



Royal Bank of Canada

Pillar 3 Report

As at October 31, 2024

TABLE OF CONTENTS

CAUTION REGARDING FORWARD-LOOKING STATEMENTS	1
ABOUT ROYAL BANK OF CANADA	1
CAPITAL FRAMEWORK	1
LEVERAGE FRAMEWORK	2
TLAC FRAMEWORK	3
DISCLOSURE MAP	4
OVERVIEW OF KEY METRICS, RISK MANAGEMENT AND RWA	11
KM1: Key Capital and Leverage metrics (at consolidated group level)	11
OVA: Bank risk management approach	13
OV1: Overview of risk weighted assets (RWA)	15
RWA: Risk-Weighted Assets by Regulatory Approach	17
RWA1: Exposure at Default and Risk-Weighted Assets by Regulatory Approach	19
LINKAGES BETWEEN FINANCIAL STATEMENTS AND REGULATORY EXPOSURES	21
L11: Differences between accounting and regulatory scopes of consolidation and mapping of financial statement categories with regulatory risk categories	21
L12: Main sources of differences between regulatory exposure amounts and carrying values in financial statements	22
LIA: Explanations of differences between accounting and regulatory exposure amounts	23
CAPITAL	24
CC1: Composition of Capital	24
CC2: Regulatory capital balance sheet	27
CREDIT RISK	30
CRA: General qualitative information about credit risk	30
CR1: Credit quality of assets	31
CR2: Changes in stock of defaulted loans and debt securities	32
CRB: Additional disclosure related to the credit quality of assets	33
CRC: Qualitative disclosure requirements related to credit risk mitigation techniques	41
CR3: Credit risk mitigation techniques – overview	42
CRD: Qualitative disclosures on banks' use of external credit ratings under the standardized approach for credit risk	43
CR4: Standardized approach – credit risk exposure and credit risk mitigation (CRM) effects	44
CR5: Standardized approach – exposures by asset classes and risk weights	46
CRE: Qualitative disclosures related to internal risk-based (IRB) models.....	52
CR6: A-IRB – Credit risk exposures by portfolio and PD range	55
CR6: F-IRB – Credit risk exposures by portfolio and PD range	61
CR7: IRB – Effect on RWA of credit derivatives used as CRM techniques.....	63
CR8: RWA flow statements of credit risk exposures	64
CR9: A-IRB – Credit risk exposures by portfolio and PD range	65
CR9: F-IRB – Credit risk exposures by portfolio and PD range	69
COUNTERPARTY CREDIT RISK	70
CCRA: Qualitative disclosure related to counterparty credit risk	70
CCR1: Analysis of counterparty credit risk (CCR) exposure by approach	71
CCR3: Standardized approach – CCR exposures by regulatory portfolio and risk weights	72
CCR4: A-IRB – CCR exposures by portfolio and PD scale.....	74
CCR4: F-IRB – CCR exposures by portfolio and PD scale	76
CCR5: Composition of collateral for CCR exposure.....	78
CCR6: Credit derivatives exposures	79
CCR8: Exposures to central counterparties	80
CREDIT VALUATION ADJUSTMENT RISK	82
CVAA: General qualitative disclosure requirements related to CVA	82
CVA2: The full basic approach for CVA (BA-CVA).....	83
SECURITIZATION	84
SECA: Qualitative disclosure requirements related to securitization exposures	84
SEC1: IRB – Securitization exposures in the banking book.....	85
SEC2: IRB – Securitization exposures in the trading book	87
SEC3: Securitization exposures in the banking book and associated regulatory capital requirements – bank acting as originator or as sponsor	89
SEC4: Securitization exposures in the banking book and associated capital requirements – bank acting as investor	91
MARKET RISK	93



MRA: Qualitative disclosure requirements related to market risk.....93
MR1: Market risk under standardized approach.....95

PRUDENT VALUATION ADJUSTMENTS.....96
PV1: Prudent valuation adjustments (PVAs).....96

OPERATIONAL RISK97
ORA: General qualitative information on a bank’s operational risk framework97
OR1: Historical losses98
OR2: Business Indicator and subcomponents100
OR3: Minimum required operational risk capital.....102

STANDARDISED RISK WEIGHTED COMPARISON.....103
CMS1: Comparison of modelled and standardised RWA at risk level.....103
CMS2: Comparison of modelled and standardised RWA for credit risk at asset class level.....105

COUNTERCYCLICAL CAPITAL BUFFER.....107
CCyB: Geographical distribution of credit exposures used in the countercyclical buffer.....107

LEVERAGE109
LR1: Summary comparison of accounting assets vs leverage ratio exposure measure109
LR2: Leverage ratio common disclosure template110

