

Supplementary Regulatory Capital and Pillar 3 Disclosure

First Quarter 2023

(unaudited)

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This document is available via the Bank's website: 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 *2022 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 the first quarter of 2023 and also in the document entitled *Supplementary Financial Information* which are available on the Bank's website at nbc.ca. 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 guidelines and advisories issued by OSFI, 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

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n.a. Not applicable

⁽¹⁾ These pages are included in the document entitled Supplementary Financial Information – First Quarter 2023.

(2) These pages are included in the Supplementary Regulatory Capital and Pillar 3 Disclosure – Fourth Quarter 2022.

KM2 – Key Metrics – TLAC Requirements

		2023	2023 2022			
		Q1	Q4	Q3	Q2	Q1
				a		
1	Total loss-absorbing capacity (TLAC) available ⁽¹⁾	34,902	32,351	31,549	29,887	29,462
2	Total RWA at the level of the resolution group	121,813	116,840	111,377	107,478	106,168
3	TLAC ratio: TLAC as a percentage of RWA (row 1 / row 2) (%) ⁽¹⁾	28.7%	27.7%	28.3%	27.8%	27.8%
4	Leverage ratio exposure measure at the level of the resolution group	411,149	401,780	383,360	371,977	367,775
5	TLAC Leverage Ratio: TLAC as a percentage of leverage ratio exposure measure (row 1 / row 4) (%)(1)	8.5%	8.1%	8.2%	8.0%	8.0%
6a	Does the subordination exemption in the antepenultimate paragraph of Section 11 of the FSB TLAC Term Sheet apply?	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
6с	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.

⁽¹⁾ For the quarters of fiscal 2022, these rows included the transitional measure for provisioning expected credit losses (ECL) granted by OSFI. This transitional measure ceased to apply on November 1, 2022.

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.

	Q1 2023	Q4 2022	Q3 2022	Q2 2022	Q1 2022	Q1 2023
	a	b	b	b	b	С
						Minimum
	D1444(1)	DM(4(1)	DM(A(1)	D1444(1)	DVA/A(1)	capital
- T	RWA ⁽¹⁾	RWA ⁽¹⁾	RWA ⁽¹⁾	RWA ⁽¹⁾		requirement ⁽²⁾
1 Credit risk (excluding counterparty credit risk)	89,972	83,620	79,036	75,524	75,604	7,197
2 Of which: standardised approach (SA)	20,607	18,998	16,948	16,353	17,284	1,648
3 Of which: foundation internal ratings-based (F-IRB) approach	-	-	-	-	-	- 1
4 Of which: supervisory slotting approach				-		
5 Of which: advanced internal ratings-based (A-IRB) approach	69,365	64,622	62,088	59,171	58,320	5,549
6 Counterparty credit risk (CCR)	5,521	5,810	5,950	7,037	7,270	441
7 Of which: standardised approach for counterparty credit risk	3,639	4,131	4,155	5,010	5,205	291
8 Of which: internal model method (IMM)	_	-	-	-	-	-
9 Of which: other CCR	1,671	1,438	1,557	1,591	1,646	133
Of which: exposures to central counterparties	211	241	238	436	419	17
1.0 Credit valuation adjustment (CVA)	1,038	2,677	2,230	2,304	2,115	83
11 Equity positions under the simple risk weight approach ⁽³⁾	872	835	812	885	896	70
1.2 Equity investments in funds — look-through approach	230	223	233	256	242	18
13 Equity investments in funds — mandate-based approach	-	-	-	-	-	-
L4 Equity investments in funds – fall-back approach	-	-	-	-	-	-
L5 Settlement risk	58	43	92	71	76	5
1.6 Securitization exposures in banking book	1,033	1,008	976	963	843	83
6a Of which: subject to the transitional arrangement	-	-	-	-	-	-
17 Of which: securitization IRB approach (SEC-IRBA)	127	177	127	177	181	10
Of which: securitization external ratings-based approach (SEC-ERBA), including internal assessment approach (IAA)	660	497	490	458	346	53
9 Of which: securitization standardised approach (SEC-SA)	246	334	359	328	316	20
20 Market risk	5,960	6,025	5,696	4,453	3,498	477
21 Of which: standardised approach (SA)	1,392	1,405	1,411	1,220	1,002	111
22 Of which: internal model approach (IMA)	4,568	4,620	4,285	3,233	2,496	366
23 Capital charge for switch between trading book and banking book	-	-	-	-	-	-
24 Operational risk	15,033	14,674	14,452	14,147	13,781	1,203
25 Amounts below the thresholds for deduction (subject to 250% risk weight)	2,096	1,925	1,900	1,838	1,843	168
26 Floor adjustment	_	_		_		_
27 Total (1+6+10+11+12+13+14+15+16+20+23+24+25+26)	121,813	116,840	111,377	107,478	106,168	9,745

⁽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.

				Q1 2023			
	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	
	financial statements	consolidation	framework	credit risk framework	framework	framework	subject to deduction from capital
Assets							
Cash and deposits with financial institutions	42,286	42,286	42,286	-	-	1,373	-
Securities							
At fair value through profit or loss	89,835	94,273	1,352	-	-	92,921	-
At fair value through other comprehensive income	10,079	19,927	19,893	-	34	-	-
At amortized cost	14,025	14,139	10,554	-	3,585	-	
	113,939	128,339	31,799	-	3,619	92,921	-
Securities purchased under reverse repurchase agreements							
and securities borrowed	26,430	30,708	-	30,708	-	-	_
Loans and acceptances							
Residential mortgage	82,104	50,772	50,772	-	-	-	-
Personal	45,067	45,067	45,067	-	-	-	-
Credit card	2,296	2,296	869	-	1,271	-	156
Business and government	75,154	75,154	75,117	-	37	296	_
	204,621	173,289	171,825	-	1,308	296	156
Customers' liability under acceptances	6,765	6,765	6,765	-	-	-	-
Allowances for credit losses	(1,007)	(1,007)	(66)	-	-	-	(941)
	210,379	179,047	178,524	-	1,308	296	(785)
Other							
Derivative financial instruments ⁽³⁾	14,060	14,694	-	14,694	-	12,764	-
Investments in associates and joint ventures	142	123	123	-	-	-	-
Premises and equipment	1,451	1,451	1,451	-	-	-	-
Goodwill	1,515	1,599	-	-	-	-	1,599
Intangible assets	1,341	1,116	-	-	-	-	1,116
Other assets	6,799	6,980	6,684	-	-	-	296
	25,308	25,963	8,258	14,694	-	12,764	3,011
Total assets	418,342	406,343	260,867	45,402	4,927	107,354	2,226
Liabilities							
Deposits	282,505	282,505	-	-	-	17,781	264,724
Other							
Acceptances	6,765	6,765	-	-	_	_	6,765
Obligations related to securities sold short	19,778	19,778	-	-	-	19,778	_
Obligations related to securities sold under repurchase							
agreements and securities loaned	37,635	47,858	-	47,858	-	-	_
Derivative financial instruments ⁽³⁾	17,170	18,402	-	18,402	-	16,691	_
Liabilities related to transferred receivables	24,832	-	-	-	-	-	_
Other liabilities	6,145	7,523	_		-	_	7,523
	112,325	100,326	_	66,260	-	36,469	14,288
Subordinated debt	1,497	1,497	-			_	1,497
Total liabilities	396,327	384,328	-	66,260	1	54,250	280,509

⁽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, 2022, 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 LI1) between the financial statements' carrying value amounts and the exposure amounts used for regulatory purposes.

		Q1 2023					
		a	b	С	d	e	
						Items subject $to^{(1)}$:	
			Credit risk	Securitization	' '	Market risk	
		Total	framework	framework	risk framework	framework	
1	Asset carrying value amount under scope of regulatory consolidation (as per template LI1)	404,117	260,867	4,927	45,402	107,354	
2	Liabilities carrying value amount under scope of regulatory consolidation (as per template LI1)	103,819	-	-	66,260	54,250	
3	Total net amount under regulatory scope of consolidation	300,298	260,867	4,927	(20,858)	53,104	
4	Gross-up for repo-style transactions ⁽²⁾	95,716	-	_	95,716	-	
5	Potential future exposures (PFE) ³⁾	9,690	-	-	9,690	-	
6	Off-balance sheet amounts ⁽⁴⁾	216,530	64,393	4,233	111,177	-	
7	Differences due to different netting rules, other than those already included in row 2 including collateral	6,188	-	-	6,188	-	
8	VaR amounts for Securities Financing Transactions (SFTs)	8,297	-	-	8,297	-	
9	Differences in valuations	=	-	-	-	-	
10	Collateral for SFTs	(184,994)	-	_	(184,994)	_	
11	Exposure amounts considered for regulatory purposes ⁽⁵⁾	451,725	325,260	9,160	25,216	53,104	

⁽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

			2023		20	22	
			Q1	Q4	Q3	Q2	Q1
		Reference ⁽¹⁾					
	Common Equity Tier 1 capital: instruments and reserves						
1	Directly issued qualifying common share capital plus related contributed surplus (2)	a + a'	3,291	3,252	3,244	3,245	3,254
2	Retained earnings	b	15,470	15,140	14,994	14,293	13,543
3	Accumulated other comprehensive income and other reserves	С	102	202	27	54	23
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		18,863	18,594	18,265	17,592	16,820
	Regulatory adjustments to Common Equity Tier 1 capital						
7	Prudential valuation adjustments		_	_	-	-	_
8	Goodwill (net of related tax liability)	e -w	(1,599)	(1,598)	(1,586)	(1,589)	(1,592)
9	Intangible assets other than mortgage-servicing rights	f - x	(1,116)	(1,133)	(1,132)	(1,118)	(1,088)
10	Deferred tax assets excluding those arising from temporary differences (net of related tax liability)	g	(41)	(39)	(38)	(33)	(34)
11	Accumulated other comprehensive income related to cash flow hedges	h	(15)	(31)	(71)	(73)	(39)
12	Shortfall of total provisions to expected losses	i	-	_	-	-	_
13	Securitisation gain on sale		-	_	-	-	_
14	Gains (losses) due to changes in own credit risk on fair valued liabilities	j	(466)	(694)	(634)	(377)	(34)
15	Defined benefit pension plan assets (net of related tax liability)	k - y	(296)	(336)	(583)	(612)	(566)
16	Investments in own shares (if not already netted off contributed surplus on reported balance sheet)		_	_	_	_	_
17	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)		_	_	_	_	_
	Deferred tax assets arising from temporary differences (amount above 10% threshold, net of related tax liability)		_	_	_	_	_
22							
23		n	_	_	_	_	_
24			_	_	_	_	_
25		0	_	_	_	_	_
	Other deductions or regulatory adjustments to CET1 as determined by OSFI (including regulatory adjustments in						
	respect of own use property)		_	55	49	43	48
27	Regulatory adjustments applied to Common Equity Tier 1 due to insufficient Additional Tier 1 and Tier 2 to cover			33	75	10	10
-,	deductions		_	_	_	_	_
28	Total regulatory adjustments to Common equity Tier 1		(3,533)	(3,776)	(3,995)	(3,759)	(3,305)
29	Common Equity Tier 1 capital (CET1) ⁽³⁾		15,330	14,818	14,270	13,833	13,515
	CET1 with transitional arrangements for ECL provisioning not applied ⁽⁴⁾		-,	14,763	14,221	13,790	13,467
	Additional Tier 1 capital: instruments						
30	Directly issued qualifying Additional Tier 1 instruments plus related contributed surplus (2)		3,150	3,150	2,650	2,650	2,650
31		V + Z	3,150	3,150	2,650	2,650	2,650
32		р	_	_	-	-	_
33	Directly issued capital instruments subject to phase out from Additional Tier 1 ⁽²⁾	v' + z' + p '	_	_	_	_	_
	Additional Tier 1 instruments (and CET1 instruments not included in row 5) issued by subsidiaries and held by	,					
•	third parties (amount allowed in group AT1)	q	_	_	_	_	_
35	of which: instruments issued by subsidiaries subject to phase out	,	_	_	_	_	_
36	Additional Tier 1 capital before regulatory adjustments		3.150	3,150	2.650	2.650	2,650
90	Auditional fiel 1 capital perofe regulatory adjustifients		3,130	3,130	2,030	2,030	2,000

⁽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.

⁽³⁾ For the quarters of fiscal 2022, this row included the transitional measure for provisioning expected credit losses (ECL) granted by OSFI. This transitional measure ceased to apply on November 1, 2022.

⁽⁴⁾ Since Q1 2023, the transitional measure for provisioning ECL is no longer applicable.

