



Supplementary Regulatory Capital and Pillar 3 Disclosure

Third Quarter 2023
(unaudited)

For information:
Investor Relations
1-866-517-5455

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 Third 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) In the second quarter of 2023, the Bank implemented the Basel III reforms. Some tables have been modified in line with the new requirements related to credit risk, operational risk, and capital floor output.
- 6) 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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Interest Rate Risk in the Banking Book	IRRBB Disclosure	37	89 and 90
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	MRB - Qualitative Disclosures for Banks Using the Internal Models Approach (IMA)		
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	MR4 - Comparison of VaR Estimates with Gains/Losses		

n.a. Not applicable

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

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

KM2 – Key Metrics – TLAC Requirements⁽¹⁾

(millions of Canadian dollars)

The following table provides summary information about total loss-absorbing capacity (TLAC) available, and TLAC requirements applied.

	2023			2022	
	Q3	Q2	Q1	Q4	Q3
	a				
1 Total loss-absorbing capacity (TLAC) available ⁽²⁾	36,015	34,886	34,902	32,351	31,549
2 Total RWA at the level of the resolution group	120,562	119,111	121,813	116,840	111,377
3 TLAC ratio: TLAC as a percentage of RWA (row 1 / row 2) (%) ⁽²⁾	29.9%	29.3%	28.7%	27.7%	28.3%
4 Leverage ratio exposure measure at the level of the resolution group	458,293	448,584	411,149	401,780	383,360
5 TLAC Leverage Ratio: TLAC as a percentage of leverage ratio exposure measure (row 1 / row 4) (%) ⁽²⁾	7.9%	7.8%	8.5%	8.1%	8.2%
6a Does the subordination exemption in the antepenultimate paragraph of Section 11 of the FSB TLAC Term Sheet apply?	yes	yes	yes	yes	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
6c If the capped subordination exemption applies, the amount of funding issued that ranks pari passu with Excluded Liabilities and that is recognised as external TLAC, divided by funding issued that ranks pari passu with Excluded Liabilities and that would be recognised as external TLAC if no cap was applied (%)	n.a.	n.a.	n.a.	n.a.	n.a.

(1) Since Q2 2023, the information in this table takes into account the implementation of the Basel III reforms requirements.

(2) 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.

		Q3 2023	Q2 2023	Q3 2023
		a	b	c
		RWA	RWA	Minimum capital requirement ⁽²⁾
1	Credit risk (excluding counterparty credit risk)	92,152	92,221	7,372
2	Of which: standardised approach (SA)	24,225	24,640	1,938
3	Of which: foundation internal ratings-based (FIRB) approach	11,416	12,748	913
4	Of which: supervisory slotting approach	–	–	–
5	Of which: advanced internal ratings-based (AIRB) approach	56,511	54,833	4,521
6	Counterparty credit risk (CCR)	5,410	5,424	433
7	Of which: standardised approach for counterparty credit risk	3,151	3,654	252
8	Of which: internal model method (IMM)	–	–	–
9	Of which: other CCR	2,259	1,770	181
10	Credit valuation adjustment (CVA)	1,770	1,386	142
11	Equity investments in funds – look-through approach	674	709	54
12	Equity investments in funds – mandate-based approach	–	–	–
13	Settlement risk	6	77	–
14	Securitization exposures in banking book	1,011	1,054	81
15	Of which: securitization IRB approach (SEC-IRBA)	81	127	7
16	Of which: securitization external ratings-based approach (SEC-ERBA), including internal assessment approach (IAA)	726	706	58
17	Of which: securitization standardised approach (SEC-SA)	204	221	16
18	Market risk	5,985	5,060	479
19	Of which: standardised approach (SA)	1,351	1,275	108
20	Of which: internal model approach (IMA)	4,634	3,785	371
21	Capital charge for switch between trading book and banking book	–	–	–
22	Operational risk	12,490	12,065	999
23	Amounts below the thresholds for deduction (subject to 250% risk weight)	1,064	1,115	85
24	Output floor applied	65%	65%	–
25	Floor adjustment (before application of transitional cap)	–	–	–
26	Floor adjustment (after application of transitional cap)	–	–	–
27	Total (1+6+10+11+12+13+14+18+21+22+23+26)	120,562	119,111	9,645

(1) Since Q2 2023, the information in this table takes into account the implementation of the Basel III reforms requirements.

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

OV1 – Overview of RWA (continued)

(millions of Canadian dollars)

		Q1 2023	Q4 2022	Q3 2022
		b	b	b
		RWA ⁽¹⁾	RWA ⁽¹⁾	RWA ⁽¹⁾
1	Credit risk (excluding counterparty credit risk)	89,972	83,620	79,036
2	Of which: standardised approach (SA)	20,607	18,998	16,948
3	Of which: foundation internal ratings-based (FIRB) approach	-	-	-
4	Of which: supervisory slotting approach	-	-	-
5	Of which: advanced internal ratings-based (AIRB) approach	69,365	64,622	62,088
6	Counterparty credit risk (CCR)	5,521	5,810	5,950
7	Of which: standardised approach for counterparty credit risk	3,639	4,131	4,155
8	Of which: internal model method (IMM)	-	-	-
9	Of which: other CCR	1,671	1,438	1,557
9a	Of which: exposures to central counterparties	211	241	238
10	Credit valuation adjustment (CVA)	1,038	2,677	2,230
11	Equity positions under the simple risk weight approach⁽²⁾	872	835	812
12	Equity investments in funds – look-through approach	230	223	233
13	Equity investments in funds – mandate-based approach	-	-	-
14	Equity investments in funds – fall-back approach	-	-	-
15	Settlement risk	58	43	92
16	Securitization exposures in banking book	1,033	1,008	976
16a	Of which: subject to the transitional arrangement	-	-	-
17	Of which: securitization IRB approach (SEC-IRBA)	127	177	127
18	Of which: securitization external ratings-based approach (SEC-ERBA), including internal assessment approach (IAA)	660	497	490
19	Of which: securitization standardised approach (SEC-SA)	246	334	359
20	Market risk	5,960	6,025	5,696
21	Of which: standardised approach (SA)	1,392	1,405	1,411
22	Of which: internal model approach (IMA)	4,568	4,620	4,285
23	Capital charge for switch between trading book and banking book	-	-	-
23	Operational risk	15,033	14,674	14,452
25	Amounts below the thresholds for deduction (subject to 250% risk weight)	2,096	1,925	1,900
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

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

(2) 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.

L11 – 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.

	Q3 2023						
	a	b	c	d	e	f	g
	Carrying values as reported in published financial statements	Carrying values under scope of regulatory consolidation	Subject to credit risk framework	Subject to counterparty credit risk framework	Subject to the securitization framework	Subject to the market risk framework	Carrying values of items ⁽²⁾ Not subject to capital requirements or subject to deduction from capital
Assets							
Cash and deposits with financial institutions	39,808	39,808	39,808	–	–	1,249	–
Securities							
At fair value through profit or loss	106,569	111,611	1,318	–	–	110,293	–
At fair value through other comprehensive income	9,117	16,403	16,364	–	39	–	–
At amortized cost	12,019	12,034	8,475	–	3,559	–	–
	127,705	140,048	26,157	–	3,598	110,293	–
Securities purchased under reverse repurchase agreements and securities borrowed	12,368	21,729	–	21,729	–	–	–
Loans and acceptances							
Residential mortgage	84,776	51,649	51,649	–	–	–	–
Personal	45,793	45,793	45,793	–	–	–	–
Credit card	2,491	2,491	1,576	–	800	–	115
Business and government	80,784	80,784	80,711	–	73	1,321	–
Customers' liability under acceptances	213,844	180,717	179,729	–	873	1,321	115
Allowances for credit losses	6,709	6,709	6,709	–	–	–	–
	(1,120)	(1,120)	(71)	–	–	–	(1,049)
	219,433	186,306	186,367	–	873	1,321	(934)
Other							
Derivative financial instruments ⁽³⁾	14,362	16,123	–	16,123	–	13,019	–
Investments in associates and joint ventures	45	124	124	–	–	–	–
Premises and equipment	1,553	1,553	1,553	–	–	–	–
Goodwill	1,514	1,598	–	–	–	–	1,598
Intangible assets	1,330	1,125	–	–	–	–	1,125
Other assets	7,897	8,133	7,864	–	–	–	269
	26,701	28,656	9,541	16,123	–	13,019	2,992
Total assets	426,015	416,547	261,873	37,852	4,471	125,882	2,058
Liabilities							
Deposits	282,323	282,323	–	–	–	18,843	263,480
Other							
Acceptances	6,709	6,709	–	–	–	–	6,709
Obligations related to securities sold short	22,825	22,825	–	–	–	22,825	–
Obligations related to securities sold under repurchase agreements and securities loaned	38,433	53,358	–	53,358	–	–	–
Derivative financial instruments ⁽³⁾	18,768	19,965	–	19,965	–	18,245	–
Liabilities related to transferred receivables	26,130	–	–	–	–	–	–
Other liabilities	7,055	7,595	–	–	–	–	7,595
	119,920	110,452	–	73,323	–	41,070	14,304
Subordinated debt	748	748	–	–	–	–	748
Total liabilities	402,991	393,523	–	73,323	–	59,913	278,532

(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.

		Q3 2023				
		a	b	c	d	e
		Total	Items subject to ⁽¹⁾ :			
			Credit risk framework	Securitization framework	Counterparty credit risk framework	Market risk framework
1	Asset carrying value amount under scope of regulatory consolidation (as per template LI1)	414,489	261,873	4,471	37,852	125,882
2	Liabilities carrying value amount under scope of regulatory consolidation (as per template LI1)	114,991	–	–	73,323	59,913
3	Total net amount under regulatory scope of consolidation	299,498	261,873	4,471	(35,471)	65,969
4	<i>Gross-up for repo-style transactions⁽²⁾</i>	106,716	–	–	106,716	–
5	<i>Potential future exposures (PFE)⁽³⁾</i>	11,003	–	–	11,003	–
6	<i>Off-balance sheet amounts⁽⁴⁾</i>	233,771	65,313	4,733	118,368	–
7	<i>Differences due to different netting rules, other than those already included in row 2 including collateral</i>	6,890	–	–	6,890	–
8	VaR amounts for Securities Financing Transactions (SFTs)	8,272	–	–	8,272	–
9	<i>Differences in valuations</i>	–	–	–	–	–
10	<i>Collateral for SFTs</i>	(187,937)	–	–	(187,937)	–
11	Exposure amounts considered for regulatory purposes⁽⁵⁾	478,213	327,186	9,204	27,841	65,969

(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⁽¹⁾

(millions of Canadian dollars)

		2023			2022		
		Q3	Q2	Q1	Q4	Q3	
		Reference ⁽²⁾					
Common Equity Tier 1 capital: instruments and reserves							
1	Directly issued qualifying common share capital plus related contributed surplus ⁽³⁾	a + a'	3,350	3,320	3,291	3,252	3,244
2	Retained earnings	b	16,285	15,943	15,470	15,140	14,994
3	Accumulated other comprehensive income and other reserves	c	237	207	102	202	27
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		19,872	19,470	18,863	18,594	18,265
Regulatory adjustments to Common Equity Tier 1 capital							
7	Prudential valuation adjustments		–	–	–	–	–
8	Goodwill (net of related tax liability)	e - w	(1,598)	(1,605)	(1,599)	(1,598)	(1,586)
9	Other intangible other than mortgage-servicing rights (net of related tax liability)	f - x	(1,125)	(1,121)	(1,116)	(1,133)	(1,132)
10	Deferred tax assets excluding those arising from temporary differences (net of related tax liability)	g	(54)	(46)	(41)	(39)	(38)
11	Accumulated other comprehensive income related to cash flow hedges	h	(188)	(36)	(15)	(31)	(71)
12	Shortfall of provisions to expected losses	i	–	–	–	–	–
13	Securitization gain on sale		–	–	–	–	–
14	Gains (losses) due to changes in own credit risk on fair valued liabilities	j	(373)	(455)	(466)	(694)	(634)
15	Defined benefit pension fund net assets (net of related tax liability)	k - y	(269)	(309)	(296)	(336)	(583)
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)		–	–	–	–	–
21	Deferred tax assets arising from temporary differences (amount above 10% threshold, net of related tax liability)		–	–	–	–	–
22	Amount exceeding the 15% threshold		–	–	–	–	–
23	Of which: significant investments in the common stock of financials	n	–	–	–	–	–
24	Of which: mortgage servicing rights		–	–	–	–	–
25	Of which: deferred tax assets arising from temporary differences	o	–	–	–	–	–
26	Other deductions or regulatory adjustments to CET1 as determined by OSFI		(6)	(6)	–	55	49
27	Regulatory adjustments applied to Common Equity Tier 1 due to insufficient Additional Tier 1 and Tier 2 to cover deductions		–	–	–	–	–
28	Total regulatory adjustments to Common equity Tier 1		(3,613)	(3,578)	(3,533)	(3,776)	(3,995)
29	Common Equity Tier 1 capital (CET1)⁽⁴⁾		16,259	15,892	15,330	14,818	14,270
29a	CET1 with transitional arrangements for ECL provisioning not applied⁽⁵⁾					14,763	14,221
Additional Tier 1 capital: instruments							
30	Directly issued qualifying Additional Tier 1 instruments plus related contributed surplus ⁽³⁾	v + z	3,150	3,150	3,150	3,150	2,650
31	Of which: classified as equity under applicable accounting standards		3,150	3,150	3,150	3,150	2,650
32	Of which: classified as liabilities under applicable accounting standards	p	–	–	–	–	–
33	Directly issued capital instruments subject to phase out from Additional Tier 1		–	–	–	–	–
34	Additional Tier 1 instruments (and CET1 instruments not included in row 5) issued by subsidiaries and held by third parties (amount allowed in group AT1)	q	–	–	–	–	–
35	Of which: instruments issued by subsidiaries subject to phase out		–	–	–	–	–
36	Additional Tier 1 capital before regulatory adjustments		3,150	3,150	3,150	3,150	2,650

(1) Since Q2 2023, the information in this table takes into account the implementation of the Basel III reforms requirements.

(2) Reconciliation with Balance Sheet is presented on pages 13 and 14.

(3) 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*.

(4) 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.

