



Supplementary Regulatory Capital and Pillar 3 Disclosure

Fourth Quarter 2023

(unaudited)

For information:
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Notes to users

- 1) This *Supplementary Regulatory Capital and Pillar 3 Disclosure* document is unaudited and should be read in conjunction with the *2023 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 *2023 Annual Report*, the *Fourth Quarter 2023 Press Release*, 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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n.a. Not applicable

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

(2) This page is included in the *Report to Shareholders – Third Quarter 2023*.

KM1 – Key Metrics⁽¹⁾

(millions of Canadian dollars)

The following table provides an overview of the Bank's prudential regulatory metrics.

		Q4 2023	Q3 2023	Q2 2023	Q1 2023	Q4 2022
		a	b	c	d	e
Available capital (amounts)						
1	Common Equity Tier 1 (CET1) ⁽²⁾	16,920	16,259	15,892	15,330	14,818
1a	Common Equity Tier 1 with transitional arrangements for ECL provisioning not applied ⁽³⁾					14,763
2	Tier 1 ⁽²⁾	20,068	19,408	19,037	18,478	17,961
2a	Tier 1 with transitional arrangements for ECL provisioning not applied ⁽³⁾					17,906
3	Total capital ⁽²⁾	21,056	20,409	20,110	19,484	19,727
3a	Total capital with transitional arrangements for ECL provisioning not applied ⁽³⁾ (%)					19,727
Risk-weighted assets (amounts)						
4	Total risk-weighted assets (RWA)	125,592	120,562	119,111	121,813	116,840
4a	Total risk-weighted assets (pre-floor)	125,592	120,562	119,111	121,813	116,840
Risk-based capital ratios as a percentage of RWA						
5	CET1 ratio ⁽²⁾ (%)	13.5%	13.5%	13.3%	12.6%	12.7%
5a	Common Equity Tier 1 ratio with transitional arrangements for ECL provisioning not applied ⁽³⁾					12.6%
5b	CET1 ratio (%) (pre-floor ratio)	13.5%	13.5%	13.3%	12.6%	12.7%
6	Tier 1 ratio ⁽²⁾ (%)	16.0%	16.1%	16.0%	15.2%	15.4%
6a	Tier 1 ratio with transitional arrangements for ECL provisioning not applied ⁽³⁾ (%)					15.3%
6b	Tier 1 ratio (%) (pre-floor ratio)	16.0%	16.1%	16.0%	15.2%	15.4%
7	Total capital ratio ⁽²⁾ (%)	16.8%	16.9%	16.9%	16.0%	16.9%
7a	Total capital ratio with transitional arrangements for ECL provisioning not applied ⁽³⁾ (%)					16.9%
7b	Total capital ratio (%) (pre-floor ratio)	16.8%	16.9%	16.9%	16.0%	16.9%
Additional CET1 buffer requirements as a percentage of RWA						
8	Capital conservation buffer requirement (2.5% from 2019) (%)	2.5%	2.5%	2.5%	2.5%	2.5%
9	Countercyclical buffer requirement (%)	0.0%	0.0%	0.0%	0.0%	0.0%
10	Bank G-SIB and/or D-SIB additional requirements (%)	1.0%	1.0%	1.0%	1.0%	1.0%
11	Total of bank CET1 specific buffer requirements (%) (row 8 + row 9 + row 10)	3.5%	3.5%	3.5%	3.5%	3.5%
12	CET1 available after meeting the bank's minimum capital requirements (%)	7.8%	7.8%	7.7%	6.9%	7.7%
Basel III Leverage ratio						
13	Total Basel III leverage ratio exposure measure	456,478	458,293	448,584	411,149	401,780
14	Basel III leverage ratio (row 2 / row 13) ⁽²⁾	4.4%	4.2%	4.2%	4.5%	4.5%
14a	Basel III leverage ratio (row 2a / row 13) with transitional arrangements for ECL provisioning not applied ⁽³⁾					4.5%

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

(2) For Q4 2022, these rows included the transitional measure ceased to apply on November 1, 2022.

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

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
		Q4	Q3	Q2	Q1	Q4
		a				
1	Total loss-absorbing capacity (TLAC) available ⁽²⁾	36,732	36,015	34,886	34,902	32,351
2	Total RWA at the level of the resolution group	125,592	120,562	119,111	121,813	116,840
3	TLAC ratio: TLAC as a percentage of RWA (row 1 / row 2) (%) ⁽²⁾	29.2%	29.9%	29.3%	28.7%	27.7%
4	Leverage ratio exposure measure at the level of the resolution group	456,478	458,293	448,584	411,149	401,780
5	TLAC Leverage Ratio: TLAC as a percentage of leverage ratio exposure measure (row 1 / row 4) (%) ⁽²⁾	8.0%	7.9%	7.8%	8.5%	8.1%
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 Q4 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.

OVI – 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.

	RWA	Q4 2023	Q3 2023	Q2 2023	Q4 2023
		a	b	b	c
			RWA	RWA	RWA
1 Credit risk (excluding counterparty credit risk)	96,383	92,152	92,221	7,710	
2 Of which: standardized approach (SA)	25,680	24,225	24,640	2,054	
3 Of which: foundation internal ratings-based (FIRB) approach	11,492	11,416	12,748	919	
4 Of which: supervisory slotting approach	–	–	–	–	
5 Of which: advanced internal ratings-based (AIRB) approach	59,211	56,511	54,833	4,737	
6 Counterparty credit risk (CCR)	5,568	5,410	5,424	445	
7 Of which: standardized approach for counterparty credit risk	3,412	3,151	3,654	273	
8 Of which: internal model method (IMM)	–	–	–	–	
9 Of which: other CCR	2,156	2,259	1,770	172	
10 Credit valuation adjustment (CVA)	2,181	1,770	1,386	174	
11 Equity investments in funds – look-through approach	725	674	709	58	
12 Equity investments in funds – mandate-based approach	–	–	–	–	
13 Settlement risk	24	6	77	2	
14 Securitization exposures in banking book	1,047	1,011	1,054	83	
15 Of which: securitization IRB approach (SEC-IRBA)	80	81	127	6	
16 Of which: securitization external ratings-based approach (SEC-ERBA), including internal assessment approach (IAA)	780	726	706	62	
17 Of which: securitization standardized approach (SEC-SA)	187	204	221	15	
18 Market risk	5,662	5,985	5,060	453	
19 Of which: standardized approach (SA)	1,204	1,351	1,275	96	
20 Of which: internal model approach (IMA)	4,458	4,634	3,785	357	
21 Capital charge for switch between trading book and banking book	–	–	–	–	
22 Operational risk	12,785	12,490	12,065	1,023	
23 Amounts below the thresholds for deduction (subject to 250% risk weight)	1,217	1,064	1,115	97	
24 Output floor applied	65%	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)	125,592	120,562	119,111	10,045	

(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
		b	b
		RWA ⁽¹⁾	RWA ⁽¹⁾
1	Credit risk (excluding counterparty credit risk)	89,972	83,620
2	Of which: standardized approach (SA)	20,607	18,998
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
6	Counterparty credit risk (CCR)	5,521	5,810
7	Of which: standardized approach for counterparty credit risk	3,639	4,131
8	Of which: internal model method (IMM)	–	–
9	Of which: other CCR	1,671	1,438
9a	Of which: exposures to central counterparties	211	241
10	Credit valuation adjustment (CVA)	1,038	2,677
11	Equity positions under the simple risk weight approach⁽²⁾	872	835
12	Equity investments in funds – look-through approach	230	223
13	Equity investments in funds – mandate-based approach	–	–
14	Equity investments in funds – fall-back approach	–	–
15	Settlement risk	58	43
16	Securitization exposures in banking book	1,033	1,008
16a	Of which: subject to the transitional arrangement	–	–
17	Of which: securitization IRB approach (SEC-IRBA)	127	177
18	Of which: securitization external ratings-based approach (SEC-ERBA), including internal assessment approach (IAA)	660	497
19	Of which: securitization standardized approach (SEC-SA)	246	334
20	Market risk	5,960	6,025
21	Of which: standardized approach (SA)	1,392	1,405
22	Of which: internal model approach (IMA)	4,568	4,620
23	Capital charge for switch between trading book and banking book	–	–
23	Operational risk	15,033	14,674
25	Amounts below the thresholds for deduction (subject to 250% risk weight)	2,096	1,925
26	Floor adjustment	–	–
27	Total (1+6+10+11+12+13+14+15+16+20+23+24+25+26)	121,813	116,840

(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.

CMS1 – Comparison of Modelled and Standardized RWA at Risk Level

(millions of Canadian dollars)

The following table compares full standardized RWA against modelled RWA that the Bank has supervisory approval to use in accordance with the Basel framework. The disclosure also provides the full standardized RWA amount that is the base of the output floor.

		Q4 2023			
		a	b	c	d
		RWA			
		RWA for modelled approaches that D-SIBs have supervisory approval to use	RWA for portfolios where standardized approaches are used	(a+b) Total Actual RWA (ie RWA which D-Sibs report as current requirements)	RWA calculated using full standardized approach (ie used in the base of the output floor)
1	Credit risk (excluding counterparty credit risk)	70,703	25,680	96,383	152,591
2	Counterparty credit risk	4,301	1,267	5,568	12,375
3	Credit valuation adjustment		2,181	2,181	2,181
4	Securitization exposures in the banking book	80	967	1,047	1,044
5	Market risk	4,458	1,204	5,662	2,871
6	Operational risk		12,785	12,785	12,785
7	Residual RWA		1,966	1,966	1,966
8	Total	79,542	46,050	125,592	185,813

CMS2 – Comparison of Modelled and Standardized RWA for Credit Risk at Asset Level

(millions of Canadian dollars)

The following table compares RWA calculated according to the standardized approach (SA) for credit risk at the asset class level against the corresponding RWA figure calculated using the approaches (including both the standardized and IRB approach for credit risk) that the Bank has supervisory approval to use in accordance with the Basel framework for credit risk.

Q4 2023					
		a	b	c	d
		RWA			
		RWA for modelled approaches that D-SIBs have supervisory approval to use	RWA for portfolios where standardized approaches are used	(a+b) Total Actual RWA (ie RWA which D-Sibs report as current requirements)	RWA calculated using full standardized approach (ie used in the base of the output floor)
1	Sovereign	1,235	1,366	2,601	2,579
	Of which: categorized as MDB/PSE in SA	1,114	1	1,115	1,146
2	Banks and other financial institutions	1,478	2,261	3,739	4,440
3	Covered Bonds	177	–	177	145
4	Equity	–	3,155	3,155	3,155
5	Purchased receivables	–	–	–	–
6	Corporates	45,953	8,656	54,609	85,848
	Of which: FIRB is applied	9,837	–	9,837	22,956
	Of which: AIRB is applied	36,116	–	36,116	54,236
7	Retail	16,986	5,700	22,686	40,929
	Of which: qualifying revolving retail	5,921	–	5,921	2,692
	Of which: other retail	3,792	1,491	5,283	11,968
	Of which: retail residential mortgages	7,273	4,209	11,482	26,269
8	Specialised lending	4,874	–	4,874	10,953
	Of which: income-producing real estate and high volatility commercial real estate	–	–	–	–
9	Others	–	4,542	4,542	4,542
10	Total	70,703	25,680	96,383	152,591

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.