CC1 - Composition of Regulatory Capital (continued)

			2023		202	2	
			Q1	Q4	Q3	Q2	Q1
		Reference ⁽¹⁾					
	Additional Tier 1 capital: regulatory adjustments						
	Investments in own Additional Tier 1 instruments		(1)	(6)	-	-	_
	Reciprocal cross holdings in Additional Tier 1 instruments		_	-	-	-	_
39	Non-significant investments in the capital of banking, financial and insurance entities, net of eligible short positions						
	(amount above 10% threshold)		-	-	-	-	-
40	Significant investments in the capital of banking, financial and insurance entities that are outside the scope of regulatory						
	consolidation, net of eligible short positions		-	-	-	-	-
41			(1)	(1)	(2)	(2)	(1)
41	a of which: Reverse mortgages		(1)	(1)	(2)	(2)	(1)
42	Regulatory adjustments applied to Additional Tier 1 due to insufficient Tier 2 to cover deductions		_	_	-	-	_
	Total regulatory adjustments to Additional Tier 1 capital		(2)	(7)	(2)	(2)	(1)
44	Additional Tier 1 capital (AT1)		3,148	3,143	2,648	2,648	2,649
45	i Tier 1 capital (T1 = CET1 + AT1) ⁽²⁾		18,478	17,961	16,918	16,481	16,164
45	a Tier 1 Capital with transitional arrangements for ECL provisioning not applied (3)			17,906	16,869	16,438	16,116
	Tier 2 capital: instruments and allowances						
	i Directly issued qualifying Tier 2 instruments plus related contributed surplus (4)	r	750	1,500	1,500	750	750
	Directly issued capital instruments subject to phase out from Tier 2 ⁽⁴⁾	r'	-	-	-	-	-
48	Tier 2 instruments (and CET1 and AT1 instruments not included in rows 5 or 34) issued by subsidiaries and held by						
	third parties (amount allowed in group Tier 2)	S	_	-	-	-	_
49	of which: instruments issued by subsidiaries subject to phase out		_	-	-	-	-
50	Allowances for credit losses	t	434	358	339	332	359
51	Tier 2 capital before regulatory adjustments		1,184	1,858	1,839	1,082	1,109
	Tier 2 capital: regulatory adjustments						
	Investments in own Tier 2 instruments		_	-	-	-	-
	Reciprocal cross holdings in Tier 2 instruments and Other TLAC-eligible instruments		_	-	-	-	-
54	Non-significant investments in the capital of banking, financial and insurance entities and Other TLAC-eligible instruments						
	issued by G-SIBs and Canadian D-SIBs that are outside the scope of regulatory consolidation, where the institution does						
	not own more than 10% of the issued common share capital of the entity (amount above 10% threshold)		(178)	(92)	(23)	(164)	(150)
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		(178)	(92)	(23)	(164)	(150)
55	Significant investments in the capital of banking, financial and insurance entities and Other TLAC-eligible instruments						
	issued by G-SIBs and Canadian D-SIBs that are outside the scope of regulatory consolidation		-	-	-	-	-
	Other deductions from Tier 2 capital		_	-	-	-	-
	Total regulatory adjustments to Tier 2 capital		(178)	(92)	(23)	(164)	(150)
	Tier 2 capital (T2)		1,006	1,766	1,816	918	959
	7 Total capital (TC = T1 + T2) ⁽²⁾		19,484	19,727	18,734	17,399	17,123
59	a Total Capital with transitional arrangements for ECL provisioning not applied (9)			19,727	18,734	17,399	17,123
(1)	Reconciliation with Balance Sheet is presented on pages 12 and 13.						

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

⁽²⁾ For the quarters of fiscal 2022, this row included the transitional measure for provisioning expected credit losses (ECL) granted by OSFI. This transitional measure ceased to apply on November 1, 2022.

⁽³⁾ Since Q1 2023, the transitional measure for provisioning ECL is no longer applicable.

⁽⁴⁾ 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)

		2023 2022		22		
		Q1	Q4	Q3	Q2	Q1
		<u></u>				
60	Total risk-weighted assets	121,813	116,840	111,377	107,478	106,168
	Common Equity Tier 1 Capital RWA (CET1)	121,813	116,840	111,377	107,478	106,168
	Tier 1 Capital RWA	121,813	116,840	111,377	107,478	106,168
60c	Total capital RWA	121,813	116,840	111,377	107,478	106,168
	Capital ratios					
61	Common Equity Tier 1 (as a percentage of risk weighted assets) ⁽¹⁾	12.6%	12.7%	12.8%	12.9%	12.7%
61a	CET1 Ratio with transitional arrangements for ECC provisioning not applied ⁽²⁾		12.6%	12.8%	12.8%	12.7%
62	Tier 1 (as a percentage of risk weighted assets) ⁽¹⁾	15.2%	15.4%	15.2%	15.3%	15.2%
62a	Tier 1 Capital Ratio with transitional arrangements for ECL provisioning not applied (2)		15.3%	15.1%	15.3%	15.2%
63	Total capital (as a percentage of risk weighted assets) ⁽¹⁾	16.0%	16.9%	16.8%	16.2%	16.1%
63a	Total Capital Ratio with transitional arrangements for ECL provisioning not applied ⁽²⁾		16.9%	16.8%	16.2%	16.1%
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%
65	of which: capital conservation buffer requirement	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%
67	of which: G-SIB buffer requirement	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%
68	Common Equity Tier 1 available to meet buffers (as a percentage of risk weighted assets)	12.6%	12.7%	12.8%	12.9%	12.7%
	OSFI target (minimum + capital conservation buffer + D-SIB buffer) ⁽³⁾					
69	Common Equity Tier 1 all-in target ratio	8.0%	8.0%	8.0%	8.0%	8.0%
70	Tier 1 capital all-in target ratio	9.5%	9.5%	9.5%	9.5%	9.5%
71	Total capital all-in target ratio	11.5%	11.5%	11.5%	11.5%	11.5%
	Amounts below the thresholds for deduction (before risk weighting)			<u>_</u>		
72	Non-significant investments in the capital and other TLAC-eligible instruments of other financials entities	1,689	1,084	976	705	694
73	Significant investments in the common stock of financials	437	409	438	419	392
74	Mortgage servicing rights (net of related tax liability)	-	_	-	-	-
75	Deferred tax assets arising from temporary differences (net of related tax liabilities)	401	361	322	316	346
	Applicable caps on the inclusion of allowances in Tier 2					
76	Allowance eligible for inclusion in Tier 2 in respect of exposures subject to standardised approach (prior to application of cap)	177	152	139	134	143
77	Cap on inclusion of allowances in Tier 2 under standardised approach	237	224	200	194	203
78	Allowance eligible for inclusion in Tier 2 in respect of exposures subject to internal ratings-based approach (IRB) (prior to application					
	of cap)	257	206	200	199	216
79	Cap on inclusion of allowances in Tier 2 under internal ratings-based approach	491	469	452	440	436
(4) F	the quarters of fiscal 2022, this row included the transitional measure for provisioning expected credit losses (FCI) granted by OSFI. This transitional measure ceased to apply on November 1, 2022.		•	•		

⁽¹⁾ For the quarters of fiscal 2022, this row included the transitional measure for provisioning expected credit losses (ECL) granted by OSFI. This transitional measure ceased to apply on November 1, 2022.

⁽²⁾ Since Q1 2023, the transitional measure for provisioning ECL is no longer applicable.

⁽³⁾ Does not include the domestic stability buffer.

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

	ss - Reference to tion of Capital ⁽²⁾	As in Report to Shareholders 42,286 113,939 - 113,939 26,430 82,104 45,067 2,296 75,154 6,765 (1,007)	Under scope of regulatory consolidation 42,286 128,339 - 128,339 30,708 50,772 45,067 2,296 75,154 6,765 (1,007) (434)
Assets Cash and deposits with financial institutions Securities Non-significant investments in capital of other financial institutions reflected in regulatory capital Other securities Assets purchased under reverse repurchase agreements and securities borrowed Loans Residential mortgage Personal Credit card Business and government Customers' liability under acceptances Less: Allowances for credit losses Allowance reflected in Tier 2 regulatory capital Shortfall of allowances to expected loss Allowances not reflected in regulatory capital Other assets Derivative financial instruments Other Goodwill Intangibles assets Deferred tax assets excluding those arising from temporary differences	tion of Capital ⁽²⁾	42,286 113,939 - 113,939 26,430 82,104 45,067 2,296 75,154 6,765	42,286 128,339 - 128,339 30,708 50,772 45,067 2,296 75,154 6,765 (1,007)
Cash and deposits with financial institutions Securities Non-significant investments in capital of other financial institutions reflected in regulatory capital Other securities Assets purchased under reverse repurchase agreements and securities borrowed Loans Residential mortgage Personal Credit card Business and government Customers' liability under acceptances Less: Allowances for credit losses Allowance reflected in Tier 2 regulatory capital Shortfall of allowances to expected loss Allowances not reflected in regulatory capital Other assets Derivative financial instruments Other Goodwill Intangibles assets Deferred tax assets Deferred tax assets Deferred tax assets Deferred tax assets excluding those arising from temporary differences	t i	113,939 - 113,939 26,430 82,104 45,067 2,296 75,154 6,765	128,339 - 128,339 30,708 50,772 45,067 2,296 75,154 6,765 (1,007)
Securities Non-significant investments in capital of other financial institutions reflected in regulatory capital Other securities Assets purchased under reverse repurchase agreements and securities borrowed Loans Residential mortgage Personal Credit card Business and government Customers' liability under acceptances Less: Allowances for credit losses Allowance reflected in Tier 2 regulatory capital Shortfall of allowances to expected loss Allowances not reflected in regulatory capital Other assets Derivative financial instruments Other Goodwill Intangibles assets Deferred tax assets Deferred tax assets Deferred tax assets Deferred tax assets excluding those arising from temporary differences	t i	113,939 - 113,939 26,430 82,104 45,067 2,296 75,154 6,765	128,339 - 128,339 30,708 50,772 45,067 2,296 75,154 6,765 (1,007)
Non-significant investments in capital of other financial institutions reflected in regulatory capital Other securities Assets purchased under reverse repurchase agreements and securities borrowed Loans Residential mortgage Personal Credit card Business and government Customers' liability under acceptances Less: Allowances for credit losses Allowance reflected in Tier 2 regulatory capital Shortfall of allowances to expected loss Allowances not reflected in regulatory capital Other assets Derivative financial instruments Other Goodwill Intangibles assets Deferred tax assets Deferred tax assets Deferred tax assets	t i	113,939 26,430 82,104 45,067 2,296 75,154 6,765	- 128,339 30,708 50,772 45,067 2,296 75,154 6,765 (1,007)
Other securities Assets purchased under reverse repurchase agreements and securities borrowed Loans Residential mortgage Personal Credit card Business and government Customers' liability under acceptances Less: Allowances for credit losses Allowance reflected in Tier 2 regulatory capital Shortfall of allowances to expected loss Allowances not reflected in regulatory capital Other assets Derivative financial instruments Other Goodwill Intangibles assets Deferred tax assets Deferred tax assets Deferred tax assets excluding those arising from temporary differences	t i	26,430 82,104 45,067 2,296 75,154 6,765	30,708 50,772 45,067 2,296 75,154 6,765 (1,007)
Assets purchased under reverse repurchase agreements and securities borrowed Loans Residential mortgage Personal Credit card Business and government Customers' liability under acceptances Less: Allowances for credit losses Allowance reflected in Tier 2 regulatory capital Shortfall of allowances to expected loss Allowances not reflected in regulatory capital Other assets Derivative financial instruments Other Goodwill Intangibles assets Deferred tax assets Deferred tax assets Deferred tax assets excluding those arising from temporary differences	t i	26,430 82,104 45,067 2,296 75,154 6,765	30,708 50,772 45,067 2,296 75,154 6,765 (1,007)
Residential mortgage Personal Credit card Business and government Customers' liability under acceptances Less: Allowances for credit losses Allowance reflected in Tier 2 regulatory capital Shortfall of allowances to expected loss Allowances not reflected in regulatory capital Other assets Derivative financial instruments Other Goodwill Intangibles assets Deferred tax assets Deferred tax assets Deferred tax assets excluding those arising from temporary differences	t i	82,104 45,067 2,296 75,154 6,765	50,772 45,067 2,296 75,154 6,765 (1,007)
Residential mortgage Personal Credit card Business and government Customers' liability under acceptances Less: Allowances for credit losses Allowance reflected in Tier 2 regulatory capital Shortfall of allowances to expected loss Allowances not reflected in regulatory capital Other assets Derivative financial instruments Other Goodwill Intangibles assets Deferred tax assets Deferred tax assets excluding those arising from temporary differences	t i	45,067 2,296 75,154 6,765	45,067 2,296 75,154 6,765 (1,007)
Personal Credit card Business and government Customers' liability under acceptances Less: Allowances for credit losses Allowance reflected in Tier 2 regulatory capital Shortfall of allowances to expected loss Allowances not reflected in regulatory capital Other assets Derivative financial instruments Other Goodwill Intangibles assets Deferred tax assets Deferred tax assets excluding those arising from temporary differences	t i	45,067 2,296 75,154 6,765	45,067 2,296 75,154 6,765 (1,007)
Credit card Business and government Customers' liability under acceptances Less: Allowances for credit losses Allowance reflected in Tier 2 regulatory capital Shortfall of allowances to expected loss Allowances not reflected in regulatory capital Other assets Derivative financial instruments Other Goodwill Intangibles assets Deferred tax assets Deferred tax assets Secretary of the property differences Interval of the property differences Deferred tax assets excluding those arising from temporary differences	t i	2,296 75,154 6,765	2,296 75,154 6,765 (1,007)
Business and government Customers' liability under acceptances Less: Allowances for credit losses Allowance reflected in Tier 2 regulatory capital Shortfall of allowances to expected loss Allowances not reflected in regulatory capital Other assets Derivative financial instruments Other Goodwill Intangibles assets Deferred tax assets Deferred tax assets Deferred tax assets excluding those arising from temporary differences	t i	75,154 6,765	75,154 6,765 (1,007)
Customers' liability under acceptances Less: Allowances for credit losses Allowance reflected in Tier 2 regulatory capital Shortfall of allowances to expected loss Allowances not reflected in regulatory capital Other assets Derivative financial instruments Other Goodwill Intangibles assets Deferred tax assets Deferred tax assets Deferred tax assets excluding those arising from temporary differences	t i	6,765	6,765 (1,007)
Less: Allowances for credit losses Allowance reflected in Tier 2 regulatory capital Shortfall of allowances to expected loss Allowances not reflected in regulatory capital Other assets Derivative financial instruments Other Goodwill Intangibles assets Deferred tax assets Deferred tax assets Deferred tax assets excluding those arising from temporary differences	t i		(1,007)
Less: Allowances for credit losses Allowance reflected in Tier 2 regulatory capital Shortfall of allowances to expected loss Allowances not reflected in regulatory capital Other assets Derivative financial instruments Other Goodwill Intangibles assets Deferred tax assets Deferred tax assets Deferred tax assets excluding those arising from temporary differences	t i	(1,007) - -	
Shortfall of allowances to expected loss Allowances not reflected in regulatory capital Other assets Derivative financial instruments Other Goodwill Intangibles assets Deferred tax assets Deferred tax assets excluding those arising from temporary differences	t i	1-1	(434) -
Shortfall of allowances to expected loss Allowances not reflected in regulatory capital Other assets Derivative financial instruments Other Goodwill Intangibles assets Deferred tax assets Deferred tax assets excluding those arising from temporary differences	i	-	_ ` _
Other assets Derivative financial instruments Other Goodwill Intangibles assets Deferred tax assets Deferred tax assets excluding those arising from temporary differences			
Derivative financial instruments Other Goodwill Intangibles assets Deferred tax assets Deferred tax assets excluding those arising from temporary differences		-	(573)
Other Goodwill Intangibles assets Deferred tax assets Deferred tax assets excluding those arising from temporary differences			,
Goodwill Intangibles assets Deferred tax assets Deferred tax assets excluding those arising from temporary differences		14,060	14,694
Intangibles assets Deferred tax assets Deferred tax assets excluding those arising from temporary differences		11,248	11,269
Deferred tax assets Deferred tax assets excluding those arising from temporary differences	e	1,515	1,599
Deferred tax assets excluding those arising from temporary differences	f	1,341	1,341
		406	746
Deferred tax assets arising from temporary differences exceeding regulatory thresholds	g	_	41
	0	-	-
Deferred tax assets - realize through loss carrybacks		_	304
Deferred tax assets - other temporary differences		_	401
Defined-benefit pension fund net assets	k	-	411
Significant investments in other financial institutions		_	437
Significant investments exceeding regulatory thresholds m·	+ n	_	_
Significant investments not exceeding regulatory thresholds		_	437
Other			6,735
Total assets		7,986	

⁽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, 2022, 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. As at January 31, 2023, on a legal entity basis, National Bank Life Insurance Company had \$338 million in assets and \$313 million in equity, Natcan Insurance Company SCC had \$6 million in assets and \$8 million in equity.