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

CC1 – Composition of Regulatory Capital⁽¹⁾ (continued)

(millions of Canadian dollars)

		2023			2022	
		Q3	Q2	Q1	Q4	Q3
		Reference ⁽²⁾				
Additional Tier 1 capital: regulatory adjustments						
37	Investments in own Additional Tier 1 instruments	(1)	(5)	(1)	(6)	–
38	Reciprocal cross holdings in Additional Tier 1 instruments	–	–	–	–	–
39	Non-significant investments in the capital of banking, financial and insurance entities, net of eligible short positions (amount above 10% threshold)	–	–	–	–	–
40	Significant investments in the capital of banking, financial and insurance entities that are outside the scope of regulatory consolidation, net of eligible short positions	–	–	–	–	–
41	Other deductions from Tier 1 capital as determined by OSFI	–	–	(1)	(1)	(2)
42	Regulatory adjustments applied to Additional Tier 1 due to insufficient Tier 2 to cover deductions	–	–	–	–	–
43	Total regulatory adjustments to Additional Tier 1 capital	(1)	(5)	(2)	(7)	(2)
44	Additional Tier 1 capital (AT1)	3,149	3,145	3,148	3,143	2,648
45	Tier 1 capital (T1 = CET1 + AT1)⁽³⁾	19,408	19,037	18,478	17,961	16,918
45a	Tier 1 Capital with transitional arrangements for ECL provisioning not applied⁽⁴⁾				17,906	16,869
Tier 2 capital: instruments and allowances						
46	Directly issued qualifying Tier 2 instruments plus related contributed surplus ⁽⁵⁾	r	750	750	750	1,500
47	Directly issued capital instruments subject to phase out from Tier 2		–	–	–	–
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	304	347	434	358
51	Tier 2 capital before regulatory adjustments		1,054	1,097	1,184	1,858
51	Tier 2 capital: regulatory adjustments					
52	Investments in own Tier 2 instruments		–	–	–	–
53	Reciprocal cross holdings in Tier 2 instruments and Other TLAC-eligible instruments		–	–	–	–
54	Non-significant investments in the capital of banking, financial and insurance entities and Other TLAC-eligible instruments issued by G-SIBs and Canadian D-SIBs that are outside the scope of regulatory consolidation, where the institution does not own more than 10% of the issued common share capital of the entity (amount above 10% threshold)		(53)	(24)	(178)	(92)
54a	Non-significant investments in the other TLAC-eligible instruments issued by G-SIBs and Canadian D-SIBs, where the institution does not own more than 10% of the issued common share capital of the entity: amount previously designated for the 5% threshold but no longer meets the conditions		(53)	(24)	(178)	(92)
55	Significant investments in the capital of banking, financial and insurance entities and Other TLAC-eligible instruments issued by G-SIBs and Canadian D-SIBs that are outside the scope of regulatory consolidation		–	–	–	–
56	Other deductions from Tier 2 capital		–	–	–	–
57	Total regulatory adjustments to Tier 2 capital		(53)	(24)	(178)	(92)
58	Tier 2 capital (T2)		1,001	1,073	1,006	1,766
59	Total capital (TC = T1 + T2)⁽³⁾		20,409	20,110	19,484	19,727
59a	Total Capital with transitional arrangements for ECL provisioning not applied⁽⁴⁾				19,727	18,734

(1) Since Q2 2023, the information in this table takes into account the implementation of the Basel III reforms requirements.

(2) Reconciliation with Balance Sheet is presented on pages 13 and 14.

(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.

(5) 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⁽¹⁾ (continued)

(millions of Canadian dollars)

		2023			2022	
		Q3	Q2	Q1	Q4	Q3
60	Total risk-weighted assets	120,562	119,111	121,813	116,840	111,377
60a	Credit Valuation Adjustment (CVA) Risk-weighted assets (RWA)	1,770	1,386			
Capital ratios						
61	Common Equity Tier 1 (as a percentage of risk weighted assets) ⁽²⁾	13.5%	13.3%	12.6%	12.7%	12.8%
61a	CET1 Ratio with transitional arrangements for ECL provisioning not applied ⁽³⁾				12.6%	12.8%
62	Tier 1 (as a percentage of risk weighted assets) ⁽²⁾	16.1%	16.0%	15.2%	15.4%	15.2%
62a	Tier 1 Capital Ratio with transitional arrangements for ECL provisioning not applied ⁽³⁾				15.3%	15.1%
63	Total capital (as a percentage of risk weighted assets) ⁽²⁾	16.9%	16.9%	16.0%	16.9%	16.8%
63a	Total Capital Ratio with transitional arrangements for ECL provisioning not applied ⁽³⁾				16.9%	16.8%
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) ⁽²⁾	13.5%	13.3%	12.6%	12.7%	12.8%
OSFI target (minimum + capital conservation buffer + D-SIB buffer)⁽⁴⁾						
69	Common Equity Tier 1 target ratio	8.0%	8.0%	8.0%	8.0%	8.0%
70	Tier 1 capital target ratio	9.5%	9.5%	9.5%	9.5%	9.5%
71	Total capital target ratio	11.5%	11.5%	11.5%	11.5%	11.5%
Amounts below the thresholds for deduction (before risk weighting)						
72	Non-significant investments in the capital and other TLAC-eligible instruments of other financial entities	1,582	1,588	1,689	1,084	976
73	Significant investments in the common stock of financials	528	471	437	409	438
74	Mortgage servicing rights (net of related tax liability)	–	–	–	–	–
75	Deferred tax assets arising from temporary differences (net of related tax liabilities)	426	446	401	361	322
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)	94	91	177	152	139
77	Cap on inclusion of allowances in Tier 2 under standardised approach	366	366	237	224	200
78	Allowance eligible for inclusion in Tier 2 in respect of exposures subject to internal ratings-based approach (IRB) (prior to application of cap)	210	256	257	206	200
79	Cap on inclusion of allowances in Tier 2 under internal ratings-based approach	437	436	491	469	452

(1) Since Q2 2023, the information in this table takes into account the implementation of the Basel III reforms requirements.

(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) Does not include the domestic stability buffer.

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

(millions of Canadian dollars)

	Q3 2023		
	Cross - Reference to Definition of Capital ⁽²⁾	As in Report to Shareholders	Under scope of regulatory consolidation
Assets			
Cash and deposits with financial institutions		39,808	39,808
Securities		127,705	140,048
Non-significant investments in capital of other financial institutions reflected in regulatory capital	l	–	–
Other securities		127,705	140,048
Assets purchased under reverse repurchase agreements and securities borrowed		12,368	21,729
Loans			
Residential mortgage		84,776	51,649
Personal		45,793	45,793
Credit card		2,491	2,491
Business and government		80,784	80,784
Customers' liability under acceptances		6,709	6,709
Less: Allowances for credit losses		(1,120)	(1,120)
Allowance reflected in Tier 2 regulatory capital	t	–	(298)
Shortfall of allowances to expected loss	i	–	–
Allowances not reflected in regulatory capital		–	(822)
Other assets			
Derivative financial instruments		14,362	16,123
Other		12,339	12,533
Goodwill	e	1,514	1,598
Intangibles assets	f	1,330	1,330
Deferred tax assets		487	796
Deferred tax assets excluding those arising from temporary differences	g	–	54
Deferred tax assets arising from temporary differences exceeding regulatory thresholds	o	–	–
Deferred tax assets - realize through loss carrybacks		–	317
Deferred tax assets - other temporary differences		–	425
Defined-benefit pension fund net assets	k	–	374
Significant investments in other financial institutions		–	528
Significant investments exceeding regulatory thresholds	m + n	–	–
Significant investments not exceeding regulatory thresholds		–	528
Other		9,008	7,907
Total assets		426,015	416,547

(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 July 31, 2023, on a legal entity basis, National Bank Life Insurance Company had \$384 million in assets and \$357 million in equity, Natcan Insurance Company SCC had \$64 million in assets and \$48 million in equity.

(2) The references identify balance sheet components which are used in calculation of regulatory capital on pages 10 to 12.

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

(millions of Canadian dollars)

	Q3 2023		
	Cross - Reference to Definition of Capital ⁽²⁾	As in Report to Shareholders	Under scope of regulatory consolidation
Liabilities			
Deposits		282,323	282,323
Derivatives financials instruments		18,768	19,965
Other liabilities		101,152	90,487
Gains and losses due to changes in own credit risk on fair value liabilities	j	–	373
Deferred tax liabilities		31	31
Related to goodwill	w	–	–
Related to intangibles	x	–	205
Related to pensions	y	–	105
Other deferred tax liabilities		–	(279)
Other		101,121	90,083
Subordinated debt		748	748
Regulatory capital amortization of maturing debentures		–	–
Fair value adjustment and unamortized issuance cost		–	(2)
Subordinated debentures not allowed for regulatory capital	s	–	–
Subordinated debentures used for regulatory capital		–	750
Allowed for inclusion in Tier 2 capital	r	–	750
Total liabilities		402,991	393,523
Equity Attributable to Shareholders and holders of other equity instruments		23,022	23,022
Common shares	a	3,294	3,294
Contributed surplus	a'	56	56
Retained earnings	b	16,285	16,285
Accumulated Other Comprehensive Income (loss)	c	237	237
Net gains (losses) on instruments designated as cash flow hedges	h	188	188
Net foreign currency translation adjustments		55	55
Other		(6)	(6)
Preferred shares and other equity instruments		3,150	3,150
Of which: are qualifying	v	–	3,150
Non-controlling interest		2	2
Innovative instruments		–	–
Of which: are qualifying		–	–
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		23,024	23,024
Total Liabilities and Equity		426,015	416,547

(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 July 31, 2023, on a legal entity basis, National Bank Life Insurance Company had \$384 million in assets and \$357 million in equity, Natcan Insurance Company SCC had \$64 million in assets and \$48 million in equity.

(2) The references identify balance sheet components which are used in calculation of regulatory capital on pages 10 to 12.

TLAC1 – TLAC Composition⁽¹⁾

(millions of Canadian dollars)

		2023			2022	
		Q3	Q2	Q1	Q4	Q3
Regulatory capital elements of TLAC and adjustments						
1	Common Equity Tier 1 capital (CET1)	16,259	15,892	15,330	14,818	14,270
2	Additional Tier 1 capital (AT1) before TLAC adjustments	3,149	3,145	3,148	3,143	2,648
3	AT1 ineligible as TLAC as issued out of subsidiaries to third parties	-	-	-	-	-
4	Other adjustments	-	-	-	-	-
5	AT1 instruments eligible under the TLAC framework	3,149	3,145	3,148	3,143	2,648
6	Tier 2 capital (T2) before TLAC adjustments	1,001	1,073	1,006	1,766	1,816
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	-	-	-	-	-
9	Other adjustments	-	-	-	-	-
10	T2 instruments eligible under the TLAC framework	1,001	1,073	1,006	1,766	1,816
11	TLAC arising from regulatory capital	20,409	20,110	19,484	19,727	18,734
Non-regulatory capital elements of TLAC						
12	External TLAC instruments issued directly by the bank and subordinated to excluded liabilities	-	-	-	-	-
13	External TLAC instruments issued directly by the bank which are not subordinated to excluded liabilities but meet all other TLAC term sheet requirements ⁽²⁾	15,760	14,847	15,452	12,689	12,916
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	-	-	-	-	-
17	TLAC arising from non-regulatory capital instruments before adjustments	15,760	14,847	15,452	12,689	12,916
Non-regulatory capital elements of TLAC: adjustments						
18	TLAC before deductions	36,169	34,957	34,936	32,416	31,650
19	Deductions of exposures between MPE resolution groups that correspond to items eligible for TLAC (not applicable to SPE G-SIBs and D-SIBs)	-	-	-	-	-
20	Deduction of investments in own other TLAC liabilities	(154)	(71)	(34)	(65)	(101)
21	Other adjustments to TLAC	-	-	-	-	-
22	TLAC available after deductions	36,015	34,886	34,902	32,351	31,549
Risk-weighted assets and leverage exposure measure for TLAC purposes						
23	Total risk-weighted assets adjusted as permitted under the TLAC regime	120,562	119,111	121,813	116,840	111,377
24	Leverage exposure measure	458,293	448,584	411,149	401,780	383,360
TLAC ratios and buffers						
25	TLAC ratio (as a percentage of risk-weighted assets adjusted as permitted under the TLAC regime)	29.9%	29.3%	28.7%	27.7%	28.3%
26	TLAC Leverage ratio (as a percentage of leverage exposure)	7.9%	7.8%	8.5%	8.1%	8.2%
27	CET1 (as a percentage of risk-weighted assets) available after meeting the resolution group's minimum capital and TLAC requirements	7.8%	7.7%	6.9%	7.7%	7.9%
28	Institution-specific buffer requirement (capital conservation buffer plus countercyclical buffer plus higher loss absorbency, expressed 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) Since Q2 2023, the information in this table takes into account the implementation of the Basel III reforms requirements.

(2) A complete list of External TLAC 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*.

TLAC3 – Creditor Ranking at Legal Entity Level⁽¹⁾

(millions of Canadian dollars)

		Q3 2023					Q2 2023						
		Creditor ranking				Sum (1 to 5)	Creditor ranking				Sum (1 to 5)		
		1	2	3	4 ⁽²⁾	5 ⁽³⁾	1	2	3	4 ⁽²⁾	5 ⁽³⁾		
		Most junior			Most senior		Most junior			Most senior			
1	Description of creditor ranking	Common shares	Preferred shares and other equity instruments	Subordinated debt	Bail-in debt	Other liabilities excluding Bail-in debt	Common shares	Preferred shares and other equity instruments	Subordinated debt	Bail-in debt	Other liabilities excluding Bail-in debt		
2	Total capital and liabilities net of credit risk mitigation	3,294	3,150	750	18,488	–	25,682	3,261	3,150	750	16,662	–	23,823
3	Subset of row 2 that are excluded liabilities	–	–	–	2,882	–	2,882	–	–	–	1,886	–	1,886
4	Total capital and liabilities less excluded liabilities (row 2 minus row 3)	3,294	3,150	750	15,606	–	22,800	3,261	3,150	750	14,776	–	21,937
5	Subset of row 4 that are potentially eligible as TLAC	3,294	3,150	750	15,606	–	22,800	3,261	3,150	750	14,776	–	21,937
6	Subset of row 5 with 1 year ≤ residual maturity < 2 years	–	–	–	7,385	–	7,385	–	–	–	6,419	–	6,419
7	Subset of row 5 with 2 years ≤ residual maturity < 5 years	–	–	–	5,881	–	5,881	–	–	–	5,930	–	5,930
8	Subset of row 5 with 5 years ≤ residual maturity < 10 years	–	–	750	131	–	881	–	–	750	158	–	908
9	Subset of row 5 residual maturity ≥ 10 years, but excluding perpetual securities	–	–	–	2,209	–	2,209	–	–	–	2,269	–	2,269
10	Subset of row 5 that is perpetual securities	3,294	3,150	–	–	–	6,444	3,261	3,150	–	–	–	6,411

		Q1 2023					Q4 2022						
		Creditor ranking				Sum (1 to 5)	Creditor ranking				Sum (1 to 5)		
		1	2	3	4 ⁽²⁾	5 ⁽³⁾	1	2	3	4 ⁽²⁾	5 ⁽³⁾		
		Most junior			Most senior		Most junior			Most senior			
1	Description of creditor ranking	Common shares	Preferred shares and other equity instruments	Subordinated debt	Bail-in debt	Other liabilities excluding Bail-in debt	Common shares	Preferred shares and other equity instruments	Subordinated debt	Bail-in debt	Other liabilities excluding 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 ≤ 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 ≥ 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

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

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

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

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

(millions of Canadian dollars)

	2023			2022	
	Q3	Q2	Q1	Q4	Q3
Accounting assets vs. leverage ratio exposure					
1 Total consolidated assets as per published financial statements	426,015	417,684	418,342	403,740	387,051
2 Adjustment for investments in banking, financial, insurance or commercial entities that are consolidated for accounting purposes but outside the scope of regulatory consolidation	62	21	13	5	35
3 Adjustment for securitized exposures that meet the operational requirements for the recognition of risk transference	(49)	(78)	(78)	(78)	(78)
4 Adjustment for fiduciary assets recognized on the balance sheet pursuant to the operative accounting framework but excluded from the leverage ratio exposure measure	-	-	-	-	-
5 Adjustment for derivative financial instruments ⁽¹⁾	(561)	(1,011)	(2,774)	(4,693)	(402)
6 Adjustment for securities financing transactions (i.e. repos and similar secured lending) ⁽¹⁾	5,443	4,671	4,110	3,003	4,296
7 Adjustment for off-balance sheet items (i.e. conversion to credit equivalent amounts of off-balance sheet exposures)	35,055	34,022	34,871	32,871	31,328
8 Other adjustments ⁽²⁾	(7,672)	(6,725)	(43,335)	(33,068)	(38,870)
9 Leverage Ratio Exposure	458,293	448,584	411,149	401,780	383,360

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

(2) For the quarters of fiscal 2022 and for Q1 2023, OSFI permitted exclusion of central bank reserves. This exclusion ceased to apply since Q2 2023.

