾	techniques ⁽¹⁾	by collateral	guarantees	derivatives	carrying amount ⁽¹⁾	techniques ⁽¹⁾	by collateral	guarantees	derivatives
1	Loans ⁽²⁾	111,619	77,205	69,360	7,500	-	113,338	73,942	66,764	6,905	-
2	Debt securities	28,868	-	-	-	-	30,523	-	-	-	-
3	Total	140,487	77,205	69,360	7,500	-	143,861	73,942	66,764	6,905	-
4	Of which defaulted	525	157	112	42	-	478	185	133	49	-

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

(2) Including deposits with financial institutions.

Distribution of Gross Credit Risk Exposure (Non-Retail Portfolio by Industries)

(millions of Canadian dollars)

						20	22								2	021		
				Q2						Q1						Q4		
									EAD - Gros	s Exposure ⁽¹⁾								
	Drawn	Undrawn commitments	Other	Repo-style transactions	Derivatives financial instruments		Drawn	Undrawn commitments	Other	Repo-style transactions	Derivatives financial instruments	Total	Drawn	Undrawn commitments	Other	Repo-style transactions	Derivatives financial instruments	
Non-Retail Portfolio																		
Agriculture	6,981	591	5	-	-	7,577	6,789	546	5	-	-	7,340	6,584	540	5	- 1	-	7,129
Oil & Gas and Pipelines	3,855	4,783	281	-	-	8,919	4,197	3,531	250	-	-	7,978	4,370	3,110	274	-	-	7,754
Oil & Gas	1,473	2,196	90	-	-	3,759	1,792	1,973	83	-	-	3,848	1,849	1,660	79	-	-	3,588
Pipelines & Other	2,382	2,587	191	-	-	5,160	2,405	1,558	167	-	-	4,130	2,521	1,450	195	-	-	4,166
Mining	591	1,584	211	-	249	2,635	394	1,507	192	-	191	2,284	473	1,477	197	-	160	2,307
Utilities	6,653	3,562	1,610	-	-	11,825	6,211	4,145	1,361	-	-	11,717	5,952	3,742	1,206	-	-	10,900
Construction Non-Real Estate ⁽²⁾	2,051	927	112	-	-	3,090	1,830	928	113	-	-	2,871	1,775	1,034	113	-	-	2,922
Manufacturing	5,807	2,317	294	-	-	8,418	5,435	2,729	244	-	-	8,408	5,248	2,632	317	-	-	8,197
Wholesale	2,905	921	56	-	-	3,882	2,498	1,125	56	-	-	3,679	2,506	1,031	56	-	-	3,593
Retail	3,230	1,408	56	-	-	4,694	2,949	1,389	50	-	-	4,388	2,833	1,433	42	-	-	4,308
Transportation	2,187	1,143	98	60	1	3,489	2,030	1,264	92	48	-	3,434	1,848	1,298	82	48	1	3,277
Communications	1,634	1,438	313	-	-	3,385	1,594	2,067	321	-	-	3,982	1,369	2,212	934	-	-	4,515
Finance and Insurance	36,497	4,866	946	135,635	4,856	182,800	35,336	4,790	927	131,738	2,902	175,693	30,022	4,929	1,046	121,821	2,251	160,069
Real Estate and Construction																		
Real Estate ⁽³⁾	18,169	4,332	365	-	-	22,866	17,720	4,317	305	-	-	22,342	16,924	4,347	292	-	-	21,563
Professional Services	1,895	1,045	283	-	-	3,223	1,729	1,055	296	-	-	3,080	1,599	1,134	300	-	-	3,033
Education & Health Care	3,327	1,321	10	7	-	4,665	3,866	1,731	11	9	-	5,617	3,871	1,728	11	3	-	5,613
Other Services	6,070	2,275	501	47	27	8,920	5,971	2,121	919	51	27	9,089	5,991	2,053	407	1	-	8,452
Government	24,802	1,402	3	38,466	333	65,006	30,026	1,348	5	38,336	294	70,009	30,461	1,373	5	33,339	291	65,469
Other	12,254	19	911	1,369	4	14,557	12,227	89	884	739	13	13,952	11,314	53	830	1,552	-	13,749
Total – Non-retail ⁽⁴⁾	138,908	33,934	6,055	175,584	5,470	359,951	140,802	34,682	6,031	170,921	3,427	355,863	133,140	34,126	6,117	156,764	2,703	332,850

(1) EAD amounts are after securitization and excluding trading related portfolio.

(2) Including civil engineering loans, public-private partnership loans, and project finance loans.(3) Including residential mortgages on dwellings of five or more units.

(4) Excluding SME retail exposure.

Distribution of Gross Credit Risk Exposure (Non-Retail Portfolio by Industries) (continued)

(millions of Canadian dollars)

									2	021								
				Q3						Q2						Q1		
								l	EAD - Gros	s Exposure ⁽¹⁾								-
					Derivatives						Derivatives					Repo-style	Derivatives	
		Undrawn		Repo-style	financial			Undrawn		Repo-style				Undrawn		transaction	financial	
	Drawn	commitments	Other	transactions	instruments	Total	Drawn	commitments	Other	transactions	instruments	Total	Drawn	commitments	Other	5	instruments	Total
Non-Retail Portfolio																		
Agriculture	6,399	515	7	-	-	6,921	6,213	499	6	-	-	6,718	6,100	446	4	-	-	6,550
Oil & Gas and Pipelines	4,146	3,553	227	-	-	7,926	4,308	3,595	314	-	-	8,217	4,822	3,625	307	-	-	8,754
Oil & Gas	1,958	1,923	55	-	-	3,936	2,116	1,978	138	-	-	4,232	2,327	1,811	145	-	-	4,283
Pipelines & Other	2,188	1,630	172	-	-	3,990	2,192	1,617	176	-	-	3,985	2,495	1,814	162	-	-	4,471
Mining	473	1,326	198	-	141	2,138	589	1,153	198	-	-	1,940	576	1,281	194	-	-	2,051
Utilities	5,438	3,482	1,222	-	-	10,142	5,371	3,047	1,302	-	-	9,720	5,376	2,804	1,290	-	-	9,470
Construction Non-Real Estate ⁽²⁾	1,654	1,165	104	-	-	2,923	1,452	1,071	107	-	-	2,630	1,369	1,117	102	-	-	2,588
Manufacturing	5,223	2,482	321	-	-	8,026	5,056	2,617	311	-	-	7,984	5,272	2,588	338	-	-	8,198
Wholesale	2,847	1,061	51	-	-	3,959	2,524	959	53	-	-	3,536	2,185	1,057	51	-	-	3,293
Retail	2,940	1,485	41	-	-	4,466	2,748	1,519	41	-	-	4,308	2,835	1,534	42	-	-	4,411
Transportation	1,871	1,239	80	48	1	3,239	1,669	1,151	83	37	-	2,940	1,498	1,109	83	56	-	2,746
Communications	1,262	2,074	937	-	-	4,273	1,129	1,999	705	-	-	3,833	1,246	972	196	-	-	2,414
Finance and Insurance	34,302	4,562	1,227	123,044	2,233	165,368	32,560	4,487	1,154	120,908	2,101	161,210	33,165	4,543	1,143	119,056	2,782	160,689
Real Estate and Construction																		
Real Estate ⁽³⁾	17,274	4,561	283	-	-	22,118	15,752	4,592	275	-	-	20,619	14,188	4,259	262	-	-	18,709
Professional Services	1,561	1,096	291	-	-	2,948	1,504	1,088	289	-	-	2,881	1,366	1,408	260	-	-	3,034
Education & Health Care	3,903	1,605	12	6	-	5,526	3,682	1,893	11	19	-	5,605	3,795	1,601	11	18	-	5,425
Other Services	6,255	1,896	446	28	-	8,625	6,248	1,640	462	13	-	8,363	6,104	1,914	439	3	-	8,460
Government	31,051	1,416	5	30,954	238	63,664	32,425	1,633	6	32,324	210	66,598	29,467	1,435	5	40,243	163	71,313
Other	10,566	174	847	1,881	-	13,468	10,258	-	783	1,632	1	12,674	10,490	14	634	1,280	1	12,419
Total – Non-retail ⁽⁴⁾	137,165	33,692	6,299	155,961	2,613	335,730	133,488	32,943	6,100	154,933	2,312	329,776	129,854	31,707	5,361	160,656	2,946	330,524

(1) EAD amounts are after securitization and excluding trading related portfolio.

(2) Including civil engineering loans, public-private partnership loans, and project finance loans.

(3) Including residential mortgages on dwellings of five or more units.

(4) Excluding SME retail exposure.

Net International Non-Retail Credit Risk Exposure at Default⁽¹⁾

(millions of Canadian dollars)

					2022							2021	
					Q2					Q1	Q4	Q3	Q2
			Asset Type				Client Type						
		Undrawn	Repo-style	Derivatives financial	Other off-balance			Financial					
	Drawn	commitments	transactions ⁽²⁾	instruments	sheet items ⁽³⁾	Corporate	Sovereign	Institutions	Total	Total	Total	Total	Total
Europe ⁽⁴⁾	634	182	543	253	190	724	158	920	1,802	2,174	3,269	2,320	2,171
United Kingdom	801	100	806	2,150	3	290	170	3,400	3,860	4,104	4,251	4,756	5,002
Latin America	150	66	29	25	-	50	28	192	270	294	263	416	452
Asia	2,607	430	4,727	143	16	1,196	5,891	836	7,923	10,112	8,414	8,032	8,098
Other	235	-	195	23	3	247	-	209	456	387	363	400	353
Total ⁽⁵⁾	4,427	778	6,300	2,594	212	2,507	6,247	5,557	14,311	17,071	16,560	15,924	16,076

(1) Exposure at default is the expected net exposure upon the default of an obligor. This amount is before any specific allowance or partial write-offs. For repo-style transactions and derivatives, the exposure presented is calculated as per the permitted regulatory approaches. These tables exclude equity exposures.

(2) Securities purchased under reverse repurchase agreements and sold under repurchase agreements as well as securities loaned and borrowed.

(3) Letters of guarantee, documentary letters of credit that represent the Bank's commitment to make payments in the event that a client cannot meet its financial obligations to third parties.

(4) Excluding United Kingdom.

(5) For drawn, undrawn commitments and other off-balance sheet items exposures, eligible financial collateral is taken into account in the Bank's Loss Given Default (LGD) models.

CR4 – Standardised Approach – Credit Risk Exposure and Credit Risk Mitigation (CRM) Effects⁽¹⁾

(millions of Canadian dollars)

The following tables illustrate the effect of CRM on standardised approach capital requirements' calculations. RWA density provides a synthetic metric on riskiness of each portfolio.