⁽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)

	Q1 2023				
	Cross - Reference to		Under scope of regulatory		
	Definition of Capital ⁽²⁾	As in Report to Shareholders	consolidation		
Liabilities					
Deposits		282,505	282,505		
Derivatives financials instruments		17,170	18,402		
Other liabilities		95,155	81,924		
Gains and losses due to changes in own credit risk on fair value liabilities	j	-	466		
Deferred tax liabilities		15	15		
Related to goodwill	w	-	-		
Related to intangibles	x	-	225		
Related to pensions	у	-	115		
Other deferred tax liabilities		-	(325)		
Other		95,140	81,443		
Subordinated debt		1,497	1,497		
Regulatory capital amortization of maturing debentures		-	-		
Fair value adjustment and unamortized issuance cost		-	747		
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		396,327	384,328		
Equity Attributable to Shareholders and holders of other equity instruments		22,013	22,013		
Common shares	a	3,236	3,236		
Contributed surplus	a'	55	55		
Retained earnings	b	15,470	15,470		
Accumulated Other Comprehensive Income (loss)	с	102	102		
Net gains (losses) on instruments designated as cash flow hedges	h	15	15		
Net foreign currency translation adjustments		104	104		
Other		(17)	(17)		
Preferred shares and other equity instruments		3,150	3,150		
of which: are qualifying	v	-	3,150		
of which: are subject to phase out	٧'	-	-		
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		22,015	22,015		
Total Liabilities and Equity		418,342	406,343		

⁽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, 2022, 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. As at January 31, 2023, on a legal entity basis, National Bank Life Insurance Company had \$338 million in assets and \$313 million in equity, Natcan Insurance Company SCC had \$6 million in assets and \$8 million in equity.

⁽²⁾ The references identify balance sheet components which are used in calculation of regulatory capital on pages 9 to 11.

TLAC1 – TLAC Composition

		2023		20	22	
		Q1	Q4	Q3	Q2	Q1
	Regulatory capital elements of TLAC and adjustments					
1	Common Equity Tier 1 capital (CET1)	15,330	14,818	14,270	13,833	13,515
2	Additional Tier 1 capital (AT1) before TLAC adjustments	3,148	3,143	2,648	2,648	2,649
3	AT1 ineligible as TLAC as issued out of subsidiaries to third parties ⁽¹⁾	-	-	-	-	_
4	Other adjustments	-	-	-	-	
5	AT1 instruments eligible under the TLAC framework	3,148	3,143	2,648	2,648	2,649
6	Tier 2 capital (T2) before TLAC adjustments	1,006	1,766	1,816	918	959
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 ⁽¹⁾	-	-	-	-	_
9	Other adjustments	-	-	-	-	
10	T2 instruments eligible under the TLAC framework	1,006	1,766	1,816	918	959
11	TLAC arising from regulatory capital	19,484	19,727	18,734	17,399	17,123
	Non-regulatory capital elements of TLAC					
	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					l
	term sheet requirements	15,452	12,689	12,916	12,576	12,400
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	_	-	-	-	<u> </u>
17	TLAC arising from non-regulatory capital instruments before adjustments	15,452	12,689	12,916	12,576	12,400
	Non-regulatory capital elements of TLAC: adjustments					
	TLAC before deductions	34,936	32,416	31,650	29,975	29,523
19	Deductions of exposures between MPE resolution groups that correspond to items eligible for TLAC (not applicable to SPE G-SIBs					l
	and D-SIBs)	-	-	-	-	_
20	Deduction of investments in own other TLAC liabilities	(34)	(65)	(101)	(88)	(61)
21	Other adjustments to TLAC	-	-	-	-	_
22	TLAC available after deductions	34,902	32,351	31,549	29,887	29,462
	Risk-weighted assets and leverage exposure measure for TLAC purposes					
23	Total risk-weighted assets adjusted as permitted under the TLAC regime	121,813	116,840	111,377	107,478	106,168
24	Leverage exposure measure	411,149	401,780	383,360	371,977	367,775
	TLAC ratios and buffers					
25	TLAC ratio (as a percentage of risk-weighted assets adjusted as permitted under the TLAC regime)	28.7%	27.7%	28.3%	27.8%	27.8%
	TLAC Leverage ratio (as a percentage of leverage exposure)	8.5%	8.1%	8.2%	8.0%	8.0%
27	CET1 (as a percentage of risk-weighted assets) available after meeting the resolution group's minimum capital and					I
	TLAC requirements	6.9%	7.7%	7.9%	7.2%	7.1%
28	Institution-specific buffer requirement (capital conservation buffer plus countercyclical buffer plus higher loss absorbency, expressed					I
	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%
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⁾ 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⁾

				Q1 2	023					Q4 2	022		
			(Creditor ranking	g		Sum (1 to 5)			Creditor ranking	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	
				Subordinated		Other liabilities excluding				Subordinated		Other liabilities excluding	5
1	Description of creditor ranking	shares	instruments	debt	Bail-in debt	Bail-in debt		shares	instruments	debt	Bail-in debt	Bail-in debt	:
2	Total capital and liabilities net of credit risk mitigation	3,236	3,150	750	17,030	-	24,166	3,196	3,150	1,500	14,304	-	22,150
3	Subset of row 2 that are excluded liabilities	-	-	-	1,612	-	1,612	-	-	-	1,680	_	1,680
4	Total capital and liabilities less excluded liabilities (row 2 minus row 3)	3,236	3,150	750	15,418	-	22,554	3,196	3,150	1,500	12,624	-	20,470
5	Subset of row 4 that are potentially eligible as TLAC	3,236	3,150	750	15,418	-	22,554	3,196	3,150	1,500	12,624	-	20,470
6	Subset of row 5 with 1 year ≤ residual maturity < 2 years	-	-	-	5,755	-	5,755	-	-	-	3,760	-	3,760
7	Subset of row 5 with 2 years \leq residual maturity $<$ 5 years	-	-	-	7,280	-	7,280	-	-	-	6,420	-	6,420
8	Subset of row 5 with 5 years ≤ residual maturity < 10 years	-	-	750	155	-	905	-	-	1,500	171	-	1,671
9	Subset of row 5 residual maturity \geq 10 years, but excluding perpetual securities	-	-	-	2,228	-	2,228	-	-	-	2,273	-	2,273
10	Subset of row 5 that is perpetual securities	3,236	3,150	-	-	-	6,386	3,196	3,150	-	-	_	6,346

				Q3 2	022					Q2 2	022		
			(Creditor ranking	Ţ		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	
			Preferred shares and			Other liabilities			Preferred shares and			Other liabilities	
		Common		Subordinated		excluding		Common		Subordinated		excluding	
1	Description of creditor ranking	shares	instruments	debt	Bail-in debt	Bail-in debt		shares	instruments	debt	Bail-in debt	Bail-in debt	
2	Total capital and liabilities net of credit risk mitigation	3,189	2,650	1,500	15,395	-	22,734	3,196	2,650	750	14,998	-	21,594
3	Subset of row 2 that are excluded liabilities	-	-	-	2,580	-	2,580	-	-	-	2,510	_	2,510
4	Total capital and liabilities less excluded liabilities (row 2 minus row 3)	3,189	2,650	1,500	12,815	-	20,154	3,196	2,650	750	12,488		19,084
5	Subset of row 4 that are potentially eligible as TLAC	3,189	2,650	1,500	12,815	-	20,154	3,196	2,650	750	12,488	-	19,084
6	Subset of row 5 with 1 year ≤ residual maturity < 2 years	-	-	-	3,241	-	3,241	-	-	-	2,867	-	2,867
7	Subset of row 5 with 2 years ≤ residual maturity < 5 years	-	-	-	7,113	-	7,113	-	-	-	7,150	-	7,150
8	Subset of row 5 with 5 years ≤ residual maturity < 10 years	-	-	1,500	319	-	1,819	-	-	750	321	-	1,071
9	Subset of row 5 residual maturity \geq 10 years, but excluding perpetual securities	-	-	_	2,142	-	2,142	-	-	-	2,150	-	2,150
10	Subset of row 5 that is perpetual securities	3,189	2,650	-	-	-	5,839	3,196	2,650	-	-	_	5,846

⁽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

		2023		20:	22	
		Q1	Q4	Q3	Q2	Q1
	Accounting assets vs. leverage ratio exposure					
1	Total consolidated assets as per published financial statements	418,342	403,740	387,051	369,785	366,888
2	Adjustment for investments in banking, financial, insurance or commercial entities that are consolidated for accounting					
	purposes but outside the scope of regulatory consolidation	13	5	35	33	9
3	Adjustment for securitized exposures that meet the operational requirements for the recognition of risk transference	(78)	(78)	(78)	(78)	(78)
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 ⁽¹⁾	(2,774)	(4,693)	(402)	(1,559)	3,217
6	Adjustment for securities financing transactions (i.e. repos and similar secured lending) ⁽¹⁾	4,110	3,003	4,296	3,969	6,416
7	Adjustment for off-balance sheet items (i.e. conversion to credit equivalent amounts of off-balance sheet exposures)	34,871	32,871	31,328	30,463	30,971
8	Other adjustments ⁽²⁾	(43,335)	(33,068)	(38,870)	(30,636)	(39,648)
9	Leverage Ratio Exposure	411,149	401,780	383,360	371,977	367,775

⁽¹⁾ Adjustments due to differences between accounting and regulatory netting standards.

⁽²⁾ Includes OSFI permitted exclusion of central bank reserves (since Q2 2020).

LR2 – Leverage Ratio Common Disclosure Template

		2023		20	22	
		Q1	Q4	Q3	Q2	Q1
	Leverage ratio common disclosure					
	On-balance sheet exposures		=	-	-	
	On-balance sheet items (excluding derivatives, SFTs and grandfathered securitization exposures but including collateral)	342,846	333,863	324,351	312,588	303,578
2	Gross-up for derivatives collateral provided where deducted from balance sheet assets pursuant to the operative					
	accounting framework		_	-	-	_
3	(Deductions of receivables assets for cash variation margin provided in derivative transactions)	(5,323)	(5,151)	,	,	,
4	(Asset amounts deducted in determining Basel III Tier 1 capital)	(3,071)	(3,145)			
5	Total on-balance sheet exposures (excluding derivatives and SFTs) (sum of rows 1 to 4)	334,452	325,567	317,357	304,589	296,659
	Derivative exposures	1				
6	Replacement cost associated with all derivative transactions (where applicable net of eligible cash variation margin					
-	and/or with bilateral netting)	2,300	3,661	3,521	9,375	5,867
-	Add-on amounts for PFE associated with all derivative transactions	8,690	10,148	9,637	11,790	12,666
	(Exempted CCP leg of client-cleared trade exposures) Adjusted effective notional amount of written credit derivatives	2000	-	200	-	- 40
	(Adjusted effective notional amount of written credit derivatives)	296	44	398	50	18
	Total derivative exposures (sum of rows 6 to 10)	11.286	13,853	13,556	21,215	18,551
11	Securities financing transaction exposures	11,200	13,033	13,336	21,213	10,551
12	Gross SFT assets (with no recognition of netting), after adjusting for sale accounting transactions	26,430	26,486	16,823	11,741	15,178
	(Netted amounts of cash payables and cash receivables of gross SFT assets)	(2,411)	(2,666)	,		
	CCR exposure for SFTs assets	6,521	5,669	6,616	5,392	8,334
	Agent transaction exposures	- 0,021	- 0,000	- 0,010	- 0,002	- 0,001
	Total securities financing transaction exposures (sum of rows 12 to 15)	30.540	29,489	21,119	15,710	21,594
	Other off-balance sheet exposures	,			10,110	
17	Off-balance sheet exposure at gross notional amount	104,325	100,113	97,530	95,471	95,272
18	(Adjustments for conversion to credit equivalent amounts)	(69,454)	(67,242)	(66,202)	(65,008)	(64,301)
19	Off-balance sheet items (sum of rows 17 and 18)	34,871	32,871	31,328	30,463	30,971
	Capital and Total Exposures					
20	Tier 1 capital ⁽¹⁾	18,478	17,961	16,918	16,481	16,164
20a	Tier 1 Capital with transitional arrangements for ECL provisioning not applied ⁽²⁾		17,906	16,869	16,438	16,116
21	Total Exposures (sum of rows 5, 11, 16 and 19)	411,149	401,780	383,360	371,977	367,775
	Leverage Ratio					
22	Basel III leverage ratio ⁽¹⁾	4.5%	4.5%	4.4%	4.4%	4.4%
	Basel III leverage ratio with transitional arrangements for ECL provisioning not applied ⁽²⁾		4.5%			
	the quarters of fiscal 2022, this row included the transitional measure for provisioning expected credit losses (FCI) granted by OSFI. This transitional measure ceased to apply on November 1, 2022					

⁽¹⁾ For the quarters of fiscal 2022, this row included the transitional measure for provisioning expected credit losses (ECL) granted by OSFI. This transitional measure ceased to apply on November 1, 2022.