LR2 – Leverage Ratio Common Disclosure Template⁽¹⁾

(millions of Canadian dollars)

		2023			2022	
		Q3	Q2	Q1	Q4	Q3
Leverage ratio common disclosure						
On-balance sheet exposures						
1	On-balance sheet items (excluding derivatives, SFTs and grandfathered securitization exposures but including collateral)	399,299	386,742	342,846	333,863	324,351
2	Gross-up for derivatives collateral provided where deducted from balance sheet assets pursuant to the operative accounting framework (IFRS)	-	-	-	-	-
3	(Deductions of receivables assets for cash variation margin provided in derivative transactions)	(4,430)	(3,595)	(5,323)	(5,151)	(3,400)
4	(Asset amounts deducted in determining Tier 1 capital)	(3,243)	(3,129)	(3,071)	(3,145)	(3,594)
5	Total on-balance sheet exposures (excluding derivatives and SFTs) (sum of rows 1 to 4)	391,626	380,018	334,452	325,567	317,357
Derivative exposures						
6	Replacement cost associated with all derivative transactions	2,997	2,649	2,300	3,661	3,521
7	Add-on amounts for PFE associated with all derivative transactions	9,644	9,808	8,690	10,148	9,637
8	(Exempted CCP leg of client-cleared trade exposures)	-	-	-	-	-
9	Adjusted effective notional amount of written credit derivatives	1,160	589	296	44	398
10	(Adjusted effective notional offsets and add-on deductions for written credit derivatives)	-	-	-	-	-
11	Total derivative exposures (sum of rows 6 to 10)	13,801	13,046	11,286	13,853	13,556
Securities financing transaction exposures						
12	Gross SFT assets recognized for accounting purposes (with no recognition of netting), after adjusting for sale accounting transactions	12,368	16,827	26,430	26,486	16,823
13	(Netted amounts of cash payables and cash receivables of gross SFT assets)	(1,487)	(1,726)	(2,411)	(2,666)	(2,320)
14	CCR exposure for SFTs	6,930	6,397	6,521	5,669	6,616
15	Agent transaction exposures	-	-	-	-	-
16	Total securities financing transaction exposures (sum of rows 12 to 15)	17,811	21,498	30,540	29,489	21,119
Other off-balance sheet exposures						
17	Off-balance sheet exposure at gross notional amount	111,185	106,552	104,325	100,113	97,530
18	(Adjustments for conversion to credit equivalent amounts)	(76,130)	(72,530)	(69,454)	(67,242)	(66,202)
19	Off-balance sheet items (sum of rows 17 and 18)	35,055	34,022	34,871	32,871	31,328
Capital and Total Exposures						
20	Tier 1 capital⁽²⁾	19,408	19,037	18,478	17,961	16,918
20a	Tier 1 Capital with transitional arrangements for ECL provisioning not applied⁽³⁾				17,906	16,869
21	Total Exposures (sum of rows 5, 11, 16 and 19)	458,293	448,584	411,149	401,780	383,360
Leverage Ratio						
22	Basel III leverage ratio⁽²⁾	4.2%	4.2%	4.5%	4.5%	4.4%
22a	Basel III leverage ratio with transitional arrangements for ECL provisioning not applied⁽³⁾				4.5%	4.4%

(1) Since Q2 2023, the information in this table takes into account the implementation of the Basel III reforms requirements.

(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.

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.

		Q3 2023						Q2 2023							
		a	b	c	d	e	f	g	a	b	c	d	e	f	g
		Gross carrying values ⁽²⁾ of		Allowances for credit losses ⁽⁴⁾	Of which ECL accounting provisions for credit losses on SA exposures		Of which ECL accounting provisions for credit losses on IRB exposures	Net values (a+b-c)	Gross carrying values ⁽²⁾ of		Allowances for credit losses ⁽⁴⁾	Of which ECL accounting provisions for credit losses on SA exposures		Of which ECL accounting provisions for credit losses on IRB exposures	Net values (a+b-c)
		Default exposures ⁽³⁾	Non-default exposures		Allocated in regulatory category of Specific	Allocated in regulatory category of General			Default exposures ⁽³⁾	Non-default exposures		Allocated in regulatory category of Specific	Allocated in regulatory category of General		
1	Loans ⁽⁵⁾	900	224,991	1,129	79	82	968	224,762	806	224,542	1,077	67	80	930	224,271
2	Debt Securities	–	30,099	11	–	2	9	30,088	–	32,016	10	–	3	7	32,006
3	Off-balance-sheet commitments ⁽⁶⁾	16	109,824	157	–	9	148	109,683	14	108,593	148	–	8	140	108,459
4	Total	916	364,914	1,297	79	93	1,125	364,533	820	365,151	1,235	67	91	1,077	364,736

		Q1 2023						Q4 2022							
		a	b	c	d	e	f	g	a	b	c	d	e	f	g
		Gross carrying values ⁽²⁾ of		Allowances for credit losses ⁽⁴⁾	Of which ECL accounting provisions for credit losses on SA exposures		Of which ECL accounting provisions for credit losses on IRB exposures	Net values (a+b-c)	Gross carrying values ⁽²⁾ of		Allowances for credit losses ⁽⁴⁾	Of which ECL accounting provisions for credit losses on SA exposures		Of which ECL accounting provisions for credit losses on IRB exposures	Net values (a+b-c)
		Default exposures ⁽³⁾	Non-default exposures		Allocated in regulatory category of Specific	Allocated in regulatory category of General			Default exposures ⁽³⁾	Non-default exposures		Allocated in regulatory category of Specific	Allocated in regulatory category of General		
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

(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.

		Q3 2023	Q2 2023	Q1 2023	Q4 2022
		a	a	a	a
1	Defaulted loans ⁽¹⁾ and debt securities at beginning	806	785	804	608
2	Loans and debt securities that have defaulted since the last reporting period	332	172	191	318
3	Returned to non-defaulted status since the last reporting period	(40)	(66)	(70)	(29)
4	Amounts written off	(55)	(44)	(40)	(67)
5	Other changes ⁽²⁾	(143)	(41)	(100)	(26)
6	Defaulted loans⁽¹⁾ and debt securities at end	900	806	785	804

(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.

		Q3 2023					Q2 2023				
		a	b	c	d	e	a	b	c	d	e
		Exposures unsecured: carrying amount ⁽¹⁾	Exposures to be secured	Exposures secured by collateral	Exposures secured by financial guarantees	Exposures secured by credit derivatives	Exposures unsecured: carrying amount ⁽¹⁾	Exposures to be secured	Exposures secured by collateral	Exposures secured by financial guarantees	Exposures secured by credit derivatives
1	Loans ⁽²⁾	138,392	87,415	84,329	2,719	–	138,093	87,161	83,882	3,054	–
2	Debt securities	30,099	–	–	–	–	32,016	–	–	–	–
3	Total	168,491	87,415	84,329	2,719	–	170,109	87,161	83,882	3,054	–
4	Of which: defaulted	629	126	92	28	–	618	117	89	25	–

		Q1 2023					Q4 2022				
		a	b	c	d	e	a	b	c	d	e
		Exposures unsecured: carrying amount ⁽¹⁾	Exposures to be secured	Exposures secured by collateral	Exposures secured by financial guarantees	Exposures secured by credit derivatives	Exposures unsecured: carrying amount ⁽¹⁾	Exposures to be secured	Exposures secured by collateral	Exposures secured by financial guarantees	Exposures secured by credit derivatives
1	Loans ⁽²⁾	138,547	82,768	74,749	7,755	–	124,973	82,533	74,648	7,677	–
2	Debt securities	32,435	–	–	–	–	30,981	–	–	–	–
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	–

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

(2) Including deposits with financial institutions.

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

(millions of Canadian dollars)

	2023																	
	Q3						Q2						Q1					
	EAD - Gross Exposure ⁽¹⁾																	
	Drawn	Undrawn commitments	Other	Repo-style transactions	Derivatives financial instruments	Total	Drawn	Undrawn commitments	Other	Repo-style transactions	Derivatives financial instruments	Total	Drawn	Undrawn commitments	Other	Repo-style transactions	Derivatives financial instruments	Total
Non-Retail Portfolio																		
Agriculture	7,729	660	8	-	-	8,397	7,456	644	10	-	-	8,110	7,391	612	5	-	-	8,008
Oil & Gas	1,772	1,298	76	-	-	3,146	1,610	1,440	88	-	-	3,138	1,446	2,310	67	-	-	3,823
Mining	1,083	1,412	268	-	354	3,117	1,086	1,386	279	-	371	3,122	1,054	1,938	348	-	351	3,691
Utilities	11,578	5,401	2,590	-	-	19,569	11,377	5,586	2,396	-	-	19,359	10,913	6,698	2,275	-	-	19,886
<i>Utilities excluding Pipelines</i>	8,118	3,994	2,463	-	-	14,575	8,163	4,184	2,261	-	-	14,608	7,987	4,589	2,105	-	-	14,681
<i>Pipelines</i>	3,460	1,407	127	-	-	4,994	3,214	1,402	135	-	-	4,751	2,926	2,109	170	-	-	5,205
Construction Non-Real Estate ⁽²⁾	2,153	1,139	99	-	-	3,391	2,109	1,125	90	-	-	3,324	2,009	1,246	80	-	-	3,335
Manufacturing	6,728	3,054	334	-	-	10,116	7,027	3,076	333	-	-	10,436	6,796	3,452	322	-	-	10,570
Wholesale	3,038	1,054	51	-	-	4,143	3,278	948	47	-	-	4,273	3,049	1,226	50	-	-	4,325
Retail	3,507	1,143	33	-	-	4,683	3,397	1,157	29	-	-	4,583	3,407	1,298	31	-	-	4,736
Transportation	2,395	1,970	142	758	1	5,266	2,414	1,689	99	922	1	5,125	2,319	1,534	102	608	2	4,565
Communications	2,737	749	388	-	-	3,874	2,452	891	190	-	-	3,533	2,229	1,763	200	-	-	4,192
Financial Services	41,628	4,600	1,252	159,185	757	207,422	45,580	4,541	1,305	155,351	1,011	207,788	42,593	5,377	1,361	164,568	1,009	214,908
Real Estate and Construction																		
Real Estate ⁽³⁾	19,491	5,506	350	-	-	25,347	20,006	5,322	314	-	-	25,642	19,814	5,394	363	-	-	25,571
Professional Services	2,495	863	202	-	-	3,560	2,346	970	198	-	-	3,514	2,225	1,126	248	-	-	3,599
Education & Health Care	3,326	879	18	7	-	4,230	3,394	943	15	6	-	4,358	3,115	1,030	14	2	-	4,161
Other Services	6,479	2,441	882	1,294	51	11,147	6,522	2,461	793	181	29	9,986	6,331	2,483	597	168	28	9,607
Government	31,931	1,293	13	40,426	449	74,112	32,148	1,238	8	36,953	186	70,533	31,719	1,157	8	32,652	136	65,672
Other	13,524	243	915	57	2	14,741	14,736	243	1,052	38	2	16,071	13,369	4	1,086	43	3	14,505
Total – Non-retail⁽⁴⁾	161,594	33,705	7,621	201,727	1,614	406,261	166,938	33,660	7,246	193,451	1,600	402,895	159,779	38,648	7,157	198,041	1,529	405,154

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

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

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

(4) Excluding SME retail exposure.