	Q4 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	35,234	35,234	35,234	–	–	685	–
Securities							
At fair value through profit or loss	99,994	105,154	1,302	–	–	103,852	–
At fair value through other comprehensive income	9,242	16,513	16,474	–	39	–	–
At amortized cost	12,582	12,597	9,148	–	3,449	–	–
	121,818	134,264	26,924	–	3,488	103,852	–
Securities purchased under reverse repurchase agreements and securities borrowed	11,260	17,805	–	17,805	–	–	–
Loans and acceptances							
Residential mortgage	86,847	53,183	53,183	–	–	–	–
Personal	46,358	46,358	46,358	–	–	–	–
Credit card	2,603	2,603	1,668	–	800	–	135
Business and government	84,192	84,192	84,129	–	63	13,166	–
Customers' liability under acceptances	220,000	186,336	185,338	–	863	13,166	135
Allowances for credit losses	6,627	6,627	6,627	–	–	–	–
	(1,184)	(1,184)	(89)	–	–	–	(1,095)
	225,443	191,779	191,876	–	863	13,166	(960)
Other							
Derivative financial instruments ⁽³⁾	17,516	20,414	–	20,414	–	16,349	–
Investments in associates and joint ventures	49	163	163	–	–	–	–
Premises and equipment	1,592	1,592	1,592	–	–	–	–
Goodwill	1,521	1,624	–	–	–	–	1,624
Intangible assets	1,256	1,070	–	–	–	–	1,070
Other assets	7,889	8,106	7,872	–	–	–	234
	29,823	32,969	9,627	20,414	–	16,349	2,928
Total assets	423,578	412,051	263,661	38,219	4,351	134,052	1,968
Liabilities							
Deposits	288,173	288,173	–	–	–	18,126	270,047
Other							
Acceptances	6,627	6,627	–	–	–	–	6,627
Obligations related to securities sold short	13,660	13,660	–	–	–	13,660	–
Obligations related to securities sold under repurchase agreements and securities loaned	38,347	50,644	–	50,644	–	–	–
Derivative financial instruments ⁽³⁾	19,888	20,316	–	20,316	–	19,145	–
Liabilities related to transferred receivables	25,034	–	–	–	–	–	–
Other liabilities	7,423	8,205	–	–	–	–	8,205
	110,979	99,452	–	70,960	–	32,805	14,832
Subordinated debt	748	748	–	–	–	–	748
Total liabilities	399,900	388,373	–	70,960	–	50,931	285,627

(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, 2023, 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.

		Q4 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)	410,083	263,661	4,351	38,219	134,052
2	Liabilities carrying value amount under scope of regulatory consolidation (as per template LI1)	102,746	–	–	70,960	50,931
3	Total net amount under regulatory scope of consolidation	307,337	263,661	4,351	(32,741)	83,121
4	<i>Gross-up for repo-style transactions⁽²⁾</i>	101,288	–	–	101,288	–
5	<i>Potential future exposures (PFE)⁽³⁾</i>	11,191	–	–	11,191	–
6	<i>Off-balance sheet amounts⁽⁴⁾</i>	241,916	68,055	5,318	121,912	–
7	<i>Differences due to different netting rules, other than those already included in row 2 including collateral</i>	5,887	–	–	5,887	–
8	VaR amounts for Securities Financing Transactions (SFTs)	7,990	–	–	7,990	–
9	<i>Differences in valuations</i>	–	–	–	–	–
10	<i>Collateral for SFTs</i>	(185,509)	–	–	(185,509)	–
11	Exposure amounts considered for regulatory purposes⁽⁵⁾	490,100	331,716	9,669	30,018	83,121

(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	
		Q4	Q3	Q2	Q1	Q4	
		Reference ⁽²⁾					
Common Equity Tier 1 capital: instruments and reserves							
1	Directly issued qualifying common share capital plus related contributed surplus ⁽³⁾	a + a'	3,362	3,350	3,320	3,291	3,252
2	Retained earnings	b	16,744	16,285	15,943	15,470	15,140
3	Accumulated other comprehensive income and other reserves	c	420	237	207	102	202
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		20,526	19,872	19,470	18,863	18,594
Regulatory adjustments to Common Equity Tier 1 capital							
7	Prudential valuation adjustments		–	–	–	–	–
8	Goodwill (net of related tax liability)	e - w	(1,624)	(1,598)	(1,605)	(1,599)	(1,598)
9	Other intangible other than mortgage-servicing rights (net of related tax liability)	f - x	(1,070)	(1,125)	(1,121)	(1,116)	(1,133)
10	Deferred tax assets excluding those arising from temporary differences (net of related tax liability)	g	(64)	(54)	(46)	(41)	(39)
11	Accumulated other comprehensive income related to cash flow hedges	h	(146)	(188)	(36)	(15)	(31)
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	(462)	(373)	(455)	(466)	(694)
15	Defined benefit pension fund net assets (net of related tax liability)	k - y	(235)	(269)	(309)	(296)	(336)
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		(5)	(6)	(6)	–	55
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		(3,606)	(3,613)	(3,578)	(3,533)	(3,776)
29	Common Equity Tier 1 capital (CET1)⁽⁴⁾		16,920	16,259	15,892	15,330	14,818
29a	CET1 with transitional arrangements for ECL provisioning not applied⁽⁵⁾						14,763
Additional Tier 1 capital: instruments							
30	Directly issued qualifying Additional Tier 1 instruments plus related contributed surplus ⁽³⁾		3,150	3,150	3,150	3,150	3,150
31	Of which: classified as equity under applicable accounting standards	v + z	3,150	3,150	3,150	3,150	3,150
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	3,150

(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 16 and 17.

(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 Q4 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	
		Q4	Q3	Q2	Q1	Q4	
		Reference ⁽²⁾					
Additional Tier 1 capital: regulatory adjustments							
37	Investments in own Additional Tier 1 instruments		(2)	(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)
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		(2)	(1)	(5)	(2)	(7)
44	Additional Tier 1 capital (AT1)		3,148	3,149	3,145	3,148	3,143
45	Tier 1 capital (T1 = CET1 + AT1)⁽³⁾		20,068	19,408	19,037	18,478	17,961
45a	Tier 1 Capital with transitional arrangements for ECL provisioning not applied⁽⁴⁾						17,906
Tier 2 capital: instruments and allowances							
46	Directly issued qualifying Tier 2 instruments plus related contributed surplus ⁽⁵⁾	r	750	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	304	347	434	358
51	Tier 2 capital before regulatory adjustments		1,054	1,054	1,097	1,184	1,858
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)		(66)	(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		(66)	(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		(66)	(53)	(24)	(178)	(92)
58	Tier 2 capital (T2)		988	1,001	1,073	1,006	1,766
59	Total capital (TC = T1 + T2)⁽³⁾		21,056	20,409	20,110	19,484	19,727
59a	Total Capital with transitional arrangements for ECL provisioning not applied⁽⁴⁾						19,727

(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 16 and 17.

(3) For Q4 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
		Q4	Q3	Q2	Q1	Q4
60	Total risk-weighted assets	125,592	120,562	119,111	121,813	116,840
60a	Credit Valuation Adjustment (CVA) Risk-weighted assets (RWA)	2,181	1,770	1,386		
Capital ratios						
61	Common Equity Tier 1 (as a percentage of risk weighted assets) ⁽²⁾	13.5%	13.5%	13.3%	12.6%	12.7%
61a	CET1 Ratio with transitional arrangements for ECL provisioning not applied ⁽³⁾					12.6%
62	Tier 1 (as a percentage of risk weighted assets) ⁽²⁾	16.0%	16.1%	16.0%	15.2%	15.4%
62a	Tier 1 Capital Ratio with transitional arrangements for ECL provisioning not applied ⁽³⁾					15.3%
63	Total capital (as a percentage of risk weighted assets) ⁽²⁾	16.8%	16.9%	16.9%	16.0%	16.9%
63a	Total Capital Ratio with transitional arrangements for ECL provisioning not applied ⁽³⁾					16.9%
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⁾	7.8%	7.8%	7.7%	6.9%	7.7%
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	1,801	1,582	1,588	1,689	1,084
73	Significant investments in the common stock of financials	553	528	471	437	409
74	Mortgage servicing rights (net of related tax liability)	–	–	–	–	–
75	Deferred tax assets arising from temporary differences (net of related tax liabilities)	487	426	446	401	361
Applicable caps on the inclusion of allowances in Tier 2						
76	Allowance eligible for inclusion in Tier 2 in respect of exposures subject to standardized approach (prior to application of cap)	96	94	91	177	152
77	Cap on inclusion of allowances in Tier 2 under standardized approach	395	366	366	237	224
78	Allowance eligible for inclusion in Tier 2 in respect of exposures subject to internal ratings-based approach (IRB) (prior to application of cap)	208	210	256	257	206
79	Cap on inclusion of allowances in Tier 2 under internal ratings-based approach	453	437	436	491	469

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

(2) For Q4 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)

	Q4 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		35,234	35,234
Securities		121,818	134,264
Non-significant investments in capital of other financial institutions reflected in regulatory capital	l	–	–
Other securities		121,818	134,264
Assets purchased under reverse repurchase agreements and securities borrowed		11,260	17,805
Loans			
Residential mortgage		86,847	53,183
Personal		46,358	46,358
Credit card		2,603	2,603
Business and government		84,192	84,192
Customers' liability under acceptances		6,627	6,627
Less: Allowances for credit losses		(1,184)	(1,184)
Allowance reflected in Tier 2 regulatory capital	t	–	(299)
Shortfall of allowances to expected loss	i	–	–
Allowances not reflected in regulatory capital		–	(885)
Other assets			
Derivative financial instruments		17,516	20,414
Other		12,307	12,555
Goodwill	e	1,521	1,624
Intangibles assets	f	1,256	1,256
Deferred tax assets		992	910
Deferred tax assets excluding those arising from temporary differences	g	–	64
Deferred tax assets arising from temporary differences exceeding regulatory thresholds	o	–	–
Deferred tax assets - realize through loss carrybacks		–	359
Deferred tax assets - other temporary differences		–	487
Defined-benefit pension fund net assets	k	–	326
Significant investments in other financial institutions		–	553
Significant investments exceeding regulatory thresholds	m + n	–	–
Significant investments not exceeding regulatory thresholds		–	553
Other		8,538	7,886
Total assets		423,578	412,051

(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, 2023, 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 October 31, 2023, on a legal entity basis, National Bank Life Insurance Company had \$368 million in assets and \$340 million in equity, Natcan Insurance Company SCC had \$68 million in assets and \$51 million in equity.

(2) The references identify balance sheet components which are used in calculation of regulatory capital on pages 13 and 14.

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

(millions of Canadian dollars)

	Q4 2023		
	Cross - Reference to Definition of Capital ⁽²⁾	As in Report to Shareholders	Under scope of regulatory consolidation
Liabilities			
Deposits		288,173	288,173
Derivatives financial instruments		19,888	20,316
Other liabilities		91,091	79,136
Gains and losses due to changes in own credit risk on fair value liabilities	j	–	462
Deferred tax liabilities		386	386
Related to goodwill	w	–	–
Related to intangibles	x	–	186
Related to pensions	y	–	91
Other deferred tax liabilities		–	109
Other		90,705	78,288
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		399,900	388,373
Equity Attributable to Shareholders and holders of other equity instruments		23,676	23,676
Common shares	a	3,294	3,294
Contributed surplus	a'	68	68
Retained earnings	b	16,744	16,744
Accumulated Other Comprehensive Income (loss)	c	420	420
Net gains (losses) on instruments designated as cash flow hedges	h	146	146
Net foreign currency translation adjustments		307	307
Other		(33)	(33)
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		23,678	23,678
Total Liabilities and Equity		423,578	412,051

(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, 2023, 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 October 31, 2023, on a legal entity basis, National Bank Life Insurance Company had \$368 million in assets and \$340 million in equity, Natcan Insurance Company SCC had \$68 million in assets and \$51 million in equity.

(2) The references identify balance sheet components which are used in calculation of regulatory capital on pages 13 and 14.