				Q2 2022						Q1 202	2		
		а	b	С	d	е	f	а	b	C	d	e	f
		Exposures befo	re CCF and CRM	Exposures po	st-CCF and CRM			Exposures befo	re CCF and CRM	Exposures po	ost-CCF and CRM		
		On-balance	Off-balance	On-balance	Off-balance		RWA	On-balance	Off-balance	On-balance	Off-balance		RWA
	Assets classes	sheet amount	sheet amount	sheet amount	sheet amount	RWA	density	sheet amount	sheet amount	sheet amount	sheet amount	RWA	density
1	Sovereigns and their central banks	2,320	828	2,320	-	1,216	52%	2,408	817	2,408	-	1,322	55%
2	Non-central government public sector entities	-	-	-	-	-	0%	-	-	-	-	-	0%
3	Multilateral development banks	342	-	342	-	-	0%	366	-	366	-	-	0%
4	Financial institutions	1,081	4,771	1,081	244	820	62%	1,078	4,769	1,078	243	788	60%
5	Securities firms	-	-	-	-	-	0%	-	-	-	-	-	0%
6	Corporates	8,540	733	8,540	213	4,776	55%	8,577	639	8,577	141	4,967	57%
7	Regulatory retail portfolios	4,403	273	4,403	101	2,974	66%	5,677	272	5,677	91	3,667	64%
8	Secured by residential property	7,779	181	7,779	56	2,705	35%	7,164	165	7,164	52	2,631	36%
9	Secured by commercial real estate	311	-	311	-	311	100%	231	-	231	-	231	100%
10	Equity	-	-	-	-	-	0%	-	-	-	-	-	0%
11	Past-due loans	95	-	95	-	87	92%	66	-	66	-	54	82%
12	Higher-risk categories	-	-	-	-	-	0%	42	-	42	-	63	150%
13	Other assets ⁽²⁾	4,884	-	4,884	-	3,464	71%	4,974	-	4,974	-	3,561	72%
14	Total	29,755	6,786	29,755	614	16,353	54%	30,583	6,662	30,583	527	17,284	56%

				Q4 2021						Q3 202	1		
		а	b	С	d	е	f	a	b	с	d	е	f
		Exposures befo	re CCF and CRM	Exposures po	st-CCF and CRM			Exposures befo	re CCF and CRM	Exposures po	ost-CCF and CRM		
		On-balance	Off-balance	On-balance	Off-balance		RWA	On-balance	Off-balance	On-balance	Off-balance		RWA
	Assets classes	sheet amount	sheet amount	sheet amount	sheet amount	RWA	density	sheet amount	sheet amount	sheet amount	sheet amount	RWA	density
1	Sovereigns and their central banks	2,483	835	2,483	-	1,806	73%	2,237	81	2,237	-	1,680	75%
2	Non-central government public sector entities	-	-	-	-	-	0%	-	-	-	-	-	0%
3	Multilateral development banks	260	-	260	-	-	0%	272	-	272	-	-	0%
4	Financial institutions	888	4,782	888	257	675	59%	865	4,937	865	411	631	49%
5	Securities firms	-	-	-	-	-	0%	-	-	-	-	-	0%
6	Corporates	7,678	601	7,678	154	4,335	55%	7,470	529	7,470	135	4,176	55%
7	Regulatory retail portfolios	5,214	244	5,214	74	3,280	62%	4,778	184	4,778	51	2,884	60%
8	Secured by residential property	6,817	157	6,817	50	2,440	36%	6,569	145	6,569	43	2,304	35%
9	Secured by commercial real estate	207	-	207	-	207	100%	221	-	221	-	221	100%
10	Equity	-	-	-	-	-	0%	-	-	-	-	-	0%
11	Past-due loans	52	2	52	-	43	83%	48	2	48	-	35	73%
12	Higher-risk categories	4	-	4	-	6	150%	4	-	4	-	6	150%
13	Other assets ⁽²⁾	4,808	-	4,808	-	3,192	66%	4,442	-	4,442	-	2,851	64%
14	Total	28,411	6,621	28,411	535	15,984	55%	26,906	5,878	26,906	640	14,788	54%

(1) Excluding items subject to securitization and counterparty credit risk frameworks.

(2) For completeness purposes, row 13 "Other assets" is populated with all other assets except exposures that are subject to direct capital deductions, those that are treated in the off-balance sheet calculations and exposures below the threshold for deduction.

CR5 – Standardised Approach – Exposures by Asset Classes and Risk Weights⁽¹⁾

(millions of Canadian dollars)

The following tables present the breakdown of credit risk exposures under the standardised approach by asset class and risk weight (corresponding to the riskiness attributed to the exposure according to standardised approach).

						Q2	2022									Q1	2022				
		а	b	С	d	е	f	g	h	i	j	а	b	С	d	е	f	g	h	i	j
	Risk weight										Total credit exposures										Total credit exposures
	Asset classes	0%	10%	20%	35%	50%	75%	100%	150%	Others	amount ⁽²⁾	0%	10%	20%	35%	50%	75%	100%	150%	Others	amount ⁽²⁾
1	Sovereigns and their central banks	1,104	-	-	-	-	-	1,216	-	-	2,320	1,087	-	-	-	-	-	1,321	-	-	2,408
2	Non-central government public sector entities	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	Multilateral development banks	342	-	-	-	-	-	-	-	-	342	366	-	-	-	-	-	-	-	-	366
4	Financial institutions	145	-	442	-	13	-	725	-	-	1,325	158	-	459	-	13	-	691	-	-	1,321
5	Securities firms	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6	Corporates	3,977	-	-	-	-	-	4,776	-	-	8,753	3,751	-	-	-	-	-	4,967	-	-	8,718
7	Regulatory retail portfolios	539	-	-	-	-	3,965	-	-	-	4,504	879	-	-	-	-	4,889	-	-	-	5,768
8	Secured by residential property	975	-	-	6,087	36	719	18	-	-	7,835	630	-	-	5,760	30	785	11	-	-	7,216
9	Secured by commercial real estate	-	-	-	-	-	-	311	-	-	311	-	-	-	-	-	-	231	-	-	231
10	Equity	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	Past-due loans	11	-	-	-	-	-	77	7	-	95	12	-	-	-	-	-	54	-	-	66
	Higher-risk categories	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	42	-	42
13	Other assets ⁽³⁾	1,238	-	228	-	-	-	3,418	-	-	4,884	1,199	-	268	-	-	-	3,507	-	-	4,974
14	Total	8,331	-	670	6,087	49	4,684	10,541	7	-	30,369	8,082	-	727	5,760	43	5,674	10,782	42	-	31,110

						Q4	2021									Q3	2021				
		а	b	С	d	е	f	g	h	i	j	а	b	С	d	е	f	g	h	i	j
	Risk weight										Total credit exposures										Total credit exposures
	Asset classes	0%	10%	20%	35%	50%	75%	100%	150%	Others	amount ⁽²⁾	0%	10%	20%	35%	50%	75%	100%	150%	Others	amount ⁽²⁾
1	Sovereigns and their central banks	677	-	-	-	1	-	1,806	-	-	2,483	557	-	-	-	1	-	1,680	-	-	2,237
2	Non-central government public sector entities	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	Multilateral development banks	260	-	-	-	-	-	-	-	-	260	272	-	-	-	-	-	-	-	-	272
4	Financial institutions	133	-	414	-	11	-	587	-	-	1,145	120	-	649	-	11	-	496	-	-	1,276
5	Securities firms	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6	Corporates	3,497	-	-	-	-	-	4,335	-	-	7,832	3,428	-	-	-	-	-	4,177	-	-	7,605
7	Regulatory retail portfolios	915	-	-	-	-	4,373	-	-	-	5,288	984	-	-	-	-	3,845	-	-	-	4,829
8	Secured by residential property	776	-	-	5,309	30	740	12	-	-	6,867	879	-	-	4,977	32	713	11	-	-	6,612
9	Secured by commercial real estate	-	-	-	-	-	-	207	-	-	207	-	-	-	-	-	-	221	-	-	221
10	Equity	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	Past-due loans	10	-	-	-	-	-	39	3	-	52	13	-	-	-	-	-	34	1	-	48
12	Higher-risk categories	-	-	-	-	-	-	-	4	-	4	-	-	-	-	-	-	-	4	-	4
13	Other assets ⁽³⁾	1,375	-	302	-	-	-	3,131	-	-	4,808	1,352	-	301	-	-	-	2,789	-	-	4,442
14	Total	7,643	-	716	5,309	41	5,113	10,117	7	-	28,946	7,605	-	950	4,977	43	4,558	9,408	5	-	27,546

(1) Excluding items subject to securitization and counterparty credit risk frameworks. In the wholesale portfolio, for sovereign and banks asset classes, risk weights are based on external credit ratings issued by independent rating agencies (Moody's, Standard & Poor's, Fitch or DBRS) approved by our supervisor, OSFI.

(2) Post-CCF and Post-CRM.

(3) For completeness purposes, row 13 "Other assets" is populated with all other assets except exposures that are subject to direct capital deductions, those that are treated in the off-balance sheet calculations and exposures below the threshold for deduction.

CR6 - IRB - Credit Risk Exposures by Portfolio and PD Range

(millions of Canadian dollars)

The following tables provide the main parameters used for the calculation of capital requirements for IRB models. The purpose of disclosing these parameters is to enhance the transparency of banks' RWA calculations and the reliability of regulatory measures.

reliability of regulator							Q2 2022						
		а	b	с	d	e	f	g	h	i	j	k	l
	PD scale ⁽¹⁾	Original on- balance sheet gross exposure	Off-balance sheet exposures pre CCF ⁽²⁾	Average CCF ⁽³⁾	EAD post CRM and post-CCF	Average PD ⁽⁴⁾	Number of obligors ⁽⁵⁾	Average LGD ⁽⁶⁾	Average maturity ⁽⁷⁾	RWA ⁽⁸⁾	RWA density ⁽⁹⁾	EL ⁽¹⁰⁾	Allowances for credit losses
Residential Mortgages	0.00 to < 0.15	830	-	0%	830	0.07%	55,230	6.2%		10	1.2%	1	
	0.15 to < 0.25	242	-	0%	242	0.19%	12,638	7.2%		7	3.0%	-	
	0.25 to < 0.50	297	-	0%	297	0.36%	15,775	5.4%		10	3.5%	-	
	0.50 to < 0.75	186	-	0%	186	0.60%	6,711	4.3%		8	4.1%	-	
	0.75 to < 2.50	318	-	0%	318	1.23%	9,456	3.8%		18	5.5%	-	
	2.50 to < 10.00	68	-	0%	68	4.37%	2,067	3.1%		7	9.7%	-	
	10.00 to < 100.00	33	-	0%	33	28.33%	712	2.8%		5	16.2%	-	
	100.00 (Default)	17	-	0%	17	100.00%	312	2.8%		2	12.6%	-	
	Sub-total	1,991	-	0%	1,991	1.85%	102,901	5.4%		67	3.4%	1	3
Residential Mortgages	0.00 to < 0.15	34,841	17,694	50%	43,669	0.07%	229,745	18.9%		1,488	3.4%	6	
and HELOCs –	0.15 to < 0.25	9,124	1,475	67%	10,110	0.19%	35,738	20.2%		860	8.5%	4	
uninsured	0.25 to < 0.50	9,324	1,508	73%	10,426	0.34%	32,752	21.0%		1,350	12.9%	7	
	0.50 to < 0.75	2,388	238	71%	2,557	0.60%	8,775	21.4%		512	20.0%	3	
	0.75 to < 2.50	2,840	203	73%	2,988	1.09%	10,314	20.9%		859	28.7%	7	
	2.50 to < 10.00	375	22	72%	390	4.45%	2,165	19.3%		239	61.4%	3	
	10.00 to < 100.00	98	2	85%	100	25.70%	660	19.8%		113	112.7%	5	
	100.00 (Default)	53	2	103%	55	100.00%	468	18.9%		89	162.2%	5	
	Sub-total	59,043	21,144	53%	70,295	0.33%	320,617	19.6%		5,510	7.8%	40	45
Qualifying revolving	0.00 to < 0.15	750	6,980	76%	6,027	0.05%	920,866	79.6%		168	2.8%	2	
retail	0.15 to < 0.25	210	587	89%	730	0.20%	207,255	85.7%		72	9.9%	1	
	0.25 to < 0.50	289	365	84%	596	0.36%	125,172	81.2%		86	14.4%	2	
	0.50 to < 0.75	205	237	87%	412	0.64%	61,210	74.9%		88	21.5%	2	
	0.75 to < 2.50	485	238	94%	709	1.42%	192,097	83.1%		312	44.1%	9	
	2.50 to < 10.00	313	103	112%	428	4.36%	201,863	86.2%		423	98.7%	16	
	10.00 to < 100.00	50	10	78%	57	19.32%	29,407	86.3%		129	225.2%	10	
	100.00 (Default)	12	-	24%	12	100.00%	3,482	70.8%		9	74.6%	8	
	Sub-total	2,314	8,520	78%	8,971	0.68%	1,741,352	80.6%		1,287	14.4%	50	199
Other retail	0.00 to < 0.15	2,080	2,493	63%	3,657	0.06%	129,082	51.2%		336	9.2%	1	
	0.15 to < 0.25	1,012	387	61%	1,248	0.20%	55,550	53.0%		291	23.3%	1	
	0.25 to < 0.50	1,500	362	62%	1,724	0.37%	77,153	53.1%		575	33.3%	3	
	0.50 to < 0.75	1,273	292	81%	1,511	0.64%	58,478	55.6%		733	48.5%	5	
	0.75 to < 2.50	5,102	209	76%	5,260	1.30%	185,605	36.8%		2,281	43.4%	26	
	2.50 to < 10.00	1,026	76	75%	1,082	4.04%	56,732	50.2%		824	76.2%	22	
	10.00 to < 100.00	243	11	50%	249	22.91%	10,769	52.8%		302	121.2%	29	
	100.00 (Default)	90	9	41%	93	100.00%	7,161	50.6%		66	70.4%	53	
	Sub-total	12,326	3,839	65%	14,824	1.91%	580,530	46.9%		5,408	36.5%	140	160

(1) Prescribed PD bands based on BIS document on Revised Pillar 3 disclosure requirements issued in January 2015.