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

(millions of Canadian dollars)

	2022																	
	Q4						Q3						Q2					
	EAD - Gross Exposure ⁽¹⁾																	
	Drawn	Undrawn commitments	Other	Repo-style transactions	Derivatives financial instruments	Total	Drawn	Undrawn commitments	Other	Repo-style transactions	Derivatives financial instruments	Total	Drawn	Undrawn commitments	Other	Repo-style transactions	Derivatives financial instruments	Total
Non-Retail Portfolio																		
Agriculture	7,330	614	6	-	-	7,950	7,210	572	6	-	-	7,788	6,981	591	5	-	-	7,577
Oil & Gas	1,440	2,116	75	-	-	3,631	1,186	2,286	62	-	-	3,534	1,473	2,196	89	-	-	3,758
Mining	960	2,028	221	-	322	3,531	916	1,391	210	-	263	2,780	591	1,584	211	-	249	2,635
Utilities	10,051	6,111	2,089	-	-	18,251	9,392	6,568	1,821	-	1	17,782	8,800	6,083	1,786	-	-	16,669
<i>Utilities excluding Pipelines</i>	<i>7,568</i>	<i>4,017</i>	<i>1,889</i>	<i>-</i>	<i>-</i>	<i>13,474</i>	<i>7,079</i>	<i>3,671</i>	<i>1,613</i>	<i>-</i>	<i>1</i>	<i>12,364</i>	<i>6,654</i>	<i>3,562</i>	<i>1,610</i>	<i>-</i>	<i>-</i>	<i>11,826</i>
<i>Pipelines</i>	<i>2,483</i>	<i>2,094</i>	<i>200</i>	<i>-</i>	<i>-</i>	<i>4,777</i>	<i>2,313</i>	<i>2,897</i>	<i>208</i>	<i>-</i>	<i>-</i>	<i>5,418</i>	<i>2,146</i>	<i>2,521</i>	<i>176</i>	<i>-</i>	<i>-</i>	<i>4,843</i>
Construction Non-Real Estate ⁽²⁾	2,154	1,200	125	-	-	3,479	2,113	991	122	-	-	3,226	2,051	927	112	-	-	3,090
Manufacturing	7,013	2,453	372	-	-	9,838	6,807	2,384	348	-	-	9,539	6,042	2,383	310	-	-	8,735
Wholesale	3,061	1,181	57	-	-	4,299	3,008	1,038	54	-	-	4,100	2,905	921	56	-	-	3,882
Retail	3,327	1,293	50	-	-	4,670	3,212	1,270	57	-	-	4,539	3,230	1,408	56	-	-	4,694
Transportation	2,214	1,391	100	44	2	3,751	2,294	1,321	91	46	1	3,753	2,187	1,143	98	60	1	3,489
Communications	1,802	1,478	245	-	-	3,525	1,701	1,509	241	-	-	3,451	1,634	1,438	313	-	-	3,385
Financial Services	38,882	5,256	979	142,474	764	188,355	44,564	4,989	1,693	145,717	1,484	198,447	42,921	4,866	1,582	135,635	4,856	189,860
Real Estate and Construction																		
Real Estate ⁽³⁾	19,009	5,021	361	-	-	24,391	19,007	4,905	325	-	-	24,237	18,169	4,332	365	-	-	22,866
Professional Services	2,131	1,021	272	-	-	3,424	1,986	1,029	261	-	-	3,276	1,895	1,045	283	-	-	3,223
Education & Health Care	3,090	1,128	13	3	-	4,234	3,222	980	17	6	-	4,225	3,327	1,321	10	7	-	4,665
Other Services	6,146	2,187	527	34	28	8,922	6,514	2,185	481	49	27	9,256	6,070	2,275	501	47	27	8,920
Government	23,476	1,312	3	39,353	356	64,500	29,551	1,337	3	38,646	302	69,839	24,802	1,402	3	38,466	333	65,006
Other	13,130	8	1,123	48	-	14,309	5,805	15	334	1,494	4	7,652	5,830	19	275	1,369	4	7,497
Total – Non-retail⁽⁴⁾	145,216	35,798	6,618	181,956	1,472	371,060	148,488	34,770	6,126	185,958	2,082	377,424	138,908	33,934	6,055	175,584	5,470	359,951

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

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

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

(4) Excluding SME retail exposure.

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

(millions of Canadian dollars)

	2023									2022			
	Q3									Q2	Q1	Q4	Q3
	Asset Type					Client Type			Total	Total	Total	Total	Total
Drawn	Undrawn commitments	Repo-style transactions ⁽²⁾	Derivatives financial instruments	Other off-balance sheet items ⁽³⁾	Corporate	Sovereign	Financial Institutions						
Europe ⁽⁴⁾	698	157	878	224	171	606	344	1,178	2,128	1,622	2,255	1,812	1,726
United Kingdom	923	118	1,111	1,082	3	567	55	2,615	3,237	2,712	3,153	3,184	3,509
Latin America	248	126	158	92	8	147	219	266	632	515	703	461	311
Asia	2,891	567	5,581	25	40	2,142	6,679	283	9,104	9,415	8,760	7,458	8,080
Other	113	2	169	56	5	198	32	115	345	363	379	257	391
Total⁽⁵⁾	4,873	970	7,897	1,479	227	3,660	7,329	4,457	15,446	14,627	15,250	13,172	14,017

(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⁾⁽²⁾

(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.

	Q3 2023						Q2 2023					
	a	b	c	d	e	f	a	b	c	d	e	f
	Exposures before CCF and CRM		Exposures post-CCF and post-CRM		RWA and RWA density		Exposures before CCF and CRM		Exposures post-CCF and post-CRM		RWA and RWA density	
Assets classes	On-balance sheet amount	Off-balance sheet amount	On-balance sheet amount	Off-balance sheet amount	RWA	RWA density	On-balance sheet amount	Off-balance sheet amount	On-balance sheet amount	Off-balance sheet amount	RWA	RWA density
1 Sovereigns and their central banks	3,096	177	2,902	177	1,360	44%	3,221	180	3,048	180	1,541	48%
2 Public sector entities (PSEs)	88	22	1,460	85	1	0%	117	21	1,509	92	-	0%
3 Multilateral development banks	433	-	828	-	-	0%	382	-	788	-	-	0%
4 Banks	1,422	684	1,661	684	2,119	90%	1,441	682	1,525	682	1,977	90%
Of which: securities firms and other financial institutions treated as banks	-	561	107	561	608	91%	-	-	84	-	44	52%
5 Covered bonds	-	-	-	-	-	0%	-	-	-	-	-	0%
6 Corporates	8,349	300	5,203	300	5,389	98%	9,220	354	5,463	354	5,747	99%
Of which: securities firms and other financial institutions treated as corporates	1,635	23	368	23	333	85%	2,204	28	396	28	354	84%
Of which: specialised lending	-	-	-	-	-	0%	-	-	-	-	-	0%
7 Subordinated debt, equity and other capital	1,218	-	1,218	-	2,937	241%	1,235	-	1,235	-	2,981	241%
8 Retail	2,314	117	1,813	117	1,449	75%	1,987	130	1,457	130	1,191	75%
9 Real estate	14,010	138	13,271	75	6,253	47%	13,942	145	13,273	74	6,361	48%
Of which: RRE	9,113	75	8,755	75	3,391	38%	9,349	74	8,988	74	3,672	41%
Of which: IPRRE	536	-	363	-	218	60%	473	-	342	-	208	61%
Of which: other RRE	-	-	-	-	-	0%	-	-	-	-	-	0%
Of which: general CRE	4,148	-	4,148	-	2,636	64%	3,936	-	3,936	-	2,471	63%
Of which: IPCRE	213	63	5	-	8	160%	184	71	7	-	10	143%
Of which: land acquisition, development and construction	-	-	-	-	-	0%	-	-	-	-	-	0%
10 Reverse mortgages	338	6	178	6	80	44%	367	7	197	7	88	43%
11 Mortgage-backed securities	-	-	-	-	-	0%	-	-	-	-	-	0%
12 Defaulted exposures	184	-	184	-	185	101%	162	-	162	-	164	101%
13 Other assets ⁽³⁾	4,553	-	4,553	-	5,516	121%	4,612	-	4,612	-	5,705	124%
14 Total	36,005	1,444	33,271	1,444	25,289	73%	36,686	1,519	33,269	1,519	25,755	74%

(1) Since Q2 2023, the information in these tables takes into account the implementation of the Basel III reforms requirements.

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

(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.

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

(millions of Canadian dollars)

		Q1 2023						Q4 2022					
		a	b	c	d	e	f	a	b	c	d	e	f
		Exposures before CCF and CRM		Exposures post-CCF and post-CRM		RWA and RWA density		Exposures before CCF and CRM		Exposures post-CCF and post-CRM		RWA and RWA density	
Assets classes		On-balance sheet amount	Off-balance sheet amount	On-balance sheet amount	Off-balance sheet amount	RWA	RWA density	On-balance sheet amount	Off-balance sheet amount	On-balance sheet amount	Off-balance sheet amount	RWA	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%

(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⁾⁽²⁾

(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).

		Q3 2023												
		a	b	c	d	e	f	g	h	i	j	k	l	m
Risk weight		0%	15%	20%	25%	30%	35%	40%	45%	50%	55%	60%	65%	70%
Asset classes														
1	Sovereigns and their central banks	1,719		-						-				
2	Public sector entities (PSEs)	1,544		-						-				
3	Multilateral development banks	828		-						-				
4	Banks					138				259				
	Of which: securities firms and other financial institutions treated as banks					33				74				
5	Covered bonds													
6	Corporates									47				
	Of which: securities firms and other financial institutions treated as corporates									47				
	Of which: specialised lending													
7	Subordinated debt, equity and other capital													
8	Retail													
9	Real estate			4,232	1,049	777	888	80	92	91		3,588		2
	Of which: general residential real estate (RRE)			4,232	1,049	738	829	80		6				2
	Of which: income-producing residential real estate (IPPRE)					39	59		92	85		10		
	Of which: other residential real estate (other RRE)													
	Of which: general commercial real estate (general CRE)											3,578		
	Of which: income-producing commercial real estate (IPCRE)													
	Of which: land acquisition, development and construction													
10	Reverse mortgages					38	85		27			18		
11	Mortgage-backed securities													
12	Defaulted exposures													
13	Other assets ⁽³⁾	1,509		145										
14	Total	5,600	-	4,377	1,049	953	973	80	119	397	-	3,606	-	2

(1) Since Q2 2023, the information in this table takes into account the implementation of the Basel III reforms requirements.

(2) 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.

(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.

CR5 – Standardised Approach – Exposures by Asset Classes and Risk Weights⁽¹⁾⁽²⁾ (continued)

(millions of Canadian dollars)

		Q3 2023													Total credit exposures amount (post-CCF and post-CRM)		
Risk weight		n	o	p	q	r	s	t	u	v	w	x	y	z			
Asset classes		75%	80%	85%	90%	100%	105%	110%	130%	150%	250%	400%	1250%	Others			
1	Sovereigns and their central banks					1,360											3,079
2	Public sector entities (PSEs)					1											1,545
3	Multilateral development banks																828
4	Banks					1,948											2,345
	Of which: securities firms and other financial institutions treated as banks					561											668
5	Covered bonds																
6	Corporates	137		373		4,946											5,503
	Of which: securities firms and other financial institutions treated as corporates	137				207											391
	Of which: specialised lending																
7	Subordinated debt, equity and other capital					70					1,148						1,218
8	Retail	1,930															1,930
9	Real estate	1,438				120	11			83					895		13,346
	Of which: general residential real estate (RRE)	1,030													864		8,830
	Of which: income-producing residential real estate (IPPRE)						11			36					31		363
	Of which: other residential real estate (other RRE)																
	Of which: general commercial real estate (general CRE)	408				120				42							4,148
	Of which: income-producing commercial real estate (IPCRE)									5							5
	Of which: land acquisition, development and construction																
10	Reverse mortgages					16											184
11	Mortgage-backed securities																
12	Defaulted exposures					181				3							184
13	Other assets ⁽³⁾					2,899											4,553
14	Total	3,505		373		11,541	11			86	1,148			895			34,715

		Q3 2023			
Risk weight		a	b	c	d
		On-balance sheet exposure	Off-balance sheet exposure (pre-CCF)	Weighted average CCF ⁽⁴⁾	Exposure (post-CCF and post-CRM)
1	Less than 40%	10,742	294	26%	12,952
2	40-70%	4,122	34	83%	5,099
3	75-80%	3,831	117	40%	3,505
4	85%	373		0%	373
5	90-100%	14,386	936	56%	11,541
6	105-130%	11		0%	11
7	150%	442	63	40%	86
8	250%	1,147		0%	1,148
9	400%			0%	
10	1250%			0%	
11	Total exposures	35,054	1,444	38%	34,715

(1) Since Q2 2023, the information in this table takes into account the implementation of the Basel III reforms requirements.

(2) 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.

(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.

(4) Weighting is based on off-balance sheet exposure (pre-CCF).

CR5 – Standardised Approach – Exposures by Asset Classes and Risk Weights⁽¹⁾⁽²⁾ (continued)

(millions of Canadian dollars)

		Q2 2023												
		a	b	c	d	e	f	g	h	i	j	k	l	m
Risk weight		0%	15%	20%	25%	30%	35%	40%	45%	50%	55%	60%	65%	70%
Asset classes		0%	15%	20%	25%	30%	35%	40%	45%	50%	55%	60%	65%	70%
1	Sovereigns and their central banks	1,687		-						-				
2	Public sector entities (PSEs)	1,601		-						-				
3	Multilateral development banks	788		-						-				
4	Banks			2		93		-		316				
	Of which: securities firms and other financial institutions treated as banks			-		15		-		51				
5	Covered bonds			-		-		-		-				
6	Corporates			-						57			-	
	Of which: securities firms and other financial institutions treated as corporates			-						58			-	
	Of which: specialised lending			-						-				
7	Subordinated debt, equity and other capital													
8	Retail		-											
9	Real estate			4,092	1,081	858	869	84	126	84	-	3,394	-	374
	Of which: general residential real estate (RRE)			4,092	1,081	829	833	84		7				374
	Of which: income-producing residential real estate (IPPRE)					29	36		126	77		11		
	Of which: other residential real estate (other RRE)					-	-		-			-		
	Of which: general commercial real estate (general CRE)			-								3,383	-	
	Of which: income-producing commercial real estate (IPCRES)													-
	Of which: land acquisition, development and construction													
10	Reverse mortgages					45	94		29			19		
11	Mortgage-backed securities			-	-	-	-	-	-	-		-	-	-
12	Defaulted exposures													
13	Other assets ⁽³⁾	1,405		266										
14	Total	5,481	-	4,360	1,081	996	963	84	155	457	-	3,413	-	374

(1) Since Q2 2023, the information in this table takes into account the implementation of the Basel III reforms requirements.

(2) 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.

(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.