TLAC1 – TLAC Composition⁽¹⁾

(millions of Canadian dollars)

		2023				2022
		Q4	Q3	Q2	Q1	Q4
Regulatory capital elements of TLAC and adjustments						
1	Common Equity Tier 1 capital (CET1)	16,920	16,259	15,892	15,330	14,818
2	Additional Tier 1 capital (AT1) before TLAC adjustments	3,148	3,149	3,145	3,148	3,143
3	AT1 ineligible as TLAC as issued out of subsidiaries to third parties	-	-	-	-	-
4	Other adjustments	-	-	-	-	-
5	AT1 instruments eligible under the TLAC framework	3,148	3,149	3,145	3,148	3,143
6	Tier 2 capital (T2) before TLAC adjustments	988	1,001	1,073	1,006	1,766
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	988	1,001	1,073	1,006	1,766
11	TLAC arising from regulatory capital	21,056	20,409	20,110	19,484	19,727
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⁾	15,800	15,760	14,847	15,452	12,689
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	15,800	15,760	14,847	15,452	12,689
Non-regulatory capital elements of TLAC: adjustments						
18	TLAC before deductions	36,856	36,169	34,957	34,936	32,416
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	(124)	(154)	(71)	(34)	(65)
21	Other adjustments to TLAC	-	-	-	-	-
22	TLAC available after deductions	36,732	36,015	34,886	34,902	32,351
Risk-weighted assets and leverage exposure measure for TLAC purposes						
23	Total risk-weighted assets adjusted as permitted under the TLAC regime	125,592	120,562	119,111	121,813	116,840
24	Leverage exposure measure	456,478	458,293	448,584	411,149	401,780
TLAC ratios and buffers						
25	TLAC ratio (as a percentage of risk-weighted assets adjusted as permitted under the TLAC regime)	29.2%	29.9%	29.3%	28.7%	27.7%
26	TLAC Leverage ratio (as a percentage of leverage exposure)	8.0%	7.9%	7.8%	8.5%	8.1%
27	CET1 (as a percentage of risk-weighted assets) available after meeting the resolution group's minimum capital and TLAC requirements	7.8%	7.8%	7.7%	6.9%	7.7%
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)

		Q4 2023						Q3 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	19,646	-	26,840	3,294	3,150	750	18,488	-	25,682
3	Subset of row 2 that are excluded liabilities	-	-	-	3,970	-	3,970	-	-	-	2,882	-	2,882
4	Total capital and liabilities less excluded liabilities (row 2 minus row 3)	3,294	3,150	750	15,676	-	22,870	3,294	3,150	750	15,606	-	22,800
5	Subset of row 4 that are potentially eligible as TLAC	3,294	3,150	750	15,676	-	22,870	3,294	3,150	750	15,606	-	22,800
6	Subset of row 5 with 1 year ≤ residual maturity < 2 years	-	-	-	6,559	-	6,559	-	-	-	7,385	-	7,385
7	Subset of row 5 with 2 years ≤ residual maturity < 5 years	-	-	-	6,694	-	6,694	-	-	-	5,881	-	5,881
8	Subset of row 5 with 5 years ≤ residual maturity < 10 years	-	-	750	102	-	852	-	-	750	131	-	881
9	Subset of row 5 residual maturity ≥ 10 years, but excluding perpetual securities	-	-	-	2,321	-	2,321	-	-	-	2,209	-	2,209
10	Subset of row 5 that is perpetual securities	3,294	3,150	-	-	-	6,444	3,294	3,150	-	-	-	6,444

		Q2 2023						Q1 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	3,261	3,150	750	16,662	-	23,823	3,236	3,150	750	17,030	-	24,166
3	Subset of row 2 that are excluded liabilities	-	-	-	1,886	-	1,886	-	-	-	1,612	-	1,612
4	Total capital and liabilities less excluded liabilities (row 2 minus row 3)	3,261	3,150	750	14,776	-	21,937	3,236	3,150	750	15,418	-	22,554
5	Subset of row 4 that are potentially eligible as TLAC	3,261	3,150	750	14,776	-	21,937	3,236	3,150	750	15,418	-	22,554
6	Subset of row 5 with 1 year ≤ residual maturity < 2 years	-	-	-	6,419	-	6,419	-	-	-	5,755	-	5,755
7	Subset of row 5 with 2 years ≤ residual maturity < 5 years	-	-	-	5,930	-	5,930	-	-	-	7,280	-	7,280
8	Subset of row 5 with 5 years ≤ residual maturity < 10 years	-	-	750	158	-	908	-	-	750	155	-	905
9	Subset of row 5 residual maturity ≥ 10 years, but excluding perpetual securities	-	-	-	2,269	-	2,269	-	-	-	2,228	-	2,228
10	Subset of row 5 that is perpetual securities	3,261	3,150	-	-	-	6,411	3,236	3,150	-	-	-	6,386

(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
		Q4	Q3	Q2	Q1	Q4
Accounting assets vs. leverage ratio exposure						
1	Total consolidated assets as per published financial statements	423,578	426,015	417,684	418,342	403,740
2	Adjustment for investments in banking, financial, insurance or commercial entities that are consolidated for accounting purposes but outside the scope of regulatory consolidation	46	62	21	13	5
3	Adjustment for securitized exposures that meet the operational requirements for the recognition of risk transference	(49)	(49)	(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⁾	(2,541)	(561)	(1,011)	(2,774)	(4,693)
6	Adjustment for securities financing transactions (i.e. repos and similar secured lending) ⁽¹⁾	5,496	5,443	4,671	4,110	3,003
7	Adjustment for off-balance sheet items (i.e. conversion to credit equivalent amounts of off-balance sheet exposures)	38,911	35,055	34,022	34,871	32,871
8	Other adjustments ⁽²⁾	(8,963)	(7,672)	(6,725)	(43,335)	(33,068)
9	Leverage Ratio Exposure	456,478	458,293	448,584	411,149	401,780

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

(2) For Q4 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
		Q4	Q3	Q2	Q1	Q4
Leverage ratio common disclosure						
On-balance sheet exposures						
1	On-balance sheet items (excluding derivatives, SFTs and grandfathered securitization exposures but including collateral)	394,799	399,299	386,742	342,846	333,863
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)	(5,817)	(4,430)	(3,595)	(5,323)	(5,151)
4	(Asset amounts deducted in determining Tier 1 capital)	(3,148)	(3,243)	(3,129)	(3,071)	(3,145)
5	Total on-balance sheet exposures (excluding derivatives and SFTs) (sum of rows 1 to 4)	385,834	391,626	380,018	334,452	325,567
Derivative exposures						
6	Replacement cost associated with all derivative transactions	4,665	2,997	2,649	2,300	3,661
7	Add-on amounts for PFE associated with all derivative transactions	10,000	9,644	9,808	8,690	10,148
8	(Exempted CCP leg of client-cleared trade exposures)	–	–	–	–	–
9	Adjusted effective notional amount of written credit derivatives	312	1,160	589	296	44
10	(Adjusted effective notional offsets and add-on deductions for written credit derivatives)	–	–	–	–	–
11	Total derivative exposures (sum of rows 6 to 10)	14,977	13,801	13,046	11,286	13,853
Securities financing transaction exposures						
12	Gross SFT assets recognized for accounting purposes (with no recognition of netting), after adjusting for sale accounting transactions	11,260	12,368	16,827	26,430	26,486
13	(Netted amounts of cash payables and cash receivables of gross SFT assets)	(1,282)	(1,487)	(1,726)	(2,411)	(2,666)
14	CCR exposure for SFTs	6,778	6,930	6,397	6,521	5,669
15	Agent transaction exposures	–	–	–	–	–
16	Total securities financing transaction exposures (sum of rows 12 to 15)	16,756	17,811	21,498	30,540	29,489
Other off-balance sheet exposures						
17	Off-balance sheet exposure at gross notional amount	118,847	111,185	106,552	104,325	100,113
18	(Adjustments for conversion to credit equivalent amounts)	(79,936)	(76,130)	(72,530)	(69,454)	(67,242)
19	Off-balance sheet items (sum of rows 17 and 18)	38,911	35,055	34,022	34,871	32,871
Capital and Total Exposures						
20	Tier 1 capital⁽²⁾	20,068	19,408	19,037	18,478	17,961
20a	Tier 1 Capital with transitional arrangements for ECL provisioning not applied⁽³⁾					17,906
21	Total Exposures (sum of rows 5, 11, 16 and 19)	456,478	458,293	448,584	411,149	401,780
Leverage Ratio						
22	Basel III leverage ratio⁽²⁾	4.4%	4.2%	4.2%	4.5%	4.5%
22a	Basel III leverage ratio with transitional arrangements for ECL provisioning not applied⁽³⁾					4.5%

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

(2) For Q4 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.

		Q4 2023						Q3 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⁾	1,010	225,292	1,194	101	82	1,011	225,108	900	224,991	1,129	79	82	968	224,762
2	Debt Securities	–	30,765	7	–	2	5	30,758	–	30,099	11	–	2	9	30,088
3	Off-balance-sheet commitments ⁽⁶⁾	16	113,100	176	–	12	164	112,940	16	109,824	157	–	9	148	109,683
4	Total	1,026	369,157	1,377	101	96	1,180	368,806	916	364,914	1,297	79	93	1,125	364,533

		Q2 2023						Q1 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⁾	806	224,542	1,077	67	80	930	224,271	785	220,596	1,012	63	67	882	220,369
2	Debt Securities	–	32,016	10	–	3	7	32,006	–	32,435	9	–	2	7	32,426
3	Off-balance-sheet commitments ⁽⁶⁾	14	108,593	148	–	8	140	108,459	18	100,967	161	–	9	152	100,824
4	Total	820	365,151	1,235	67	91	1,077	364,736	803	353,998	1,182	63	78	1,041	353,619

(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.

		Q4 2023	Q3 2023	Q2 2023	Q1 2023
		a	a	a	a
1	Defaulted loans ⁽¹⁾ and debt securities at beginning	900	806	785	804
2	Loans and debt securities that have defaulted since the last reporting period	269	332	172	191
3	Returned to non-defaulted status since the last reporting period	(43)	(40)	(66)	(70)
4	Amounts written off	(60)	(55)	(44)	(40)
5	Other changes ⁽²⁾	(56)	(143)	(41)	(100)
6	Defaulted loans⁽¹⁾ and debt securities at end	1,010	900	806	785

(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.

		Q4 2023					Q3 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⁾	137,284	88,915	85,633	3,108	–	138,392	87,415	84,329	2,719	–
2	Debt securities	30,765	–	–	–	–	30,099	–	–	–	–
3	Total	168,049	88,915	85,633	3,108	–	168,491	87,415	84,329	2,719	–
4	Of which: defaulted	644	143	104	35	–	629	126	92	28	–

		Q2 2023					Q1 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⁾	138,093	87,161	83,882	3,054	–	138,547	82,768	74,749	7,755	–
2	Debt securities	32,016	–	–	–	–	32,435	–	–	–	–
3	Total	170,109	87,161	83,882	3,054	–	170,982	82,768	74,749	7,755	–
4	Of which: defaulted	618	117	89	25	–	599	123	92	28	–

(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																	
	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	7,636	498	5	-	-	8,139	7,729	660	8	-	-	8,397	7,456	644	10	-	-	8,110
Oil & Gas	1,836	1,417	71	-	-	3,324	1,772	1,298	76	-	-	3,146	1,610	1,440	88	-	-	3,138
Mining	1,163	1,542	268	-	385	3,358	1,083	1,412	268	-	354	3,117	1,086	1,386	279	-	371	3,122
Utilities	12,749	5,889	3,036	-	-	21,674	11,578	5,401	2,590	-	-	19,569	11,377	5,586	2,396	-	-	19,359
<i>Utilities excluding Pipelines</i>	<i>9,277</i>	<i>4,734</i>	<i>2,898</i>	<i>-</i>	<i>-</i>	<i>16,909</i>	<i>8,118</i>	<i>3,994</i>	<i>2,463</i>	<i>-</i>	<i>-</i>	<i>14,575</i>	<i>8,163</i>	<i>4,184</i>	<i>2,261</i>	<i>-</i>	<i>-</i>	<i>14,608</i>
<i>Pipelines</i>	<i>3,472</i>	<i>1,155</i>	<i>138</i>	<i>-</i>	<i>-</i>	<i>4,765</i>	<i>3,460</i>	<i>1,407</i>	<i>127</i>	<i>-</i>	<i>-</i>	<i>4,994</i>	<i>3,214</i>	<i>1,402</i>	<i>135</i>	<i>-</i>	<i>-</i>	<i>4,751</i>
Construction Non-Real Estate ⁽²⁾	1,973	1,183	95	-	-	3,251	2,153	1,139	99	-	-	3,391	2,109	1,125	90	-	-	3,324
Manufacturing	6,670	3,409	339	9	-	10,427	6,728	3,054	334	-	-	10,116	7,027	3,076	333	-	-	10,436
Wholesale	3,014	1,025	46	-	-	4,085	3,038	1,054	51	-	-	4,143	3,278	948	47	-	-	4,273
Retail	3,631	1,376	41	-	-	5,048	3,507	1,143	33	-	-	4,683	3,397	1,157	29	-	-	4,583
Transportation	2,641	1,997	157	747	-	5,542	2,395	1,970	142	758	1	5,266	2,414	1,689	99	922	1	5,125
Communications	2,582	845	356	-	-	3,783	2,737	749	388	-	-	3,874	2,452	891	190	-	-	3,533
Financial Services	44,926	4,240	1,888	164,428	2,523	218,005	41,628	4,600	1,252	159,185	757	207,422	45,580	4,541	1,305	155,351	1,011	207,788
Real Estate and Construction																		
Real Estate ⁽³⁾	20,492	5,429	359	-	-	26,280	19,491	5,506	350	-	-	25,347	20,006	5,322	314	-	-	25,642
Professional Services	2,760	913	200	-	-	3,873	2,495	863	202	-	-	3,560	2,346	970	198	-	-	3,514
Education & Health Care	3,434	775	16	2	-	4,227	3,326	879	18	7	-	4,230	3,394	943	15	6	-	4,358
Other Services	6,786	2,092	898	31	14	9,821	6,479	2,441	882	1,294	51	11,147	6,522	2,461	793	181	29	9,986
Government	23,218	1,305	13	33,087	470	58,093	31,931	1,293	13	40,426	449	74,112	32,148	1,238	8	36,953	186	70,533
Other	14,640	834	900	47	6	16,427	13,524	243	915	57	2	14,741	14,736	243	1,052	38	2	16,071
Total – Non-retail⁽⁴⁾	160,151	34,769	8,688	198,351	3,398	405,357	161,594	33,705	7,621	201,727	1,614	406,261	166,938	33,660	7,246	193,451	1,600	402,895