(2) Represents the exposure value without taking into account value adjustments and provisions, conversion factors and the effect of credit risk mitigation techniques.

(3) Represents the EAD post-CCF for off-balance sheet exposure to total off-balance sheet exposure pre CCF.

(4) Represents the obligor grade PD weighted by EAD.

(5) Represents the number of retail accounts.

(6) Represents the obligor grade LGD (net of any CRM effect) weighted by EAD.

(7) Represents the obligor maturity in years weighted by EAD. This parameter needs to be filled in only when it is used for the RWA calculation.

(8) Risk weighted assets including the 1.06 scaling factor.

(9) Total risk-weighted assets to EAD post-CRM.

CR6 - IRB - Credit Risk Exposures by Portfolio and PD Range (continued)

(millions of Canadian dollars)

							Q2 2022						
		a	b	с	d	e	f	g	h	i	j	k	l
	PD scale ⁽¹⁾	Original on- balance sheet gross exposure	Off-balance sheet exposures pre CCF ⁽²⁾	Average CCF ⁽³⁾	EAD post CRM and post-CCF	Average PD ⁽⁴⁾	Number of obligors ⁽⁵⁾	Average LGD ⁽⁶⁾	Average maturity ⁽⁷⁾	RWA ⁽⁸⁾	RWA density ⁽⁹⁾	EL ⁽¹⁰⁾	Allowances for credit losses
Corporate	0.00 to < 0.15	3,497	8,906	85%	9,628	0.09%	850	45.6%	2.32	2,497	25.9%	4	cicult tosses
	0.15 to < 0.25	14,687	16,202	90%	26,800	0.03%	3,101	37.9%	2.32	8,508	31.7%	20	
	0.25 to < 0.50	11,673	6,953	90%	16,937	0.36%	2,460	35.7%	2.51	6,698	39.5%	22	
	0.50 to < 0.75	12,739	4,859	90%	16,453	0.56%	2,607	35.4%	2.17	7,678	46.7%	32	
	0.75 to < 2.50	21,189	6,258	87%	25,296	1.13%	6,500	33.7%	2.11	15,001	59.3%	96	
	2.50 to < 10.00	3,399	783	75%	4,047	4.39%	918	34.6%	1.47	3,722	92.0%	62	
	10.00 to < 100.00	141	49	58%	183	18.00%	56	39.3%	1.09	312	170.0%	13	
	100.00 (Default)	387	21	82%	404	100.00%	169	37.1%	1.40	344	85.3%	185	
	Sub-total	67,712	44,031	88%	99,748	1.12%	16,661	36.6%	2.23	44,760	44.9%	434	557
Sovereign	0.00 to < 0.15	51,212	7,685	98%	58,117	0.01%	627	8.4%	2.28	538	0.9%	1	
	0.15 to < 0.25	58	-	0%	58	0.21%	1	14.5%	1.00	6	10.6%	-	
	0.25 to < 0.50	-	-	0%	-	0%	-	0%	-	-	0%	-	
	0.50 to < 0.75	-	-	0%	-	0%	-	0%	-	-	0%	-	
	0.75 to < 2.50	-	-	0%	-	0%	-	0%	-	-	0%	-	
	2.50 to < 10.00	-	55	96%	49	8.62%	2	16.6%	1.00	31	64.4%	1	
	10.00 to < 100.00	-	-	0%	-	0%	-	0%	-	-	0%	-	
	100.00 (Default)	-	-	0%	-	0%	-	0%	-	-	0%	-	<u> </u>
	Sub-total	51,270	7,740	98%	58,224	0.02%	630	8.4%	2.28	575	1.0%	2	2
Financial institutions	0.00 to < 0.15	5,639	415	6%	6,113	0.05%	70	47.7%	1.30	1,008	16.5%	2	
	0.15 to < 0.25	283	17	0%	299	0.20%	28	46.7%	1.37	117	39.1%	-	
	0.25 to < 0.50	23	132	85%	155	0.36%	7	28.2%	1.19	55	35.5%	-	
	0.50 to < 0.75	16	2	0%	17	0.56%	8	47.4%	1.00	14	78.7%	-	
	0.75 to < 2.50	637	6	100%	1,285	1.84%	8	11.5%	2.23	370	28.8%	3	
	2.50 to < 10.00 10.00 to < 100.00	_	-	0% 0%	_	3.20% 0%	2	29.9% 0%	1.00	-	70.6% 0%	-	
	100.00 (Default)	_	_	0% 0%	-	0% 0%	-	0%	_	-	0%	-	
	Sub-total	6,598	572	25%	7,869	0.36%	123	41.3%	1.45	1,564	19.9%	5	7
		,			7				-	,			1
Total (all portfolio)		201,254	85,846	76%	261,922	0.68%	2,762,814	27.8%	2.00	59,171	25.1%	672	973

(1) Prescribed PD bands based on BIS document on Revised Pillar 3 disclosure requirements issued in January 2015.

(2) Represents the exposure value without taking into account value adjustments and provisions, conversion factors and the effect of credit risk mitigation techniques.

(3) Represents the EAD post-CCF for off-balance sheet exposure to total off-balance sheet exposure pre CCF.

(4) Represents the obligor grade PD weighted by EAD.

(5) Represents the number of individual borrowers.

(6) Represents the obligor grade LGD (net of any CRM effect) weighted by EAD.

(7) Represents the obligor maturity in years weighted by EAD. This parameter needs to be filled in only when it is used for the RWA calculation.

(8) Risk weighted assets including the 1.06 scaling factor.

(9) Total risk-weighted assets to EAD post-CRM.

CR6 - IRB - Credit Risk Exposures by Portfolio and PD Range (continued)

(millions of Canadian dollars)

							Q1 2022						
		а	b	с	d	e	f	g	h	i	j	k	l
		Original on-	Off-balance										
	. (1)		sheet exposures		EAD post CRM	(0)	Number of		Average	(2)	(0)	(10)	Allowances for
	PD scale ⁽¹⁾	gross exposure	pre CCF ⁽²⁾	Average CCF ⁽³⁾	and post-CCF	Average PD ⁽⁴⁾	obligors ⁽⁵⁾	Average LGD ⁽⁶⁾	maturity ⁽⁷⁾	RWA ⁽⁸⁾	RWA density ⁽⁹⁾	EL ⁽¹⁰⁾	credit losses
Residential Mortgages		1,039	-	0%	1,039	0.07%	55,606	6.5%		14	1.3%	-	
– insured	0.15 to < 0.25	266	-	0%	266	0.19%	13,175	6.9%		8	2.9%	-	
	0.25 to < 0.50	378	-	0%	378	0.36%	16,797	5.1%		12	3.3%	-	
	0.50 to < 0.75	196	-	0%	196	0.61%	7,263	4.4%		8	4.1%	-	
	0.75 to < 2.50	306	-	0%	306	1.25%	10,013	3.6%		16	5.3%	-	
	2.50 to < 10.00	70	-	0%	70	4.61%	2,136	3.1%		7	10.0%	-	
	10.00 to < 100.00	33	-	0%	33	29.68%	786	2.8%		5	16.4%	-	
	100.00 (Default)	22	-	0%	22	100.00%	339	2.9%		2	6.9%	1	
	Sub-total	2,310	-	0%	2,310	1.86%	106,115	5.5%		72	3.1%	1	4
Residential Mortgages	0.00 to < 0.15	33,387	17,154	49%	41,872	0.07%	225,076	19.0%		1,443	3.4%	5	
and HELOCs –	0.15 to < 0.25	8,864	1,456	66%	9,828	0.19%	35,547	20.2%		836	8.5%	4	
uninsured	0.25 to < 0.50	9,089	1,456	73%	10,153	0.34%	32,911	21.0%		1,314	12.9%	7	
	0.50 to < 0.75	2,383	224	72%	2,544	0.60%	9,055	21.7%		514	20.2%	3	
	0.75 to < 2.50	2,770	200	74%	2,917	1.10%	10,403	21.1%		848	29.1%	7	
	2.50 to < 10.00	358	23	62%	372	4.47%	2,139	19.4%		229	61.6%	4	
	10.00 to < 100.00	114	1	164%	115	25.87%	711	20.2%		133	116.2%	6	
	100.00 (Default)	58	3	93%	60	100.00%	492	19.2%		92	151.7%	5	
	Sub-total	57,023	20,517	53%	67,861	0.35%	316,334	19.6%		5,409	8.0%	41	45
Qualifying revolving	0.00 to < 0.15	668	6,611	75%	5,626	0.05%	918,383	78.8%		152	2.7%	2	
retail	0.15 to < 0.25	195	515	87%	643	0.20%	202,634	84.6%		63	9.7%	1	
	0.25 to < 0.50	276	317	82%	536	0.36%	119,194	79.7%		76	14.1%	2	
	0.50 to < 0.75	197	214	86%	381	0.64%	61,013	74.3%		81	21.3%	2	
	0.75 to < 2.50	464	206	92%	654	1.42%	190,703	81.6%		281	43.1%	8	
	2.50 to < 10.00	281	69	110%	357	4.46%	196,411	84.7%		352	98.7%	15	
	10.00 to < 100.00	45	8	80%	51	18.89%	30,131	85.6%		113	222.2%	8	
	100.00 (Default)	12	-	34%	12	100.00%	3,286	70.8%		7	57.1%	8	
	Sub-total	2,138	7,940	77%	8,260	0.67%	1,721,755	79.6%		1,125	13.6%	46	201
Other retail	0.00 to < 0.15	1,967	2,483	63%	3,538	0.06%	128,104	51.2%		324	9.2%	1	
	0.15 to < 0.25	937	406	62%	1,189	0.20%	52,677	52.3%		273	23.0%	1	
	0.25 to < 0.50	1,438	368	63%	1,669	0.37%	74,955	52.4%		551	33.0%	3	
	0.50 to < 0.75	1,248	284	81%	1,478	0.64%	58,070	54.8%		706	47.8%	5	
	0.75 to < 2.50	3,419	241	70%	3,587	1.35%	186,889	52.5%		2,219	61.8%	26	
	2.50 to < 10.00	968	71	69%	1,016	4.00%	55,774	51.1%		788	77.5%	21	
	10.00 to < 100.00	233	13	52%	240	24.09%	10,963	53.2%		297	123.8%	30	
	100.00 (Default)	82	7	40%	84	100.00%	6,827	52.7%		55	64.8%	52	
	Sub-total	10,292	3.873	65%	12.801	1.96%	574,259	52.3%		5,213	40.7%	139	163

(1) Prescribed PD bands based on BIS document on Revised Pillar 3 disclosure requirements issued in January 2015.