TOTAL LOSS ABSORBING CAPACITY (TLAC) DISCLOSURE REQUIREMENTS111
KM2: Key metrics – TLAC requirements (at resolution group level).....111
TLAC1: TLAC composition (at resolution group level)112
TLAC2: Material subgroup entity – creditor ranking at legal entity level (G-SIBs only)114
TLAC3: Resolution entity – creditor ranking at legal entity level116

INTEREST RATE RISK IN THE BANKING BOOK117



Caution regarding forward-looking statements

From time to time, we make written or oral forward-looking statements within the meaning of certain securities laws, including the “safe harbour” provisions of the *United States Private Securities Litigation Reform Act of 1995* and any applicable Canadian securities legislation. We may make forward-looking statements in this Pillar 3 Report, our 2024 Annual Report, in other filings with Canadian regulators or the SEC, in other reports to shareholders, and in other communications. In addition, our representatives may communicate forward-looking statements orally to analysts, investors, the media and others. Forward-looking statements are typically identified by words such as “believe”, “expect”, “suggest”, “seek”, “foresee”, “forecast”, “schedule”, “anticipate”, “intend”, “estimate”, “goal”, “commit”, “target”, “objective”, “plan”, “outlook”, “timeline”, and “project” and similar expressions of future or conditional verbs such as “will”, “may”, “might”, “should”, “could”, “can” or “would” or negative or grammatical variations thereof. By their very nature, forward-looking statements require us to make assumptions and are subject to inherent risks and uncertainties, both general and specific in nature, which give rise to the possibility that our predictions, forecasts, projections, expectations or conclusions will not prove to be accurate, that our assumptions may not be correct that our financial performance objectives, vision and strategic goals will not be achieved and that our actual results may differ materially from such predictions, forecasts, projections, expectations or conclusions. We caution readers not to place undue reliance on our forward-looking statements as a number of risk factors could cause our actual results to differ materially from the expectations expressed in such forward-looking statements. Additional information about certain risk factors can be found in the Caution regarding forward-looking statements and risk sections of our 2024 Annual Report, as may be updated by subsequent quarterly reports. When relying on our forward-looking statements to make decisions with respect to us, investors and others should carefully consider such risk factors and other uncertainties and potential events, as well as the inherent uncertainty of forward-looking statements. Except as required by law, we do not undertake to update any forward-looking statement, whether written or oral, that may be made from time to time by us or on our behalf.

About Royal Bank of Canada

Royal Bank of Canada is a global financial institution with a purpose-driven, principles-led approach to delivering leading performance. Our success comes from the 98,000+ employees who leverage their imaginations and insights to bring our vision, values and strategy to life so we can help our clients thrive and communities prosper. As Canada’s biggest bank, and one of the largest in the world based on market capitalization, we have a diversified business model with a focus on innovation and providing exceptional experiences to our more than 18 million clients in Canada, the U.S. and 27 other countries. Learn more at [rbc.com](https://www.rbc.com).

Effective the fourth quarter of 2024, the Personal & Commercial Banking segment became two standalone business segments: Personal Banking and Commercial Banking. With this change, RBC Direct Investing moved from the previous Personal & Commercial Banking segment to the Wealth Management segment. Comparative results in our 2024 Annual Report MD&A have been revised to conform to our new basis of segment presentation. Our business segments are supported by Corporate Support, which consists of Technology & Operations and Functions. Technology & Operations provides the technological and operational foundation required to effectively deliver products and services to our clients, while Functions includes our finance, human resources, risk management, internal audit and other functional groups, as well as our corporate treasury function.

Capital framework

Our consolidated regulatory capital requirements are determined by guidelines issued by the Office of the Superintendent of the Financial Institutions (OSFI), which are based on the Basel III framework (inclusive of the 2017 Basel III reforms) adopted by the Basel Committee on Banking Supervision (BCBS).

The Basel III framework integrates three “Pillars” to establish a robust foundation for banking supervision and financial stability:

- Pillar 1 prescribes minimum capital requirements and addresses capital adequacy, including standards for calculating risk-weighted assets (RWA);
- Pillar 2 requires the establishment of internal assessment processes and supervisory review to evaluate the risk profile and capital adequacy of banks; and
- Pillar 3 enhances the consistency and comparability of risk and capital profiles between banks and across jurisdictions for market participants through meaningful disclosures.