⁽²⁾ Since Q1 2023, the transitional measure for provisioning ECL is no longer applicable.

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.

					Q1 2023							Q4 2022			
		a	b	С	d	e	f	g	a	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	g values ⁽²⁾ of		for credit loss	es on SA exposures	accounting		Gross carryir	ng values ⁽²⁾ of		for credit loss	ses on SA exposures	accounting	:
	Allowa		Allowances	Allocated in	Allocated in	provisions				Allowances	Allocated in	Allocated in	provisions	:	
			for	regulatory	regulatory	for credit				for	regulatory	regulatory	for credit	i l	
		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⁾	785	220,596	1,012	63	67	882	220,369	804	206,765	960	62	40	858	206,609
2	Debt Securities	-	32,435	9	-	2	7	32,426	-	30,981	9	-	2	7	30,972
3	Off-balance-sheet commitments ⁽⁶⁾	18	100,967	161	_	9	152	100,824	29	96,701	162	-	7	155	96,568
4	Total	803	353,998	1,182	63	78	1,041	353,619	833	334,447	1,131	62	49	1,020	334,149

					Q3 2022							Q2 2022			
		a	b	С	d	e	f	g	a	b	С	d	е	f	g
					Of which ECL ac	counting provisions	Of which ECL					Of which ECL ac	counting provisions	Of which ECL	
		Gross carryir	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	
		All		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	- ,	losses on IRB			Non-default		category	category	losses on IRB	
		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⁾	608	208,549	957	46	51	860	208,200	603	195,192	920	39	39	842	194,875
2	Debt Securities	-	30,961	6	-	2	4	30,955	-	31,122	7	-	2	5	31,115
3	Off-balance-sheet commitments ⁽⁶⁾	8	94,567	130	_	6	124	94,445	13	92,538	131	_	5	126	92,420
4	Total	616	334,077	1,093	46	59	988	333,600	616	318,852	1,058	39	46	973	318,410

⁽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.

		Q1 2023	Q4 2022	Q3 2022	Q2 2022
		a	a	a	a
1	Defaulted loans ⁽¹⁾ and debt securities at beginning	804	608	603	596
2	Loans and debt securities that have defaulted since the last reporting period	191	318	172	136
3	Returned to non-defaulted status since the last reporting period	(70)	(29)	(31)	(21)
4	Amounts written off	(40)	(67)	(30)	
5	Other changes ⁽²⁾	(100)	(26)	(106)	(66)
6	Defaulted loans ⁽¹⁾ and debt securities at end	785	804	608	603

⁽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.

				Q1 2023					Q4 2022		
		a	b1	b	d	f	a	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⁾	138,547	82,768	74,749	7,755	1	124,973	82,533	74,648	7,677	_
2	Debt securities	32,435	I	I	ı	1	30,981	1	-	_	_
3	Total	170,982	82,768	74,749	7,755	_	155,954	82,533	74,648	7,677	_
4	Of which defaulted	599	123	92	28	_	620	112	83	27	_

			_	Q3 2022	-			-	Q2 2022	_	-
		a	b1	b	d	f	a	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⁾	127,253	81,860	74,243	7,398	_	116,196	79,562	72,134	7,082	-
2	Debt securities	30,961	-	-	I	-	31,122	I	-	-	-
3	Total	158,214	81,860	74,243	7,398	_	147,318	79,562	72,134	7,082	_
4	Of which defaulted	472	96	69	25	-	436	125	93	30	_

⁽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)

			2	023								20	22					
			1	Q1						Q4					1	Q3		
									EAD - Gros	s Exposure ⁽¹⁾								
					Derivatives						Derivatives						Derivatives	
	_	Undrawn		Repo-style			_	Undrawn		Repo-style	financial		_	Undrawn		Repo-style	financial	
	Drawn	commitments	Other	transactions	instruments	Total	Drawn	commitments	Other	transactions	instruments	Total	Drawn	commitments	Other	transactions	instruments	Total
Non-Retail Portfolio																		
Agriculture	7,391	612	5	-	_	8,008	7,330	614	6	_	-	7,950	7,210	572	6	-	-	7,788
Oil & Gas	1,446	2,310	67	-	_	3,823	1,440	2,116	75	_	-	3,631	1,186	2,286	62	_	-	3,534
Mining	1,054	1,938	348	-	351	3,691	960	2,028	221	_	322	3,531	916	1,391	210	-	263	2,780
Utilities	10,913	6,698	2,275	_	_	19,886	10,051	6,111	2,089	_	_	18,251	9,392	6,568	1,821	_	1	17,782
Utilities excluding Pipelines	9 /				-	14,681	7,568	4,017	1,889	-	-	13,474	7,079	3,671	1,613	-	1	12,364
Pipelines	2,926	2,109	170	-	-	5,205	2,483	2,094	200	-	-	4,777	2,313	2,897	208	-	_	5,418
Construction Non-Real Estate ⁽²⁾	2,009	1,246	80	-	_	3,335	2,154	1,200	125	_	_	3,479	2,113	991	122	-	_	3,226
Manufacturing	6,796	3,452	322	-	_	10,570	7,013	2,453	372	_	_	9,838	6,807	2,384	348	-	_	9,539
Wholesale	3,049	1,226	50	-	_	4,325	3,061	1,181	57	_	_	4,299	3,008	1,038	54	-	_	4,100
Retail	3,407	1,298	31	-	_	4,736	3,327	1,293	50	_	_	4,670	3,212	1,270	57	-	_	4,539
Transportation	2,319	1,534	102	608	2	4,565	2,214	1,391	100	44	2	3,751	2,294	1,321	91	46	1	3,753
Communications	2,229	1,763	200	-	-	4,192	1,802	1,478	245	-	-	3,525	1,701	1,509	241	-	-	3,451
Financial Services	42,593	5,377	1,361	164,568	1,009	214,908	38,882	5,256	979	142,474	764	188,355	44,564	4,989	1,693	145,717	1,484	198,447
Real Estate and Construction																		
Real Estate ⁽³⁾	19,814	5,394	363	-	-	25,571	19,009	5,021	361	-	-	24,391	19,007	4,905	325	-	-	24,237
Professional Services	2,225	1,126	248	-	-	3,599	2,131	1,021	272	-	-	3,424	1,986	1,029	261	-	-	3,276
Education & Health Care	3,115	1,030	14	2	-	4,161	3,090	1,128	13	3	-	4,234	3,222	980	17	6	-	4,225
Other Services	6,331	2,483	597	168	28	9,607	6,146	2,187	527	34	28	8,922	6,514	2,185	481	49	27	9,256
Government	31,719	1,157	8	32,652	136	65,672	23,476	1,312	3	39,353	356	64,500	29,551	1,337	3	38,646	302	69,839
Other	13,369	4	1,086	43	3	14,505	13,130	8	1,123	48	ı	14,309	5,805	15	334	1,494	4	7,652
Total – Non-retail ⁽⁴⁾	159,779	38,648	7,157	198,041	1,529	405,154	145,216	35,798	6,618	181,956	1,472	371,060	148,488	34,770	6,126	185,958	2,082	377,424

⁽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)

			2022												2	021		
				Q2					(Q1					(Q4		
								E	AD - Gros	s Exposure ⁽¹⁾								
					Derivatives						Derivatives					Repo-style	Derivatives	
		Undrawn		Repo-style	financial			Undrawn		Repo-style	financial			Undrawn		transaction	financial	
	Drawn	commitments	Other	transactions	instruments	Total	Drawn	commitments	Other	transactions	instruments	Total	Drawn	commitments	Other	S	instruments	Total
Non-Retail Portfolio																		
Agriculture	6,981	591	5	_	-	7,577	6,789	546	5	_	_	7,340	6,584	540	5	-	_	7,129
Oil & Gas	1,473	2,196	89	_	-	3,758	1,792	1,973	83	_	_	3,848	1,849	1,660	79	-	_	3,588
Mining	591	1,584	211	_	249	2,635	394	1,507	192	-	191	2,284	473	1,477	197	_	160	2,307
Utilities	8,800	6,083	1,786	-	_	16,669	8,366	5,658	1,513	-	-	15,537	8,255	5,093	1,383	-	-	14,731
Utilities excluding Pipelines	6,654	3,562	1,610	-	-	11,826	6,211	4,144	1,361	-	-	11,716	5,952	3,742	1,206	_	_	10,900
Pipelines	2,146	2,521	176	-	-	4,843	2,155	1,514	152	-	_	3,821	2,303	1,351	177	-	_	3,831
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	6,042	2,383	310	_	_	8,735	5,685	2,774	259	_	_	8,718	5,466	2,731	335	-	_	8,532
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
Financial Services	42,921	4,866	1,582	135,635	4,856	189,860	41,946	4,790	1,535	131,738	2,902	182,911	36,180	4,929	1,594	121,821	2,251	166,775
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	5,830	19	275	1,369	4	7,497	5,617	89	276	739	13	6,734	5,156	53	282	1,552	_	7,043
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.

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

					2023						20	22	
					Q1					Q4	Q3	Q2	Q1
			Asset Type				Client Type						
	Drawn	Undrawn commitments	Repo-style transactions ⁽²⁾			Corporate	Sovereign	Financial Institutions	Total	Total	Total	Total	Total
Europe ⁽⁴⁾	912	226	610	285	222	809	41	1,405	2,255	1,812	1,726	1,802	2,174
United Kingdom	1,206	89	867	988	3	331	53	2,769	3,153	3,184	3,509	3,860	4,104
Latin America	225	197	211	58	12	263	249	191	703	461	311	270	294
Asia	2,808	519	5,363	44	26	1,516	6,952	292	8,760	7,458	8,080	7,923	10,112
Other	156	2	202	16	3	243	34	102	379	257	391	456	387
Total ⁽⁵⁾	5,307	1,033	7,253	1,391	266	3,162	7,329	4,759	15,250	13,172	14,017	14,311	17,071

⁽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.

				Q1 2023	3					Q4 2022	2		
		a	b	С	d	e	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	st-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	2,937	803	2,937	-	1,646	56%	2,558	796	2,558	-	1,425	56%
2	Non-central government public sector entities	-	-	_	-	-	0%	-	-	-	-	-	0%
3	Multilateral development banks	384	-	384	-	_	0%	375	-	375	-	-	0%
4	Financial institutions	1,219	4,783	1,219	251	853	58%	916	4,825	916	292	682	56%
5	Securities firms	-	-	_	-	_	0%	-	-	_	-	-	0%
6	Corporates	8,772	881	8,772	259	5,296	59%	9,200	870	9,200	230	5,441	58%
7	Regulatory retail portfolios	5,027	291	5,027	130	3,486	68%	4,868	275	4,868	116	3,373	68%
8	Secured by residential property	10,200	268	10,200	58	4,114	40%	9,254	138	9,254	56	3,483	37%
9	Secured by commercial real estate	652	-	652	-	652	100%	497	-	497	-	497	100%
10	Equity	-	-	_	-	_	0%	-	-	_	-	-	0%
11	Past-due loans	183	-	183	-	174	95%	191	-	191	-	182	95%
12	Higher-risk categories	-	-	_	-	_	0%	-	-	_	-	-	0%
13	Other assets ⁽²⁾	5,888	-	5,888	-	4,386	74%	5,481	-	5,481	=	3,915	71%
14	Total	35,262	7,026	35,262	698	20,607	57%	33,340	6,904	33,340	694	18,998	56%

				Q3 2022	2					Q2 202	2	-	
		a	b	С	d	e	f	a	b	С	d	e	f
		Exposures befo	re CCF and CRM	Exposures po	st-CCF and CRM			Exposures befo	re CCF and CRM	Exposures po	st-CCF and CRM		ĺ
		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	2,309	800	2,309	-	1,212	52%	2,320	828	2,320	-	1,216	52%
2	Non-central government public sector entities	-	-	_	-	-	0%	-	_	-	_	-	0%
3	Multilateral development banks	360	-	360	-	-	0%	342	-	342	-	-	0%
4	Financial institutions	1,018	4,826	1,018	292	694	53%	1,081	4,771	1,081	244	820	62%
5	Securities firms	-	-	_	-	-	0%	-	_	-	-	-	0%
6	Corporates	8,588	1,007	8,588	258	4,900	55%	8,540	733	8,540	213	4,776	55%
7	Regulatory retail portfolios	4,595	255	4,595	99	3,142	67%	4,403	273	4,403	101	2,974	66%
8	Secured by residential property	8,149	136	8,149	55	2,868	35%	7,779	181	7,779	56	2,705	35%
9	Secured by commercial real estate	356	-	356	-	356	100%	311	_	311	-	311	100%
10	Equity	_	-	-	-	-	0%	-	_	-	-	-	0%
11	Past-due loans	134	-	134	-	162	121%	95	_	95	-	87	92%
12	Higher-risk categories	-	-	_	-	_	0%	-	_	-	_	-	0%
13	Other assets ⁽²⁾	5,008	_	5,008	-	3,614	72%	4,884	_	4,884	-	3,464	71%
14	Total	30,517	7,024	30,517	704	16,948	54%	29,755	6,786	29,755	614	16,353	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).