CR5 – Standardised Approach – Exposures by Asset Classes and Risk Weights⁽¹⁾⁽²⁾ (continued)

(millions of Canadian dollars)

		Q2 2023													Total credit exposures amount (post-CCF and post-CRM)	
Risk weight		n	o	p	q	r	s	t	u	v	w	x	y	z		
Asset classes		75%	80%	85%	90%	100%	105%	110%	130%	150%	250%	400%	1250%	Others		
1	Sovereigns and their central banks					1,541										
2	Public sector entities (PSEs)															
3	Multilateral development banks															
4	Banks					1,778								18		
	Of which: securities firms and other financial institutions treated as banks													18		
5	Covered bonds															
6	Corporates	166				5,594										
	Of which: securities firms and other financial institutions treated as corporates	166				200										
	Of which: specialised lending															
7	Subordinated debt, equity and other capital					70						1,165				
8	Retail	1,587														
9	Real estate	1,361				107										
	Of which: general residential real estate (RRE)	904														
	Of which: income-producing residential real estate (IPPRE)	11														
	Of which: other residential real estate (other RRE)															
	Of which: general commercial real estate (general CRE)	446				107										
	Of which: income-producing commercial real estate (IPCRE)															
	Of which: land acquisition, development and construction															
10	Reverse mortgages					17										
11	Mortgage-backed securities															
12	Defaulted exposures					157										
13	Other assets ⁽³⁾					2,941										
14	Total	3,114				12,205					46	1,165			894	34,788

		Q2 2023			
Risk weight		a	b	c	d
		On-balance sheet exposure	Off-balance sheet exposure (pre-CCF)	Weighted average CCF ⁽⁴⁾	Exposure (post-CCF and post-CRM)
1	Less than 40%	10,648	294	23%	12,881
2	40-70%	4,406	34	81%	4,483
3	75-80%	4,240	130	40%	4,008
4	85%			0%	
5	90-100%	15,664	990	15%	12,205
6	105-130%			0%	
7	150%	321	71	40%	46
8	250%	1,165		0%	1,165
9	400%			0%	
10	1250%			0%	
11	Total exposures	36,444	1,519	19%	34,788

(1) Since Q2 2023, the information in this table takes into account the implementation of the Basel III reforms requirements.

(2) 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.

(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.

(4) Weighting is based on off-balance sheet exposure (pre-CCF).

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

(millions of Canadian dollars)

		Q1 2023										Q4 2022									
		a	b	c	d	e	f	g	h	i	j	a	b	c	d	e	f	g	h	i	j
Risk weight		0%	10%	20%	35%	50%	75%	100%	150%	Others	Total credit exposures amount ⁽²⁾	0%	10%	20%	35%	50%	75%	100%	150%	Others	Total credit exposures amount ⁽²⁾
Asset classes		0%	10%	20%	35%	50%	75%	100%	150%	Others	Total credit exposures amount ⁽²⁾	0%	10%	20%	35%	50%	75%	100%	150%	Others	Total credit exposures amount ⁽²⁾
1	Sovereigns and their central banks	1,291	-	-	-	-	-	1,646	-	-	2,937	1,133	-	-	-	-	-	1,425	-	-	2,558
2	Non-central government public sector entities	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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	1,600	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

(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.

Q3 2023													
AIRB Approach	PD scale ⁽¹⁾	a	b	c	d	e	f	g	h	i	j	k	l
		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	RWA density (RWA %) ⁽⁸⁾	EL ⁽⁹⁾	Allowances for credit losses
Residential Mortgages and HELOCs – insured	0.00 to < 0.15	922	–	0%	922	0.08%	46,436	8.4%		26	2.9%	–	
	0.15 to < 0.25	238	–	0%	238	0.20%	10,815	4.3%		11	4.4%	–	
	0.25 to < 0.50	329	–	0%	329	0.35%	16,250	3.5%		19	5.7%	–	
	0.50 to < 0.75	165	–	0%	165	0.62%	5,605	3.4%		13	7.7%	–	
	0.75 to < 2.50	532	–	0%	532	1.32%	7,599	4.3%		52	10.0%	–	
	2.50 to < 10.00	180	–	0%	180	4.29%	2,791	3.6%		21	11.7%	–	
	10.00 to < 100.00	29	–	0%	29	15.14%	689	2.7%		4	13.9%	–	
	100.00 (Default)	15	–	0%	15	100.00%	193	3.3%		4	24.1%	3	
Sub-total	2,410	–	0%	2,410	1.54%	90,378	5.6%		150	6.2%	3	7	
Residential Mortgages and HELOCs – uninsured	0.00 to < 0.15	40,988	20,338	35%	48,109	0.07%	241,543	21.2%		1,837	3.8%	7	
	0.15 to < 0.25	7,369	1,382	39%	7,912	0.19%	29,323	26.8%		850	10.7%	4	
	0.25 to < 0.50	7,428	1,581	73%	8,578	0.34%	26,886	24.4%		1,240	14.5%	7	
	0.50 to < 0.75	2,155	176	57%	2,255	0.61%	8,788	26.0%		531	23.5%	4	
	0.75 to < 2.50	4,211	207	61%	4,337	1.17%	15,812	25.7%		1,510	34.8%	14	
	2.50 to < 10.00	1,001	44	66%	1,030	4.62%	4,752	23.0%		737	71.6%	11	
	10.00 to < 100.00	211	1	170%	213	17.49%	1,090	22.7%		255	119.5%	8	
	100.00 (Default)	78	2	93%	80	100.00%	562	20.2%		134	167.4%	6	
Sub-total	63,441	23,731	38%	72,514	0.42%	328,756	22.6%		7,094	9.8%	61	59	
Qualifying revolving retail	0.00 to < 0.15	951	9,099	97%	9,743	0.08%	930,211	82.8%		388	4.0%	6	
	0.15 to < 0.25	260	954	134%	1,543	0.20%	214,669	89.0%		149	9.7%	3	
	0.25 to < 0.50	361	604	128%	1,130	0.35%	139,211	85.9%		159	14.1%	3	
	0.50 to < 0.75	227	262	118%	536	0.62%	63,044	82.8%		118	22.0%	3	
	0.75 to < 2.50	684	348	147%	1,194	1.43%	182,316	86.7%		518	43.4%	15	
	2.50 to < 10.00	487	150	183%	761	4.37%	210,020	88.9%		733	96.3%	30	
	10.00 to < 100.00	92	21	122%	118	19.90%	35,308	88.8%		260	220.9%	21	
	100.00 (Default)	21	–	9%	21	100.00%	4,338	70.8%		27	124.2%	14	
Sub-total	3,083	11,438	105%	15,046	0.75%	1,779,117	84.3%		2,352	15.6%	95	238	
Other retail	0.00 to < 0.15	1,257	2,432	62%	2,771	0.09%	80,086	48.8%		306	11.0%	1	
	0.15 to < 0.25	704	377	62%	940	0.20%	38,589	52.3%		205	21.8%	1	
	0.25 to < 0.50	1,686	317	61%	1,881	0.37%	91,981	58.0%		653	34.7%	4	
	0.50 to < 0.75	1,715	496	86%	2,143	0.63%	80,882	57.8%		1,040	48.5%	8	
	0.75 to < 2.50	4,702	278	79%	4,922	1.43%	258,766	57.8%		3,242	65.9%	42	
	2.50 to < 10.00	2,532	86	68%	2,590	4.32%	69,922	29.7%		1,105	42.7%	31	
	10.00 to < 100.00	198	16	51%	206	25.47%	8,856	49.0%		225	109.3%	24	
	100.00 (Default)	109	3	35%	110	100.00%	9,283	52.0%		131	118.6%	57	
Sub-total	12,903	4,005	66%	15,563	2.37%	638,365	51.1%		6,907	44.4%	168	179	

(1) Prescribed PD bands based on *Pillar 3 Disclosure Guideline for D-SIBs* effective since February 1, 2023.

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

(9) The expected losses (EL) as calculated according to paragraphs 182 - 185 of the Basel framework.

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

(millions of Canadian dollars)

Q3 2023													
AIRB Approach	PD scale ⁽¹⁾	a	b	c	d	e	f	g	h	i	j	k	l
		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	RWA density (RWA %) ⁽⁸⁾	EL ⁽⁹⁾	Allowances for credit losses
Corporate	0.00 to < 0.15	2,389	2,550	98%	4,175	0.09%	1,266	35.7%	2.16	664	15.9%	2	
	0.15 to < 0.25	10,167	7,557	83%	16,009	0.19%	2,905	36.6%	2.07	3,947	24.7%	11	
	0.25 to < 0.50	10,708	4,591	88%	14,513	0.35%	2,368	34.2%	2.36	4,931	34.0%	17	
	0.50 to < 0.75	11,526	5,321	90%	16,228	0.53%	2,815	36.2%	2.29	7,275	44.8%	31	
	0.75 to < 2.50	21,714	7,298	89%	27,434	1.16%	6,114	35.2%	2.02	16,097	58.3%	110	
	2.50 to < 10.00	4,035	884	89%	4,808	4.45%	1,188	36.7%	1.51	4,464	92.8%	81	
	10.00 to < 100.00	152	31	77%	181	15.80%	63	46.4%	1.07	338	187.0%	14	
	100.00 (Default)	454	27	95%	474	100.00%	160	40.8%	1.29	412	87.0%	178	
	Sub-total	61,145	28,259	88%	83,822	1.44%	16,879	35.7%	2.11	38,128	45.3%	444	534
Sovereign	0.00 to < 0.15	62,242	6,758	95%	68,353	0.03%	585	11.9%	1.95	1,731	2.5%	2	
	0.15 to < 0.25	–	–	0%	–	0.25%	1	14.5%	1.00	–	11.1%	–	
	0.25 to < 0.50	–	–	0%	–	0.00%	–	0.0%	–	–	0.0%	–	
	0.50 to < 0.75	–	–	0%	–	0.00%	–	0.0%	–	–	0.0%	–	
	0.75 to < 2.50	–	–	0%	–	0.00%	–	0.0%	–	–	0.0%	–	
	2.50 to < 10.00	83	4	0%	87	7.63%	3	49.4%	1.00	149	172.0%	3	
	10.00 to < 100.00	–	–	0%	–	0.00%	–	0.0%	–	–	0.0%	–	
	100.00 (Default)	–	–	0%	–	0.00%	–	0.0%	–	–	0.0%	–	
	Sub-total	62,325	6,762	95%	68,440	0.04%	589	12.0%	1.95	1,880	2.8%	5	5

(1) Prescribed PD bands based on *Pillar 3 Disclosure Guideline for D-SIBs* effective since February 1, 2023.

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

(9) The expected losses (EL) as calculated according to paragraphs 182 - 185 of the Basel framework.

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

(millions of Canadian dollars)

Q3 2023													
FIRB Approach	PD scale ⁽¹⁾	a	b	c	d	e	f	g	h	i	j	k	l
		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	RWA density (RWA %) ⁽⁸⁾	EL ⁽⁹⁾	Allowances for credit losses
Corporate	0.00 to < 0.15	1,591	5,257	89%	3,984	0.10%	50	40.3%	2.73	947	23.8%	1	
	0.15 to < 0.25	4,845	9,764	89%	9,432	0.18%	124	39.0%	2.61	2,872	30.4%	5	
	0.25 to < 0.50	2,011	3,092	89%	3,351	0.35%	54	36.9%	3.07	1,418	42.3%	3	
	0.50 to < 0.75	1,237	1,372	97%	1,800	0.53%	33	35.5%	2.91	863	48.0%	3	
	0.75 to < 2.50	4,144	2,678	70%	5,247	1.07%	82	33.5%	2.32	2,886	57.0%	12	
	2.50 to < 10.00	244	146	45%	406	3.75%	7	30.7%	1.28	321	79.0%	4	
	10.00 to < 100.00	–	–	0%	–	0.00%	–	0.0%	–	–	0.0%	–	
	100.00 (Default)	–	–	0%	–	0.00%	–	0.0%	–	–	0.0%	–	
Sub-total	14,072	22,309	87%	24,220	0.47%	350	37.3%	2.63	9,307	38.9%	28	90	
Financial institutions	0.00 to < 0.15	4,619	2,234	41%	6,279	0.06%	74	44.9%	1.54	1,282	20.4%	1	
	0.15 to < 0.25	207	590	98%	438	0.19%	30	44.2%	2.60	240	54.8%	–	
	0.25 to < 0.50	37	54	60%	67	0.35%	10	45.0%	1.09	38	56.0%	–	
	0.50 to < 0.75	304	3	98%	304	0.53%	10	45.0%	1.00	214	70.3%	–	
	0.75 to < 2.50	340	40	100%	354	1.89%	7	45.0%	1.00	335	94.7%	–	
	2.50 to < 10.00	–	–	0%	–	9.12%	1	45.0%	1.00	–	198.0%	–	
	10.00 to < 100.00	–	–	0%	–	0.00%	–	0.0%	–	–	0.0%	–	
	100.00 (Default)	–	–	0%	–	0.00%	–	0.0%	–	–	0.0%	–	
Sub-total	5,507	2,921	53%	7,442	0.18%	132	44.8%	1.55	2,109	28.3%	1	13	
Total (all portfolio)	224,886	99,425	79%	289,457	0.74%	2,854,566	27.4%	2.10	67,927	28.0%	805	1,125	

(1) Prescribed PD bands based on *Pillar 3 Disclosure Guideline for D-SIBs* effective since February 1, 2023.

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

(9) The expected losses (EL) as calculated according to paragraphs 182 - 185 of the Basel framework.