Under Basel III, banks use defined approaches to calculate their minimum regulatory capital required to support various risks and exposure types including credit risk, counterparty credit risk, credit valuation adjustment risk, market risk, operational risk, and securitizations exposures. Refer to the Capital management section of our 2024 Annual Report for further information on calculation approaches. Refer to the following sections in this report for further information on:

- Capital
- Credit Risk
- Counterparty Credit Risk
- Credit Valuation Adjustment Risk
- Market Risk

Capital framework (continued)

- Operational Risk
- Securitization Exposures

In December 2018, the BCBS issued its consolidated Pillar 3 disclosure requirements, *Pillar 3 disclosure requirements – updated framework*. The finalized requirements incorporated revisions and additions to the Pillar 3 framework arising from the finalization of the Basel III reforms in December 2017, such as additional disclosure requirements comparing RWA as determined by banks' internal models against results based on the Standardized Approach (SA), and new disclosure requirements on operational risk. On January 31, 2022, OSFI finalized its revised Pillar 3 guideline with an implementation date requirement of April 30, 2023. Beginning Q2 2023, our Pillar 3 disclosures reflect the finalized OSFI disclosure guideline requirements. On November 11, 2021, BCBS finalized revisions to its market risk disclosures. On November 14, 2023, OSFI released a revised Pillar 3 guideline incorporating these market risk and credit valuation adjustment risk (CVA) disclosure requirements. We have incorporated these updated disclosure requirements in our Pillar 3 Report.

Our reported figures reflect OSFI's domestic stability buffer (DSB) guidance of 3% of RWA effective February 1, 2023 which subsequently increased 50 bps to 3.5% of RWA effective November 1, 2023, as fully described in the Capital management section of our 2024 Annual Report. On June 18, 2024, OSFI reaffirmed the DSB will remain at 3.5% of RWA.

On February 1, 2023 (Q2 2023), we adopted OSFI's revised capital and disclosure guidelines incorporating and implementing OSFI's first phase of the adoption of the final BCBS Basel III reforms. On November 1, 2023, we adopted the second phase of OSFI's implementation relating to the revised CVA risk and market risk chapters of the Capital Adequacy Requirements (CAR) guideline. The revised CAR guidelines adopted and implemented in the beginning of Q2 2023 and Q1 2024 reflect the following notable changes:

- For IRB portfolios, elimination of a 6% regulatory scaling factor applied to RWA generated by internal models and introduction of prescribed supervisory parameters applicable to certain asset classes within our wholesale portfolio.
- Adoption of a new Operational risk Standardized Approach framework based on a bank's 3 years of average income and 10 years of historical losses.
- Adoption of a new Credit Risk Standardized Approach framework enhancing risk sensitivity.
- Adoption of a new Standardized Approach framework for Market Risk incorporating the Fundamental Review of the Trading Book (FRTB) revisions.
- Adoption of the Basic Approach framework for calculating CVA Risk.
- Prescribed revisions to the existing regulatory capital floor from 70% to 65% requiring a transition to a new regulatory capital floor of 72.5% of RWA under the SA by 2026. This new regulatory floor will be transitioned over three years, reflecting a regulatory capital floor requirement of 67.5%, 70% and 72.5% in, fiscal 2024, 2025 and 2026, respectively.

On July 5, 2024, OSFI announced a one-year delay to the increase in the capital floor factor, maintaining the current 67.5% of RWA (as calculated using only SA for credit, market and operational risk) factor throughout 2024 and 2025, and delaying the 70% factor implementation from 2025 to 2026, and the 72.5% factor implementation from 2026 to 2027.

Given substantial changes to credit risk, market risk, operational risk and CVA risk frameworks, OSFI required only prospective disclosures under the Pillar 3 guidelines. As such, our comparative credit risk and operational risk figures for Q1 2023 reflect our credit risk and operational risk capital position under the earlier OSFI CAR guidelines. Our comparative market risk and CVA figures for fiscal 2023 reflect our capital position under the earlier guidelines as well.

On March 28, 2024, we completed the acquisition of HSBC Bank Canada (HSBC Canada). HSBC Canada exposures for capital purposes have been consolidated from the closing date and are included in our Pillar 3 Report. We applied our IRB approach to HSBC Canada exposures except for certain credit risk portfolios subject to SA, which were primarily certain non-mortgage retail portfolios acquired through the HSBC Canada acquisition. Refer to the Key corporate events and Capital management sections of our Q2 2024 Report to Shareholders on additional details related to our HSBC Canada acquisition as further updated in our 2024 Annual Report.

Refer to the Capital management section of our 2024 Annual Report for further information on upcoming regulatory developments which were announced during the year.