(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)

	2023						2022											
	Q1						Q4						Q3					
	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	7,391	612	5	-	-	8,008	7,330	614	6	-	-	7,950	7,210	572	6	-	-	7,788
Oil & Gas	1,446	2,310	67	-	-	3,823	1,440	2,116	75	-	-	3,631	1,186	2,286	62	-	-	3,534
Mining	1,054	1,938	348	-	351	3,691	960	2,028	221	-	322	3,531	916	1,391	210	-	263	2,780
Utilities	10,913	6,698	2,275	-	-	19,886	10,051	6,111	2,089	-	-	18,251	9,392	6,568	1,821	-	1	17,782
<i>Utilities excluding Pipelines</i>	7,987	4,589	2,105	-	-	14,681	7,568	4,017	1,889	-	-	13,474	7,079	3,671	1,613	-	1	12,364
<i>Pipelines</i>	2,926	2,109	170	-	-	5,205	2,483	2,094	200	-	-	4,777	2,313	2,897	208	-	-	5,418
Construction Non-Real Estate ⁽²⁾	2,009	1,246	80	-	-	3,335	2,154	1,200	125	-	-	3,479	2,113	991	122	-	-	3,226
Manufacturing	6,796	3,452	322	-	-	10,570	7,013	2,453	372	-	-	9,838	6,807	2,384	348	-	-	9,539
Wholesale	3,049	1,226	50	-	-	4,325	3,061	1,181	57	-	-	4,299	3,008	1,038	54	-	-	4,100
Retail	3,407	1,298	31	-	-	4,736	3,327	1,293	50	-	-	4,670	3,212	1,270	57	-	-	4,539
Transportation	2,319	1,534	102	608	2	4,565	2,214	1,391	100	44	2	3,751	2,294	1,321	91	46	1	3,753
Communications	2,229	1,763	200	-	-	4,192	1,802	1,478	245	-	-	3,525	1,701	1,509	241	-	-	3,451
Financial Services	42,593	5,377	1,361	164,568	1,009	214,908	38,882	5,256	979	142,474	764	188,355	44,564	4,989	1,693	145,717	1,484	198,447
Real Estate and Construction																		
Real Estate ⁽³⁾	19,814	5,394	363	-	-	25,571	19,009	5,021	361	-	-	24,391	19,007	4,905	325	-	-	24,237
Professional Services	2,225	1,126	248	-	-	3,599	2,131	1,021	272	-	-	3,424	1,986	1,029	261	-	-	3,276
Education & Health Care	3,115	1,030	14	2	-	4,161	3,090	1,128	13	3	-	4,234	3,222	980	17	6	-	4,225
Other Services	6,331	2,483	597	168	28	9,607	6,146	2,187	527	34	28	8,922	6,514	2,185	481	49	27	9,256
Government	31,719	1,157	8	32,652	136	65,672	23,476	1,312	3	39,353	356	64,500	29,551	1,337	3	38,646	302	69,839
Other	13,369	4	1,086	43	3	14,505	13,130	8	1,123	48	-	14,309	5,805	15	334	1,494	4	7,652
Total – Non-retail⁽⁴⁾	159,779	38,648	7,157	198,041	1,529	405,154	145,216	35,798	6,618	181,956	1,472	371,060	148,488	34,770	6,126	185,958	2,082	377,424

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

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

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

(4) Excluding SME retail exposure.

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

(millions of Canadian dollars)

	2023										2022		
	Q4					Q3					Q2	Q1	Q4
	Asset Type					Client Type							
	Drawn	Undrawn commitments	Repo-style transactions ⁽²⁾	Derivatives financial instruments	Other off-balance sheet items ⁽³⁾	Corporate	Sovereign	Financial Institutions	Total	Total	Total	Total	Total
Europe ⁽⁴⁾	634	288	832	272	181	709	417	1,081	2,207	2,128	1,622	2,255	1,812
United Kingdom	921	134	1,426	1,126	1	612	210	2,786	3,608	3,237	2,712	3,153	3,184
Latin America	259	119	88	37	1	181	139	184	504	632	515	703	461
Asia	3,299	622	4,890	34	44	2,593	5,959	337	8,889	9,104	9,415	8,760	7,458
Other	136	3	131	22	5	159	33	105	297	345	363	379	257
Total⁽⁵⁾	5,249	1,166	7,367	1,491	232	4,254	6,758	4,493	15,505	15,446	14,627	15,250	13,172

(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 – Standardized 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 standardized approach capital requirements' calculations. RWA density provides a synthetic metric on riskiness of each portfolio.

		Q4 2023						Q3 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	On-balance sheet amount	Off-balance sheet amount	RWA	RWA density
1	Sovereigns and their central banks	3,369	177	3,156	177	1,364	41%	3,096	177	2,902	177	1,360	44%				
2	Public sector entities (PSEs)	125	22	1,415	84	1	0%	88	22	1,460	85	1	0%				
3	Multilateral development banks	444	–	860	–	–	0%	433	–	828	–	–	0%				
4	Banks	1,570	681	1,836	681	2,261	90%	1,422	684	1,661	684	2,119	90%				
	Of which: securities firms and other financial institutions treated as banks	–	561	127	561	620	90%	–	561	107	561	608	91%				
5	Covered bonds	–	–	–	–	–	0%	–	–	–	–	–	0%				
6	Corporates	8,740	227	5,447	227	5,549	98%	8,349	300	5,203	300	5,389	98%				
	Of which: securities firms and other financial institutions treated as corporates	1,592	25	283	25	240	78%	1,635	23	368	23	333	85%				
	Of which: specialised lending	–	–	–	–	–	0%	–	–	–	–	–	0%				
7	Subordinated debt, equity and other capital	1,310	–	1,310	–	3,155	241%	1,218	–	1,218	–	2,937	241%				
8	Retail	2,437	37	1,947	37	1,491	75%	2,314	117	1,813	117	1,449	75%				
9	Real estate	15,171	363	14,478	301	7,024	48%	14,010	138	13,271	75	6,253	47%				
	Of which: RRE	9,788	86	9,414	86	3,661	39%	9,113	75	8,755	75	3,391	38%				
	Of which: IPRRE	490	–	415	–	256	62%	536	–	363	–	218	60%				
	Of which: other RRE	–	–	–	–	–	0%	–	–	–	–	–	0%				
	Of which: general CRE	4,640	215	4,640	215	3,093	64%	4,148	–	4,148	–	2,636	64%				
	Of which: IPCRE	253	62	9	–	14	156%	213	63	5	–	8	160%				
	Of which: land acquisition, development and construction	–	–	–	–	–	0%	–	–	–	–	–	0%				
10	Reverse mortgages	333	7	175	7	74	41%	338	6	178	6	80	44%				
11	Mortgage-backed securities	–	–	–	–	–	0%	–	–	–	–	–	0%				
12	Defaulted exposures	214	–	214	–	217	101%	184	–	184	–	185	101%				
13	Other assets ⁽³⁾	4,582	–	4,582	–	5,761	126%	4,553	–	4,553	–	5,516	121%				
14	Total	38,295	1,514	35,420	1,514	26,897	73%	36,005	1,444	33,271	1,444	25,289	73%				

(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 – Standardized Approach – Credit Risk Exposure and Credit Risk Mitigation (CRM) Effects⁽¹⁾⁽²⁾ (continued)

(millions of Canadian dollars)

		Q2 2023					
		a	b	c	d	e	f
		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
1	Sovereigns and their central banks	3,221	180	3,048	180	1,541	48%
2	Public sector entities (PSEs)	117	21	1,509	92	–	0%
3	Multilateral development banks	382	–	788	–	–	0%
4	Banks	1,441	682	1,525	682	1,977	90%
	Of which: securities firms and other financial institutions treated as banks	–	–	84	–	44	52%
5	Covered bonds	–	–	–	–	–	0%
6	Corporates	9,220	354	5,463	354	5,747	99%
	Of which: securities firms and other financial institutions treated as corporates	2,204	28	396	28	354	84%
	Of which: specialised lending	–	–	–	–	–	0%
7	Subordinated debt, equity and other capital	1,235	–	1,235	–	2,981	241%
8	Retail	1,987	130	1,457	130	1,191	75%
9	Real estate	13,942	145	13,273	74	6,361	48%
	Of which: RRE	9,349	74	8,988	74	3,672	41%
	Of which: IPRRE	473	–	342	–	208	61%
	Of which: other RRE	–	–	–	–	–	0%
	Of which: general CRE	3,936	–	3,936	–	2,471	63%
	Of which: IPCRE	184	71	7	–	10	143%
	Of which: land acquisition, development and construction	–	–	–	–	–	0%
10	Reverse mortgages	367	7	197	7	88	43%
11	Mortgage-backed securities	–	–	–	–	–	0%
12	Defaulted exposures	162	–	162	–	164	101%
13	Other assets ⁽³⁾	4,612	–	4,612	–	5,705	124%
14	Total	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 – Standardized 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 – Standardized 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 standardized approach by asset class and risk weight (corresponding to the riskiness attributed to the exposure according to standardized approach).