(2) Represents the exposure value without taking into account value adjustments and provisions, conversion factors and the effect of credit risk mitigation techniques.

(3) Represents the EAD post-CCF for off-balance sheet exposure to total off-balance sheet exposure pre CCF.

(4) Represents the obligor grade PD weighted by EAD.

(5) Represents the number of retail accounts.

(6) Represents the obligor grade LGD (net of any CRM effect) weighted by EAD.

(7) Represents the obligor maturity in years weighted by EAD. This parameter needs to be filled in only when it is used for the RWA calculation.

(8) Risk weighted assets including the 1.06 scaling factor.

(9) Total risk-weighted assets to EAD post-CRM.

CR6 - IRB - Credit Risk Exposures by Portfolio and PD Range (continued)

(millions of Canadian dollars)

							Q1 2022						
		а	b	с	d	e	f	g	h	i	j	k	l
	PD scale ⁽¹⁾	Original on- balance sheet gross exposure	Off-balance sheet exposures pre CCF ⁽²⁾	Average CCF ⁽³⁾	EAD post CRM and post-CCF	Average PD ⁽⁴⁾	Number of obligors ⁽⁵⁾	Average LGD ⁽⁶⁾	Average maturity ⁽⁷⁾	RWA ⁽⁸⁾	RWA density ⁽⁹⁾	EL ⁽¹⁰⁾	Allowances for credit losses
Corporate	0.00 to < 0.15	2,518	9,318	88%	9,054	0.09%	786	46.0%	2.38	2,395	26.5%	4	
-	0.15 to < 0.25	13,690	16,430	87%	26,039	0.20%	3,135	37.1%	2.32	8,217	31.6%	19	
	0.25 to < 0.50	11,259	7,490	91%	16,995	0.36%	2,554	36.3%	2.49	6,959	41.0%	22	
	0.50 to < 0.75	12,405	4,818	91%	16,192	0.56%	2,478	35.2%	2.18	7,541	46.6%	32	
	0.75 to < 2.50	20,598	6,640	91%	24,890	1.13%	6,389	33.5%	2.12	14,557	58.5%	93	
	2.50 to < 10.00	3,804	851	85%	4,552	4.31%	982	33.7%	1.54	4,048	88.9%	66	
	10.00 to < 100.00	135	48	58%	169	17.80%	55	38.9%	1.06	282	166.9%	11	
	100.00 (Default)	410	51	29%	455	100.00%	187	38.0%	1.23	471	103.5%	196	
	Sub-total	64,819	45,646	89%	98,346	1.19%	16,566	36.4%	2.24	44,470	45.2%	443	603
Sovereign	0.00 to < 0.15	57,968	7,131	98%	64,209	0.01%	630	9.1%	2.05	708	1.1%	1	
	0.15 to < 0.25	8	-	0%	7	0.21%	1	14.5%	1.00	1	14.3%	-	
	0.25 to < 0.50	-	-	0%	-	0%	-	0%	-	-	0%	-	
	0.50 to < 0.75	-	-	0%	-	0%	-	0%	-	-	0%	-	
	0.75 to < 2.50	-	-	0%	-	0%	-	0%	-	-	0%	-	
	2.50 to < 10.00	6	51	92%	51	8.62%	2	16.7%	1.00	33	64.7%	1	
	10.00 to < 100.00	-	-	0%	-	0%	-	0%	-	-	0%	-	
	100.00 (Default)	-	-	0%	-	0%	-	0%	-	-	0%	-	
	Sub-total	57,982	7,182	98%	64,267	0.02%	633	9.1%	2.05	742	1.2%	2	3
Financial institutions	0.00 to < 0.15	3,717	397	6%	4,127	0.05%	62	46.7%	1.39	734	17.8%	1	
	0.15 to < 0.25	225	32	0%	257	0.17%	29	49.9%	1.16	107	41.6%	-	
	0.25 to < 0.50	19	113	100%	132	0.36%	6	24.8%	1.28	41	31.1%	-	
	0.50 to < 0.75	11	2	0%	13	0.56%	9	42.9%	1.00	10	76.9%	-	
	0.75 to < 2.50	640	6	100%	1,281	1.83%	12	11.6%	2.40	397	31.0%	3	
	2.50 to < 10.00	-	-	0%	-	3.38%	2	30.0%	1.00	-	0%	-	
	10.00 to < 100.00	-	-	0%	-	0%	-	0%	-	-	0%	-	
	100.00 (Default)	-	-	0%	-	0%	_	0%	-	-	0%	-	
	Sub-total	4,612	550	26%	5,810	0.46%	120	38.6%	1.60	1,289	22.2%	4	7
Total (all portfolio)		199,176	85,708	76%	259,655	0.69%	2,735,782	27.3%	2.00	58,320	22.5%	676	1,026

(1) Prescribed PD bands based on BIS document on Revised Pillar 3 disclosure requirements issued in January 2015.

(2) Represents the exposure value without taking into account value adjustments and provisions, conversion factors and the effect of credit risk mitigation techniques.

(3) Represents the EAD post-CCF for off-balance sheet exposure to total off-balance sheet exposure pre CCF.

(5) Represents the number of individual borrowers.

(6) Represents the obligor grade LGD (net of any CRM effect) weighted by EAD.

(7) Represents the obligor maturity in years weighted by EAD. This parameter needs to be filled in only when it is used for the RWA calculation.

(8) Risk weighted assets including the 1.06 scaling factor.

(9) Total risk-weighted assets to EAD post-CRM.

⁽⁴⁾ Represents the obligor grade PD weighted by EAD.

CR8 – Flow Statements for Risk-Weighted Assets (RWA) – Credit Risk

(millions of Canadian dollars)

The following table presents a flow statement explaining variations in the credit RWA.

			Q2 2022			Q1 2022	
			a			a	
		Non-counterparty	Of which determined under	Counterparty			
		credit risk	an IRB approach	credit risk ⁽¹⁾	credit risk	an IRB approach	credit risk ⁽¹⁾
1	RWA at beginning	79,504	59,639	9,385	77,755	58,831	9,458
2	Book size ⁽²⁾	1,561	1,356	219	1,174	541	(172)
3	Book quality ⁽³⁾	(857)	(830)	(540)	(16)	(16)	(6)
4	Model updates ⁽⁴⁾	(708)	233	42	29	29	-
5	Methodology and policy ⁽⁵⁾	-	-	-	-	-	-
6	Acquisitions and disposals	-	-	-	-	-	-
7	Foreign exchange movements	37	91	235	562	254	105
8	Other ⁽⁶⁾	-	-	-	-	-	-
9	RWA at end	79,537	60,489	9,341	79,504	59,639	9,385

			Q4 2021			Q3 2021	
			a			a	
		Non-counterparty	Of which determined under	Counterparty	Non-counterparty	Of which determined under	Counterparty
		credit risk	an IRB approach	credit risk ⁽¹⁾	credit risk	an IRB approach	credit risk ⁽¹⁾
1	RWA at beginning	76,414	58,417	9,500	73,792	56,503	8,722
2	Book size ⁽²⁾	2,073	1,054	(129)	2,905	2,376	840
3	Book quality ⁽³⁾	(552)	(552)	122	(595)	(595)	(125)
4	Model updates ⁽⁴⁾	(7)	(7)	-	-	-	-
5	Methodology and policy ⁽⁵⁾	-	-	-	-	-	-
6	Acquisitions and disposals	-	-	-	-	-	-
7	Foreign exchange movements	(173)	(81)	(35)	312	133	63
8	Other ⁽⁶⁾	-	-	-	-	-	-
9	RWA at end	77,755	58,831	9,458	76,414	58,417	9,500

(1) Counterparty credit risk is comprised of derivatives, SFTs, trades cleared through central counterparties, and CVA RWA.

(2) The Book size item reflects organic changes in book size and composition (including new loans and maturing loans). RWA movements attributable to book size include increases or decreases in exposures, measured by exposure at default, assuming a stable risk profile.

(3) The Book quality item is the Bank's best estimate of changes in book quality related to experience, such as underlying customer behaviour or demographics, including changes resulting from model recalibrations or realignments and also including risk mitigation factors.

(4) The Model updates item is used to reflect implementations of new models, changes in model scope, and any other change applied to address model malfunctions.

(5) The Methodology and policy item presents the impact of changes in calculation methods resulting from changes in regulatory policies as a result, for example, of new regulations.

(6) The Other item captures changes that cannot be attributed to any other category.

AIRB Credit Risk Exposure - Backtesting⁽¹⁾

(millions of Canadian dollars)

						20	22					
			Q2						Q1			
	PD average	PD actual (%)	LGD average estimated (%) ⁽²⁾	LGD actual (%) ⁽³⁾	EAD estimated (%) ⁽⁴⁾				LGD average estimated (%) ⁽²⁾	LGD actual (%) ⁽³⁾	EAD estimated (%) ⁽⁴⁾	EAD actual (%) ⁽⁴⁾
Retail Portfolio ⁽⁵⁾	estimateu (76)	FD actual (76)	estimated (76)	actual (78)	estimated (76)	actual (76)	estimated (76)	FD actual (78)	estimated (76)	actual (76)	estimated (76)	actual (76)
Insured residential mortgages ⁽⁶⁾	0.72%	0.21%	2.64%	n.a.	n.a.	n.a.	0.78%	0.18%	2.64%	n.a.	n.a.	n.a.
Uninsured residential mortgages incl. HELOCs ⁽⁷⁾	0.28%	0.12%	21.48%	3.85%	91.03%	86.69%	0.31%	0.11%	21.53%	5.44%	91.33%	85.96%
Qualifying revolving retail	1.01%	0.73%	87.38%	78.74%	106.54%	100.60%	1.07%	0.73%	86.63%	77.97%	106.59%	100.56%
Other retail	1.53%	0.71%	41.29%	30.83%	79.82%	72.11%	1.60%	0.70%	42.34%	28.70%	78.76%	69.80%
Non-Retail Portfolio ⁽⁸⁾												
Corporate	1.06%	0.20%	30.94%	19.45%	94.60%	74.37%	1.04%	0.24%	28.49%	15.89%	93.08%	67.48%
Sovereign ⁽⁹⁾	0.07%	0.00%	11.80%	n.a.	88.30%	n.a.	0.06%	0.00%	11.80%	n.a.	88.30%	n.a.
Financial Institutions ⁽⁹⁾	0.45%	0.00%	39.00%	n.a.	100.00%	n.a.	0.44%	0.00%	39.00%	n.a.	100.00%	n.a.

						20	21					
			Q4						Q3			
	PD average		LGD average	LGD	EAD	EAD			LGD average	LGD	EAD	EAD
	estimated (%)	PD actual (%)	estimated (%) ⁽²⁾	actual (%) ⁽³⁾	estimated (%) ⁽⁴⁾	actual (%) ⁽⁴⁾	estimated (%)	PD actual (%)	estimated (%) ⁽²⁾	actual (%) ⁽³⁾	estimated (%) ⁽⁴⁾	actual (%) ⁽⁴⁾
Retail Portfolio ⁽⁵⁾												
Insured residential mortgages ⁽⁶⁾	1.01%	0.18%	2.64%	n.a.	n.a.	n.a.	1.11%	0.22%	2.64%	n.a.	n.a.	n.a.
Uninsured residential mortgages incl. HELOCs ⁽⁷⁾	0.38%	0.11%	21.11%	4.26%	90.17%	84.67%	0.40%	0.12%	20.64%	3.09%	89.41%	86.10%
Qualifying revolving retail	1.07%	0.73%	85.54%	76.13%	106.70%	100.65%	1.06%	0.77%	82.05%	71.03%	106.06%	101.01%
Other retail	1.64%	0.76%	43.33%	29.99%	79.42%	69.73%	1.77%	0.82%	43.14%	26.75%	79.02%	69.24%
Non-Retail Portfolio ⁽⁸⁾												
Corporate	1.06%	0.32%	29.79%	14.62%	88.71%	74.24%	1.06%	0.35%	28.78%	16.46%	84.46%	75.66%
Sovereign ⁽⁹⁾	0.07%	0.00%	11.80%	n.a.	88.30%	n.a.	0.06%	0.00%	11.80%	n.a.	88.30%	n.a.
Financial Institutions ⁽⁹⁾	0.47%	0.00%	39.00%	n.a.	100.00%	n.a.	0.45%	0.00%	39.00%	n.a.	100.00%	n.a.