						Q1	2023									Q4	2022				
		a	b	С	d	е	f	g	h	i	j	а	b	С	d	е	f	g	h	i	j
											Total										Total
	Risk weight										credit										credit
	Asset classes	0%	10%	20%	35%	50%	75%	100%	150%		exposures amount ⁽²⁾	0%	10%	20%	35%	50%	75%	100%	150%	Others	exposures amount ⁽²⁾
1	Sovereigns and their central banks	1,291	1076	2076	JJ /6	J0 76	7 5 70	1,646	13076	- Others	2,937	1,133	1076	2076	J J /6	J0 76	7 7 76	1,425	13076	Others	2,558
2	Non-central government public sector entities	1,291	_	_	_	_	_	1,040	_	_	2,337	1,133	_	_	_	_	_	1,425	_	_	2,550
3	Multilateral development banks	384	_	_	_	_	_	_	_	_	384	375	_	_	_	_	_	_	_	_	375
4	Financial institutions	155	_	568	_	14	_	733	_	_	1,470	158	_	451	_	14	_	585	_	_	1,208
5	Securities firms	-	_	-	_	_	_	-	_	_	- 1, 17 0	-	_	-	_		_	-	_	_	- 1,200
6	Corporates	3,734	_	_	_	_	_	5,297	_	_	9,031	3,990	_	_	_	_	_	5,440	_	_	9,430
7	Regulatory retail portfolios	510	_	_	_	_	4,647	-	_	_	5,157	487	_	_	_	_	4,497	-	_	_	4,984
8	Secured by residential property	1,402	_	_	6,305	37	2,501	13	_	_	10,258	1,222	_	_	6,440	38		10	_	_	9,310
9	Secured by commercial real estate	_	_	_	_	_	_	652	_	_	652	_	_	_	_	_	_	497	_	_	497
10	Equity	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
11	Past-due loans	12	-	_	_	_	-	166	5	_	183	11	-	_	_	_	_	176	4	_	191
12	Higher-risk categories	-	-	-	_	_	_	_	-	_	-	_	-	_	-	-	_	-	-	-	-
13	Other assets ⁽³⁾	1,310	-	241	_	_	_	4,337	-	_	5,888	1,243	-	404	-	-	_	3,834	-	_	5,481
14	Total	8,798	-	809	6,305	51	7,148	12,844	5	-	35,960	8,619	-	855	6,440	52	6,097	11,967	4	_	34,034

						Q3	2022									Q2	2022				
		а	b	С	d	е	f	g	h	i	j	а	b	С	d	e	f	g	h	i	j
											Total										Total
	Risk weight										credit										credit
		-0/							/		exposures								/		exposures
	Asset classes	0%	10%	20%	35%	50%	75%		150%	Others		0%	10%	20%	35%	50%	75%		150%	Others	
1	Sovereigns and their central banks	1,097	-	-	-	-	-	1,212	-	-	2,309	1,104	-	-	-	-	-	1,216	_	-	2,320
2	Non-central government public sector entities	-	-	-	-	-	-	-	-	-	-	-	-	_	-	-	-	-	-	-	-
3	Multilateral development banks	360	-	-	-	-	-	_	-	-	360	342	-	-	-	-	-	-	_	-	342
4	Financial institutions	155	-	567	-	15	-	573	-	-	1,310	145	-	442	-	13	_	725	_	-	1,325
5	Securities firms	-	-	_	-	_	-	_	-	_	-	-	-	_	-	-	-	-	_	-	_
6	Corporates	3,944	-	_	-	_	-	4,902	-	_	8,846	3,977	-	_	-	-	-	4,776	_	-	8,753
7	Regulatory retail portfolios	506	-	_	-	_	4,188	_	-	_	4,694	539	-	_	-	-	3,965	-	_	-	4,504
8	Secured by residential property	1,086	-	-	6,166	33	901	18	-	-	8,204	975	-	-	6,087	36	719	18	_	-	7,835
9	Secured by commercial real estate	-	-	_	-	_	-	356	-	_	356	-	-	_	-	-	-	311	_	-	311
10	Equity	-	-	-	-	_	-	_	-	-	-	-	-	-	-	-	-	-	_	-	-
11	Past-due loans	10	-	_	-	_	-	48	76	_	134	11	-	_	-	-	-	77	7	-	95
12	Higher-risk categories	_	-	_	-	_	_	_	-	_	-	-	-	_	-	_	-	-	_	-	-
13	Other assets ⁽³⁾	1,394	-	-	-	_	_	3,614	-	_	5,008	1,238	_	228	-	-	_	3,418	_	_	4,884
14	Total	8,552	-	567	6,166	48	5,089	10,723	76	-	31,221	8,331	-	670	6,087	49	4,684	10,541	7	-	30,369

⁽¹⁾ Excluding items subject to securitization and counterparty credit risk frameworks. In the wholesale portfolio, for sovereign and their central banks, financial institutions and corporate asset classes, risk weights are based on, if available, 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.

							Q1 2023						
		a	b	С	d	e	f	g	h	i	j	k	l
	PD scale ⁽¹⁾	balance sheet gross exposure	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		755	- p.c cc.	0%	755	0.07%	48,110	8.1%	· · · · · · · · · · · · · · · · · · ·	13	1.6%	1	crear tosses
	0.15 to < 0.25	144	_	0%	144	0.20%	11,428	7.4%		4	3.1%	_	
	0.25 to < 0.50	207	_	0%	207	0.36%	17,249	6.0%		8	3.8%	_	
	0.50 to < 0.75	82	_	0%	82	0.62%	6,229	5.5%		4	5.3%	_	
	0.75 to < 2.50	243	_	0%	243	1.30%	7,280	6.8%		23	9.4%	_	
	2.50 to < 10.00	132	_	0%	132	4.45%	2,775	3.5%		14	10.9%	_	
	10.00 to < 100.00	27	_	0%	27	14.69%	719	2.6%		4	13.8%	_	
	100.00 (Default)	14	_	0%	14	100.00%	189	3.1%		3	19.6%	_	
	Sub-total	1,604	-	0%	1,604	1.84%	93,979	6.9%		73	4.6%	1	4
Residential Mortgages	0.00 to < 0.15	40,240	19,533	35%	47,163	0.07%	238,988	21.9%		1,925	4.1%	7	
and HELOCs -	0.15 to < 0.25	6,893	1,353	39%	7,418	0.19%	28,559	26.6%		830	11.2%	4	
uninsured	0.25 to < 0.50	7,155	1,456	71%	8,186	0.34%	26,493	24.6%		1,257	15.4%	7	
	0.50 to < 0.75	2,145	188	57%	2,251	0.61%	9,011	26.4%		565	25.1%	4	
	0.75 to < 2.50	4,414	219	69%	4,565	1.13%	16,519	25.9%		1,654	36.2%	12	
	2.50 to < 10.00	956	46	62%	985	4.58%	4,698	23.3%		744	75.6%	11	
	10.00 to < 100.00	177	1	223%	179	17.67%	1,017	21.8%		216	120.6%	7	
	100.00 (Default)	80	2	70%	82	100.00%	530	20.7%		152	185.3%	6	
	Sub-total	62,060	22,798	38%	70,829	0.42%	325,815	23.1%		7,343	10.4%	58	54
Qualifying revolving	0.00 to < 0.15	699	7,230	76%	6,167	0.08%	930,598	79.7%		250	4.1%	4	
	0.15 to < 0.25	207	611	88%	747	0.20%	206,977	85.3%		73	9.8%	1	
	0.25 to < 0.50	290	354	82%	581	0.36%	120,261	80.8%		83	14.3%	2	
	0.50 to < 0.75	214	267	88%	449	0.64%	63,884	74.6%		96	21.4%	2	
	0.75 to < 2.50	522	256	95%	764	1.42%	200,613	82.9%		336	43.9%	9	
	2.50 to < 10.00	340	93	114%	447	4.46%	210,371	85.5%		445	99.5%	18	
	10.00 to < 100.00	61	12	78%	70	19.58%	34,448	86.2%		158	226.4%	12	
	100.00 (Default)	17	-	0%	17	100.00%	4,031	72.9%		15	87.2%	11	
	Sub-total	2,350	8,823	78%	9,242	0.79%	1,771,183	80.6%		1,456	15.8%	59	223
	0.00 to < 0.15	2,016	2,630	63%	3,682	0.08%	131,943	52.4%		440	11.9%	2	
	0.15 to < 0.25	964	399	63%	1,213	0.20%	52,430	53.4%		285	23.5%	1	
	0.25 to < 0.50	1,465	372	63%	1,700	0.37%	73,676	52.6%		564	33.2%	3	
	0.50 to < 0.75	1,324	341	83%	1,605	0.64%	58,524	55.7%		780	48.6%	6	
	0.75 to < 2.50	3,796	249	68%	3,965	1.40%	193,002	53.4%		2,531	63.8%	31	
	2.50 to < 10.00	2,635	89	69%	2,696	4.33%	64,588	26.3%		1,073	39.8%	28	
	10.00 to < 100.00	213	15	52%	221	27.09%	9,410	49.7%		271	122.8%	30	
	100.00 (Default)	98	3	32%	99	100.00%	7,972	52.0%		63	63.7%	56	
	Sub-total	12,511	4,098	65%	15,181	2.33%	591,545	48.4%		6,007	39.6%	157	179

⁽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.

⁽¹⁰⁾ The expected losses (EL) as calculated according to paragraphs 375 - 379 of the Basel framework.

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

							Q1 2023						
		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	4,113	9,857	85%	11,223	0.09%	846	44.1%	2.43	2,743	24.4%	5	
	0.15 to < 0.25	15,549	17,585	89%	29,022	0.19%	3,372	38.9%	2.44	9,214	31.7%	21	
	0.25 to < 0.50	12,585	7,683	90%	18,805	0.34%	2,500	36.8%	2.62	7,631	40.6%	24	
	0.50 to < 0.75	13,032	6,592	92%	18,464	0.53%	2,730	36.3%	2.29	8,847	47.9%	35	
	0.75 to < 2.50	24,210	8,389	88%	29,793	1.11%	6,241	34.8%	2.09	18,049	60.6%	114	
	2.50 to < 10.00	3,899	932	77%	4,738	4.46%	955	35.5%	1.69	4,591	96.9%	76	
	10.00 to < 100.00	139	13	87%	150	16.50%	45	43.4%	1.06	284	189.0%	11	
	100.00 (Default)	420	18	66%	436	100.00%	155	38.9%	1.12	652	150.0%	138	
	Sub-total	73,947	51,069	89%	112,631	1.09%	16,844	37.4%	2.31	52,011	46.2%	424	563
Sovereign	0.00 to < 0.15	64,890	6,543	95%	70,762	0.01%	596	9.4%	2.02	556	0.8%	1	
	0.15 to < 0.25	-	_	0%	-	0%	-	0%	-	-	0%	-	
	0.25 to < 0.50	8	-	0%	8	0.44%	1	25.0%	1.09	2	29.2%	-	
	0.50 to < 0.75	-	-	0%	-	0%	-	0%	-	_	0%	-	
	0.75 to < 2.50	-	-	0%	_	0%	-	0%	-	_	0%	-	
	2.50 to < 10.00	44	4	0%	48	7.63%	2	36.5%	1.00	65	135.0%	1	
	10.00 to < 100.00	-	-	0%	-	0%	-	0%	-	_	0%	-	
	100.00 (Default)	_	_	0%	_	0%	-	0%	-	-	0%	_	
	Sub-total	64,942	6,547	95%	70,818	0.01%	599	9.4%	2.02	623	0.9%	2	7
Financial institutions	0.00 to < 0.15	4,627	897	40%	5,213	0.06%	64	48.1%	1.64	1,067	20.5%	2	
	0.15 to < 0.25	556	16	0%	573	0.16%	26	48.2%	1.15	220	38.4%	-	
	0.25 to < 0.50	25	132	85%	157	0.35%	7	25.9%	1.07	55	34.9%	-	
	0.50 to < 0.75	78	1	0%	79	0.53%	6	50.3%	1.00	65	82.8%	_	
	0.75 to < 2.50	1,253	46	100%	1,632	1.82%	13	12.0%	1.54	443	27.1%	3	
	2.50 to < 10.00 10.00 to < 100.00	2	_	0% 0%	2	3.05% 0%	2	50.0% 0%	1.00	2	130.0% 0%	_	
	10.00 to \ 100.00 100.00 (Default)	_	_	0%	_	0%	_	0%	_	_	0%	_	
	Sub-total	6,541	1,092	47%	7,656	0.46%	118	40.0%	1.56	1,852	24.2%	5	11
Total (all portfolio)		223,955	94,427	60%	287,961	0.71%	2,800,083	28.9%	2.00	69,365	24.1%	706	1,041

⁽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.

⁽¹⁰⁾ The expected losses (EL) as calculated according to paragraphs 375 - 379 of the Basel framework.