		Q4 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	1,969		-						-				
2	Public sector entities (PSEs)	1,498												
3	Multilateral development banks	860		-										
4	Banks			-		113		-		354				
	Of which: securities firms and other financial institutions treated as banks			-		27		-		100				
5	Covered bonds			-		-		-		-				
6	Corporates			-						52			-	
	Of which: securities firms and other financial institutions treated as corporates			-						52			-	
	Of which: specialised lending			-						-				
7	Subordinated debt, equity and other capital													
8	Retail		-											
9	Real estate			4,534	1,103	806	925	81	101	99	-	4,245	-	2
	Of which: general residential real estate (RRE)			4,534	1,103	760	865	81		7				2
	Of which: income-producing residential real estate (IPPRE)					46	60		101	92	-	11		
	Of which: other residential real estate (other RRE)					-	-		-		-	-		
	Of which: general commercial real estate (general CRE)			-								4,234	-	
	Of which: income-producing commercial real estate (IPCRE)													-
	Of which: land acquisition, development and construction													
10	Reverse mortgages					45	94		14			18		
11	Mortgage-backed securities			-	-	-	-	-	-	-		-	-	-
12	Defaulted exposures													
13	Other assets ⁽³⁾	1,427		161										
14	Total	5,754	-	4,695	1,103	964	1,019	81	115	505	-	4,263	-	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 – Standardized Approach – Exposures by Asset Classes and Risk Weights⁽¹⁾⁽²⁾ (continued)

(millions of Canadian dollars)

		Q4 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					1,364												3,333
2	Public sector entities (PSEs)					1												1,499
3	Multilateral development banks																	860
4	Banks					2,050												2,517
	Of which: securities firms and other financial institutions treated as banks					561												688
5	Covered bonds																	
6	Corporates	165		382		5,075												5,674
	Of which: securities firms and other financial institutions treated as corporates	165				91												308
	Of which: specialised lending																	
7	Subordinated debt, equity and other capital					82						1,228						1,310
8	Retail	1,984																1,984
9	Real estate	1,527				142	4				128					1,082		14,779
	Of which: general residential real estate (RRE)	1,107														1,041		9,500
	Of which: income-producing residential real estate (IPPRE)	10					4				50					41		415
	Of which: other residential real estate (other RRE)																	
	Of which: general commercial real estate (general CRE)	410				142					69							4,855
	Of which: income-producing commercial real estate (IPCRE)										9							9
	Of which: land acquisition, development and construction																	
10	Reverse mortgages					11												182
11	Mortgage-backed securities																	
12	Defaulted exposures					209					5							214
13	Other assets ⁽³⁾					2,994												4,582
14	Total	3,676		382		11,928	4			133	1,228			1,082			36,934	

		Q4 2023			
Risk weight		a	b	c	d
Risk weight		On-balance sheet exposure	Off-balance sheet exposure (pre-CCF)	Weighted average CCF ⁽⁴⁾	Exposure (post-CCF and post-CRM)
1	Less than 40%	11,431	314	26%	13,535
2	40-70%	4,623	224	50%	4,966
3	75-80%	4,066	37	40%	3,676
4	85%	382		0%	382
5	90-100%	16,100	877	40%	13,010
6	105-130%	4		0%	4
7	150%	437	62	40%	133
8	250%	1,228		0%	1,228
9	400%			0%	
10	1250%			0%	
11	Total exposures	38,271	1,514	35%	36,934

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

(millions of Canadian dollars)

		Q3 2023												
		a	b	c	d	e	f	g	h	i	j	k	l	m
Asset classes		0%	15%	20%	25%	30%	35%	40%	45%	50%	55%	60%	65%	70%
Risk weight														
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 – Standardized 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).

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.

Q4 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	1,055	–	0%	1,055	0.08%	45,725	8.2%		31	3.0%	1	
	0.15 to < 0.25	302	–	0%	302	0.20%	11,252	4.2%		14	4.6%	–	
	0.25 to < 0.50	375	–	0%	375	0.35%	15,383	3.6%		22	5.9%	–	
	0.50 to < 0.75	207	–	0%	207	0.62%	5,467	3.5%		17	8.2%	–	
	0.75 to < 2.50	583	–	0%	583	1.21%	7,127	3.6%		54	9.1%	–	
	2.50 to < 10.00	151	–	0%	151	4.54%	2,493	3.4%		17	11.5%	–	
	10.00 to < 100.00	30	–	0%	30	15.59%	708	2.7%		4	14.0%	–	
	100.00 (Default)	18	–	0%	18	100.00%	207	2.9%		4	23.1%	2	
Sub-total	2,721	–	0%	2,721	1.48%	88,362	5.4%		163	6.0%	3	6	
Residential Mortgages and HELOCs – uninsured	0.00 to < 0.15	41,386	20,229	35%	48,450	0.07%	241,852	21.3%		1,851	3.8%	7	
	0.15 to < 0.25	7,374	1,326	37%	7,867	0.19%	28,939	26.0%		815	10.4%	4	
	0.25 to < 0.50	7,423	1,612	74%	8,612	0.34%	26,816	23.4%		1,197	13.9%	7	
	0.50 to < 0.75	2,070	187	51%	2,165	0.61%	8,653	24.8%		486	22.4%	3	
	0.75 to < 2.50	4,377	205	62%	4,504	1.16%	16,172	25.1%		1,525	33.9%	13	
	2.50 to < 10.00	1,057	39	73%	1,086	4.63%	4,818	22.9%		768	70.7%	11	
	10.00 to < 100.00	248	1	250%	250	17.48%	1,239	22.8%		303	121.2%	10	
	100.00 (Default)	86	2	84%	88	100.00%	531	21.4%		165	187.1%	7	
Sub-total	64,021	23,601	38%	73,022	0.44%	329,020	22.4%		7,110	9.7%	62	66	
Qualifying revolving retail	0.00 to < 0.15	966	11,160	80%	9,843	0.08%	934,569	82.9%		392	4.0%	6	
	0.15 to < 0.25	261	1,367	93%	1,527	0.20%	211,775	89.1%		148	9.7%	3	
	0.25 to < 0.50	363	855	89%	1,121	0.35%	138,586	86.1%		158	14.1%	3	
	0.50 to < 0.75	230	351	88%	540	0.62%	62,095	82.4%		118	21.9%	3	
	0.75 to < 2.50	716	503	100%	1,218	1.44%	181,821	86.8%		534	43.8%	16	
	2.50 to < 10.00	521	264	100%	837	4.32%	227,217	89.4%		802	95.9%	33	
	10.00 to < 100.00	102	33	71%	125	20.23%	36,580	88.6%		276	220.9%	22	
	100.00 (Default)	24	–	0%	24	100.00%	3,913	70.7%		25	103.5%	16	
Sub-total	3,183	14,533	83%	15,235	0.80%	1,796,556	84.4%		2,453	16.1%	102	241	
Other retail	0.00 to < 0.15	1,223	2,462	62%	2,760	0.09%	80,002	49.6%		309	11.2%	1	
	0.15 to < 0.25	715	372	61%	942	0.20%	38,923	52.9%		208	22.1%	1	
	0.25 to < 0.50	1,675	311	62%	1,867	0.37%	90,896	58.0%		648	34.7%	4	
	0.50 to < 0.75	1,638	501	86%	2,070	0.63%	78,322	60.3%		1,050	50.8%	8	
	0.75 to < 2.50	5,391	298	78%	5,624	1.53%	278,004	58.1%		3,818	67.9%	52	
	2.50 to < 10.00	2,666	84	70%	2,724	4.32%	71,849	29.6%		1,160	42.6%	33	
	10.00 to < 100.00	225	18	51%	234	26.14%	9,548	47.3%		247	105.4%	27	
	100.00 (Default)	108	4	44%	109	100.00%	7,348	52.4%		174	159.2%	50	
Sub-total	13,641	4,050	66%	16,330	2.44%	654,892	51.7%		7,614	46.6%	176	170	

(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)

Q4 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	2,227	2,321	98%	3,835	0.08%	1,188	40.2%	2.21	705	18.4%	1	
	0.15 to < 0.25	10,098	7,485	82%	15,886	0.19%	2,672	37.9%	2.10	4,129	26.0%	12	
	0.25 to < 0.50	11,121	4,950	90%	15,221	0.35%	2,282	35.1%	2.28	5,202	34.2%	19	
	0.50 to < 0.75	11,579	5,450	88%	16,442	0.53%	2,681	37.1%	2.29	7,596	46.2%	32	
	0.75 to < 2.50	23,206	7,598	89%	29,015	1.17%	6,462	35.2%	1.94	17,232	59.1%	118	
	2.50 to < 10.00	4,482	987	91%	5,383	4.42%	1,243	36.6%	1.64	5,029	93.4%	90	
	10.00 to < 100.00	215	30	78%	240	16.10%	82	35.8%	1.10	329	137.0%	14	
	100.00 (Default)	426	28	54%	452	100.00%	150	39.3%	1.01	414	91.6%	205	
	Sub-total	63,354	28,849	88%	86,474	1.44%	16,760	36.4%	2.08	40,636	46.9%	491	585
Sovereign	0.00 to < 0.15	57,423	6,627	96%	63,408	0.01%	591	12.0%	2.01	1,137	1.8%	1	
	0.15 to < 0.25	5	–	0%	5	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	73	4	3%	77	7.63%	3	36.5%	1.00	98	127.0%	2	
	10.00 to < 100.00	–	–	0%	–	0.00%	–	0.0%	–	–	0.0%	–	
	100.00 (Default)	–	–	0%	–	0.00%	–	0.0%	–	–	0.0%	–	
	Sub-total	57,501	6,631	96%	63,490	0.02%	595	12.1%	2.01	1,235	2.0%	3	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)

Q4 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	1,250	6,124	75%	4,676	0.09%	64	41.2%	2.44	1,025	21.9%	1	
	0.15 to < 0.25	4,715	11,241	91%	9,876	0.18%	134	38.4%	2.48	3,027	30.6%	5	
	0.25 to < 0.50	2,795	3,030	87%	4,149	0.35%	61	37.0%	2.67	1,698	40.9%	4	
	0.50 to < 0.75	905	1,086	97%	1,358	0.53%	29	35.0%	2.74	660	48.6%	1	
	0.75 to < 2.50	4,586	3,006	74%	5,729	1.04%	86	33.5%	2.24	3,206	57.4%	13	
	2.50 to < 10.00	182	151	41%	357	4.92%	6	23.2%	1.75	241	67.6%	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	14,433	24,638	84%	26,145	0.46%	380	37.2%	2.45	9,857	38.0%	27	95
Financial institutions	0.00 to < 0.15	4,524	2,371	40%	6,297	0.07%	74	44.9%	1.54	1,233	19.6%	1	
	0.15 to < 0.25	252	524	98%	469	0.19%	27	45.0%	2.65	245	52.3%	–	
	0.25 to < 0.50	80	56	58%	113	0.34%	8	45.0%	2.17	64	56.4%	–	
	0.50 to < 0.75	10	3	98%	10	0.53%	10	44.9%	1.00	7	66.5%	–	
	0.75 to < 2.50	73	40	100%	86	1.75%	5	45.0%	1.00	86	99.6%	–	
	2.50 to < 10.00	–	–	0%	–	0.00%	–	0.0%	–	–	0.0%	–	
	10.00 to < 100.00	–	–	0%	–	0.00%	–	0.0%	–	–	0.0%	–	
	100.00 (Default)	–	–	0%	–	0.00%	–	0.0%	–	–	0.0%	–	
	Sub-total	4,939	2,994	51%	6,975	0.10%	124	44.9%	1.62	1,635	23.4%	1	12
Total (all portfolio)		223,793	105,296	76%	290,392	0.76%	2,886,689	28.4%	2.09	70,703	29.1%	865	1,180

(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													
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.

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(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.

CR8 – RWA Flow Statements of Credit Risk⁽¹⁾

(millions of Canadian dollars)

The following tables present a flow statement explaining variations in the credit RWA.

		Q4 2023			Q3 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	94,907	68,008	7,180	95,176	67,708	6,810
2	Book size ⁽³⁾	2,095	935	193	119	201	459
3	Book quality ⁽⁴⁾	1,254	1,254	(209)	465	465	2
4	Model updates ⁽⁵⁾	(107)	(107)	–	–	–	–
5	Methodology and policy ⁽⁶⁾	–	–	–	–	–	–
6	Acquisitions and disposals	–	–	–	–	–	–
7	Foreign exchange movements	1,659	693	173	(853)	(366)	(91)
8	Other ⁽⁷⁾	–	–	–	–	–	–
9	RWA at end	99,808	70,783	7,337	94,907	68,008	7,180

		Q2 2023			Q1 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	94,261	70,594	6,559	87,654	65,857	8,487
2	Book size ⁽³⁾	959	1,531	(387)	5,492	3,260	(1,053)
3	Book quality ⁽⁴⁾	609	567	342	1,525	1,525	(828)
4	Model updates ⁽⁵⁾	116	104	–	159	159	13
5	Methodology and policy ⁽⁶⁾	(1,288)	(5,344)	237	93	93	13
6	Acquisitions and disposals	–	–	–	–	–	–
7	Foreign exchange movements	519	256	59	(662)	(300)	(73)
8	Other ⁽⁷⁾	–	–	–	–	–	–
9	RWA at end	95,176	67,708	6,810	94,261	70,594	6,559

(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.