(1) Estimated PD and actual default rates are consistent with what is presented in table CR9 (presented annually). Actual and estimated LGD and EAD parameters are reported on a one-month lag. For example, for Q2 2022, estimated percentages are as of March 31, 2021 and actual percentages reflect experience in the following 12 months.

(2) Estimated LGD reflects loss estimates under a downturn economic scenario and is based on defaulted accounts.

(3) Actual LGD includes indirect costs and discount rate and is based on defaulted accounts on which recovery process is completed.

(4) Estimated and actual EAD are computed for revolving products only and are based on defaulted accounts.

(5) Retail PD and EAD are based on account weighted average whilst retail LGD is based on exposure weighted average.

(6) Actual LGD for insured residential mortgages is not applicable to reflect the credit risk mitigation from government backed entities.

(7) Actual and estimated EAD for residential mortgage is computed only for HELOCs since the conventional residential mortgages are non-revolving.

(8) Wholesale and Sovereign's PD is based on borrower weighted average whilst the LGD and EAD are based on facility weighted average.

(9) Actual LGD for the financial institutions and sovereign are not applicable because no defaulted facilities recovery were completed during the period. Actual EAD are not applicable because no default was observed during the period.

CR10 – IRB – Specialised Lending and Equities Under the Simple Risk Weight Method

(millions of Canadian dollars)

			Q2 2022			Q1 2022							
	On-balance	Off-balance				On-balance	Off-balance						
	sheet amount	sheet amount	RW	Exposure amount	RWA	sheet amount	sheet amount	RW	Exposure amount	RWA			
Equities under the materiality exemption	772	126	100%	835	885	782	125	100%	845	896			

			Q4 2021			Q3 2021							
	On-balance	Off-balance				On-balance	Off-balance						
	sheet amount	sheet amount	RW	Exposure amount	RWA	sheet amount	sheet amount	RW	Exposure amount	RWA			
Equities under the materiality exemption	825	133	100%	892	945	894	130	100%	959	1,016			

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

(millions of Canadian dollars)

The following tables provide a comprehensive view of the methods used to calculate counterparty credit risk regulatory requirements and the main parameters used within each method.

				Q2 20	22			Q1 2022								
		а	b	с	d	e	f	а	b	с	d	e	f			
					Alpha						Alpha					
					used for						used for					
			Potential		computing				Potential		computing					
		Replacement	future		regulatory	EAD		Replacement	future		regulatory	EAD				
		cost	exposure	EEPE ⁽²⁾	EAD	post-CRM	RWA	cost	exposure	EEPE ⁽²⁾	EAD	post-CRM	RWA			
1	SA-CCR (for derivatives)	4,933	7,649		1.4	17,615	5,010	4,163	8,007		1.4	17,038	5,205			
2	Internal Model Method (for derivatives and SFTs)			-	-	-	-			-	-	-	-			
3	Simple Approach for credit risk mitigation (for SFTs)					-	-					-	-			
	Comprehensive Approach for credit risk mitigation (for SFTs)					-	-					-	-			
5	VaR for SFTs					11,825	1,591					15,937	1,646			
6	Total						6,601						6,851			

				Q4 20	21			Q3 2021							
		а	b	С	d	е	f	а	b	С	d	е	f		
					Alpha						Alpha				
					used for						used for				
			Potential		computing				Potential		computing				
		Replacement	future		regulatory	EAD		Replacement	future		regulatory	EAD			
		cost	exposure	EEPE ⁽²⁾	EAD	post-CRM	RWA	cost	exposure	EEPE ⁽²⁾	EAD	post-CRM	RWA		
1	SA-CCR (for derivatives)	4,583	7,980		1.4	17,589	5,495	4,199	8,269		1.4	17,455	5,676		
2	Internal Model Method (for derivatives and SFTs)			-	-	-	-			-	-	-	-		
3	Simple Approach for credit risk mitigation (for SFTs)					-	-					-	-		
4	Comprehensive Approach for credit risk mitigation (for SFTs)					-	-					-	-		
5	VaR for SFTs					13,434	1,399					12,496	1,346		
6	Total						6,894						7,022		

(1) Excluding exposure and RWA for qualified central counterparties (QCCPs) and credit valuation adjustment (CVA).

(2) EEPE: Effective Expected Positive Exposure.

CCR2 – Credit Valuation Adjustment (CVA) Capital Charge

(millions of Canadian dollars)

The following table provides the CVA regulatory calculations (with a breakdown by standardised and advanced approaches).

		Q2 2	022	Q1 2	2022	Q4 2	2021	Q3 2	2021	Q2 2021		
		а	b	а	b	a	b	a	b	a	b	
		EAD post-CRM	RWA									
	Total portfolios subject to the Advanced CVA capital charge											
1	(i) VaR component (including the 3 x multiplier)		-		-		-		-		-	
2	(ii) Stressed VaR component (including the 3 x multiplier)		-		-		-		-		-	
3	All portfolios subject to the Standardised CVA capital charge	10,971	2,304	10,453	2,115	10,582	2,112	11,134	2,046	9,795	1,716	
4	Total subject to the CVA capital charge	10,971	2,304	10,453	2,115	10,582	2,112	11,134	2,046	9,795	1,716	

CCR3 – Standardised Approach – CCR Exposures by Regulatory Portfolio and Risk Weights

(millions of Canadian dollars)

The following tables provide a breakdown of counterparty credit risk exposures calculated according to the standardised approach: by portfolio (type of counterparties) and by risk weights (riskiness attributed according to standardised approach).

					Q2 202	2				Q1 2022								
	а	b	С	d	е	f	g	h	i	а	b	с	d	e	f	g	h	i
									Total									Total
Risk weig	t								credit									credit
Regulatory portfolio	0%	10%	20%	50%	75%	100%	150%	Others	exposure	0%	10%	20%	50%	75%	100%	150%	Others	exposure
Sovereigns	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Non-central government public sector entities (PSEs)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Multilateral development banks (MDBs)	75	-	-	-	-	-	-	-	75	39	-	-	-	-	-	-	-	39
Financial institutions	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Securities firms	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Corporates	-	-	-	-	-	677	-	-	677	-	-	-	-	-	667	-	-	667
Regulatory retail portfolios	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other assets ⁽¹⁾	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	75	-	-	١	-	677	-	-	752	39	-	-	-	-	667	I	-	706

		Q4 2021									Q3 2021							
	а	b	C	d	е	f	g	h	i	а	b	С	d	е	f	g	h	i
									Total									Total
Risk weigh									credit									credit
Regulatory portfolio	0%	10%	20%	50%	75%	100%	150%	Others	exposure	0%	10%	20%	50%	75%	100%	150%	Others	exposure
Sovereigns	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Non-central government public sector entities (PSEs)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Multilateral development banks (MDBs)	4	-	-	-	-	-	-	-	4	6	-	-	-	-	-	-	-	6
Financial institutions	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Securities firms	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Corporates	-	-	-	-	-	554	-	-	554	-	-	-	-	-	663	-	-	663
Regulatory retail portfolios	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other assets ⁽¹⁾	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	4	-	-	-	-	554	-	-	558	6	-	-	-	-	663	-	-	669

(1) Excluding the exposures to CCPs, which are reported in CCR8.

CCR4 - IRB - CCR Exposures by Portfolio and PD Scale

(millions of Canadian dollars)

The following tables provide all relevant parameters used for the calculation of counterparty credit risk capital requirements for IRB models.

				Q2 20	22			
		a	b	с	d	е	f	g
	PD scale ⁽¹⁾	EAD post-CRM	Average PD ⁽²⁾	Number of obligors ⁽³⁾	Average LGD ⁽⁴⁾	Average maturity ⁽⁵⁾	RWA	RWA density ⁽
Corporate	0.00 to < 0.15	2,736	0.06%	537	46.5%	0.89	502	18.3%
	0.15 to < 0.25	3,804	0.19%	516	46.3%	1.14	1,329	34.9%
	0.25 to < 0.50	1,012	0.36%	270	29.9%	1.21	334	33.0%
	0.50 to < 0.75	1,143	0.56%	211	39.0%	1.83	484	42.3%
	0.75 to < 2.50	3,864	0.89%	761	40.8%	1.22	1,232	31.9%
	2.50 to < 10.00	148	4.60%	68	52.2%	1.06	211	142.6%
	10.00 to < 100.00	1	20.40%	6	44.3%	1.00	1	100.0%
	100.00 (Default)	1	100.00%	3	28.8%	2.40	-	0%
	Sub-total	12,709	0.48%	2,372	42.8%	1.18	4,093	32.2%
Sovereign	0.00 to < 0.15	8,823	0.03%	127	11.8%	1.24	160	1.8%
-	0.15 to < 0.25	13	0.21%	2	13.1%	0.07	1	7.7%
	0.25 to < 0.50	28	0.36%	2	13.4%	0.24	3	10.7%
	0.50 to < 0.75	-	0.60%	1	13.8%	1.00	-	0%
	0.75 to < 2.50	-	0%	-	0%	-	-	0%
	2.50 to < 10.00	-	0%	-	0%	-	-	0%
	10.00 to < 100.00	-	0%	-	0%	-	-	0%
	100.00 (Default)	-	0%	-	0%	-	-	0%
	Sub-total	8,864	0.03%	132	11.8%	1.24	164	1.9%
Financial institutions	0.00 to < 0.15	6,338	0.07%	67	50.4%	0.86	1,265	20.0%
	0.15 to < 0.25	567	0.18%	39	50.5%	0.30	195	34.4%
	0.25 to < 0.50	102	0.36%	12	50.0%	0.22	48	47.1%
	0.50 to < 0.75	211	0.56%	12	48.3%	0.26	116	55.0%
	0.75 to < 2.50	66	0.96%	22	47.0%	0.02	43	65.2%
	2.50 to < 10.00	-	0%	-	0%	-	-	0%
	10.00 to < 100.00	-	0%	-	0%	-	-	0%
	100.00 (Default)	-	0%	-	0%	-	-	0%
	Sub-total	7,284	0.11%	152	50.3%	0.78	1,667	22.9%
Total (sum of portfolios)		28.857	0.25%	2,656	35.0%	1.02	5.924	20.5%

(1) Prescribed PD bands based on BIS document on Revised Pillar 3 disclosure requirements issued in January 2015.

(2) Represents the obligor grade PD weighted by EAD.

(3) Represents the number of individual borrowers.

(4) Represents the obligor grade LGD (net of any CRM effect) weighted by EAD.

(5) Represents the obligor maturity in years weighted by EAD. This parameter needs to be filled in only when it is used for the RWA calculation.

(6) Total risk-weighted assets to EAD post-CRM.