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

							Q4 2022						
		a	b	С	d	e	f	g	h	i	j	k	l
		Original on-							_				
	PD scale ⁽¹⁾	gross exposure	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		837	pic eci	0%	837	0.08%	49,577	9.0%	í	15	1.8%	_	credit tosses
- insured	0.15 to < 0.25	170		0%	170	0.00%	11,532	8.1%		6	3.4%	_	
	0.25 to < 0.50	242	_	0%	242	0.35%	17,594	6.0%		9	3.8%	_	
	0.50 to < 0.75	134	_	0%	134	0.62%	6,352	6.2%		8	6.0%	_	
	0.75 to < 2.50	397	_	0%	397	1.32%	7,638	4.9%		31	7.5%	1	
	2.50 to < 10.00	163	_	0%	163	4.51%	2,806	3.7%		19	11.7%		
	10.00 to < 100.00	32	_	0%	32	14.97%	744	2.5%		4	13.8%	_	
	100.00 (Default)	12	_	0%	12	100.00%	216	3.0%		3	24.1%	_	
	Sub-total	1,987	_	0%	1,987	1.62%	96,459	7.0%		95	4.8%	1	3
Residential Mortgages		40,686	19,043	36%	47,565	0.07%	239,882	20.9%		1,841	3.9%	7	J
and HELOCs –	0.15 to < 0.25	6,797	1,324	41%	7,346	0.19%	28,227	24.2%		750	10.2%	4	
uninsured	0.25 to < 0.50	7,011	1,390	63%	7,890	0.34%	26,105	23.9%		1,161	14.7%	6	
	0.50 to < 0.75	2,023	175	58%	2,124	0.61%	8,724	24.0%		486	22.9%	3	
	0.75 to < 2.50	4,194	188	64%	4,315	1.13%	15,882	23.1%		1,404	32.5%	11	
	2.50 to < 10.00	891	36	72%	918	4.67%	4,536	21.7%		649	70.7%	9	
	10.00 to < 100.00	162	1	233%	164	17.66%	956	21.2%		192	117.1%	6	
	100.00 (Default)	72	3	67%	73	100.00%	507	19.9%		129	176.2%	5	
	Sub-total	61,836	22,160	39%	70,395	0.40%	324,819	21.8%		6,612	9.4%	51	48
Qualifying revolving	0.00 to < 0.15	769	7,198	76%	6,218	0.08%	914,238	79.8%		254	4.1%	4	
retail	0.15 to < 0.25	219	635	89%	784	0.20%	209,545	85.5%		77	9.8%	1	
	0.25 to < 0.50	307	371	83%	616	0.36%	122,943	81.2%		88	14.4%	2	
	0.50 to < 0.75	221	263	88%	453	0.64%	64,663	75.1%		97	21.5%	2	
	0.75 to < 2.50	535	286	88%	786	1.42%	210,781	83.2%		348	44.0%	10	
	2.50 to < 10.00	353	92	112%	457	4.47%	208,081	85.8%		457	100.1%	17	
	10.00 to < 100.00	63	13	75%	73	19.69%	34,391	86.2%		164	226.3%	13	
	100.00 (Default)	16	-	39%	16	100.00%	3,745	73.4%		19	120.0%	11	
	Sub-total	2,483	8,858	78%	9,403	0.78%	1,768,387	80.8%		1,504	16.0%	60	211
Other retail	0.00 to < 0.15	2,093	2,567	63%	3,718	0.08%	131,187	51.7%		438	11.8%	2	
	0.15 to < 0.25	967	396	63%	1,216	0.20%	52,489	53.2%		284	23.4%	1	
	0.25 to < 0.50	1,521	365	62%	1,749	0.37%	75,329	52.8%		585	33.4%	3	
	0.50 to < 0.75	1,353	326	83%	1,623	0.64%	60,280	55.8%		789	48.6%	6	
	0.75 to < 2.50	5,278	242	69%	5,445	1.32%	194,952	39.4%		2,535	46.5%	30	
	2.50 to < 10.00	1,095	87	69%	1,155	4.03%	58,426	50.9%		892	77.2%	24	
	10.00 to < 100.00	217	13	48%	223	27.60%	9,212	48.0%		265	118.9%	30	
	100.00 (Default)	95	4	27%	96	100.00%	7,580	51.6%		50	52.1%	56	
	Sub-total	12,619	4,000	65%	15,225	1.96%	589,455	47.8%		5,838	38.3%	152	178

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

⁽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.

⁽¹⁰⁾ The expected losses (EL) as calculated according to paragraphs 375 - 379 of the Basel framework.

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

		-	-				Q4 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	3,154	9,175	85%	9,545	0.09%	813	45.3%	2.46	2,469	25.9%	4	
	0.15 to < 0.25	15,815	17,451	90%	28,890	0.19%	3,376	38.0%	2.43	8,895	30.8%	20	
	0.25 to < 0.50	12,350	7,033	90%	17,989	0.35%	2,520	36.0%	2.53	7,024	39.0%	22	
	0.50 to < 0.75	13,589	5,647	91%	17,975	0.53%	2,675	35.5%	2.34	8,247	45.9%	34	
	0.75 to < 2.50	22,730	7,263	88%	27,563	1.10%	6,246	34.4%	2.11	16,380	59.4%	103	
	2.50 to < 10.00	3,830	820	75%	4,586	4.03%	883	35.4%	1.62	4,209	91.8%	65	
	10.00 to < 100.00	135	17	88%	148	17.00%	50	43.5%	1.07	280	189.0%	11	
	100.00 (Default)	457	38	81%	484	100.00%	182	40.7%	1.34	718	148.0%	170	
	Sub-total	72,060	47,444	89%	107,180	1.14%	16,745	36.9%	2.31	48,222	45.0%	429	563
Sovereign	0.00 to < 0.15	53,312	6,794	95%	59,410	0.01%	604	9.2%	2.16	539	0.9%	1	
	0.15 to < 0.25	-	-	0%	_	0%	-	0%	-	_	0%	-	
	0.25 to < 0.50	8	-	0%	8	0.44%	1	25.0%	1.11	2	29.3%	-	
	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	7.63%	2	36.5%	1.00	66	135.0%	1	
	10.00 to < 100.00	-	-	0%	_	0%	_	0%	-	-	0%	-	
	100.00 (Default)	-	-	0%	_	0%	-	0%	-		0%	-	
	Sub-total	53,320	6,849	95%	59,467	0.02%	607	9.2%	2.16	607	1.0%	2	6
Financial institutions	0.00 to < 0.15	4,193	802	46%	4,677	0.07%	67	51.0%	1.46	1,099	23.5%	2	
	0.15 to < 0.25	321	18	0%	339	0.18%	25	54.2%	1.30	152	44.9%	-	
	0.25 to < 0.50	15	132	85%	147	0.35%	7	21.4%	1.11	42	28.5%	-	
	0.50 to < 0.75	4	2	0%	6	0.53%	7	42.3%	1.00	4	62.2%	-	
	0.75 to < 2.50	1,357	46	100%	1,744	1.80%	14	11.8%		447	25.6%	4	
	2.50 to < 10.00	-	-	0%	_	9.12%	1	33.6%		-	146.0%	-	
	10.00 to < 100.00	_	-	0%	-	0%	-	0%		-	0%	_	
	100.00 (Default)	_	-	0%	_	0%	_	0%			0%	-	
	Sub-total	5,890	1,000	52%	6,913	0.51%	121	40.6%	1.50	1,744	25.2%	6	11
Total (all portfolio)		210,195	90,311	65%	270,570	0.72%	2,796,593	28.9%	2.00	64,622	23.9%	701	1,020

⁽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.

⁽¹⁰⁾ The expected losses (EL) as calculated according to paragraphs 375 - 379 of the Basel framework.

CR8 - RWA Flow Statements of Credit Risk

(millions of Canadian dollars)

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

			Q1 2023			Q4 2022	
			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	87,654	65,857	8,487	83,049	63,260	8,180
2	Book size ⁽²⁾	5,492	3,260	(1,053)	2,377	1,222	28
3	Book quality ⁽³⁾	1,525	1,525	(828)	257	257	(164)
4	Model updates ⁽⁴⁾	159	159	13	162	162	138
5	Methodology and policy ⁽⁵⁾	93	93	13	235	235	104
6	Acquisitions and disposals	-	=	-	-	=	=
7	Foreign exchange movements	(662)	(300)	(73)	1,574	721	201
8	Other ⁽⁶⁾	-	=	=	Ī	П	-
9	RWA at end	94,261	70,594	6,559	87,654	65,857	8,487

			Q3 2022			Q2 2022	
			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	79,537	60,489	9,341	79,504	59,639	9,385
2	Book size ⁽²⁾	3,450	2,663	(950)	1,561	1,356	219
3	Book quality ⁽³⁾	226	226	(285)	(857)	(830)	(540)
4	Model updates ⁽⁴⁾	(74)	(74)	87	(708)	233	42
5	Methodology and policy ⁽⁵⁾	-	=	-	-	-	=
6	Acquisitions and disposals	-	=	-	-	-	=
7	Foreign exchange movements	(90)	(44)	(13)	37	91	235
8	Other ⁽⁶⁾	-	=	=	=	-	=
9	RWA at end	83,049	63,260	8,180	79,537	60,489	9,341

⁽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)

			202	3					202	2		
			Q1						Q4			
	PD average		LGD average	LGD	EAD	EAD	PD average		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⁾	0.59%	0.28%	2.88%	n.a.	n.a.	n.a.	0.57%	0.22%	2.64%	n.a.	n.a.	n.a.
Uninsured residential mortgages incl. HELOCs ⁽⁷⁾	0.25%	0.18%	23.53%	7.13%	91.45%	89.63%	0.29%	0.15%	20.54%	3.94%	89.81%	88.52%
Qualifying revolving retail	1.01%	0.85%	85.98%	70.94%	107.32%	101.23%	0.99%	0.80%	87.42%	74.93%	106.91%	100.82%
Other retail	1.57%	0.95%	28.36%	16.26%	85.03%	82.75%	1.45%	0.78%	42.62%	29.22%	82.70%	77.17%
Non-Retail Portfolio ⁽⁸⁾												
Corporate	0.95%	0.22%	28.73%	17.73%	86.28%	63.20%	0.98%	0.17%	29.50%	15.22%	83.79%	56.82%
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⁾	0.73%	0.00%	39.00%	n.a.	100.00%	n.a.	0.68%	0.00%	39.00%	n.a.	100.00%	n.a.

	2022												
			Q3			20	22		Q	2			
	PD average		LGD average	LGD	EAD	EAD	PD average		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⁾	0.64%	0.21%	2.64%	n.a.	n.a.	n.a.	0.72%	0.21%	2.64%	n.a.	n.a.	n.a.	
Uninsured residential mortgages incl. HELOCs ⁽⁷⁾	0.27%	0.13%	20.67%	4.29%	89.23%	88.15%	0.28%	0.12%	21.48%	3.85%	91.03%	86.69%	
Qualifying revolving retail	0.96%	0.75%	87.97%	78.63%	106.58%	100.57%	1.01%	0.73%	87.38%	78.74%	106.54%	100.60%	
Other retail	1.49%	0.73%	41.40%	30.54%	82.20%	76.35%	1.53%	0.71%	41.29%	30.83%	79.82%	72.11%	
Non-Retail Portfolio ⁽⁸⁾													
Corporate	1.00%	0.19%	31.26%	19.23%	96.31%	79.06%	1.06%	0.20%	30.94%	19.45%	94.60%	74.37%	
Sovereign ⁽⁹⁾	0.07%	0.00%	11.80%	n.a.	88.30%	n.a.	0.07%	0.00%	11.80%	n.a.	88.30%	n.a.	
Financial Institutions ⁽⁹⁾	0.51%	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 Q1 2023, estimated percentages are as of December 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

			Q1 2023			Q4 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	755	136	100%	823	872	732	111	100%	788	835				

			Q3 2022			Q2 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	707	118	100%	766	812	772	126	100%	835	885			

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.

				Q1 20	23			Q4 2022								
		a	b	С	d	e	f	a	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)	1,592	6,323		1.4	11,081	3,639	2,592	7,466		1.4	14,081	4,131			
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					12,661	1,671					10,864	1,438			
6	Total						5,310						5,569			

				Q3 20	22			Q2 2022							
		a	b	С	d	e	f	a	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)	2,480	7,142		1.4	13,471	4,155	4,933	7,649		1.4	17,615	5,010		
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					13,223	1,557					11,825	1,591		
6	Total						5,712						6,601		

⁽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).

		Q1 2	023	Q4 2	022	Q3 2	2022	Q2 2	2022	Q1 2022	
		a	b	a	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	7,524	1,038	9,838	2,677	9,105	2,230	10,971	2,304	10,453	2,115
4	Total subject to the CVA capital charge	7,524	1,038	9,838	2,677	9,105	2,230	10,971	2,304	10,453	2,115

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).

		Q1 2023									Q4 2022							
	a	b	С	d	е	f	g	h	i	a	b	С	d	е	f	g	h	i
									Total									Total
Risk weight									credit									credit
Regulatory portfolio	0%	10%	20%	50%	75%	100%	150%	Others	exposure	0%	10%	20%	50%	75%	100%	150%	Others	exposure
Sovereigns	-	-	-	1	1	-	-	-	-	-	-	-	-	-	-	1	-	-
Non-central government public sector entities (PSEs)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Multilateral development banks (MDBs)	108	-	-	_	_	-	_	-	108	141	-	_	-	-	-	_	-	141
Financial institutions	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Securities firms	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Corporates	-	-	-	-	-	667	-	-	667	-	-	-	-	-	694	-	-	694
Regulatory retail portfolios	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other assets ⁽¹⁾	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ı	-
Total	108	_	-	-	-	667	-	_	775	141	-	-	-	-	694	-	ı	835

		Q3 2022									Q2 2022							
	a	b	С	d	е	f	g	h	i	a	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)	68	-	-	-	-	_	-	-	68	75	-	-	-	-	-	-	-	75
Financial institutions	-	-	-	-	-	-	-	_	-	-	-	-	-	-	-	-	-	-
Securities firms	-	-	-	-	-	-	-	_	-	-	-	-	-	-	-	-	-	-
Corporates	-	-	-	-	-	663	-	_	663	-	-	-	-	-	677	-	-	677
Regulatory retail portfolios	-	-	-	-	-	-	-	_	-	-	-	-	-	-	-	-	-	-
Other assets ⁽¹⁾	-	_	-	-	ı	_	-	_	-	_	-	-	-	-	-	-	-	_
Total	68	_	-	-	-	663	_	-	731	75	-	-	-	-	677	-	-	752

⁽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.