CR9 – IRB – Backtesting of Probability of Default (PD) per Portfolio

(millions of Canadian dollars)

The following tables provide backtesting data to validate the reliability of PD calculations. In particular, the template compares the PD used in IRB capital calculations with the effective default rates of bank obligors. A minimum five-year average annual default rate is required to compare the PD with a "more stable" default rate, although a bank may use a longer historical period that is consistent with its actual risk management practices.

Q4 2023										
a	b	c		d	e	f		g	h	i
AIRB Approach	PD Range ⁽¹⁾	External rating equivalent		Weighted average PD	Arithmetic average PD by obligors	Number of obligors ⁽²⁾		Defaulted obligors in the year	Of which new defaulted obligors in the year	Average historical annual default rate
		S&P	Moody's			End of previous year	End of the year			
Residential Mortgages – insured	0.00 to < 0.15	AAA to BBB+	Aaa to Baa1	0.08%	0.08%	49,577	45,725	22	–	0.06%
	0.15 to < 0.25	BBB	Baa2	0.20%	0.20%	11,532	11,252	11	–	0.10%
	0.25 to < 0.50	BBB-	Baa3	0.35%	0.35%	17,594	15,383	24	–	0.19%
	0.50 to < 0.75	BB+	Ba1	0.62%	0.62%	6,352	5,467	18	–	0.32%
	0.75 to < 2.50	BB to BB-	Ba2 to Ba3	1.21%	1.26%	7,638	7,127	44	1	0.60%
	2.50 to < 10.00	B+ to B-	B1 to B3	4.54%	4.71%	2,806	2,493	91	5	2.51%
	10.00 to < 100.00	CCC+ to CCC-	Caa1 to Caa3	15.59%	14.91%	744	708	100	1	20.81%
Residential Mortgages and HELOCs – uninsured	0.00 to < 0.15	AAA to BBB+	Aaa to Baa1	0.07%	0.06%	239,882	241,852	77	2	0.04%
	0.15 to < 0.25	BBB	Baa2	0.19%	0.19%	28,227	28,939	29	4	0.12%
	0.25 to < 0.50	BBB-	Baa3	0.34%	0.35%	26,105	26,816	49	4	0.23%
	0.50 to < 0.75	BB+	Ba1	0.61%	0.61%	8,724	8,653	42	5	0.50%
	0.75 to < 2.50	BB to BB-	Ba2 to Ba3	1.16%	1.23%	15,882	16,172	177	3	1.39%
	2.50 to < 10.00	B+ to B-	B1 to B3	4.63%	4.65%	4,536	4,818	229	2	6.48%
	10.00 to < 100.00	CCC+ to CCC-	Caa1 to Caa3	17.48%	17.67%	956	1,239	163	–	20.43%
Qualifying revolving retail	0.00 to < 0.15	AAA to BBB+	Aaa to Baa1	0.08%	0.08%	914,238	934,569	299	–	0.03%
	0.15 to < 0.25	BBB	Baa2	0.20%	0.20%	209,545	211,775	163	–	0.09%
	0.25 to < 0.50	BBB-	Baa3	0.35%	0.35%	122,943	138,586	396	39	0.19%
	0.50 to < 0.75	BB+	Ba1	0.62%	0.62%	64,663	62,095	314	4	0.38%
	0.75 to < 2.50	BB to BB-	Ba2 to Ba3	1.44%	1.49%	210,781	181,821	2,368	173	1.05%
	2.50 to < 10.00	B+ to B-	B1 to B3	4.32%	3.92%	208,081	227,217	5,491	479	3.03%
	10.00 to < 100.00	CCC+ to CCC-	Caa1 to Caa3	20.23%	23.01%	34,391	36,580	9,435	124	26.95%
Other retail	0.00 to < 0.15	AAA to BBB+	Aaa to Baa1	0.09%	0.08%	131,187	80,002	117	1	0.08%
	0.15 to < 0.25	BBB	Baa2	0.20%	0.20%	52,489	38,923	98	–	0.13%
	0.25 to < 0.50	BBB-	Baa3	0.37%	0.37%	75,329	90,896	180	9	0.19%
	0.50 to < 0.75	BB+	Ba1	0.63%	0.62%	60,280	78,322	187	6	0.32%
	0.75 to < 2.50	BB to BB-	Ba2 to Ba3	1.53%	1.46%	194,952	278,004	1,864	358	0.66%
	2.50 to < 10.00	B+ to B-	B1 to B3	4.32%	4.02%	58,426	71,849	2,322	227	2.27%
	10.00 to < 100.00	CCC+ to CCC-	Caa1 to Caa3	26.14%	23.90%	9,212	9,548	1,753	9	16.65%

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

(2) Represents the number of retail accounts.

CR9 – IRB – Backtesting of Probability of Default (PD) per Portfolio (continued)

(millions of Canadian dollars)

Q4 2023										
a	b	c		d	e	f		g	h	i
AIRB Approach	PD Range ⁽¹⁾	External rating equivalent		Weighted average PD	Arithmetic average PD by obligors	Number of obligors ⁽²⁾		Defaulted obligors in the year	Of which new defaulted obligors in the year	Average historical annual default rate
		S&P	Moody's			End of previous year	End of the year			
Corporate	0.00 to < 0.15	AAA to BBB+	Aaa to Baa1	0.08%	0.09%	813	1,188	–	–	0.00%
	0.15 to < 0.25	BBB+ to BBB	Baa1 to Baa2	0.19%	0.19%	3,376	2,672	3	–	0.05%
	0.25 to < 0.50	BBB to BB+	Baa2 to Ba1	0.35%	0.34%	2,520	2,282	2	–	0.04%
	0.50 to < 0.75	BB+	Ba1	0.53%	0.53%	2,675	2,681	2	–	0.14%
	0.75 to < 2.50	BB+ to B+	Ba1 to B1	1.17%	1.13%	6,246	6,462	27	–	0.40%
	2.50 to < 10.00	B+ to B-	B1 to B3	4.42%	4.36%	883	1,243	9	–	1.45%
	10.00 to < 100.00	B- to CCC	B3 to Caa2	16.11%	17.19%	50	82	4	–	10.44%
Sovereign	0.00 to < 0.15	AAA to BBB+	Aaa to Baa1	0.01%	0.05%	604	591	–	–	0.00%
	0.15 to < 0.25	BBB+ to BBB	Baa1 to Baa2	0.25%	0.25%	–	1	–	–	0.00%
	0.25 to < 0.50	BBB to BB+	Baa2 to Ba1	0.00%	0.00%	1	–	–	–	0.00%
	0.50 to < 0.75	BB+	Ba1	0.00%	0.00%	–	–	–	–	0.00%
	0.75 to < 2.50	BB+ to B+	Ba1 to B1	0.00%	0.00%	–	–	–	–	0.00%
	2.50 to < 10.00	B+ to B-	B1 to B3	7.63%	7.63%	2	3	–	–	0.00%
	10.00 to < 100.00	B- to CCC	B3 to Caa2	0.00%	0.00%	–	–	–	–	0.00%

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

(2) Represents the number of individual borrowers.

CR9 – IRB – Backtesting of Probability of Default (PD) per Portfolio (continued)

(millions of Canadian dollars)

Q4 2023										
a	b	c		d	e	f		g	h	i
FIRB Approach	PD Range ⁽¹⁾	External rating equivalent		Weighted average PD	Arithmetic average PD by obligors	Number of obligors ⁽²⁾		Defaulted obligors in the year	Of which new defaulted obligors in the year	Average historical annual default rate
		S&P	Moody's			End of previous year	End of the year			
Corporate	0.00 to < 0.15	AAA to BBB+	Aaa to Baa1	0.09%	0.09%	–	64	–	–	0.00%
	0.15 to < 0.25	BBB+ to BBB	Baa1 to Baa2	0.18%	0.18%	–	134	–	–	0.00%
	0.25 to < 0.50	BBB to BB+	Baa2 to Ba1	0.35%	0.35%	–	61	–	–	0.00%
	0.50 to < 0.75	BB+	Ba1	0.53%	0.53%	–	29	–	–	0.00%
	0.75 to < 2.50	BB+ to B+	Ba1 to B1	1.04%	1.09%	–	86	–	–	0.00%
	2.50 to < 10.00	B+ to B-	B1 to B3	4.92%	4.53%	–	6	–	–	0.00%
	10.00 to < 100.00	B- to CCC	B3 to Caa2	0.00%	0.00%	–	–	–	–	0.00%
Financial institutions	0.00 to < 0.15	AAA to BBB+	Aaa to Baa1	0.07%	0.08%	–	74	–	–	0.00%
	0.15 to < 0.25	BBB+ to BBB	Baa1 to Baa2	0.19%	0.20%	–	27	–	–	0.00%
	0.25 to < 0.50	BBB to BB+	Baa2 to Ba1	0.35%	0.35%	–	8	–	–	0.00%
	0.50 to < 0.75	BB+	Ba1	0.53%	0.53%	–	10	–	–	0.00%
	0.75 to < 2.50	BB+ to B+	Ba1 to B1	1.75%	1.60%	–	5	–	–	0.00%
	2.50 to < 10.00	B+ to B-	B1 to B3	0.00%	0.00%	–	–	–	–	0.00%
	10.00 to < 100.00	B- to CCC	B3 to Caa2	0.00%	0.00%	–	–	–	–	0.00%

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

(2) Represents the number of individual borrowers.

CR9 – IRB – Backtesting of Probability of Default (PD) per Portfolio (continued)

(million of Canadian dollars)

Q4 2022										
a	b	c		d	e	f		g	h	i
AIRB Approach	PD Range ⁽¹⁾	External rating equivalent		Weighted average PD	Arithmetic average PD by obligors	Number of obligors ⁽²⁾		Defaulted obligors in the year	Of which new defaulted obligors in the year	Average historical annual default rate
		S&P	Moody's			End of previous year	End of the year			
Residential Mortgages – insured	0.00 to < 0.15	AAA to BBB+	Aaa to Baa1	0.08%	0.08%	56,924	49,577	22	–	0.06%
	0.15 to < 0.25	BBB	Baa2	0.20%	0.20%	13,587	11,532	4	–	0.11%
	0.25 to < 0.50	BBB-	Baa3	0.35%	0.35%	16,995	17,594	16	–	0.21%
	0.50 to < 0.75	BB+	Ba1	0.62%	0.62%	7,604	6,352	19	1	0.40%
	0.75 to < 2.50	BB to BB-	Ba2 to Ba3	1.32%	1.27%	10,533	7,638	51	2	0.72%
	2.50 to < 10.00	B+ to B-	B1 to B3	4.51%	4.71%	2,233	2,806	56	–	3.01%
	10.00 to < 100.00	CCC+ to CCC-	Caa1 to Caa3	14.97%	14.72%	797	744	148	2	19.94%
Residential Mortgages and HELOCs – uninsured	0.00 to < 0.15	AAA to BBB+	Aaa to Baa1	0.07%	0.06%	223,803	239,882	107	8	0.04%
	0.15 to < 0.25	BBB	Baa2	0.19%	0.19%	34,977	28,227	36	13	0.13%
	0.25 to < 0.50	BBB-	Baa3	0.34%	0.35%	31,980	26,105	66	6	0.24%
	0.50 to < 0.75	BB+	Ba1	0.61%	0.61%	9,033	8,724	27	–	0.51%
	0.75 to < 2.50	BB to BB-	Ba2 to Ba3	1.13%	1.21%	10,294	15,882	117	1	1.30%
	2.50 to < 10.00	B+ to B-	B1 to B3	4.67%	4.69%	2,243	4,536	136	–	4.84%
	10.00 to < 100.00	CCC+ to CCC-	Caa1 to Caa3	17.66%	17.63%	722	956	140	1	18.71%
Qualifying revolving retail	0.00 to < 0.15	AAA to BBB+	Aaa to Baa1	0.08%	0.08%	895,932	914,238	257	1	0.03%
	0.15 to < 0.25	BBB	Baa2	0.20%	0.20%	222,337	209,545	120	4	0.09%
	0.25 to < 0.50	BBB-	Baa3	0.36%	0.36%	124,348	122,943	306	20	0.19%
	0.50 to < 0.75	BB+	Ba1	0.64%	0.62%	60,117	64,663	211	2	0.34%
	0.75 to < 2.50	BB to BB-	Ba2 to Ba3	1.42%	1.48%	194,991	210,781	2,095	94	1.13%
	2.50 to < 10.00	B+ to B-	B1 to B3	4.47%	4.04%	201,684	208,081	4,971	445	3.16%
	10.00 to < 100.00	CCC+ to CCC-	Caa1 to Caa3	19.69%	22.67%	29,254	34,391	6,743	67	26.58%
Other retail	0.00 to < 0.15	AAA to BBB+	Aaa to Baa1	0.08%	0.07%	129,478	131,187	85	–	0.06%
	0.15 to < 0.25	BBB	Baa2	0.20%	0.20%	53,364	52,489	66	5	0.11%
	0.25 to < 0.50	BBB-	Baa3	0.37%	0.38%	75,791	75,329	147	17	0.19%
	0.50 to < 0.75	BB+	Ba1	0.64%	0.62%	58,064	60,280	142	13	0.29%
	0.75 to < 2.50	BB to BB-	Ba2 to Ba3	1.32%	1.32%	186,270	194,952	931	124	0.67%
	2.50 to < 10.00	B+ to B-	B1 to B3	4.03%	4.01%	57,554	58,426	1,060	72	2.19%
	10.00 to < 100.00	CCC+ to CCC-	Caa1 to Caa3	27.60%	28.03%	10,463	9,212	1,117	22	11.72%

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

(2) Represents the number of individual borrowers.