CCR4 – IRB - CCR Exposures by Portfolio and PD Scale (continued)

(millions of Canadian dollars)

				Q4 2	021			
		а	b	C	d	e	f	5
	PD scale ⁽¹⁾	EAD post-CRM	Average PD ⁽²⁾	Number of obligors ⁽³⁾	Average LGD ⁽⁴⁾	Average maturity ⁽⁵⁾	RWA	RWA density ⁽⁶⁾
Corporate	0.00 to < 0.15	2,285	0.06%	497	47.4%	0.83	428	18.7%
	0.15 to < 0.25	2,887	0.19%	506	46.2%	1.52	1,114	38.6%
	0.25 to < 0.50	1,257	0.36%	246	47.7%	1.41	669	53.2%
	0.50 to < 0.75	2,220	0.56%	192	50.9%	3.43	576	25.9%
	0.75 to < 2.50	4,147	0.91%	710	43.4%	1.23	1,243	30.0%
	2.50 to < 10.00	221	3.58%	71	68.5%	1.16	398	180.1%
	10.00 to < 100.00	4	14.00%	4	61.0%	1.05	11	275.0%
	100.00 (Default)	1	100.00%	6	40.4%	1.25	1	100.0%
	Sub-total	13,022	0.55%	2,232	46.8%	1.62	4,440	34.1%
Sovereign	0.00 to < 0.15	9,903	0.03%	126	11.8%	1.15	177	1.8%
	0.15 to < 0.25	69	0.21%	1	13.1%	-	5	7.2%
	0.25 to < 0.50	25	0%	2	24.7%	1.00	5	20.0%
	0.50 to < 0.75	-	0%	-	0%	-	-	0%
	0.75 to < 2.50	-	0%	-	0%	-	-	0%
	2.50 to < 10.00	-	8.62%	1	14.5%	1.00	-	100.0%
	10.00 to < 100.00	-	0%	-	0%	-	-	0%
	100.00 (Default)	-	0%	-	0%	-	-	0%
	Sub-total	9,997	0.03%	130	11.8%	1.14	187	1.9%
Financial institutions	0.00 to < 0.15	7,764	0.06%	68	49.3%	0.71	1,310	16.9%
	0.15 to < 0.25	695	0.17%	34	49.6%	0.52	233	33.5%
	0.25 to < 0.50	77	0.36%	11	50.2%	0.24	36	46.8%
	0.50 to < 0.75	161	0.56%	15	46.3%	0.39	89	55.3%
	0.75 to < 2.50	62	1.03%	22	48.0%	0.20	45	72.6%
	2.50 to < 10.00	-	0%	-	0%	-	-	0%
	10.00 to < 100.00	-	0%	-	0%	-	-	0%
	100.00 (Default)	-	0%	-	0%	-	-	0%
	Sub-total	8,759	0.09%	150	49.2%	0.68	1,713	19.6%
Total (sum of portfolios)		31.778	0.26%	2,512	36.0%	1.17	6.340	20.0%

(1) Prescribed PD bands based on BIS document on Revised Pillar 3 disclosure requirements issued in January 2015.

(2) Represents the obligor grade PD weighted by EAD.

(3) Represents the number of individual borrowers.

(4) Represents the obligor grade LGD (net of any CRM effect) weighted by EAD.

(5) Represents the obligor maturity in years weighted by EAD. This parameter needs to be filled in only when it is used for the RWA calculation.

(6) Total risk-weighted assets to EAD post-CRM.

CCR5 – Composition of Collateral for CCR Exposure

(millions of Canadian dollars)

The following tables provide a breakdown of all types of collateral posted or received by banks to support or reduce the counterparty credit risk exposures related to derivative transactions or to SFTs, including transactions cleared through a CCP.

			Q2 2	2022					Q1 2	2022		
	a	b	C	d	e	f	а	b	c	d	e	f
		Collateral u	sed in derivativ	ve transactions	Collater	al used in SFTs		Collateral u	sed in derivativ	ve transactions	Collatera	al used in SFTs
	Fair val	ue of collateral	Fairv	value of posted	Fair value of	Fair value of	Fair val	ue of collateral	Fairv	value of posted	run vutue or	Fair value of
		received collateral collateral posted received collateral Segregated Unsegregated Segregated Unsegregated received ⁽¹⁾ collateral ⁽¹⁾ Segregated Unsegregated Unsegregated Unsegregated						collateral	posted			
						collateral ⁽¹⁾	Segregated	Unsegregated	Segregated	Unsegregated	received ⁽¹⁾	collateral ⁽¹⁾
Cash	-	14,028	-	3,628	32,172	19,622	-	11,205	-	2,993	29,241	20,502
Securities issued or guaranteed by												
Canadian government	391	132	149	281	23,197	20,825	24	346	-	417	15,153	14,817
Canadian provincial and municipal governments	246	938	502	216	10,213	13,400	213	282	250	116	15,462	15,042
U.S. Treasury, other U.S. agencies and other												
foreign governments	935	27	373	57	32,551	26,254	1,471	30	524	47	35,613	26,085
Other debt securities	1,257	23	1,457	-	2,557	1,795	597	29	1,294	1	2,043	1,499
Equity securities	–	-	-	-	62,216	85,130	-	-	-	-	56,428	82,024
Total	2,829	15,148	2,481	4,182	162,906	167,026	2,305	11,892	2,068	3,574	153,940	159,969

			Q4 :	2021					Q3 2	2021		
	а	b	C	d	e	f	а	b	C	d	e	f
		Collateral u	sed in derivati	ve transactions	Collater	al used in SFTs		Collateral u	sed in derivativ	ve transactions	Collatera	al used in SFTs
	Fair val	ue of collateral	Fair	value of posted	Fair value of	Fair value of	Fair val	ue of collateral	Fair	value of posted	Fair value of	Fair value of
		received		collateral	collateral	posted		received		collateral	collateral	posted
	Segregated	Unsegregated	Segregated	Unsegregated	received ⁽¹⁾	collateral ⁽¹⁾	Segregated	Unsegregated	Segregated	Unsegregated	received ⁽¹⁾	collateral ⁽¹⁾
Cash	-	9,539	-	4,021	23,600	15,215	-	9,891	-	2,274	28,099	11,643
Securities issued or guaranteed by												
Canadian government	4	516	-	708	15,250	11,788	18	566	-	756	14,239	14,359
Canadian provincial and municipal governments	209	127	-	219	11,127	15,877	218	152	-	75	7,047	10,563
U.S. Treasury, other U.S. agencies and other												
foreign governments	95	65	-	3	37,715	24,150	96	43	-	34	33,210	23,939
Other debt securities	66	29	-	-	2,053	663	-	35	-	-	1,594	470
Equity securities	-	-	-	-	51,017	77,073	-	-	-	-	50,116	76,892
Total	374	10,276	-	4,951	140,762	144,766	332	10,687	-	3,139	134,305	137,866

(1) Excluding collateral from repurchase agreements guaranteed by bearer deposit notes issued by the Bank and covered bonds issued by the Bank.

CCR6 – Credit Derivatives Exposures

(millions of Canadian dollars)

The following tables illustrate the extent of a bank's exposures to credit derivative transactions broken down between derivatives purchased or sold.

	Q2 20)22	Q1 2	022	Q4 2	2021	Q3 2	021	Q2 2	2021
	a	b	а	b	а	b	а	b	а	b
	Protection									
	purchased	sold	purchased	sold	purchased	sold	purchased	sold	purchased	solo
Notionals										
Credit default swaps										
Indices, singles names and other	2,142	997	2,755	1,371	2,565	638	2,417	246	2,091	545
Tranches on indices	-	-	-	-	-	-	-	-	-	-
Total return swaps	83	-	83	-	92	-	92	-	92	-
Credit options	-	-	-	-	-	-	-	-	-	-
Other credit derivatives	-	-	-	-	-	-	-	-	-	-
Total notionals	2,225	997	2,838	1,371	2,657	638	2,509	246	2,183	545
Fair values										
Positive fair value (asset)	10	13	2	29	9	17	7	8	11	16
Negative fair value (liability)	(23)	(3)	(54)	(1)	(64)	-	(64)	-	(57)	

CCR8 – Exposures to Central Counterparties (CCP)⁽¹⁾

(millions of Canadian dollars)

The following table provides a comprehensive picture of the bank's exposures to central counterparties. In particular, the template includes all types of exposures and related capital requirements.

		Q2 :	2022	Q1 2	2022	Q4 2	2021	Q3 2	2021	Q2 2	021
		a	b	а	b	а	b	а	b	a	b
		EAD		EAD		EAD		EAD		EAD	
		(post-CRM)	RWA	(post-CRM)	RWA	(post-CRM)	RWA	(post-CRM)	RWA	(post-CRM)	RWA
1	Exposures to QCCPs (total)		436		419		452		432		296
2	Exposures for trades at QCCPs (excluding initial margin and default fund contributions); of which	5,214	104	3,432	68	2,658	54	2,674	53	2,791	56
3	(i) OTC derivatives	204	4	400	8	386	8	228	5	210	4
4	(ii) Exchange-traded derivatives	4,557	91	2,386	47	1,738	35	1,880	37	1,795	36
5	(iii) Securities financing transactions	453	9	646	13	534	11	566	11	786	16
6	(iv) Netting sets where cross-product netting has been approved	-	-	-	-	-	-	-	-	-	-
7	Segregated initial margin	4,563		4,725		6,535		5,122		6,087	
8	Non-segregated initial margin	351	-	460	-	582	-	436	-	385	-
9	Pre-funded default fund contributions	684	332	646	351	520	398	722	379	642	240
10	Unfunded default fund contributions	-	-	-	-	-	-	-	-	-	-

(1) The Bank has no exposure to non-qualifying central counterparties.

SEC1 – Securitization Exposures in the Banking Book

(millions of Canadian dollars)

The following tables present the bank's securitization exposures in its banking book.

						Q2 2022				
		a	b	С	e	f	g	i	j	k
			Ba	ink acts as originator		E	Bank acts as sponsor		Ba	inks acts as investor ⁽¹⁾
		Traditional	Synthetic ⁽²⁾	Sub-total	Traditional	Synthetic ⁽²⁾	Sub-total	Traditional	Synthetic ⁽²⁾	Sub-total
1	Retail	1,271	-	1,271	3,066	-	3,066	2,151	-	2,151
	Of which :									
2	Residential mortgages	-	-	-	2,294	-	2,294	-	-	-
3	Credit card	1,271	-	1,271	-	-	-	154	-	154
4	Other retail exposures	-	-	-	772	-	772	1,997	-	1,997
5	Re-securitization	_	-	-	-	-	-	_	-	-
6	Non-Retail	-	-	-	703	-	703	828	-	828
	Of which :									
7	Loans to corporates	-	-	-	-	-	-	-	-	-
8	Commercial mortgage	-	-	-	130	-	130	2	-	2
9	Lease and receivables	-	-	-	567	-	567	826	-	826
10	Other wholesale	-	-	-	6	-	6	-	-	-
11	Re-securitization	-	-	-	-	-	-	-	-	-

						Q1 2022				
		a	b	C	е	f	g	i	j	k
			Ba	ank acts as originator		I	Bank acts as sponsor		Ba	nks acts as investor ⁽¹⁾
		Traditional	Synthetic ⁽²⁾	Sub-total	Traditional	Synthetic ⁽²⁾	Sub-total	Traditional	Synthetic ⁽²⁾	Sub-total
1	Retail	1,271	-	1,271	2,524	-	2,524	1,880	-	1,880
	Of which :									
2	Residential mortgages	-	-	-	1,759	-	1,759	29	-	29
3	Credit card	1,271	-	1,271	-	-	-	107	-	107
4	Other retail exposures	-	-	-	765	-	765	1,744	-	1,744
5	Re-securitization	-	-	-	-	-	-	-	-	-
6	Non-Retail	-	-	-	642	-	642	846	-	846
	Of which :									
7	Loans to corporates	-	-	-	-	-	-	-	-	-
8	Commercial mortgage	-	-	-	113	-	113	22	-	22
9	Lease and receivables	-	-	-	524	-	524	824	-	824
10	Other wholesale	-	-	-	5	-	5	-	-	-
11	Re-securitization	-	-	-	-	-	-	-	-	-

(1) Represents the investment positions purchased in third-party deals.