		<u>-</u>		Q1 2	023		<u> </u>	
		a	b	С	d	e	f	g
	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	3,127	0.07%	583	45.0%	1.10	642	20.5%
	0.15 to < 0.25	2,431	0.18%	496	40.9%	1.51	782	32.2%
	0.25 to < 0.50	514	0.35%	258	40.0%	1.84	256	49.8%
	0.50 to < 0.75	523	0.53%	205	48.8%	3.27	205	39.2%
	0.75 to < 2.50	1,816	0.85%	771	40.1%	1.71	1,033	56.9%
	2.50 to < 10.00	127	3.73%	74	47.8%	1.24	171	134.6%
	10.00 to < 100.00	16	14.40%	5	57.2%	1.00	43	268.8%
	100.00 (Default)	-	100.00%	3	58.4%	1.46	_	0%
	Sub-total	8,554	0.40%	2,395	42.8%	1.53	3,132	36.6%
Sovereign	0.00 to < 0.15	8,378	0.02%	129	13.8%	0.75	96	1.1%
	0.15 to < 0.25	212	0.25%	3	13.4%	0.04	17	8.0%
	0.25 to < 0.50	-	0%	_	0%	-	_	0%
	0.50 to < 0.75	-	0%	_	0%	-	_	0%
	0.75 to < 2.50	1	1.38%	1	14.5%	1.00	_	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	8,591	0.02%	133	13.8%	0.73	113	1.3%
Financial institutions	0.00 to < 0.15	5,278	0.07%	73	50.3%	0.82	1,091	20.7%
	0.15 to < 0.25	561	0.18%	38	44.1%	0.45	184	32.8%
	0.25 to < 0.50	38	0.34%	13	46.5%	1.27	24	63.2%
	0.50 to < 0.75	107	0.53%	13	47.9%	0.39	69	64.5%
	0.75 to < 2.50	43	1.23%	23	48.0%	0.11	30	69.8%
	2.50 to < 10.00	-	0%	=.	0%	-		0%
	10.00 to < 100.00	-	0%	-	0%	-	-	0%
	100.00 (Default)	-	0%	-	0%	-	-	0%
	Sub-total	6,027	0.10%	160	49.7%	0.78	1,398	23.2%
Total (sum of portfolios)		23,172	0.18%	2,688	33.8%	1.14	4,643	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.

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

				Q4 2	022			
		a	b	С	d	e	f	g
	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	3,505	0.07%	581	43.8%	1.18	733	20.9%
	0.15 to < 0.25	2,847	0.17%	489	42.5%	1.21	876	30.8%
	0.25 to < 0.50	559	0.35%	241	36.0%	1.39	230	41.1%
	0.50 to < 0.75	747	0.53%	202	41.0%	2.40	286	38.3%
	0.75 to < 2.50	1,242	0.86%	729	36.5%	1.57	790	63.6%
	2.50 to < 10.00	171	3.53%	76	50.6%	1.09	231	135.1%
	10.00 to < 100.00	6	15.10%	4	57.5%	1.00	15	250.0%
	100.00 (Default)	1	100.00%	4	38.2%	2.00	1	100.0%
	Sub-total	9,078	0.35%	2,326	41.8%	1.35	3,162	34.8%
Sovereign	0.00 to < 0.15	8,501	0.02%	133	13.5%	1.28	130	1.5%
_	0.15 to < 0.25	199	0.25%	2	13.4%	0.13	16	8.0%
	0.25 to < 0.50	-	0%	-	0%	-	-	0%
	0.50 to < 0.75	-	0%	_	0%	-	_	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	8,700	0.03%	135	13.5%	1.25	146	1.7%
Financial institutions	0.00 to < 0.15	5,708	0.07%	71	50.3%	0.88	1,223	21.4%
	0.15 to < 0.25	591	0.19%	39	50.3%	0.31	207	35.0%
	0.25 to < 0.50	60	0.35%	11	48.9%	0.43	31	51.7%
	0.50 to < 0.75	124	0.53%	16	47.3%	0.27	78	62.9%
	0.75 to < 2.50	41	1.01%	19	48.5%	0.06	28	68.3%
	2.50 to < 10.00	-	0%	_	0%	-	-	0%
	10.00 to < 100.00	-	0%	_	0%	-	-	0%
	100.00 (Default)	-	0%	_	0%	-	-	0%
	Sub-total	6,524	0.10%	156	50.2%	0.81	1,567	24.0%
	_							
Total (sum of portfolios)		24,302	0.17%	2,617	33.9%	1.08	4,875	20.1%

⁽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.

			Q1 2	2023					Q4:	2022		
	a	b	С	d	e	f	а	b	С	d	e	f
		Collateral u	sed in derivativ	ve transactions	Collatera	al used in SFTs		Collateral u	sed in derivati	ve transactions	Collatera	al used in SFTs
	Fair val	ue of collateral received		alue of posted/ collateral	Fair value of collateral	Fair value of posted		ue of collateral received		value of posted collateral	Tull Vulue of	Fair value of posted
	Segregated	Unsegregated	Segregated	Unsegregated	received ⁽¹⁾	collateral ⁽¹⁾		Unsegregated	Segregated	Unsegregated		collateral ⁽¹⁾
Cash	-	12,527	_	4,082	44,341	33,135	_	11,827	-	3,794	39,121	32,134
Securities issued or guaranteed by												
Canadian government	175	89	73	661	20,114	22,094	185	290	75	774	24,708	22,321
Canadian provincial and municipal governments	162	663	117	397	9,565	12,073	40	1,117	189	165	11,276	12,806
U.S. Treasury, other U.S. agencies and other												
foreign governments	2,313	52	1,051	-	44,934	36,605	1,315	104	775	5	34,591	33,543
Other debt securities	924	24	723	-	5,016	1,750	752	24	452	-	2,893	1,888
Equity securities	1,092	-	2,464	-	65,107	87,385	571	-	1,247	-	57,167	71,373
Total	4,666	13,355	4,428	5,140	189,077	193,042	2,863	13,362	2,738	4,738	169,756	174,065

			Q3 :	2022					Q2 2	2022		
	а	b	С	d	e	f	a	b	С	d	e	f
		Collateral u	sed in derivati	ve transactions	Collatera	al used in SFTs		Collateral u	sed in derivativ	ve transactions	Collatera	al used in SFTs
	Fair val	ue of collateral received	Fair	value of posted collateral	Fair value of collateral		Fair val	ue of collateral received	Fair	value of posted collateral	Fair value of collateral	Fair value of posted
	Segregated	Unsegregated	Segregated	Unsegregated	received ⁽¹⁾	collateral ⁽¹⁾	Segregated	Unsegregated	Segregated	Unsegregated	received ⁽¹⁾	collateral ⁽¹⁾
Cash	-	12,172	-	2,601	37,435	24,121	-	14,028	-	3,628	32,172	19,622
Securities issued or guaranteed by												
Canadian government	84	93	268	344	24,805	23,816	391	132	149	281	23,197	20,825
Canadian provincial and municipal governments	4	741	369	282	10,180	15,918	246	938	502	216	10,213	13,400
U.S. Treasury, other U.S. agencies and other												
foreign governments	2,179	29	670	5	32,213	28,853	935	27	373	57	32,551	26,254
Other debt securities	526	23	27	-	2,954	1,489	502	23	45	_	2,557	1,795
Equity securities	514	-	1,614	-	63,081	81,100	756	-	1,412	_	62,216	85,130
Total	3,307	13,058	2,948	3,232	170,668	175,297	2,830	15,148	2,481	4,182	162,906	167,026

⁽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.

	Q1 2	023	Q4 2	022	Q3 2	2022	Q2 2	2022	Q1 :	2022
	а	b	a	b	a	b	a	b	a	b
	Protection									
	purchased	sold								
Notionals										
Credit default swaps										
Indices, singles names and other	3,500	1,958	3,010	1,555	2,464	1,263	2,142	997	2,755	1,371
Tranches on indices	-	-	-	-	-	-	-	-	-	-
Total return swaps	126	_	122	_	125	-	83	-	83	-
Credit options	_	_	-	_	-	-	-	-	-	-
Other credit derivatives	_	_	_	=	-	ı	-	ı	-	=
Total notionals	3,626	1,958	3,132	1,555	2,589	1,263	2,225	997	2,838	1,371
Fair values										
Positive fair value (asset)	1	27	7	16	1	14	10	13	2	29
Negative fair value (liability)	(49)	(3)	(24)	(2)	(29)	(2)	(23)	(3)	(54)	(1)

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.

		Q1 2	023	Q4 2	2022	Q3 2	2022	Q2 2	2022	Q1 2	022
		a	b	a	b	a	b	a	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)		211		241		238		436		419
2	Exposures for trades at QCCPs (excluding initial margin and default fund contributions); of which	1,474	29	1,194	24	2,218	45	5,214	104	3,432	68
3	(i) OTC derivatives	119	2	94	2	192	4	204	4	400	8
4	(ii) Exchange-traded derivatives	969	19	959	19	1,516	31	4,557	91	2,386	47
5	(iii) Securities financing transactions	386	8	141	3	510	10	453	9	646	13
6	(iv) Netting sets where cross-product netting has been approved	-	-	-	-	-	-	-	-	-	-
7	Segregated initial margin	3,368		3,235		4,120		4,563		4,725	
8	Non-segregated initial margin	323	-	274	-	384	-	351	-	460	-
9	Pre-funded default fund contributions	397	182	378	217	419	193	684	332	646	351
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.

						Q1 2023				
		a	b	С	e	f	g	i	j	k
			В	ank acts as originator			Bank acts as sponsor		Ва	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	4,200	-	4,200	2,223	-	2,223
	Of which:									
2	Residential mortgages	-	-	-	3,571	-	3,571	329	_	329
3	Credit card	1,271	-	1,271	-	-	-	268	_	268
4	Other retail exposures	-	-	-	629	-	629	1,626	-	1,626
5	Re-securitization	-	-	I	-	-	ı	-	-	-
6	Non-Retail	-	-	1	820	-	820	646	-	646
	Of which:									
7	Loans to corporates	-	-	-	-	-	-	-	_	-
8	Commercial mortgage	-	-	-	226	-	226	2	-	2
9	Lease and receivables	-	-	-	587	-	587	644	-	644
10	Other wholesale	-	-	-	7	-	7	-	-	-
11	Re-securitization	-	-	ı	-	-	ı	-	-	-

						Q4 2022	-	-		
		a	b	С	e	f	g	i	j	k
			Ba	nk acts as originator			Bank acts as sponsor		Ва	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	3,970	ı	3,970	1,994	-	1,994
	Of which:									
2	Residential mortgages	-	-	=	3,347	-	3,347	_	-	-
3	Credit card	1,271	-	1,271	-	-	-	143	-	143
4	Other retail exposures	-	-	_	623	-	623	1,851	-	1,851
5	Re-securitization	_	-	_	-	1	-	-	_	-
6	Non-Retail	-	-	-	705	ı	705	842	-	842
	Of which:									
7	Loans to corporates	-	-	-	-	-	-	-	-	-
8	Commercial mortgage	-	-	=	170	-	170	2	-	2
9	Lease and receivables	-	-	=	528	-	528	840	-	840
10	Other wholesale	-	-	-	7	-	7	_	-	-
11	Re-securitization	_	-	_	-	1	_	_	_	-

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

⁽²⁾ The Bank has no synthetic securitization exposure.

SEC1 – Securitization Exposures in the Banking Book (continued)

						Q3 2022				
		a	b	С	e	f	g	i	j	k
			Ва	ank acts as originator			Bank acts as sponsor		Ва	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	3,366	-	3,366	2,192	-	2,192
	Of which :									
2	Residential mortgages	-	-	-	2,699	-	2,699	-	_	-
3	Credit card	1,271	-	1,271	=	-	=	154	-	154
4	Other retail exposures	-	-	-	667	-	667	2,038	-	2,038
5	Re-securitization	_	1	1	-	-	1	-	_	-
6	Non-Retail	-	ı	-	720	-	720	829	-	829
	Of which:									
7	Loans to corporates	-	-	-	=	-	=	-	-	-
8	Commercial mortgage	-	-	-	167	-	167	2	-	2
9	Lease and receivables	-	-	-	547	-	547	827	-	827
10	Other wholesale	-	-	-	6	-	6	-	-	-
11	Re-securitization	-	-	-	-	_	-	-	_	-

						Q2 2022				
		a	b	С	e	f	g	i	j	k
			Ва	ank acts as originator		I	Bank acts as sponsor		Bai	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	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	-	-	1	1	-	_	-	-	_
6	Non-Retail	-	-	ı	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	_	-	_	-	-	-	_	-	_

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

⁽²⁾ The Bank has no synthetic securitization exposure.

SEC2 – Securitization Exposures in the Trading Book

(millions of Canadian dollars)

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

						Q1 2023				
		a	b	С	e	f	g	i	j	k
			Ва	ank acts as originator			Bank acts as sponsor		Ва	nks acts as investor ⁽¹⁾
		Traditional	Synthetic ⁽²⁾	Sub-total	Traditional	Synthetic ⁽²⁾	Sub-total	Traditional	Synthetic ⁽²⁾	Sub-total
1	Retail	-	1	1	11	1	11	23	-	23
	Of which :									
2	Residential mortgages	-	_	-	8	_	8	5	_	5
3	Credit card	-	-	-	-	-	-	18	_	18
4	Other retail exposures	-	-	-	3	-	3	-	-	-
5	Re-securitization	ı	-	I	-	-	I	-	-	-
6	Non-Retail	ı	-	ı	4	-	4	13	-	13
	Of which:									
7	Loans to corporates	-	-	-	-	-	-	-	_	-
8	Commercial mortgage	-	-	-	1	-	1	12	_	12
9	Lease and receivables	-	-	-	3	-	3	1	-	1
10	Other wholesale	-	-	-	-	-	-	-	-	-
11	Re-securitization	_	_	_	_	_	_	-	_	_

						Q4 2022				
		a	b	С	e	f	g	i	j	k
			Ва	ank acts as originator			Bank acts as sponsor		Ва	nks acts as investor ⁽¹⁾
		Traditional	Synthetic ⁽²⁾	Sub-total	Traditional	Synthetic ⁽²⁾	Sub-total	Traditional	Synthetic ⁽²⁾	Sub-total
1	Retail	-	-	-	27	-	27	20	-	20
	Of which :									
2	Residential mortgages	-	-	-	20	-	20	1	-	1
3	Credit card	-	-	-	=	-	-	19	-	19
4	Other retail exposures	-	-	-	7	-	7	-	-	-
5	Re-securitization	_	-	1	-	ı	-	_	-	ı
6	Non-Retail	-	-	-	8	ı	8	13	-	13
	Of which:									
7	Loans to corporates	-	-	-	=	-	-	_	-	-
8	Commercial mortgage	-	-	-	2	-	2	12	-	12
9	Lease and receivables	-	-	-	6	-	6	1	-	1
10	Other wholesale	-	_	-	-	-	-	_	-	-
11	Re-securitization	_	-	-	_	-	_	_	_	-

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

⁽²⁾ The Bank has no synthetic securitization exposure.