CR9 – IRB – Backtesting of Probability of Default (PD) per Portfolio (continued)

(millions of Canadian dollars)

Q4 2022										
a	b	c		d	e	f		g	h	i
AIRB Approach	PD Range ⁽¹⁾	External rating equivalent		Weighted average PD	Arithmetic average PD by obligors	Number of obligors ⁽²⁾		Defaulted obligors in the year	Of which new defaulted obligors in the year	Average historical annual default rate
		S&P	Moody's			End of previous year	End of the year			
Corporate	0.00 to < 0.15	AAA to BBB+	Aaa to Baa1	0.09%	0.09%	754	813	–	–	0.00%
	0.15 to < 0.25	BBB+ to BBB	Baa1 to Baa2	0.19%	0.19%	3,105	3,376	–	–	0.04%
	0.25 to < 0.50	BBB to BB+	Baa2 to Ba1	0.35%	0.35%	2,569	2,520	–	–	0.04%
	0.50 to < 0.75	BB+	Ba1	0.53%	0.53%	2,513	2,675	4	–	0.16%
	0.75 to < 2.50	BB+ to B+	Ba1 to B1	1.10%	1.07%	6,313	6,246	17	1	0.39%
	2.50 to < 10.00	B+ to B-	B1 to B3	4.03%	4.41%	1,033	883	7	–	1.47%
	10.00 to < 100.00	B- to CCC	B3 to Caa2	16.97%	16.95%	56	50	1	–	10.00%
Sovereign	0.00 to < 0.15	AAA to BBB+	Aaa to Baa1	0.01%	0.01%	628	604	–	–	0.00%
	0.15 to < 0.25	BBB+ to BBB	Baa1 to Baa2	0.00%	0.00%	–	–	–	–	0.00%
	0.25 to < 0.50	BBB to BB+	Baa2 to Ba1	0.44%	0.44%	–	1	–	–	0.00%
	0.50 to < 0.75	BB+	Ba1	0.00%	0.00%	–	–	–	–	0.00%
	0.75 to < 2.50	BB+ to B+	Ba1 to B1	0.00%	0.00%	–	–	–	–	0.00%
	2.50 to < 10.00	B+ to B-	B1 to B3	7.63%	7.63%	2	2	–	–	0.00%
	10.00 to < 100.00	B- to CCC	B3 to Caa2	0.00%	0.00%	–	–	–	–	0.00%
Financial institutions	0.00 to < 0.15	AAA to BBB+	Aaa to Baa1	0.07%	0.07%	67	67	–	–	0.00%
	0.15 to < 0.25	BBB+ to BBB	Baa1 to Baa2	0.18%	0.20%	28	25	–	–	0.00%
	0.25 to < 0.50	BBB to BB+	Baa2 to Ba1	0.35%	0.35%	6	7	–	–	0.00%
	0.50 to < 0.75	BB+	Ba1	0.53%	0.53%	7	7	–	–	0.00%
	0.75 to < 2.50	BB+ to B+	Ba1 to B1	1.80%	1.54%	11	14	–	–	0.00%
	2.50 to < 10.00	B+ to B-	B1 to B3	9.12%	9.12%	2	1	–	–	0.00%
	10.00 to < 100.00	B- to CCC	B3 to Caa2	0.00%	0.00%	–	–	–	–	0.00%

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

(2) Represents the number of individual borrowers.

IRB Credit Risk Exposure - Backtesting⁽¹⁾

(millions of Canadian dollars)

	2023											
	Q4						Q3					
	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⁾	0.57%	0.31%	2.64%	n.a.	n.a.	n.a.	0.58%	0.28%	2.78%	n.a.	n.a.	n.a.
Uninsured residential mortgages incl. HELOCs ⁽⁷⁾	0.27%	0.20%	21.25%	2.93%	93.21%	91.74%	0.26%	0.21%	20.54%	2.27%	93.17%	88.62%
Qualifying revolving retail	1.04%	1.06%	83.12%	74.21%	108.18%	101.98%	1.00%	0.99%	84.65%	74.18%	107.74%	101.92%
Other retail	1.56%	1.04%	45.36%	36.52%	85.16%	79.20%	1.50%	0.99%	38.02%	24.71%	85.02%	80.58%
Non-Retail Portfolio⁽⁸⁾												
Corporate	0.89%	0.28%	27.81%	8.24%	86.99%	81.85%	0.91%	0.26%	28.62%	12.50%	83.69%	68.05%
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%	45.00%	n.a.	100.00%	n.a.

	2023											
	Q2						Q1					
	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 (%)	LGD average estimated (%) ⁽²⁾	LGD actual (%) ⁽³⁾	EAD estimated (%) ⁽⁴⁾	EAD actual (%) ⁽⁴⁾
Retail Portfolio⁽⁵⁾												
Insured residential mortgages ⁽⁶⁾	0.58%	0.26%	2.84%	n.a.	n.a.	n.a.	0.59%	0.28%	2.88%	n.a.	n.a.	n.a.
Uninsured residential mortgages incl. HELOCs ⁽⁷⁾	0.25%	0.19%	20.42%	2.62%	92.84%	89.14%	0.25%	0.18%	23.53%	7.13%	91.45%	89.63%
Qualifying revolving retail	1.01%	0.91%	93.21%	87.31%	107.36%	101.55%	1.01%	0.85%	85.98%	70.94%	107.32%	101.23%
Other retail	1.52%	1.03%	23.76%	9.19%	85.71%	84.86%	1.57%	0.95%	28.36%	16.26%	85.03%	82.75%
Non-Retail Portfolio⁽⁸⁾												
Corporate	0.94%	0.27%	26.84%	10.82%	84.45%	70.03%	0.95%	0.22%	28.73%	17.73%	86.28%	63.20%
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%	39.00%	n.a.	100.00%	n.a.	0.73%	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 Q4 2023, estimated percentages are as of September 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.

		Q4 2023						Q3 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)	3,267	6,938		1.4	14,287	3,412	2,070	7,202		1.4	12,981	3,151
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					12,503	1,796					13,529	2,030
6	Total						5,208						5,181

		Q2 2023						Q1 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)	1,822	7,221		1.4	12,661	3,654	1,592	6,323		1.4	11,081	3,639
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					12,853	1,550					12,661	1,671
6	Total						5,204						5,310

(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 standardized and advanced approaches).

		Q4 2023		Q3 2023		Q2 2023		Q1 2023		Q4 2022	
		a	b	a	b	a	b	a	b	a	b
		EAD post-CRM	RWA								
	Total portfolios subject to the Advanced CVA capital charge										
1	(i) VaR component (including the 3 x multiplier)		-		-		-		-		-
2	(ii) Stressed VaR component (including the 3 x multiplier)		-		-		-		-		-
3	All portfolios subject to the Standardized CVA capital charge	9,888	2,181	8,943	1,770	8,710	1,386	7,524	1,038	9,838	2,677
4	Total subject to the CVA capital charge	9,888	2,181	8,943	1,770	8,710	1,386	7,524	1,038	9,838	2,677

CCR3 – Standardized 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 standardized approach: by portfolio (type of counterparties) and by risk weights (riskiness attributed according to standardized approach).

Risk weight	Q4 2023														Q3 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	202	-	-	-	-	-	-	-	-	-	-	-	-	202	127	-	-	-	-	-	-	-	-	-	-	-	-	-	127
Banks	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Securities firms and other financial institutions treated as Banks	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Corporates	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Of which: specialised lending	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Securities firms and other financial institutions treated as Corporate	-	-	-	-	-	-	-	-	-	943	-	-	-	943	-	-	-	-	-	-	-	-	-	-	-	-	-	845	845
Regulatory retail portfolios	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Other assets ⁽¹⁾	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Total	202	-	943	-	-	-	1,145	127	-	845	972																		

Risk weight	Q2 2023													
	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
Sovereigns	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Public sector entities (PSEs)	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Multilateral development banks	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	-	-	-	-	-	-	-	-	-	617	-	-	-	617
Regulatory retail portfolios	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other assets ⁽¹⁾	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	137	-	617	-	-	-	754							

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

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

(millions of Canadian dollars)

	Q1 2023										Q4 2022										
	a	b	c	d	e	f	g	h	i	Total credit exposure	a	b	c	d	e	f	g	h	i	Total credit exposure	
Regulatory portfolio	0%	10%	20%	50%	75%	100%	150%	Others			0%	10%	20%	50%	75%	100%	150%	Others			
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.

Q4 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	15	0.10%	33	44.8%	2.31	3	20.0%
	0.15 to < 0.25	297	0.19%	200	38.7%	2.66	104	35.0%
	0.25 to < 0.50	239	0.34%	189	31.5%	1.78	80	33.5%
	0.50 to < 0.75	150	0.53%	214	31.9%	1.66	63	42.0%
	0.75 to < 2.50	1,684	0.84%	1,077	42.1%	2.08	688	40.9%
	2.50 to < 10.00	36	4.49%	87	52.0%	1.20	48	133.3%
	10.00 to < 100.00	1	20.90%	5	62.5%	1.00	3	300.0%
	100.00 (Default)	–	100.00%	1	39.9%	1.00	–	0.0%
Sub-total	2,422	0.75%	1,806	40.1%	2.08	989	40.8%	
Sovereign	0.00 to < 0.15	9,727	0.03%	119	13.8%	1.37	211	2.2%
	0.15 to < 0.25	10	0.25%	1	13.4%	1.00	1	10.0%
	0.25 to < 0.50	74	0.44%	2	13.8%	–	9	12.2%
	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	9,811	0.03%	122	13.8%	1.36	221	2.3%	

(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.

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

(millions of Canadian dollars)

		Q4 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	2,366	0.07%	502	42.8%	0.73	371	15.7%	
	0.15 to < 0.25	2,428	0.18%	283	35.9%	1.36	639	26.3%	
	0.25 to < 0.50	477	0.34%	66	26.8%	1.36	134	28.1%	
	0.50 to < 0.75	127	0.53%	44	32.8%	2.20	73	57.5%	
	0.75 to < 2.50	939	1.12%	55	26.8%	1.24	477	50.8%	
	2.50 to < 10.00	4	4.19%	4	37.5%	1.00	4	100.0%	
	10.00 to < 100.00	–	0.00%	–	0.0%	–	–	0.0%	
	100.00 (Default)	–	0.00%	–	0.0%	–	–	0.0%	
	Sub-total	6,341	0.30%	954	36.4%	1.12	1,698	26.8%	
Financial institutions	0.00 to < 0.15	6,876	0.07%	91	45.0%	0.77	1,143	16.6%	
	0.15 to < 0.25	354	0.18%	36	45.0%	0.33	115	32.5%	
	0.25 to < 0.50	39	0.35%	12	45.0%	0.44	17	43.6%	
	0.50 to < 0.75	125	0.53%	15	45.0%	0.38	76	60.8%	
	0.75 to < 2.50	46	1.21%	20	45.0%	0.04	35	76.1%	
	2.50 to < 10.00	4	3.05%	1	45.0%	–	5	125.0%	
	10.00 to < 100.00	–	0.00%	–	0.0%	–	–	0.0%	
	100.00 (Default)	–	0.00%	–	0.0%	–	–	0.0%	
	Sub-total	7,444	0.09%	175	45.0%	0.74	1,391	18.7%	
Total (sum of portfolios)		26,018	0.18%	3,057	30.7%	1.19	4,299	16.5%	

(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						
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.