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

(millions of Canadian dollars)

Q2 2023													
AIRB Approach	PD scale ⁽¹⁾	a	b	c	d	e	f	g	h	i	j	k	l
		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	RWA density (RWA %) ⁽⁸⁾	EL ⁽⁹⁾	Allowances for credit losses
Residential Mortgages and HELOCs – insured	0.00 to < 0.15	790	–	0%	790	0.07%	47,706	8.9%		22	3.0%	1	
	0.15 to < 0.25	167	–	0%	167	0.20%	11,067	4.3%		7	4.3%	–	
	0.25 to < 0.50	208	–	0%	208	0.35%	17,056	3.6%		10	5.3%	–	
	0.50 to < 0.75	88	–	0%	88	0.62%	5,833	3.4%		6	7.2%	–	
	0.75 to < 2.50	244	–	0%	244	1.32%	6,900	4.8%		23	10.1%	–	
	2.50 to < 10.00	127	–	0%	127	4.53%	2,600	3.3%		14	11.8%	–	
	10.00 to < 100.00	26	–	0%	26	15.64%	703	2.7%		4	16.2%	–	
	100.00 (Default)	13	–	0%	13	100.00%	174	2.9%		3	22.5%	–	
Sub-total		1,663	–	0%	1,663	1.70%	92,039	6.3%		89	5.7%	1	4
Residential Mortgages and HELOCs – uninsured	0.00 to < 0.15	40,682	19,975	35%	47,724	0.07%	241,135	22.0%		1,887	4.2%	7	
	0.15 to < 0.25	7,077	1,380	38%	7,596	0.19%	28,588	28.3%		861	12.0%	4	
	0.25 to < 0.50	7,223	1,495	72%	8,298	0.34%	26,463	25.1%		1,238	15.8%	7	
	0.50 to < 0.75	2,068	184	57%	2,173	0.61%	8,760	27.3%		534	26.1%	4	
	0.75 to < 2.50	4,082	215	60%	4,212	1.17%	15,651	26.6%		1,521	38.3%	13	
	2.50 to < 10.00	1,019	45	68%	1,049	4.56%	4,860	24.3%		784	79.2%	12	
	10.00 to < 100.00	208	1	189%	210	17.50%	1,119	22.9%		254	128.2%	8	
	100.00 (Default)	77	2	78%	78	100.00%	518	19.8%		135	181.9%	5	
Sub-total		62,436	23,297	38%	71,340	0.42%	327,094	23.5%		7,214	10.7%	60	57
Qualifying revolving retail	0.00 to < 0.15	810	7,782	112%	9,542	0.08%	939,589	82.6%		381	4.2%	6	
	0.15 to < 0.25	226	665	190%	1,485	0.20%	212,523	88.9%		143	10.2%	3	
	0.25 to < 0.50	301	398	170%	978	0.35%	126,312	85.1%		138	14.9%	3	
	0.50 to < 0.75	195	201	148%	492	0.62%	61,984	81.8%		107	23.1%	3	
	0.75 to < 2.50	530	240	207%	1,027	1.41%	179,795	85.3%		435	44.9%	13	
	2.50 to < 10.00	359	98	276%	631	4.34%	206,492	87.5%		594	99.9%	23	
	10.00 to < 100.00	67	13	200%	92	19.38%	35,424	87.1%		197	227.3%	16	
	100.00 (Default)	20	–	0%	20	100.00%	4,027	72.2%		31	167.2%	13	
Sub-total		2,508	9,397	125%	14,267	0.68%	1,766,146	83.8%		2,026	15.1%	80	224
Other retail	0.00 to < 0.15	1,316	2,377	63%	2,806	0.09%	79,459	47.7%		303	11.5%	1	
	0.15 to < 0.25	720	373	61%	946	0.20%	38,400	51.9%		204	22.9%	1	
	0.25 to < 0.50	1,640	323	60%	1,833	0.36%	88,989	56.8%		621	35.9%	4	
	0.50 to < 0.75	1,583	479	86%	1,994	0.63%	76,809	57.4%		962	51.1%	7	
	0.75 to < 2.50	4,447	280	82%	4,675	1.43%	250,979	56.8%		3,034	68.8%	39	
	2.50 to < 10.00	2,681	88	66%	2,739	4.35%	69,930	28.1%		1,104	42.7%	31	
	10.00 to < 100.00	205	18	50%	214	25.05%	9,060	47.9%		227	112.3%	24	
	100.00 (Default)	104	4	32%	105	100.00%	8,459	52.8%		102	102.7%	59	
Sub-total		12,696	3,942	66%	15,312	2.41%	622,085	49.6%		6,557	45.4%	166	177

(1) Prescribed PD bands based on *Pillar 3 Disclosure Guideline for D-SIBs* effective since February 1, 2023.

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

(9) The expected losses (EL) as calculated according to paragraphs 182 - 185 of the Basel framework.

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

(millions of Canadian dollars)

Q2 2023													
AIRB Approach	PD scale ⁽¹⁾	a	b	c	d	e	f	g	h	i	j	k	l
		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	RWA density (RWA %) ⁽⁸⁾	EL ⁽⁹⁾	Allowances for credit losses
Corporate	0.00 to < 0.15	3,110	2,863	98%	5,147	0.09%	1,250	36.8%	2.32	847	16.5%	2	
	0.15 to < 0.25	10,936	7,542	86%	16,753	0.19%	2,970	36.5%	2.15	4,127	24.6%	12	
	0.25 to < 0.50	10,852	5,160	91%	15,062	0.35%	2,434	34.2%	2.41	5,164	34.3%	18	
	0.50 to < 0.75	11,575	4,816	92%	15,811	0.53%	2,859	35.7%	2.17	6,792	43.0%	30	
	0.75 to < 2.50	21,011	6,616	89%	26,177	1.15%	6,001	35.1%	2.11	15,328	58.0%	103	
	2.50 to < 10.00	3,952	896	78%	4,795	4.42%	1,038	34.4%	1.79	4,219	88.0%	75	
	10.00 to < 100.00	174	28	76%	205	16.40%	49	47.6%	1.24	413	201.0%	17	
	100.00 (Default)	500	30	96%	483	100.00%	152	39.8%	1.39	491	102.0%	156	
	Sub-total	62,110	27,951	89%	84,433	1.42%	16,753	35.5%	2.17	37,381	44.1%	413	554
Sovereign	0.00 to < 0.15	65,512	6,728	95%	71,575	0.03%	588	9.4%	1.97	1,495	2.1%	2	
	0.15 to < 0.25	–	–	0%	–	0.00%	–	0.0%	–	–	0.0%	–	
	0.25 to < 0.50	8	–	0%	8	0.44%	1	25.0%	1.07	2	27.5%	–	
	0.50 to < 0.75	–	–	0%	–	0.00%	–	0.0%	–	–	0.0%	–	
	0.75 to < 2.50	–	–	0%	–	0.00%	–	0.0%	–	–	0.0%	–	
	2.50 to < 10.00	70	4	6%	74	7.63%	3	26.9%	1.00	69	93.8%	1	
	10.00 to < 100.00	–	–	0%	–	0.00%	–	0.0%	–	–	0.0%	–	
	100.00 (Default)	–	–	0%	–	0.00%	–	0.0%	–	–	0.0%	–	
	Sub-total	65,590	6,732	95%	71,657	0.03%	592	9.4%	1.97	1,566	2.2%	3	2

(1) Prescribed PD bands based on *Pillar 3 Disclosure Guideline for D-SIBs* effective since February 1, 2023.

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

(9) The expected losses (EL) as calculated according to paragraphs 182 - 185 of the Basel framework.

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

(millions of Canadian dollars)

Q2 2023													
FIRB Approach	PD scale ⁽¹⁾	a	b	c	d	e	f	g	h	i	j	k	l
		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	RWA density (RWA %) ⁽⁸⁾	EL ⁽⁹⁾	Allowances for credit losses
Corporate	0.00 to < 0.15	1,848	5,485	90%	4,369	0.10%	49	40.3%	2.71	995	22.8%	1	
	0.15 to < 0.25	3,556	9,351	90%	7,881	0.18%	115	39.7%	2.71	2,617	33.2%	5	
	0.25 to < 0.50	2,518	2,880	86%	3,948	0.34%	53	38.3%	3.07	1,624	41.1%	4	
	0.50 to < 0.75	1,193	1,328	90%	1,796	0.53%	33	40.3%	2.68	986	54.9%	3	
	0.75 to < 2.50	4,154	2,424	73%	5,059	1.01%	77	37.3%	2.42	3,099	63.7%	12	
	2.50 to < 10.00	246	213	64%	405	3.43%	6	38.3%	1.53	408	101.0%	5	
	10.00 to < 100.00	–	–	0%	–	0.00%	–	0.0%	–	–	0.0%	–	
	100.00 (Default)	–	–	0%	–	0.00%	–	0.0%	–	–	0.0%	–	
	Sub-total	13,515	21,681	87%	23,458	0.45%	333	39.1%	2.69	9,729	42.0%	30	48
Financial institutions	0.00 to < 0.15	3,338	2,389	38%	5,071	0.06%	72	44.8%	1.89	1,047	20.7%	1	
	0.15 to < 0.25	185	376	95%	334	0.19%	29	43.1%	2.63	163	48.9%	–	
	0.25 to < 0.50	3	133	84%	65	0.35%	8	45.0%	1.04	36	56.3%	–	
	0.50 to < 0.75	315	3	55%	317	0.53%	10	45.0%	1.00	223	70.3%	–	
	0.75 to < 2.50	1,005	46	100%	1,362	1.95%	13	45.0%	1.48	1,550	114.0%	9	
	2.50 to < 10.00	–	–	0%	–	9.12%	1	45.0%	1.00	–	198.0%	–	
	10.00 to < 100.00	–	–	0%	–	0.00%	–	0.0%	–	–	0.0%	–	
	100.00 (Default)	–	–	0%	–	0.00%	–	0.0%	–	–	0.0%	–	
	Sub-total	4,846	2,947	48%	7,149	0.45%	133	44.8%	1.80	3,019	42.2%	10	11
Total (all portfolio)	225,364	95,947	78%	289,279	0.73%	2,825,175	26.3%	2.14	67,581	27.7%	763	1,077	

(1) Prescribed PD bands based on *Pillar 3 Disclosure Guideline for D-SIBs* effective since February 1, 2023.

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

(9) The expected losses (EL) as calculated according to paragraphs 182 - 185 of the Basel framework.

CR8 – RWA Flow Statements of Credit Risk⁽¹⁾

(millions of Canadian dollars)

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

		Q3 2023			Q2 2023		
		a			a		
		Non-counterparty credit risk	Of which: determined under an IRB approach	Counterparty credit risk ⁽²⁾	Non-counterparty credit risk	Of which: determined under an IRB approach	Counterparty credit risk ⁽²⁾
1	RWA at beginning	95,176	67,708	6,810	94,261	70,594	6,559
2	Book size ⁽³⁾	119	201	459	959	1,531	(387)
3	Book quality ⁽⁴⁾	465	465	2	609	567	342
4	Model updates ⁽⁵⁾	–	–	–	116	104	–
5	Methodology and policy ⁽⁶⁾	–	–	–	(1,288)	(5,344)	237
6	Acquisitions and disposals	–	–	–	–	–	–
7	Foreign exchange movements	(853)	(366)	(91)	519	256	59
8	Other ⁽⁷⁾	–	–	–	–	–	–
9	RWA at end	94,907	68,008	7,180	95,176	67,708	6,810

		Q1 2023			Q4 2022		
		a			a		
		Non-counterparty credit risk	Of which: determined under an IRB approach	Counterparty credit risk ⁽²⁾	Non-counterparty credit risk	Of which: determined under an IRB approach	Counterparty credit risk ⁽²⁾
1	RWA at beginning	87,654	65,857	8,487	83,049	63,260	8,180
2	Book size ⁽³⁾	5,492	3,260	(1,053)	2,377	1,222	28
3	Book quality ⁽⁴⁾	1,525	1,525	(828)	257	257	(164)
4	Model updates ⁽⁵⁾	159	159	13	162	162	138
5	Methodology and policy ⁽⁶⁾	93	93	13	235	235	104
6	Acquisitions and disposals	–	–	–	–	–	–
7	Foreign exchange movements	(662)	(300)	(73)	1,574	721	201
8	Other ⁽⁷⁾	–	–	–	–	–	–
9	RWA at end	94,261	70,594	6,559	87,654	65,857	8,487

(1) Since Q2 2023, the information in this table takes into account the implementation of the Basel III reforms requirements.

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

(3) 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.

(4) 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.

(5) 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.

(6) 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.

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

IRB Credit Risk Exposure - Backtesting⁽¹⁾

(millions of Canadian dollars)

	2023											
	Q3						Q2					
	PD average estimated (%)	PD actual (%)	IRB - LGD average estimated (%) ⁽²⁾	IRB - LGD actual (%) ⁽³⁾	EAD estimated (%) ⁽⁴⁾	EAD actual (%) ⁽⁴⁾	PD average estimated (%)	PD actual (%)	IRB - LGD average estimated (%) ⁽²⁾	IRB - LGD actual (%) ⁽³⁾	EAD estimated (%) ⁽⁴⁾	EAD actual (%) ⁽⁴⁾
Retail Portfolio⁽⁵⁾												
Insured residential mortgages ⁽⁶⁾	0.58%	0.28%	2.78%	n.a.	n.a.	n.a.	0.58%	0.26%	2.84%	n.a.	n.a.	n.a.
Uninsured residential mortgages incl. HELOCs ⁽⁷⁾	0.26%	0.21%	20.54%	2.27%	93.17%	88.62%	0.25%	0.19%	20.42%	2.62%	92.84%	89.14%
Qualifying revolving retail	1.00%	0.99%	84.65%	74.18%	107.74%	101.92%	1.01%	0.91%	93.21%	87.31%	107.36%	101.55%
Other retail	1.50%	0.99%	38.02%	24.71%	85.02%	80.58%	1.52%	1.03%	23.76%	9.19%	85.71%	84.86%
Non-Retail Portfolio⁽⁸⁾												
Corporate	0.91%	0.26%	28.62%	12.50%	83.69%	68.05%	0.94%	0.27%	26.84%	10.82%	84.45%	70.03%
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⁾	0.71%	0.00%	45.00%	n.a.	100.00%	n.a.	0.71%	0.00%	39.00%	n.a.	100.00%	n.a.

	2023						2022					
	Q1			Q4			Q1			Q4		
	PD average estimated (%)	PD actual (%)	LGD average estimated (%) ⁽²⁾	LGD actual (%) ⁽³⁾	EAD estimated (%) ⁽⁴⁾	EAD actual (%) ⁽⁴⁾	PD average estimated (%)	PD actual (%)	LGD average estimated (%) ⁽²⁾	LGD actual (%) ⁽³⁾	EAD estimated (%) ⁽⁴⁾	EAD 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.

(1) Estimated PD and actual default rates are consistent with what is presented in table CR9 (presented annually). Actual and estimated PD, LGD and EAD parameters are reported on a one-month lag. For example, for Q3 2023, estimated percentages are as of June 30, 2022 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.

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.

		Q3 2023						Q2 2023					
		a	b	c	d	e	f	a	b	c	d	e	f
		Replacement cost	Potential future exposure	EEPE ⁽²⁾	Alpha used for computing regulatory EAD	EAD post-CRM	RWA	Replacement cost	Potential future exposure	EEPE ⁽²⁾	Alpha used for computing regulatory EAD	EAD post-CRM	RWA
1	SA-CCR (for derivatives)	2,070	7,202		1.4	12,981	3,151	1,822	7,221		1.4	12,661	3,654
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					13,529	2,030					12,853	1,550
6	Total						5,181						5,204

		Q1 2023						Q4 2022					
		a	b	c	d	e	f	a	b	c	d	e	f
		Replacement cost	Potential future exposure	EEPE ⁽²⁾	Alpha used for computing regulatory EAD	EAD post-CRM	RWA	Replacement cost	Potential future exposure	EEPE ⁽²⁾	Alpha used for computing regulatory EAD	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

(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).

		Q3 2023		Q2 2023		Q1 2023		Q4 2022		Q3 2022	
		a	b	a	b	a	b	a	b	a	b
		EAD post-CRM	RWA	EAD post-CRM	RWA	EAD post-CRM	RWA	EAD post-CRM	RWA	EAD post-CRM	RWA
	Total portfolios subject to the Advanced CVA capital charge										
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	8,943	1,770	8,710	1,386	7,524	1,038	9,838	2,677	9,105	2,230
4	Total subject to the CVA capital charge	8,943	1,770	8,710	1,386	7,524	1,038	9,838	2,677	9,105	2,230

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).