SEC2 – Securitization Exposures in the Trading Book (continued)

						Q3 2022				
		a	b	С	e	f	g	i	j	k
			Ва	ank acts as originator			Bank acts as sponsor		Ва	nks acts as investor ⁽¹⁾
		Traditional	Synthetic ⁽²⁾	Sub-total	Traditional	Synthetic ⁽²⁾	Sub-total	Traditional	Synthetic ⁽²⁾	Sub-total
1	Retail	_	-	1	6	-	6	29	-	29
	Of which:									
2	Residential mortgages	-	-	-	4	-	4	10	-	10
3	Credit card	-	-	-	-	-	-	19	-	19
4	Other retail exposures	-	-	-	2	-	2	-	-	-
5	Re-securitization	-	-	I	ı	ı	ı	-	-	-
6	Non-Retail	-	-	ı	1	ı	1	15	-	15
	Of which:									
7	Loans to corporates	-	-	-	-	-	-	-	-	-
8	Commercial mortgage	-	-	-	-	-	-	12	-	12
9	Lease and receivables	-	-	-	1	-	1	3	-	3
10	Other wholesale	-	-	-	-	-	-	-	-	-
11	Re-securitization	-	_	_	_	_	_	-	_	-

						Q2 2022				
		a	b	С	e	f	g	i	j	k
			Ва	nk acts as originator			Bank acts as sponsor		Bai	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	-	-	=	I	ı	-	-	-	ı
6	Non-Retail	-	-	1	2	ı	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	_	-	_	-	1	_	-	_	-

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

⁽²⁾ 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

(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.

										01 2023								
		а	b	С	d	е	f	g	h	i	i	k	ı	m	n	0	р	а
				Exposure	e values (by	RW bands)	Exposu	re values (b	v regulatory	approach)		RWA (by	regulatory a	approach) ⁽²⁾			apital charg	e after can
					>100% to				,			(2)						and the same
			> 20% to	>50% to	1250%	1250%												İ
		≤ 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	6,291	-	-	-	-	1,271	4,770	250	-	127	479	25	-	10	38	2	-
2	Traditional securitization	6,291	-	_	-	_	1,271	4,770	250	-	127	479	25	_	10	38	2	_
3	Of which securitization	6,291	-	_	_	-	1,271	4,770	250	-	127	479	25	-	10	38	2	-
4	Of which retail underlying	5,471	-	_	_	-	1,271	3,950	250	_	127	397	25	-	10	31	2	-
5	Of which wholesale	820	-	_	-	-	-	820	-	_	-	82	-	-	-	7	-	-
6	Of which re-securitization	_	-	_	_	-	-	_	-	_	-	-	-	-	-	-	-	-
7	Of which senior	-	-	_	-	-	_	_	-	_	-	-	-	-	-	-	-	-
8	Of which non-senior	-	-	_	-	_	-	_	_	_	_	_	_	_	_	_	_	-

										Q4 2022								
		a	b	С	d	e	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	pproach)(2)		С	apital charg	ge after cap
					>100% to													
			> 20% to	>50% 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	5,946	-	-	-	-	1,771	3,925	250		177	393	25	-	14	31	2	_
2	Traditional securitization	5,946	-	-	-	-	1,771	3,925	250	1	177	393	25	-	14	31	2	_
3	Of which securitization	5,946	-	-	-	-	1,771	3,925	250	1	177	393	25	-	14	31	2	-
4	Of which retail underlying	5,241	-	-	-	-	1,771	3,220	250	_	177	323	25	-	14	25	2	-
5	Of which wholesale	705	-	-	-	-	-	705	-	_	-	70	-	-	-	6	-	1 - 1
6	Of which re-securitization	-	-	-	-	-	-	-	-	_	-	-	-	-	-	-	-	-
7	Of which senior	-	-	-	-	-	-	-	-	-	_	-	-	_	-	-	-	-
8	Of which non-senior	-	_	-	-	-	-	-	-	_	-	-	-	-	-	-	-	-

⁽¹⁾ The Bank has no synthetic securitization exposure.

⁽²⁾ RWA amounts do not include the transitional arrangement related amount.

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

			-	-			-	-	Q3 2022	-	-	-	-	-	-	-	
	a	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	e after cap
		200/ 1	500/ 1	>100% to													
	≤ 20% RW	> 20% to 50% RW	>50% to 100% RW			IRBA	ERBA/IAA	SA/SSFA	1250%	IRBA	ERBA/IAA	SA/SSFA	1250%	IRBA	ERBA/IAA	SA/SSFA	1250%
1 Total exposures	5,357	-	-	-	-	1,271	3,836	250	-	127	384	25	-	10	30	2	-
2 Traditional securitization	5,357	-	-	-	-	1,271	3,836	250	-	127	384	25	-	10	30	2	-
3 Of which securitization	5,357	-	-	-	-	1,271	3,836	250	-	127	384	25	-	10	30	2	-
4 Of which retail underlying	4,637	_	_	-	-	1,271	3,116	250	_	127	312	25	-	10	24	2	-
5 Of which wholesale	720	_	_	-	-	-	720	-	_	-	72	-	-	-	6	-	-
6 Of which re-securitization	-	-	_	-	-	-	-	-	_	_	_	-	-	-	-	-	-
7 Of which senior	-	-	_	-	-	-	-	-	_	_	-	-	-	-	-	-	-
8 Of which non-senior	-	-	_	-	-	-	_	-	_	_	-	-	-	-	-	_	-

				_				_		Q2 2022	_						-	_
		a	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	pproach) ⁽²⁾		С	apital charg	ge after cap
					>100% to													
			> 20% to	>50% 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	5,040	-	-	-	-	1,771	3,269	-	-	177	352	-	-	14	29	-	_
2	Traditional securitization	5,040	-	-	-	-	1,771	3,269	ı	1	177	352	-	_	14	29	-	-
3	Of which securitization	5,040	-	-	-	-	1,771	3,269	1	-	177	352	-	-	14	29	-	-
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	-	_	-	-	-	-	-	-	_	-	-	-	_	-	-	-	-

⁽¹⁾ The Bank has no synthetic securitization exposure.

⁽²⁾ RWA amounts do not include the transitional arrangement related amount.

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.

				-						Q1 2023	_						_	
		a	b	С	d	e	f	g	h	i	j	k	l	m	n	0	р	q
				Exposure	values (by I	RW bands)	Exposu	re values (by	/ regulatory	approach)		RWA (by	regulatory a	pproach)(2)		С	apital charg	e after cap
					>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	2,850	19	-	-	-	-	1,289	1,580	-	-	181	221	-	-	15	18	-
2	Traditional securitization	2,850	19	-	-	-	-	1,289	1,580	-	-	181	221	-	-	15	18	-
3	Of which securitization	2,850	19	-	-	-	-	1,289	1,580	-	-	181	221	-	-	15	18	1
4	Of which retail underlying	2,204	19	-	_	-	-	843	1,380	-	-	134	200	_	-	11	16	-
5	Of which wholesale	646	-	-	_	-	-	446	200	-	-	47	21	-	-	4	2	-
6	Of which re-securitization	-	-	_	-	-	-	_	-	-	_	_	-	-	-	-	-	-
7	Of which senior	-	-	_	-	-	-	_	-	-	_	-	-	-	-	-	-	-
8	Of which non-senior	-	-	_	-	-	-	_	-	-	_	-	-	-	-	-	-	-

										Q4 2022								
		а	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	regulatory a	approach) ⁽²⁾		С	apital charg	e after cap
					>100% to													
			> 20% to			1250%												
		$\leq 20\% \; RW$	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	2,779	21	36	-	-	ı	861	1,975	-	-	104	309	-	-	9	25	-
2	Traditional securitization	2,779	21	36	ı	_	I	861	1,975	-	-	104	309	-	-	9	25	_
3	Of which securitization	2,779	21	36	-	-	-	861	1,975	-	-	104	309	-	-	9	25	-
4	Of which retail underlying	1,975	19	-	_	-	-	259	1,735	-	-	44	253	-	-	4	21	-
5	Of which wholesale	804	2	36	-	-	-	602	240	-	-	60	56	-	-	5	4	-
6	Of which re-securitization	-	-	-	-	-	-	-	-	-	-	_	-	-	-	-	-	-
7	Of which senior	-	-	-	-	_	-	-	-	-	-	_	-	-	-	-	-	-
8	Of which non-senior	-	-	-	ı	_	ı	-	-	-	-	ı	-	_	-	-	-	-

⁽¹⁾ The Bank has no synthetic securitization exposure.

⁽²⁾ RWA amounts do not include the transitional arrangement related amount.

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

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

				-	-					Q3 2022								
		a	b	С	d	е	f	g	h	i	j	k	l	m	n	0	р	q
				Exposure	e values (by I	RW bands)	Exposu	re values (by	/ regulatory	approach)		RWA (by	regulatory a	approach) ⁽²⁾		C	Capital charg	e after cap
					>100% to													
			> 20% to			1250%			0								0.1/005.	
		\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	2,966	21	34	_	-	-	876	2,145	-	•	106	334	-	-	9	27	_
2	Traditional securitization	2,966	21	34	-	-	-	876	2,145	-	-	106	334	_	-	9	27	-
3	Of which securitization	2,966	21	34	_	-		876	2,145	-	-	106	334	-	-	9	27	_
4	Of which retail underlying	2,173	19	-	_	-	-	273	1,919	-	-	45	281	-	-	4	23	-
5	Of which wholesale	793	2	34	_	-	-	603	226	-	-	61	53	-	-	5	4	-
6	Of which re-securitization	-	-	_	-	-	-	-	-	-	-	-	-	_	-	-	-	i -
7	Of which senior	-	-	_	-	-	-	-	-	-	-	-	-	_	-	-	-	i -
8	Of which non-senior	_	_	_	-	-	_	-	_	-	_	_	_	_	-	_	-	- 1

										Q2 2022								
		a	b	С	d	е	f	g	h	i	j	k	l	m	n	0	р	q
				Exposure	values (by	RW bands)	Exposu	re values (b	y regulatory	approach)		RWA (by	regulatory a	pproach) ⁽²⁾		С	apital charg	ge after cap
					>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	2,924	21	34	-	-	-	870	2,109	-	-	106	328	-	-	8	26	-
2	Traditional securitization	2,924	21	34	-	1	-	870	2,109	-	-	106	328		-	8	26	-
3	Of which securitization	2,924	21	34	-	1	-	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	_	-	-	_	-	-	_	-	-	-	_	-	-	-	-	_ '	_

⁽¹⁾ The Bank has no synthetic securitization exposure.

⁽²⁾ RWA amounts do not include the transitional arrangement related amount.

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. The CET1 capital ratio is calculated by dividing total CET1 capital by the corresponding 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 incurring a financial loss if an obligor does not fully honour its contractual commitments to the Bank. Obligors may be debtors, issuers, counterparties, or guarantors. Credit risk is the most significant risk facing the Bank in the normal course of its business. The Bank is exposed to credit risk not only through its direct lending activities and transactions but also through commitments to extend credit and through letters of guarantee, letters of credit, over-the-counter derivatives trading, 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 and other receivables advanced to the customer.
Exposure at default (EAD)	Represents an estimate of the amount drawn and of the expected use of any undrawn portion prior to default, and cannot be lower than the current balance.
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 Tier 1 capital by total exposure. Total exposure is defined as the sum of on-balance-sheet assets (including derivative financial instruments exposures and securities financing transaction exposures) and off-balance-sheet items.
Loss given default (LGD)	Represents the magnitude of the loss from the obligor's default that would be expected in an economic downturn and subject to certain regulatory floors, expressed as a percentage of exposure at default.
Market risk	Market risk is the risk of losses arising from movements in market prices. Market risk comes from a number of factors, particularly changes to market variables such as interest rates, credit spreads, exchange rates, equity prices, commodity prices, and implied volatilities. The Bank is exposed to market risk through its participation in trading, investment, and asset/liability management activities. Trading activities involve taking positions on various instruments such as bonds, shares, currencies, commodities, or derivative financial instruments. The Bank is exposed to non-trading market risk through its asset/liability management and investment portfolios.
Operational risk	Operational risk is the risk of loss resulting from an inadequacy or a failure ascribable to human resources, equipment, processes, technology, or external events. Operational risk exists for every Bank activity. Theft, fraud, cyberattacks, unauthorized transactions, system errors, human error, amendments to or misinterpretation of laws and regulations, litigation or disputes with clients, inappropriate sales practice behaviour, or property damage are just a few examples of events likely to cause financial loss, harm the Bank's reputation, or lead to 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 an obligor cannot meet its financial obligations to third parties.
Other retail	This exposure class includes consumer loans, and other retail loans but excludes SME loans which are included in Non-retail portfolios.
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)	Represents the probability of through-the-cycle 12-month default by the obligor, calibrated on a long-run average PD throughout a full economic cycle.
Qualifying revolving retail (QRR)	This exposure class includes lines of credit and credit card receivables.
Repo-style transactions	Securities purchased under reverse repurchase agreements and sold under repurchase agreements as well as securities loaned and borrowed.
Retail Residential Mortgage	This exposure class includes residential mortgage loans on one-to-four-unit dwellings (Basel definitions) and home equity lines of credit (HELOC).
Risk-weighted assets (RWA)	Assets are risk weighted according to the guidelines established by the Office of the Superintendent of Financial Institutions (Canada). In the Standardized calculation approach, risk factors are applied to the face value of certain assets in order to reflect comparable risk levels. In the Advanced Internal Rating-Based (AIRB) approach, risk-weighted assets are derived from the Bank's internal models, which represent 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	The sum of CET1 and Additional Tier 1 (AT1) capital forms what is known as Tier 1 capital. AT1 capital consists of eligible non-cumulative preferred shares, limited recourse capital notes (LRCN), and other AT1 capital adjustments. Tier 1 capital ratio is calculated by dividing Tier 1 capital by risk-weighted assets.
Tier 2 capital	Tier 2 capital consists of the eligible portion of subordinated debt and certain allowances for credit losses.
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.