SEC1 – Securitization Exposures in the Banking Book (continued)

(millions of Canadian dollars)

						Q4 2021				
		a	b	C	е	f	g	i	j	k
			Ba	ink acts as originator		E	Bank acts as sponsor		Ba	inks acts as investor ⁽¹⁾
		Traditional	Synthetic ⁽²⁾	Sub-total	Traditional	Synthetic ⁽²⁾	Sub-total	Traditional	Synthetic ⁽²⁾	Sub-total
1	Retail	1,871	-	1,871	2,709	-	2,709	1,550	-	1,550
	Of which :									
2	Residential mortgages	-	-	-	2,037	-	2,037	47	-	47
3	Credit card	1,871	-	1,871	-	-	-	107	-	107
4	Other retail exposures	-	-	-	672	-	672	1,396	-	1,396
5	Re-securitization	-	-	-	-	-	-	-	-	-
6	Non-Retail	-	-	-	523	-	523	822	-	822
	Of which :									
7	Loans to corporates	-	-	-	-	-	-	-	-	-
8	Commercial mortgage	-	-	-	-	-	-	4	-	4
9	Lease and receivables	-	-	-	518	-	518	818	-	818
10	Other wholesale	-	-	-	5	-	5	-	-	-
11	Re-securitization	-	-	-	-	-	-	-	-	-

						Q3 2021				
		а	b	С	е	f	g	i	j	k
			Ba	ink acts as originator		E	Bank acts as sponsor		Ba	nks acts as investor ⁽¹⁾
		Traditional	Synthetic ⁽²⁾	Sub-total	Traditional	Synthetic ⁽²⁾	Sub-total	Traditional	Synthetic ⁽²⁾	Sub-total
1	Retail	1,071	-	1,071	2,888	-	2,888	907	-	907
	Of which :									
2	Residential mortgages	-	-	-	2,198	-	2,198	49	-	49
3	Credit card	1,071	-	1,071	-	-	-	107	-	107
4	Other retail exposures	-	-	-	690	-	690	751	-	751
5	Re-securitization	-	-	-	-	-	-	-	-	-
6	Non-Retail	-	-	-	534	-	534	637	-	637
	Of which :									
7	Loans to corporates	-	-	-	-	-	-	-	-	-
8	Commercial mortgage	-	-	-	-	-	-	4	-	4
9	Lease and receivables	-	-	-	528	-	528	633	-	633
10	Other wholesale	-	-	-	6	-	6	-	-	-
11	Re-securitization	-	-	-	-	-	-	-	-	-

(1) Represents the investment positions purchased in third-party deals.

SEC2 – Securitization Exposures in the Trading Book

(millions of Canadian dollars)

The following tables present the bank's securitization exposures in its trading book.

						Q2 2022				
		a	b	C	е	f	g	i	j	k
			Ba	ank acts as originator			Bank acts as sponsor		Ba	nks acts as investor ⁽¹⁾
		Traditional	Synthetic ⁽²⁾	Sub-total	Traditional	Synthetic ⁽²⁾	Sub-total	Traditional	Synthetic ⁽²⁾	Sub-total
1	Retail	-	-	-	8	-	8	20	-	20
	Of which :									
2	Residential mortgages	-	-	-	5	-	5	-	-	-
3	Credit card	-	-	-	-	-	-	20	-	20
4	Other retail exposures	-	-	-	3	-	3	-	-	-
5	Re-securitization	-	-	_	-	-	-	-	-	_
6	Non-Retail	_	-	_	2	-	2	17	-	17
	Of which :									
7	Loans to corporates	-	-	-	-	-	-	-	-	-
8	Commercial mortgage	-	-	-	-	-	-	12	-	12
9	Lease and receivables	-	-	-	2	-	2	5	-	5
10	Other wholesale	-	-	-	-	-	-	-	-	-
11	Re-securitization	-	-	-	-	-	-	-	-	-

						Q1 2022				
		а	b	C	e	f	g	i	j	k
			Ba	ink acts as originator		E	Bank acts as sponsor		Ba	nks acts as investor ⁽¹⁾
		Traditional	Synthetic ⁽²⁾	Sub-total	Traditional	Synthetic ⁽²⁾	Sub-total	Traditional	Synthetic ⁽²⁾	Sub-total
1	Retail	-	-	-	13	-	13	12	-	12
	Of which :									
2	Residential mortgages	-	-	-	8	-	8	-	-	-
3	Credit card	-	-	-	-	-	-	12	-	12
4	Other retail exposures	-	-	-	5	-	5	-	-	-
5	Re-securitization	-	-	-	-	-	-	-	-	-
6	Non-Retail	-	-	-	4	-	4	17	-	17
	Of which :									
7	Loans to corporates	-	-	-	-	-	-	-	-	-
8	Commercial mortgage	-	-	-	-	-	-	12	-	12
9	Lease and receivables	-	-	-	4	-	4	5	-	5
10	Other wholesale	-	-	-	-	-	-	-	-	-
11	Re-securitization	-	-	-	-	-	-	-	-	-

(1) Represents the investment positions purchased in third-party deals.

SEC2 – Securitization Exposures in the Trading Book (continued)

(millions of Canadian dollars)

						Q4 2021				
		a	b	С	e	f	g	i	j	k
			Ba	ink acts as originator		E	Bank acts as sponsor		Ba	nks acts as investor ⁽¹⁾
		Traditional	Synthetic ⁽²⁾	Sub-total	Traditional	Synthetic ⁽²⁾	Sub-total	Traditional	Synthetic ⁽²⁾	Sub-total
1	Retail	-	-	-	18	-	18	24	-	24
	Of which :									
2	Residential mortgages	-	-	-	13	-	13	-	-	
3	Credit card	-	-	-	-	-	-	24	-	24
4	Other retail exposures	-	-	-	5	-	5	-	-	-
5	Re-securitization	-	-	-	-	-	-	-	-	-
6	Non-Retail	-	-	-	4	-	4	27	-	27
	Of which :									
7	Loans to corporates	-	-	-	-	-	-	-	-	-
8	Commercial mortgage	-	-	-	-	-	-	12	-	12
9	Lease and receivables	-	-	-	4	-	4	15	-	15
10	Other wholesale	-	-	-	-	-	-	-	-	-
11	Re-securitization	-	-	-	-	-	-	-	-	-

						Q3 2021				
		а	b	с	e	f	g	i	j	k
			Ba	ink acts as originator		E	Bank acts as sponsor		Ba	inks acts as investor ⁽¹⁾
		Traditional	Synthetic ⁽²⁾	Sub-total	Traditional	Synthetic ⁽²⁾	Sub-total	Traditional	Synthetic ⁽²⁾	Sub-total
1	Retail	-	-	-	7	-	7	17	-	17
	Of which :									
2	Residential mortgages	-	-	-	5	-	5	-	-	-
3	Credit card	-	-	-	-	-	-	17	-	17
4	Other retail exposures	-	-	-	2	-	2	-	-	-
5	Re-securitization	-	-	-	-	-	-	-	-	-
6	Non-Retail	-	-	-	1	-	1	16	-	16
	Of which :									
7	Loans to corporates	-	-	-	-	-	-	-	-	-
8	Commercial mortgage	-	-	-	-	-	-	12	-	12
9	Lease and receivables	-	-	-	1	-	1	4	-	4
10	Other wholesale	-	-	-	-	-	-	-	-	-
11	Re-securitization	-	-	-	-	-	-	-	-	-

(1) Represents the investment positions purchased in third-party deals.

SEC 3 – Securitization Exposures in the Banking Book and Associated Regulatory Capital Requirements⁽¹⁾ – Bank Acting as Originator or as Sponsor

(millions of Canadian dollars)

The following tables present securitization in the banking book when the bank acts as originator or sponsor and the associated capital requirements.

										Q2 2022								
		а	b	с	d	е	f	g	h	i	j	k	l	m	n	0	р	q
				Exposure	values (by	RW bands)	Exposu	re values (by	/ regulatory	approach)		RWA (by	regulatory a	pproach)(2)		C	apital charg	e after cap
					>100% to													
		< 200/ DW	> 20% to			1250%				42500/				42500/				42500/
-		≤ 20% RW	50% RW	100% RW	RW	RW	IRBA	ERBA/IAA	SA/SSFA	1250%	IRBA	ERBA/IAA	5A/55FA	1250%	IRBA	ERBA/IAA	5A/55FA	1250%
1	Total exposures	5,040	-	-	-	-	1,771	3,269	-	-	177	352	-	-	14	29	-	-
2	Traditional securitization	5,040	-	-	-	-	1,771	3,269	-	-	177	352	1	-	14	29	1	-
3	Of which securitization	5,040	-	-	-	-	1,771	3,269	-	-	177	352	1	-	14	29	1	-
4	Of which retail underlying	4,337	-	-	-	-	1,771	2,566	-	-	177	282	-	-	14	23	-	-
5	Of which wholesale	703	-	-	-	-	-	703	-	-	-	70	-	-	-	6	-	-
6	Of which re-securitization	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7	Of which senior	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8	Of which non-senior	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

										Q1 2022								
		а	b	С	d	е	f	g	h	i	i	k	l	m	n	0	р	q
				Exposure	values (by	RW bands)	Exposu	re values (by	regulatory	approach)		RWA (by	regulatory a	pproach)(2)		C	apital charg	e after cap
				500/ 1	>100% to													
		≤ 20% RW	> 20% to 50% RW	>50% to 100% RW		1250% RW	IRBA	ERBA/IAA	SA/SSFA	1250%	IRBA	ERBA/IAA	SA/SSFA	1250%	IRBA	ERBA/IAA	SA/SSFA	1250%
1	Total exposures	4,437	-	-	-	-	1,771	2,666	-	-	177	266	-	-	14	22	-	-
2	Traditional securitization	4,437	-	-	-	-	1,771	2,666	-	-	177	266	-	-	14	22	-	-
3	Of which securitization	4,437	I	-	-	-	1,771	2,666	-	-	177	266	I	-	14	22	I	-
4	Of which retail underlying	3,795	-	-	-	-	1,771	2,024	-	-	177	202	-	-	14	17	-	-
5	Of which wholesale	642	-	-	-	-	-	642	-	-	-	64	-	-	-	5	-	-
6	Of which re-securitization	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7	Of which senior	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8	Of which non-senior	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

(1) The Bank has no synthetic securitization exposure.

SEC 3 – Securitization Exposures in the Banking Book and Associated Regulatory Capital Requirements⁽¹⁾ - Bank Acting as Originator or as Sponsor (continued)

(millions of Canadian dollars)

										Q4 2021								
		а	b	С	d	е	f	g	h	i	j	k	l	m	n	0	р	q
				Exposure	values (by	RW bands)	Exposu	re values (by	y regulatory	approach)		RWA (by	regulatory a	approach) ⁽²⁾		C	apital charg	ge after cap
					>100% to													
			> 20% to															
_		≤ 20% RW	50% RW	100% RW	RW	RW	IRBA	ERBA/IAA	SA/SSFA	1250%	IRBA	erba/iaa	SA/SSFA	1250%	IRBA	ERBA/IAA	SA/SSFA	1250%
1	Total exposures	5,103	-	-	-	-	2,371	2,732	-	-	237	273	-	-	19	22	-	-
	Traditional securitization	5,103	-	-	1	-	2,371	2,732	-	-	237	273	١	-	19	22	-	-
3	Of which securitization	5,103	-	-	1	-	2,371	2,732	-	-	237	273	-	-	19	22	-	-
4	Of which retail underlying	4,580	-	-	-	-	2,371	2,209	-	-	237	221	-	-	19	18	-	-
5	Of which wholesale	523	-	-	-	-	-	523	-	-	-	52	-	-	-	4	-	-
6	Of which re-securitization	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7	Of which senior	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8	Of which non-senior	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

										Q3 2021								
		а	b	с	d	е	f	g	h	i	i	k	l	m	n	0	р	q
				Exposure	values (by	RW bands)	Exposu	re values (b	y regulatory	approach)		RWA (by	regulatory a	approach) ⁽²⁾		С	apital charg	e after cap
			> 20% to	>50% to	>100% to 1250%	1250%												
		≤ 20% RW	50% RW	100% RW	RW	RW	IRBA	ERBA/IAA	SA/SSFA	1250%	IRBA	ERBA/IAA	SA/SSFA	1250%	IRBA	ERBA/IAA	SA/SSFA	1250%
1	Total exposures	4,493	-	-	-	-	1,571	2,922	-	-	182	292	-	-	14	23	-	-
2	Traditional securitization	4,493	-	-	-	-	1,571	2,922	-	-	182	292	I	-	14	23	-	-
3	Of which securitization	4,493	-	-	-	-	1,571	2,922	-	-	182	292	-	-	14	23	-	-
4	Of which retail underlying	3,959	-	-	-	-	1,571	2,388	-	-	182	239	-	-	14	19	-	-
5	Of which wholesale	534	-	-	-	-	-	534	-	-	-	53	-	-	-	4	-	-
6	Of which re-securitization	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7	Of which senior	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8	Of which non-senior	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

(1) The Bank has no synthetic securitization exposure.