Risk weight	Q3 2023														Q2 2023													
	a	b	c	d	e	f	g	h	i	j	k	l	m	n	a	b	c	d	e	f	g	h	i	j	k	l	m	n
Regulatory portfolio	0%	10%	20%	30%	40%	50%	75%	80%	85%	100%	130%	150%	Others	Total credit exposure	0%	10%	20%	30%	40%	50%	75%	80%	85%	100%	130%	150%	Others	Total credit exposure
Sovereigns	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Public sector entities (PSEs)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Multilateral development banks	127	-	-	-	-	-	-	-	-	-	-	-	-	127	137	-	-	-	-	-	-	-	-	-	-	-	-	137
Banks	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Securities firms and other financial institutions treated as Banks	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Corporates	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Of which: specialised lending	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Securities firms and other financial institutions treated as Corporate	-	-	-	-	-	-	-	-	-	845	-	-	-	845	-	-	-	-	-	-	-	-	-	617	-	-	-	617
Regulatory retail portfolios	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Other assets ⁽¹⁾	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Total	127	-	-	-	-	-	-	-	-	845	-	-	-	972	137	-	-	-	-	-	-	-	-	617	-	-	-	754

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

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

(millions of Canadian dollars)

Regulatory portfolio	Q1 2023									Q4 2022								
	a	b	c	d	e	f	g	h	i	a	b	c	d	e	f	g	h	i
Risk weight	0%	10%	20%	50%	75%	100%	150%	Others	Total credit exposure	0%	10%	20%	50%	75%	100%	150%	Others	Total credit exposure
Sovereigns	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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⁾	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	108	-	-	-	-	667	-	-	775	141	-	-	-	-	694	-	-	835

(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.

Q3 2023								
AIRB Approach	PD scale ⁽¹⁾	a	b	c	d	e	f	g
		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	14	0.09%	38	36.0%	3.33	3	21.4%
	0.15 to < 0.25	281	0.21%	227	39.9%	2.65	102	36.3%
	0.25 to < 0.50	157	0.34%	199	34.8%	2.14	63	40.1%
	0.50 to < 0.75	163	0.53%	183	34.6%	2.02	79	48.5%
	0.75 to < 2.50	1,815	0.85%	987	45.7%	1.86	769	42.4%
	2.50 to < 10.00	23	3.78%	87	51.4%	1.22	29	126.1%
	10.00 to < 100.00	–	21.60%	8	62.5%	1.00	1	0.0%
	100.00 (Default)	2	100.00%	2	36.1%	1.09	1	50.0%
Sub-total	2,455	0.82%	1,731	43.6%	1.98	1,047	42.6%	
Sovereign	0.00 to < 0.15	9,635	0.03%	119	13.2%	1.22	189	2.0%
	0.15 to < 0.25	180	0.25%	3	13.4%	0.21	14	7.8%
	0.25 to < 0.50	–	0.44%	1	13.8%	1.00	–	0.0%
	0.50 to < 0.75	–	0.00%	–	0.0%	–	–	0.0%
	0.75 to < 2.50	–	0.00%	–	0.0%	–	–	0.0%
	2.50 to < 10.00	–	0.00%	–	0.0%	–	–	0.0%
	10.00 to < 100.00	–	0.00%	–	0.0%	–	–	0.0%
	100.00 (Default)	–	0.00%	–	0.0%	–	–	0.0%
Sub-total	9,815	0.04%	123	13.2%	1.20	203	2.1%	

(1) Prescribed PD bands based on *Pillar 3 Disclosure Guideline for D-SIBs* effective since February 1, 2023.

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

(3) Represents the number of individual borrowers.

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

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

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

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

(millions of Canadian dollars)

Q3 2023								
FIRB Approach	PD scale ⁽¹⁾	a	b	c	d	e	f	g
		EAD post-CRM	Average PD ⁽²⁾	Number of obligors ⁽³⁾	Average LGD ⁽⁴⁾	Average maturity ⁽⁵⁾	RWA	RWA density ⁽⁶⁾
Corporate	0.00 to < 0.15	2,280	0.07%	481	42.6%	0.70	347	15.2%
	0.15 to < 0.25	2,050	0.18%	255	39.4%	1.49	610	29.8%
	0.25 to < 0.50	336	0.34%	65	34.9%	1.14	123	36.6%
	0.50 to < 0.75	179	0.53%	51	33.3%	2.16	93	52.0%
	0.75 to < 2.50	761	1.17%	47	27.1%	1.33	384	50.5%
	2.50 to < 10.00	10	3.22%	5	37.8%	3.34	15	150.0%
	10.00 to < 100.00	–	0.00%	–	0.0%	–	–	0.0%
	100.00 (Default)	–	0.00%	–	0.0%	–	–	0.0%
Sub-total	5,616	0.30%	904	38.6%	1.15	1,572	28.0%	
Financial institutions	0.00 to < 0.15	7,472	0.07%	94	45.0%	0.84	1,298	17.4%
	0.15 to < 0.25	383	0.18%	38	44.9%	0.48	130	33.9%
	0.25 to < 0.50	24	0.34%	13	45.0%	0.65	12	50.0%
	0.50 to < 0.75	76	0.53%	16	45.0%	0.58	46	60.5%
	0.75 to < 2.50	77	1.17%	22	45.0%	0.04	57	74.0%
	2.50 to < 10.00	3	3.05%	2	45.0%	–	4	133.3%
	10.00 to < 100.00	–	0.00%	–	0.0%	–	–	0.0%
	100.00 (Default)	–	0.00%	–	0.0%	–	–	0.0%
Sub-total	8,035	0.09%	185	45.0%	0.81	1,547	19.3%	
Total (sum of portfolios)		25,921	0.18%	2,943	31.4%	1.14	4,369	16.9%

(1) Prescribed PD bands based on *Pillar 3 Disclosure Guideline for D-SIBs* effective since February 1, 2023

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

(3) Represents the number of individual borrowers.

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

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

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

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

(millions of Canadian dollars)

		Q2 2023							
AIRB Approach	PD scale ⁽¹⁾	a	b	c	d	e	f	g	
		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	117	0.10%	54	40.2%	1.65	19	16.2%	
	0.15 to < 0.25	314	0.22%	243	44.1%	2.08	118	37.6%	
	0.25 to < 0.50	276	0.34%	194	46.3%	2.56	164	59.4%	
	0.50 to < 0.75	177	0.53%	179	44.4%	2.63	118	66.7%	
	0.75 to < 2.50	1,358	0.86%	965	47.1%	2.66	538	39.6%	
	2.50 to < 10.00	63	3.63%	91	49.9%	1.08	77	122.2%	
	10.00 to < 100.00	1	21.20%	8	60.7%	1.00	2	200.0%	
	100.00 (Default)	4	100.00%	3	36.5%	1.14	2	50.0%	
Sub-total	2,310	0.88%	1,737	46.1%	2.47	1,038	44.9%		
Sovereign	0.00 to < 0.15	8,554	0.03%	123	13.1%	0.82	144	1.7%	
	0.15 to < 0.25	129	0.25%	1	13.4%	0.01	10	7.8%	
	0.25 to < 0.50	-	0.00%	-	0.0%	-	-	0.0%	
	0.50 to < 0.75	-	0.00%	-	0.0%	-	-	0.0%	
	0.75 to < 2.50	-	0.00%	-	0.0%	-	-	0.0%	
	2.50 to < 10.00	-	0.00%	-	0.0%	-	-	0.0%	
	10.00 to < 100.00	-	0.00%	-	0.0%	-	-	0.0%	
	100.00 (Default)	-	0.00%	-	0.0%	-	-	0.0%	
Sub-total	8,683	0.03%	124	13.2%	0.81	154	1.8%		

(1) Prescribed PD bands based on *Pillar 3 Disclosure Guideline for D-SIBs* effective since February 1, 2023.

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

(3) Represents the number of individual borrowers.

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

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

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

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

(millions of Canadian dollars)

Q2 2023								
FIRB Approach	PD scale ⁽¹⁾	a	b	c	d	e	f	g
		EAD post-CRM	Average PD ⁽²⁾	Number of obligors ⁽³⁾	Average LGD ⁽⁴⁾	Average maturity ⁽⁵⁾	RWA	RWA density ⁽⁶⁾
Corporate	0.00 to < 0.15	2,708	0.07%	508	42.8%	0.65	399	14.7%
	0.15 to < 0.25	2,041	0.17%	275	41.5%	1.37	590	28.9%
	0.25 to < 0.50	331	0.34%	69	38.5%	1.24	130	39.3%
	0.50 to < 0.75	164	0.53%	42	41.6%	1.71	100	61.0%
	0.75 to < 2.50	866	1.19%	40	30.2%	1.47	491	56.7%
	2.50 to < 10.00	60	3.15%	6	40.3%	1.30	64	106.7%
	10.00 to < 100.00	–	0.00%	–	0.0%	–	–	0.0%
	100.00 (Default)	–	0.00%	–	0.0%	–	–	0.0%
Sub-total	6,170	0.32%	940	40.3%	1.07	1,774	28.8%	
Financial institutions	0.00 to < 0.15	7,204	0.07%	89	45.0%	0.98	1,321	18.3%
	0.15 to < 0.25	584	0.18%	42	44.0%	0.75	207	35.4%
	0.25 to < 0.50	48	0.35%	12	45.0%	0.73	22	45.8%
	0.50 to < 0.75	81	0.53%	15	45.0%	0.57	49	60.5%
	0.75 to < 2.50	47	1.20%	21	45.0%	0.02	34	72.3%
	2.50 to < 10.00	–	3.05%	1	45.0%	–	–	0.0%
	10.00 to < 100.00	–	0.00%	–	0.0%	–	–	0.0%
	100.00 (Default)	–	0.00%	–	0.0%	–	–	0.0%
Sub-total	7,964	0.09%	180	44.9%	0.95	1,633	20.5%	
Total (sum of portfolios)		25,127	0.19%	2,981	32.9%	1.07	4,599	18.3%

(1) Prescribed PD bands based on *Pillar 3 Disclosure Guideline for D-SIBs* effective since February 1, 2023

(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.

	Q3 2023						Q2 2023					
	a	b	c	d	e	f	a	b	c	d	e	f
	Collateral used in derivative transactions				Collateral used in SFTs		Collateral used in derivative transactions				Collateral used in SFTs	
	Fair value of collateral received		Fair value of posted collateral		Fair value of collateral received ⁽¹⁾	Fair value of posted collateral ⁽¹⁾	Fair value of collateral received		Fair value of posted collateral		Fair value of collateral received ⁽¹⁾	Fair value of posted collateral ⁽¹⁾
Segregated	Unsegregated	Segregated	Unsegregated			Segregated	Unsegregated	Segregated	Unsegregated			
Cash	-	12,853	-	3,284	49,895	23,831	-	13,046	-	2,582	45,052	23,813
Securities issued or guaranteed by												
Canadian government	21	186	31	1,360	21,772	28,578	23	172	1,147	781	19,198	24,629
Canadian provincial and municipal governments	278	1,801	5	632	8,956	14,360	277	868	40	420	8,580	14,232
U.S. Treasury, other U.S. agencies and other foreign governments	2,478	106	789	195	43,653	30,595	2,419	50	1,764	7	38,373	34,311
Other debt securities	693	44	706	-	4,352	1,604	426	28	552	-	4,972	2,532
Equity securities	826	-	2,921	-	61,758	96,283	925	-	1,199	-	66,121	86,991
Total	4,296	14,990	4,452	5,471	190,386	195,251	4,070	14,164	4,702	3,790	182,296	186,508

	Q1 2023						Q4 2022					
	a	b	c	d	e	f	a	b	c	d	e	f
	Collateral used in derivative transactions				Collateral used in SFTs		Collateral used in derivative transactions				Collateral used in SFTs	
	Fair value of collateral received		Fair value of posted collateral		Fair value of collateral received ⁽¹⁾	Fair value of posted collateral ⁽¹⁾	Fair value of collateral received		Fair value of posted collateral		Fair value of collateral received ⁽¹⁾	Fair value of posted collateral ⁽¹⁾
Segregated	Unsegregated	Segregated	Unsegregated			Segregated	Unsegregated	Segregated	Unsegregated			
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

(1) Excluding collateral from repurchase agreements guaranteed by bearer deposit notes 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.

	Q3 2023		Q2 2023		Q1 2023		Q4 2022		Q3 2022	
	a	b	a	b	a	b	a	b	a	b
	Protection purchased	Protection sold	Protection purchased	Protection sold	Protection purchased	Protection sold	Protection purchased	Protection sold	Protection purchased	Protection sold
Notionals										
Credit default swaps										
Indices, singles names and other	5,056	3,000	4,000	2,547	3,500	1,958	3,010	1,555	2,464	1,263
Tranches on indices	-	-	-	-	-	-	-	-	-	-
Total return swaps	267	-	126	-	126	-	122	-	125	-
Credit options	-	-	-	-	-	-	-	-	-	-
Other credit derivatives	-	-	-	-	-	-	-	-	-	-
Total notionals	5,323	3,000	4,126	2,547	3,626	1,958	3,132	1,555	2,589	1,263
Fair values										
Positive fair value (asset)	7	28	1	32	1	27	7	16	1	14
Negative fair value (liability)	(51)	(4)	(45)	(4)	(49)	(3)	(24)	(2)	(29)	(2)

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.

	Q3 2023		Q2 2023		Q1 2023		Q4 2022		Q3 2022			
	a	b	a	b	a	b	a	b	a	b		
	EAD (post-CRM)	RWA	EAD (post-CRM)	RWA	EAD (post-CRM)	RWA	EAD (post-CRM)	RWA	EAD (post-CRM)	RWA		
1	Exposures to QCCPs (total)			229		220		211		241		238
2	Exposures for trades at QCCPs (excluding initial margin and default fund contributions); of which:		1,331	26	1,413	28	1,474	29	1,194	24	2,218	45
3	(i) OTC derivatives		112	2	143	3	119	2	94	2	192	4
4	(ii) Exchange-traded derivatives		958	19	859	17	969	19	959	19	1,516	31
5	(iii) Securities financing transactions		261	5	411	8	386	8	141	3	510	10
6	(iv) Netting sets where cross-product netting has been approved		-	-	-	-	-	-	-	-	-	-
7	Segregated initial margin		5,915		5,087		3,368		3,235		4,120	
8	Non-segregated initial margin		458	-	331	-	323	-	274	-	384	-
9	Pre-funded default fund contributions		586	203	581	192	397	182	378	217	419	193
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.