Leverage framework

OSFI's Leverage Requirements (LR) guideline requires banks to disclose their leverage ratio and its underlying components as well as maintain a minimum leverage ratio of 3.5% for domestic systemically important banks (D-SIBs). The leverage ratio is defined as the capital measure divided by the leverage exposure measure. The capital measure is defined as Tier 1 capital and the leverage exposure measure is the sum of (a) on-balance sheet exposures; (b) derivative exposures; (c) securities financing transaction (SFT) exposures; and (d) off-balance sheet items.

Unmanaged leverage can lead to unwarranted corrective measures due to excessive exposure growth or capital reduction, causing detriment to the bank's balance sheet and overall shareholders' wealth. Maintaining a prescribed minimum level of leverage helps neutralize leverage risk in the event of unexpected economic crises.



The BCBS introduced an additional leverage ratio buffer requirement for global systemically important banks (G-SIB) as part of the Basel III reforms. A G-SIB's leverage ratio must be met with Tier 1 capital and is set at 50% of a G-SIB's higher-loss absorbency risk-weighted requirement. This minimum leverage requirement was incorporated into OSFI's LR guideline as part of the 3.5% D-SIB requirement.

On February 1, 2023, we adopted OSFI's revised LR guideline which incorporates the internationally agreed BCBS leverage reforms with certain jurisdictional amendments. Our leverage calculations reflect the changes prescribed by OSFI. Disclosure requirements for LR were not affected by OSFI's updated Pillar 3 disclosure requirements.

On March 28, 2024, we completed the acquisition of HSBC Canada. HSBC Canada leverage exposures have been consolidated from the closing date and are included in our Pillar 3 Report leverage disclosures. Refer to the Key corporate events of our Q2 2024 Report to Shareholders as further updated in our 2024 Annual Report on additional details related to our HSBC Canada acquisition. Refer to our Leverage disclosures included in this report, as required by OSFI.

TLAC framework

The Canadian Bail-in regime, including OSFI's Total Loss Absorbing Capacity (TLAC) guideline, came into effect on September 23, 2018. The purpose of the TLAC requirement is to address the sufficiency of a Canadian D-SIB's loss absorbing capacity in supporting its recapitalization in the event of its failure. TLAC is defined as the aggregate of Tier 1 capital, Tier 2 capital, and other TLAC instruments (senior bail-in debt), which includes senior unsecured debt with an original term to maturity of greater than 400 days and remaining term to maturity of greater than 365 days. Under the Bail-in regime, claims of some creditors whose claims otherwise rank equally with those of the holders holding bail-inable notes would be excluded from a bail-in conversion and thus the holders and beneficial owners of bail-inable notes will have to absorb losses ahead of these other creditors as a result of the bail-in conversion.

TLAC requirements establish two minimum standards, which were required to be met effective November 1, 2021: the risk-based TLAC ratio, which builds on the risk-based capital ratios described in the CAR guideline, and the TLAC leverage ratio, which builds on the leverage ratio described in OSFI's LR guideline. The risk-based TLAC ratio is defined as TLAC divided by Total risk-weighted assets while the TLAC leverage ratio is defined as TLAC divided by the Leverage ratio exposure. The current OSFI requirement for D-SIBs is to maintain a minimum TLAC ratio of 25% (inclusive of the DSB of 3.5%) before considering the countercyclical capital buffer and a TLAC leverage ratio of 7.25%. Prior TLAC ratio minimum requirements were 24% in Q1 2023 and 24.5% for the remaining fiscal 2023 quarters. Our TLAC leverage ratio minimum requirement beginning Q2 2023 was 7.25% reflecting incorporation of a 50 bps leverage buffer discussed in the Leverage framework section above.

We began issuing TLAC eligible debt in Q4 2018 and our TLAC ratio is expected to increase through normal course refinancing of maturing debt. More details on our TLAC issuance is available in our Capital management section of our 2024 Annual Report.

In May 2018, OSFI published its TLAC Disclosure guideline for Canadian D-SIBs. The disclosure requirements reflect the BCBS TLAC disclosure requirements. Refer to our TLAC disclosures included in this report, as required by OSFI.