SEC 4 – Securitization Exposures in the Banking Book and Associated Capital Requirements⁽¹⁾ – Bank Acting as Investor

(millions of Canadian dollars)

The following tables present securitization exposures in the banking book where the bank acts as investor and the associated capital requirements.

										Q2 2022								
		а	b	С	d	е	f	g	h	i	j	k	l	m	n	0	р	q
				Exposure	e values (by	RW bands)	Exposu	re values (b	y regulatory	approach)		RWA (by	regulatory a	approach) ⁽²⁾		C	apital charg	ge after cap
					>100% to													
		\leq 20% RW	> 20% to 50% RW	>50% to 100% RW		1250% RW	IRBA	ERBA/IAA	SA/SSFA	1250%	IRBA	ERBA/IAA	SA/SSFA	1250%	IRBA	ERBA/IAA	SA/SSFA	1250%
1	Total exposures	2,924	21	34	-	-	-	870	2,109	-	-	106	328	-	-	8	26	-
2	Traditional securitization	2,924	21	34	-	-	-	870	2,109	-	-	106	328	-	I	8	26	-
3	Of which securitization	2,924	21	34	-	-	-	870	2,109	-	-	106	328	-	-	8	26	-
4	Of which retail underlying	2,132	19	-	-	-	-	268	1,883	-	-	45	275	-	-	4	22	-
5	Of which wholesale	792	2	34	-	-	-	602	226	-	-	61	53	-	-	4	4	-
6	Of which re-securitization	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7	Of which senior	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8	Of which non-senior	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

										Q1 2022								
		а	b	С	d	е	f	g	h	i	j	k	l	m	n	0	р	q
				Exposure	e values (by	RW bands)	Exposu	re values (by	regulatory	approach)		RWA (by	regulatory a	approach) ⁽²⁾		С	apital charg	e after cap
					>100% to													
		< 200/ DW/	> 20% to			1250%				12500/				125.00/				125.09/
		\leq 20% RW	50% RW	100% RW	RW	RW	IRBA	erba/iaa	SA/SSFA	1250%	IRBA	ERBA/IAA	SA/SSFA	1250%	IRBA	ERBA/IAA	SA/SSFA	1250%
1	Total exposures	2,666	27	33	-	-	29	685	2,012	-	4	80	316	-	-	6	25	-
2	Traditional securitization	2,666	27	33	-	-	29	685	2,012	-	4	80	316	-	1	6	25	-
3	Of which securitization	2,666	27	33	-	-	29	685	2,012	-	4	80	316	-	-	6	25	-
4	Of which retail underlying	1,861	19	-	-	-	29	63	1,788	-	4	15	264	-	-	1	21	-
5	Of which wholesale	805	8	33	-	-	-	622	224	-	-	65	52	-	-	5	4	-
6	Of which re-securitization	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7	Of which senior	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8	Of which non-senior		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

(1) The Bank has no synthetic securitization exposure.

SEC 4 – Securitization Exposures in the Banking Book and Associated Capital Requirements⁽¹⁾

- Bank Acting as Investor (continued) (millions of Canadian dollars)

										Q4 2021								
		а	b	C	d	е	f	g	h	i	j	k	l	m	n	0	р	q
				Exposure	values (by	RW bands)	Exposu	re values (by	/ regulatory	approach)		RWA (by	regulatory a	approach) ⁽²⁾		C	apital charg	ge after cap
			> 20% to			1250%												
_		\leq 20% RW		100% RW	RW	RW	IRBA		SA/SSFA	1250%	IRBA	1	,	1250%	IRBA	ERBA/IAA	SA/SSFA	1250%
1	Total exposures	2,319	21	32	-	-	47	699	1,626	-	7	97	242	-	1	8	19	-
2	Traditional securitization	2,319	21	32	-	-	47	699	1,626	-	7	97	242	-	1	8	19	-
3	Of which securitization	2,319	21	32	-	-	47	699	1,626	-	7	97	242	-	1	8	19	-
4	Of which retail underlying	1,531	19	-	-	-	47	63	1,440	-	7	15	221	-	1	1	17	-
5	Of which wholesale	788	2	32	-	-	-	636	186	-	-	82	21	-	-	7	2	-
6	Of which re-securitization	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7	Of which senior	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8	Of which non-senior	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

										Q3 2021								
		a	b	с	d	e	f	g	h	i	j	k	l	m	n	0	р	q
				Exposure	values (by	RW bands)	Exposu	re values (by	/ regulatory	approach)		RWA (by i	regulatory a	pproach) ⁽²⁾		С	apital charg	e after cap
					>100% to													
		≤20% RW	> 20% to 50% RW	>50% to 100% RW	1250% RW	1250% RW	IRBA	ERBA/IAA	SA/SSFA	1250%	IRBA	ERBA/IAA	SA/SSFA	1250%	IRBA	ERBA/IAA	SA/SSFA	1250%
1	Total exposures	1,488	23	33	-	-	49	700	795	-	7	98	119	-	1	8	10	-
	Traditional securitization	1,488	23	33	-	-	49	700	795	-	7	98	119	-	1	8	10	-
3	Of which securitization	1,488	23	33	-	-	49	700	795	-	7	98	119	-	1	8	10	-
4	Of which retail underlying	888	19	-	-	-	49	63	795	-	7	15	119	-	1	1	10	-
5	Of which wholesale	600	4	33	-	-	-	637	-	-	-	83	-	-	-	7	-	-
6	Of which re-securitization	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7	Of which senior	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8	Of which non-senior	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

(1) The Bank has no synthetic securitization exposure.

Glossary

Advanced Internal Ratings-Based (AIRB) approach	See risk-weighted assets below.
Banking Book Equities	Banking book equities comprise mainly exposures held for strategic and other reasons.
Capital Ratio	The Bank's capital divided by risk-weighted assets. The Bank's capital can be either CET1 Capital, Tier 1 capital or Total capital, producing three different capital ratios.
Common Equity Tier 1 (CET1) capital	Common Equity Tier 1 capital consists of common shareholders' equity less goodwill, intangible assets and other capital deductions. Common Equity Tier 1 capital ratio is calculated by dividing Common Equity Tier 1 capital by risk-weighted assets.
Corporate	All direct credit risk exposures to corporations, partnerships and proprietorships, exposures guaranteed by those entities.
Credit Risk	Credit risk is the risk of a financial loss if an obligor does not fully honor its contractual commitments to the Bank. Obligors may be borrowers, issuers, counterparties or guarantors. Credit risk is the most significant risk facing the Bank in the normal course of business. The Bank is exposed to credit risk not only through its direct lending activities and transactions but also through commitments to extend credit, letters of guarantee, letters of credit, over-the-counter derivatives trading, available-for-sale debt securities, securities purchased under reverse repurchase agreements, deposits with financial institutions, brokerage activities and transactions carrying a settlement risk for the Bank such as irrevocable fund transfers to third parties via electronic payment systems.
Drawn exposure	The amount of credit risk exposure resulting from loans already advanced to the customer.
Exposure at default (EAD)	An estimate of the amount of exposure to a customer at the event of, and at the time of, default.
Financial institutions	All direct credit risk exposures to deposit-taking institutions and regulated securities firms, and exposures guaranteed by those entities.
Leverage ratio	The leverage ratio is calculated by dividing the amount of Tier 1 capital by the total exposure. Total exposure is defined as the sum of on-balance-sheet assets (including derivative exposures and securities financing transaction exposures) and off-balance-sheet items. Assets deducted from Tier 1 capital are also deducted from the total exposure.
Loss given default (LGD)	An estimate of the amount of exposure to a customer that will not be recovered following a default by that customer, expressed as a percentage of the exposure at default.
Market risk	Market risk is the risk of financial loss resulting from adverse movements in underlying market factors. Market risk at the Bank arises from its participation in market-making, trading, investment and asset/liability management activities.
Operational risk	Operational risk is the risk of loss resulting from an inadequacy or a failure ascribable to people, processes, technology or external events. Operational risks are present in every activity of the Bank. Theft, fraud, unauthorized transactions, system errors, human error, amendments to or misinterpretation of acts and regulations, litigation or disputes with clients or property damage are just a few examples of events likely to cause financial loss, harm the Bank's reputation or result in regulatory penalties or sanctions.
Other off-balance sheet	Letters of guarantee, documentary letters of credit and securitized assets that represent the Bank's commitment to make payments in the event that a client cannot meet its financial obligations to third parties.
Other retail	This exposure class includes consumer loans, SME credit card receivables, SME loans (excluding mortgages of five units or more), and other personal loans.
Over-the-counter derivatives (OTC)	The amount of credit risk exposure resulting from derivatives that trade directly between two counterparties, rather than through exchanges.
Probability of default (PD)	An estimate of the likelihood of default for any particular customer which occurs when that customer is not able to repay its obligations as they become contractually due.
Qualifying revolving retail (QRR)	This exposure class includes lines of credit and credit card receivables.
Repo-style transactions	Financial obligations related to securities sold (repos) or repurchased (reverse repos) pursuant to an agreement under which the securities will be repurchased (repos) or resold (reverse repos) on a specified date and at a specified price. Such an agreement is a form of short-term funding (repos) or collateralized lending (reverse repos). Repo-style transactions also include loaned and borrowed securities that are off-balance sheet.
Retail Residential Mortgage	This exposure class includes loans to individuals against residential property (four units or less) and lines of credit secured by equity in residential property (HELOC).
Risk-weighted assets (RWA)	Assets are risk weighted according to the guidelines established by the Office of the Superintendent of Financial Institutions. In the standardized calculation approach, factors are applied to the face value of certain assets in order to reflect comparable risk levels. In the advanced approach, risk-weighted assets are derived from the Bank's internal models which represents the Bank's own assessment of the risks it incurs. Off-balance sheet instruments are converted to balance sheet (or credit) equivalents by adjusting the notional values before applying the appropriate risk-weighting factors.
Scaling Factor	An add-on of 6% is applied as a calibration adjustment to the risk weighted assets amount for credit risk assessed under the AIRB approach.
Sovereign	All direct credit risk exposures to governments, central banks and certain public sector entities, and exposures guaranteed by those entities.
Standardized approach	See risk-weighted assets.
Tier 1 capital	Tier 1 capital ratio consists of Common Equity Tier 1 capital and Additional Tier 1 instruments, namely, eligible non-cumulative preferred shares and the eligible amount of innovative instruments. Tier 1 capital ratio is calculated by dividing Tier 1 capital by risk-weighted assets.
Tier 2 capital	Tier 2 capital mainly includes the qualifying portion of the subordinated debentures and the collective allowance on non-impaired loans eligible for credit risk.
Total capital	Total capital is the sum of Tier 1 and Tier 2 capital. Total capital ratio is calculated by dividing total capital, less adjustments or regulatory deductions, by risk-weighted assets.
Undrawn commitments	The amount of credit risk exposure resulting from loans that have not been advanced to a customer, but which a customer may be entitled to draw in the future.