Q3 2023													
		a	b	c	d	e	f	g	h	i	j	k	l
		Bank acts as originator				Bank acts as sponsor				Banks acts as investor ⁽¹⁾			
		Traditional	Of which: simple transparent and comparable (STC)	Synthetic ⁽²⁾	Sub-total	Traditional	Of which: STC	Synthetic ⁽²⁾	Sub-total	Traditional	Of which: STC	Synthetic ⁽²⁾	Sub-total
1	Retail	800	800	–	800	5,059	5,047	–	5,059	1,462	109	–	1,462
	Of which:												
2	Residential mortgages	–	–	–	–	4,340	4,328	–	4,340	8	–	–	8
3	Credit card	800	800	–	800	–	–	–	–	238	107	–	238
4	Other retail exposures	–	–	–	–	719	719	–	719	1,216	2	–	1,216
5	Re-securitization	–	–	–	–	–	–	–	–	–	–	–	–
6	Non-Retail	–	–	–	–	1,335	1,335	–	1,335	548	547	–	548
	Of which:												
7	Loans to corporates	–	–	–	–	–	–	–	–	–	–	–	–
8	Commercial mortgage	–	–	–	–	449	449	–	449	1	–	–	1
9	Lease and receivables	–	–	–	–	874	874	–	874	547	547	–	547
10	Other wholesale	–	–	–	–	12	12	–	12	–	–	–	–
11	Re-securitization	–	–	–	–	–	–	–	–	–	–	–	–

Q2 2023													
		a	b	c	d	e	f	g	h	i	j	k	l
		Bank acts as originator				Bank acts as sponsor				Banks acts as investor ⁽¹⁾			
		Traditional	Of which: simple transparent and comparable (STC)	Synthetic ⁽²⁾	Sub-total	Traditional	Of which: STC	Synthetic ⁽²⁾	Sub-total	Traditional	Of which: STC	Synthetic ⁽²⁾	Sub-total
1	Retail	1,271	1,271	–	1,271	4,377	4,364	–	4,377	2,115	108	–	2,115
	Of which :												
2	Residential mortgages	–	–	–	–	3,662	3,649	–	3,662	341	–	–	341
3	Credit card	1,271	1,271	–	1,271	–	–	–	–	228	103	–	228
4	Other retail exposures	–	–	–	–	715	715	–	715	1,546	5	–	1,546
5	Re-securitization	–	–	–	–	–	–	–	–	–	–	–	–
6	Non-Retail	–	–	–	–	1,019	1,019	–	1,019	585	536	–	585
	Of which :												
7	Loans to corporates	–	–	–	–	–	–	–	–	–	–	–	–
8	Commercial mortgage	–	–	–	–	283	283	–	283	2	–	–	2
9	Lease and receivables	–	–	–	–	727	727	–	727	583	536	–	583
10	Other wholesale	–	–	–	–	9	9	–	9	–	–	–	–
11	Re-securitization	–	–	–	–	–	–	–	–	–	–	–	–

(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)

(millions of Canadian dollars)

		Q1 2023								
		a	c	d	e	g	h	i	k	l
		Bank acts as originator			Bank acts as sponsor			Banks 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	–	–	–	–	–	–	–	–	–
6	Non-Retail	–	–	–	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	–	–	–	–	–	–	–	–	–

		Q4 2022								
		a	c	d	e	g	h	i	k	l
		Bank acts as originator			Bank acts as sponsor			Banks 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	–	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	–	–	–	–	–	–	–	–	–
6	Non-Retail	–	–	–	705	–	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) 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.

		Q3 2023								
		a	c	d	e	g	h	i	k	l
		Bank acts as originator			Bank acts as sponsor			Banks acts as investor ⁽¹⁾		
		Traditional	Synthetic ⁽²⁾	Sub-total	Traditional	Synthetic ⁽²⁾	Sub-total	Traditional	Synthetic ⁽²⁾	Sub-total
1	Retail	-	-	-	12	-	12	29	-	29
	Of which:									
2	Residential mortgages	-	-	-	9	-	9	3	-	3
3	Credit card	-	-	-	-	-	-	26	-	26
4	Other retail exposures	-	-	-	3	-	3	-	-	-
5	Re-securitization	-	-	-	-	-	-	-	-	-
6	Non-Retail	-	-	-	5	-	5	13	-	13
	Of which:									
7	Loans to corporates	-	-	-	-	-	-	-	-	-
8	Commercial mortgage	-	-	-	2	-	2	12	-	12
9	Lease and receivables	-	-	-	3	-	3	1	-	1
10	Other wholesale	-	-	-	-	-	-	-	-	-
11	Re-securitization	-	-	-	-	-	-	-	-	-

		Q2 2023								
		a	c	d	e	g	h	i	k	l
		Bank acts as originator			Bank acts as sponsor			Banks acts as investor ⁽¹⁾		
		Traditional	Synthetic ⁽²⁾	Sub-total	Traditional	Synthetic ⁽²⁾	Sub-total	Traditional	Synthetic ⁽²⁾	Sub-total
1	Retail	-	-	-	5	-	5	21	-	21
	Of which:									
2	Residential mortgages	-	-	-	4	-	4	2	-	2
3	Credit card	-	-	-	-	-	-	19	-	19
4	Other retail exposures	-	-	-	1	-	1	-	-	-
5	Re-securitization	-	-	-	-	-	-	-	-	-
6	Non-Retail	-	-	-	1	-	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	-	-	-	-	-	-	-	-	-

(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)

(millions of Canadian dollars)

		Q1 2023								
		a	c	d	e	g	h	i	k	l
		Bank acts as originator			Bank acts as sponsor			Banks acts as investor ⁽¹⁾		
		Traditional	Synthetic ⁽²⁾	Sub-total	Traditional	Synthetic ⁽²⁾	Sub-total	Traditional	Synthetic ⁽²⁾	Sub-total
1	Retail	-	-	-	11	-	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	-	-	-	-	-	-	-	-	-
6	Non-Retail	-	-	-	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	c	d	e	g	h	i	k	l
		Bank acts as originator			Bank acts as sponsor			Banks 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	-	-	-	-	-	-	-	-	-
6	Non-Retail	-	-	-	8	-	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.

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.

		Q3 2023																
		a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	p	q
		Exposure values (by RW bands)					Exposure values (by regulatory approach)				RWA (by regulatory approach) ⁽²⁾				Capital charge after cap			
		≤ 20% RW	> 20% to 50% RW	>50% to 100% RW	>100% to 1250% RW	1250% RW	SEC-IRBA	SEC-ERBA /IAA	SEC-SA	1250%	SEC-IRBA	SEC-ERBA /IAA	SEC-SA	1250%	SEC-IRBA	SEC-ERBA /IAA	SEC-SA	1250%
1	Total exposures	7,194	–	–	–	–	800	6,205	189	–	81	622	19	–	7	50	2	–
2	Traditional securitization	7,194	–	–	–	–	800	6,205	189	–	81	622	19	–	7	50	2	–
3	Of which: securitization	7,194	–	–	–	–	800	6,205	189	–	81	622	19	–	7	50	2	–
4	Of which: retail underlying	5,859	–	–	–	–	800	4,870	189	–	81	488	19	–	7	39	2	–
5	Of which: STC	5,847	–	–	–	–	800	4,858	189	–	81	486	19	–	7	39	2	–
6	Of which: wholesale	1,335	–	–	–	–	–	1,335	–	–	–	134	–	–	–	11	–	–
7	Of which: STC	1,335	–	–	–	–	–	1,335	–	–	–	134	–	–	–	11	–	–
8	Of which: re-securitization	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–

		Q2 2023																
		a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	p	q
		Exposure values (by RW bands)					Exposure values (by regulatory approach)				RWA (by regulatory approach) ⁽²⁾				Capital charge after cap			
		≤ 20% RW	> 20% to 50% RW	>50% to 100% RW	>100% to 1250% RW	1250% RW	SEC-IRBA	SEC-ERBA /IAA	SEC-SA	1250%	SEC-IRBA	SEC-ERBA /IAA	SEC-SA	1250%	SEC-IRBA	SEC-ERBA /IAA	SEC-SA	1250%
1	Total exposures	6,667	–	–	–	–	1,271	5,296	100	–	127	530	10	–	10	41	1	–
2	Traditional securitization	6,667	–	–	–	–	1,271	5,296	100	–	127	530	10	–	10	41	1	–
3	Of which: securitization	6,667	–	–	–	–	1,271	5,296	100	–	127	530	10	–	10	41	1	–
4	Of which: retail underlying	5,648	–	–	–	–	1,271	4,277	100	–	127	428	10	–	10	33	1	–
5	Of which: STC	5,635	–	–	–	–	1,271	4,264	100	–	127	425	10	–	10	33	1	–
6	Of which: wholesale	1,019	–	–	–	–	–	1,019	–	–	–	102	–	–	–	8	–	–
7	Of which: STC	1,019	–	–	–	–	–	1,019	–	–	–	102	–	–	–	8	–	–
8	Of which: re-securitization	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–

(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)

(millions of Canadian dollars)

		Q1 2023																
		a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	p	q
		Exposure values (by RW bands)					Exposure values (by regulatory approach)				RWA (by regulatory approach) ⁽²⁾				Capital charge after cap			
		≤ 20% RW	> 20% to 50% RW	>50% to 100% RW	>100% to 1250% RW	1250% RW	IRBA	ERBA/IAA	SA/SSFA	1250%	IRBA	ERBA/IAA	SA/SSFA	1250%	IRBA	ERBA/IAA	SA/SSFA	1250%
1	Total exposures	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	c	d	e	f	g	h	i	j	k	l	m	n	o	p	q
		Exposure values (by RW bands)					Exposure values (by regulatory approach)				RWA (by regulatory approach) ⁽²⁾				Capital charge after cap			
		≤ 20% RW	> 20% to 50% RW	>50% to 100% RW	>100% to 1250% RW	1250% RW	IRBA	ERBA/IAA	SA/SSFA	1250%	IRBA	ERBA/IAA	SA/SSFA	1250%	IRBA	ERBA/IAA	SA/SSFA	1250%
1	Total exposures	5,946	-	-	-	-	1,771	3,925	250	-	177	393	25	-	14	31	2	-
2	Traditional securitization	5,946	-	-	-	-	1,771	3,925	250	-	177	393	25	-	14	31	2	-
3	Of which: securitization	5,946	-	-	-	-	1,771	3,925	250	-	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	-	-
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.

Q3 2023																	
	a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	p	q
	Exposure values (by RW bands)					Exposure values (by regulatory approach)				RWA (by regulatory approach) ⁽²⁾				Capital charge after cap			
	≤ 20% RW	> 20% to 50% RW	>50% to 100% RW	>100% to 1250% RW	1250% RW	SEC-IRBA	SEC-ERBA /IAA	SEC-SA	1250%	SEC-IRBA	SEC-ERBA /IAA	SEC-SA	1250%	SEC-IRBA	SEC-ERBA /IAA	SEC-SA	1250%
1 Total exposures	1,991	19	–	–	–	–	774	1,236	–	–	104	185	–	–	8	14	–
2 Traditional securitization	1,991	19	–	–	–	–	774	1,236	–	–	104	185	–	–	8	14	–
3 Of which: securitization	1,991	19	–	–	–	–	774	1,236	–	–	104	185	–	–	8	14	–
4 Of which: retail underlying	1,443	19	–	–	–	–	386	1,076	–	–	65	156	–	–	5	12	–
5 Of which: STC	109	–	–	–	–	–	2	107	–	–	–	11	–	–	–	1	–
6 Of which: wholesale	548	–	–	–	–	–	388	160	–	–	39	29	–	–	3	2	–
7 Of which: STC	547	–	–	–	–	–	387	160	–	–	39	29	–	–	3	2	–
8 Of which: re-securitization	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–

Q2 2023																	
	a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	p	q
	Exposure values (by RW bands)					Exposure values (by regulatory approach)				RWA (by regulatory approach) ⁽²⁾				Capital charge after cap			
	≤ 20% RW	> 20% to 50% RW	>50% to 100% RW	>100% to 1250% RW	1250% RW	SEC-IRBA	SEC-ERBA /IAA	SEC-SA	1250%	SEC-IRBA	SEC-ERBA /IAA	SEC-SA	1250%	SEC-IRBA	SEC-ERBA /IAA	SEC-SA	1250%
1 Total exposures	2,681	19	–	–	–	–	1,237	1,463	–	–	176	211	–	–	15	17	–
2 Traditional securitization	2,681	19	–	–	–	–	1,237	1,463	–	–	176	211	–	–	15	17	–
3 Of which: securitization	2,681	19	–	–	–	–	1,237	1,463	–	–	176	211	–	–	15	17	–
4 Of which: retail underlying	2,096	19	–	–	–	–	819	1,296	–	–	132	189	–	–	11	15	–
5 Of which: STC	108	–	–	–	–	–	5	103	–	–	–	10	–	–	–	1	–
6 Of which: wholesale	585	–	–	–	–	–	418	167	–	–	44	22	–	–	4	2	–
7 Of which: STC	536	–	–	–	–	–	369	167	–	–	37	22	–	–	3	2	–
8 Of which: re-securitization	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–

(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)

		Q1 2023																
		a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	p	q
		Exposure values (by RW bands)					Exposure values (by regulatory approach)				RWA (by regulatory approach) ⁽²⁾				Capital charge after cap			
		≤ 20% RW	> 20% to 50% RW	>50% to 100% RW	>100% to 1250% RW	1250% RW	SEC-IRBA	SEC-ERBA /IAA	SEC-SA	1250%	SEC-IRBA	SEC-ERBA /IAA	SEC-SA	1250%	SEC-IRBA	SEC-ERBA /IAA	SEC-SA	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	–
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																
		a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	p	q
		Exposure values (by RW bands)					Exposure values (by regulatory approach)				RWA (by regulatory approach) ⁽²⁾				Capital charge after cap			
		≤ 20% RW	> 20% to 50% RW	>50% to 100% RW	>100% to 1250% RW	1250% RW	SEC-IRBA	SEC-ERBA /IAA	SEC-SA	1250%	SEC-IRBA	SEC-ERBA /IAA	SEC-SA	1250%	SEC-IRBA	SEC-ERBA /IAA	SEC-SA	1250%
1	Total exposures	2,779	21	36	–	–	–	861	1,975	–	–	104	309	–	–	9	25	–
2	Traditional securitization	2,779	21	36	–	–	–	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	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–

(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.
Foundation Internal Ratings-Based (FIRB) approach	See risk-weighted assets below.
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. The Bank must use the Foundation Internal Ratings-Based (FIRB) Approach for certain specific exposure types such as large corporates and financial institutions. Under this approach, the bank can use its own estimate of probability of default (PD) but must also rely on OSFI estimates for loss given default (LGD) and exposure at default (EAD) risk parameters. 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 prior to Q2 2023.
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.