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.

	Q4 2023						Q3 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	–	14,279	–	4,466	47,431	20,344	–	12,853	–	3,284	49,895	23,831
Securities issued or guaranteed by												
Canadian government	3	279	–	1,531	20,984	26,864	21	186	31	1,360	21,772	28,578
Canadian provincial and municipal governments	223	1,393	2	556	7,601	11,900	278	1,801	5	632	8,956	14,360
U.S. Treasury, other U.S. agencies and other foreign governments	2,123	18	847	108	44,455	31,123	2,478	106	789	195	43,653	30,595
Other debt securities	518	194	487	–	4,272	1,872	693	44	706	–	4,352	1,604
Equity securities	1,418	–	3,170	–	62,958	100,073	826	–	2,921	–	61,758	96,283
Total	4,285	16,163	4,506	6,661	187,701	192,176	4,296	14,990	4,452	5,471	190,386	195,251

	Q2 2023						Q1 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	–	13,046	–	2,582	45,052	23,813	–	12,527	–	4,082	44,341	33,135
Securities issued or guaranteed by												
Canadian government	23	172	1,147	781	19,198	24,629	175	89	73	661	20,114	22,094
Canadian provincial and municipal governments	277	868	40	420	8,580	14,232	162	663	117	397	9,565	12,073
U.S. Treasury, other U.S. agencies and other foreign governments	2,419	50	1,764	7	38,373	34,311	2,313	52	1,051	–	44,934	36,605
Other debt securities	426	28	552	–	4,972	2,532	924	24	723	–	5,016	1,750
Equity securities	925	–	1,199	–	66,121	86,991	1,092	–	2,464	–	65,107	87,385
Total	4,070	14,164	4,702	3,790	182,296	186,508	4,666	13,355	4,428	5,140	189,077	193,042

(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.

	Q4 2023		Q3 2023		Q2 2023		Q1 2023		Q4 2022	
	a	b	a	b	a	b	a	b	a	b
	Protection purchased	Protection sold								
Notionals										
Credit default swaps										
Indices, singles names and other	5,917	4,131	5,056	3,000	4,000	2,547	3,500	1,958	3,010	1,555
Tranches on indices	-	-	-	-	-	-	-	-	-	-
Total return swaps	321	-	267	-	126	-	126	-	122	-
Credit options	-	-	-	-	-	-	-	-	-	-
Other credit derivatives	-	-	-	-	-	-	-	-	-	-
Total notionals	6,238	4,131	5,323	3,000	4,126	2,547	3,626	1,958	3,132	1,555
Fair values										
Positive fair value (asset)	18	41	7	28	1	32	1	27	7	16
Negative fair value (liability)	(56)	(4)	(51)	(4)	(45)	(4)	(49)	(3)	(24)	(2)

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

(millions of Canadian dollars)

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

	Q4 2023		Q3 2023		Q2 2023		Q1 2023		Q4 2022	
	a	b	a	b	a	b	a	b	a	b
	EAD (post-CRM)	RWA								
1 Exposures to QCCPs (total)		360		229		220		211		241
2 Exposures for trades at QCCPs (excluding initial margin and default fund contributions); of which:	3,228	65	1,331	26	1,413	28	1,474	29	1,194	24
3 (i) OTC derivatives	78	2	112	2	143	3	119	2	94	2
4 (ii) Exchange-traded derivatives	2,811	56	958	19	859	17	969	19	959	19
5 (iii) Securities financing transactions	339	7	261	5	411	8	386	8	141	3
6 (iv) Netting sets where cross-product netting has been approved	-	-	-	-	-	-	-	-	-	-
7 Segregated initial margin	3,500		5,915		5,087		3,368		3,235	
8 Non-segregated initial margin	692	-	458	-	331	-	323	-	274	-
9 Pre-funded default fund contributions	538	295	586	203	581	192	397	182	378	217
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.

Q4 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	5,311	5,299	–	5,311	1,546	108	–	1,546
	Of which:												
2	Residential mortgages	–	–	–	–	4,204	4,192	–	4,204	8	–	–	8
3	Credit card	800	800	–	800	–	–	–	–	240	107	–	240
4	Other retail exposures	–	–	–	–	1,107	1,107	–	1,107	1,298	1	–	1,298
5	Re-securitization	–	–	–	–	–	–	–	–	–	–	–	–
6	Non-Retail	–	–	–	–	1,440	1,440	–	1,440	572	571	–	572
	Of which:												
7	Loans to corporates	–	–	–	–	–	–	–	–	–	–	–	–
8	Commercial mortgage	–	–	–	–	602	602	–	602	1	–	–	1
9	Lease and receivables	–	–	–	–	826	826	–	826	571	571	–	571
10	Other wholesale	–	–	–	–	12	12	–	12	–	–	–	–
11	Re-securitization	–	–	–	–	–	–	–	–	–	–	–	–

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	–	–	–	–	–	–	–	–	–	–	–	–

(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)

		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	–	–	–	–	–	–	–	–	–

(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.

		Q4 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	-	-	-	48	-	48	27	-	27
	Of which:									
2	Residential mortgages	-	-	-	33	-	33	12	-	12
3	Credit card	-	-	-	-	-	-	15	-	15
4	Other retail exposures	-	-	-	15	-	15	-	-	-
5	Re-securitization	-	-	-	-	-	-	-	-	-
6	Non-Retail	-	-	-	19	-	19	13	-	13
	Of which:									
7	Loans to corporates	-	-	-	-	-	-	-	-	-
8	Commercial mortgage	-	-	-	8	-	8	12	-	12
9	Lease and receivables	-	-	-	11	-	11	1	-	1
10	Other wholesale	-	-	-	-	-	-	-	-	-
11	Re-securitization	-	-	-	-	-	-	-	-	-

		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	-	-	-	-	-	-	-	-	-

(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)

		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	–	–	–	–	–	–	–	–	–

		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	–	–	–	–	–	–	–	–	–

(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.

		Q4 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	7,551	–	–	–	–	800	6,751	–	–	80	676	–	–	6	54	–	–
2	Traditional securitization	7,551	–	–	–	–	800	6,751	–	–	80	676	–	–	6	54	–	–
3	Of which: securitization	7,551	–	–	–	–	800	6,751	–	–	80	676	–	–	6	54	–	–
4	Of which: retail underlying	6,111	–	–	–	–	800	5,311	–	–	80	532	–	–	6	42	–	–
5	Of which: STC	6,099	–	–	–	–	800	5,299	–	–	80	530	–	–	6	42	–	–
6	Of which: wholesale	1,440	–	–	–	–	–	1,440	–	–	–	144	–	–	–	12	–	–
7	Of which: STC	1,440	–	–	–	–	–	1,440	–	–	–	144	–	–	–	12	–	–
8	Of which: re-securitization	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–

		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	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–

(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)

		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	IRBA	ERBA/IAA	SA/SSFA	1250%	IRBA	ERBA/IAA	SA/SSFA	1250%	IRBA	ERBA/IAA	SA/SSFA	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	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–

		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	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–

(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.

Q4 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	2,099	19	–	–	–	773	1,345	–	–	104	187	–	–	8	15	–
2	Traditional securitization	2,099	19	–	–	–	773	1,345	–	–	104	187	–	–	8	15	–
3	Of which: securitization	2,099	19	–	–	–	773	1,345	–	–	104	187	–	–	8	15	–
4	Of which: retail underlying	1,527	19	–	–	–	386	1,160	–	–	65	168	–	–	5	13	–
5	Of which: STC	108	–	–	–	–	1	107	–	–	–	11	–	–	–	1	–
6	Of which: wholesale	572	–	–	–	–	387	185	–	–	39	19	–	–	3	2	–
7	Of which: STC	571	–	–	–	–	386	185	–	–	39	19	–	–	3	2	–
8	Of which: re-securitization	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–

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	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–

(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)

		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	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–

		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	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–

(1) The Bank has no synthetic securitization exposure.

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

OR1 – Historical Losses

(millions of Canadian dollars)

The following table discloses the aggregate operational losses incurred over the past 10 years, based on the accounting date of the incurred losses (reported on a one quarter lag). This disclosure informs the operational risk capital calculation.

		a	b	c	d	e	f	g	h	i	j	k
		2023 ⁽¹⁾	2022	2021	2020	2019	2018	2017	2016	2015	2014	Ten-year average
Using \$30,000 CAD threshold												
1	Total amount of operational losses net of recoveries (no exclusions)	46	12	40	23	29	17	26	14	36	19	26
2	Total number of operational risk losses	220	143	140	154	138	103	110	98	84	97	129
3	Total amount of excluded operational risk losses	-	-	-	-	-	-	-	-	-	-	-
4	Total number of exclusions	-	-	-	-	-	-	-	-	-	-	-
5	Total amount of operational losses net of recoveries and net of excluded losses	46	12	40	23	29	17	26	14	36	19	26
Details of operational risk calculation												
6	Are losses used to calculate the ILM?	yes										
7	If “no” in row 6, is the exclusion of internal loss data due to non-compliance with the minimum loss data standards?	n.a.										

(1) The amounts in the column 2023 are calculated using the standardized approach.

OR2 – Business Indicator and Subcomponents

(millions of Canadian dollars)

The following table discloses the business indicator (BI) and its subcomponents, which inform the operational risk capital calculation.

		a	b	c
		2023	2022	2021
BI and its subcomponents				
1	Interest, lease and dividend component	4,540		
1a	Interest and lease income	15,119	8,066	5,937
1b	Interest and lease expense	13,191	4,274	2,204
1c	Interest earning assets	331,630	302,986	266,709
1d	Dividend income	1,658	1,479	1,050
2	Services component	3,831		
2a	Fee and commission income	3,865	3,715	3,760
2b	Fee and commission expense	635	583	550
2c	Other operating income	11	27	23
2d	Other operating expense	91	26	36
3	Financial component	1,269		
3a	Net P&L on the trading book	2,677	543	268
3b	Net P&L on the banking book	61	122	137
4	BI	9,641		
5	Business indicator component (BIC)	1,401		
		a		
6a	BI gross of excluded divested activities	-		
6b	Reduction in BI due to excluded divested activities	-		

OR3 – Minimum Required Operational Risk Capital

(millions of Canadian dollars)

The following table provides the operational risk regulatory capital requirements.

		a
		2023
1	Business indicator component (BIC)	1,401
2	Internal loss multiplier (ILM)	0.73
3	Minimum required operational risk capital (ORC)	1,023
4	Operational risk RWA	12,785

CCyB1 – Geographical Distribution of Credit Exposures Used in the Calculation of the Bank-specific Countercyclical Capital Buffer Requirement

(millions of Canadian dollars)

The following table provides an overview of the geographical distribution of private sector credit exposures relevant for the calculation of the bank's countercyclical capital buffer.

Q4 2023					
	a	b	c	d	e
	Countercyclical capital buffer rate	Exposure values and/or risk-weighted assets (RWA) used in the computation of the countercyclical capital buffer		Bank specific countercyclical capital buffer rate	Countercyclical capital buffer amount
		Exposure values	RWA		
Geographical breakdown					
Australia (AU)	1.00%		155		
France (FR)	0.50%		12		
Germany (DE)	0.75%		34		
Luxembourg (LU)	0.50%		18		
Netherlands (NL)	1.00%		65		
Sweden (SE)	2.00%		–		
Hong Kong SAR (HK)	1.00%		1		
United Kingdom (GB)	2.00%		270		
Norway (NO)	2.50%		–		
Sum			555		
Total			94,612	0%	–

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.