DISCLOSURE MAP

Pillar 3 Requirement	Pillar 3 Requirement	2024 Annual Report section	Sub-section	2024 Annual Report Reference	
Overview of key metrics, risk management and RWA	KM1				
		a) Business model and risk profile	Top and emerging risks	Top and emerging risks	66-69
			Risk management overview	Risk management principles	69
				Principal Risks	70
		Enterprise risk management	Risk governance	70-71	
			Risk appetite	72	
			Risk measurement	72-73	
			Risk control	73-75	
		b) Risk governance structure	Enterprise risk management	Risk governance	70-71
				Risk control	73-75
		c) Communication and enforcement of risk culture within the bank	Operational risk	Culture and conduct risk	106
		d) Scope and main features of risk measurement systems	Enterprise risk management	Risk measurement	72-73
		e) Risk information reporting	Enterprise risk management	Risk control - <i>Risk monitoring and reporting</i>	74-75
		f) Stress testing	Enterprise risk management	Risk measurement – <i>Stress testing</i>	73
			Market risk	Stress tests	85
			Systemic risk	Systemic risk	110
		g) Strategies and processes applied to manage, hedge and mitigate risks	Enterprise risk management	Risk appetite	72
				Risk measurement	72-73
				Risk control	73-75
			Credit risk	Overview	75-76
				Credit risk measurement	76-77
				Credit risk assessment	77-78
				Credit risk mitigation	78-79
				Credit risk approval	79
				Credit risk administration	79
			Market risk	Market risk controls – FVTPL positions, including trading portfolios	85
				Stress tests	85
				Market risk controls – Interest Rate Risk in the Banking Book (IRRBB) positions	87
				IRRBB measurement	87
				Non-trading foreign exchange rate risk	88
			Liquidity and funding risk	Overview	90
				Governance of liquidity risk	90-91
				Liquidity risk mitigation strategies and techniques	91
				Risk measurement and internal liquidity reporting	91-92
				Contingency liquidity risk management and funding plans	92
				Funding	94-96
				Liquidity Coverage Ratio (LCR)	98-99
				Net Stable Funding Ratio (NSFR)	99-101
			Insurance risk	Insurance risk	104
			Operational risk	Overview	104
Operational risk framework	104-105				
Compliance risk	Compliance risk		107		
Strategic risk	Strategic risk		107		
Reputation risk	Reputation risk	108			
Legal and regulatory environment risk	Legal and regulatory environment risk	108-109			
Competitive risk	Competitive risk	109			
Systemic risk	Systemic risk	110			
Environmental and social risk	Environmental and social risk (including climate change)	111-113			

DISCLOSURE MAP (continued)

Pillar 3 Requirement	Pillar 3 Requirement	2024 Annual Report section	Sub-section	2024 Annual Report Reference		
Overview of key metrics, risk management and RWA (continued)	g) Strategies and processes applied to manage, hedge and mitigate risks (continued)	Consolidated Financial Statements	Note 9 – Derivative financial instruments and hedging activities - <i>Derivatives issued for trading purposes</i>	201		
			Note 9 – Derivative financial instruments and hedging activities - <i>Derivatives issued for other-than-trading purposes</i>	201		
			Note 9 – Derivative financial instruments and hedging activities - <i>Derivative-related credit risk</i>	204		
Linkages between financial statements and regulatory exposures	OV1					
	LI1					
	LI2					
Composition of Capital	LIA					
	CC1					
	CC2					
Macroprudential supervisory measures	CCA ¹	Main features of regulatory capital instruments and of other TLAC-eligible instruments				
	GSIB ²	Disclosure of G-SIB indicators				
Credit risk	CRA	a) Translation of the business model into the components of the bank's credit risk profile	Credit risk	Overview	75-76	
				Measurement of economic and regulatory capital - <i>Gross credit risk exposure</i>	77	
		b) Criteria and approach used for defining credit risk management policy and for setting credit risk limits	Enterprise risk management		Risk governance	70-71
					Risk appetite	72
			Credit risk		Risk measurement	72-73
					Risk control - <i>Risk appetite, risk approval authorities and risk limits</i>	74
		c) Structure and organization of the credit risk management and control function	Enterprise risk management		Overview	75-76
					Credit risk assessment	77-78
					Credit risk mitigation	78-79
		d) Interaction between the credit risk management, risk control, compliance and internal audit functions	Enterprise risk management		Credit risk approval	79
					Risk governance	70-71
		e) Scope and content of the reporting on credit risk exposure to the executive management and to the board of directors	Enterprise risk management		Risk control	73-75
					Risk governance	70-71
CR1						
CR2						
CRB	a) Definitions of past due	Consolidated Financial Statements	Note 2 – Summary of significant accounting policies, estimates and judgments - <i>Allowance for credit losses - Definition of default Credit impaired financial assets (Stage 3)</i>	159		
			Note 5 – Loans and allowance for credit losses - <i>Loans past due but not impaired</i>	194		
	b) Extent of past due exposures	Consolidated Financial Statements	Note 5 – Loans and allowance for credit losses - <i>Loans past due but not impaired</i>	194		

¹ CCA is available at <https://www.rbc.com/investor-relations/regulatory-information.html>.

² G-SIB is provided on page 44 of our Q1 2024 Report to Shareholders available at [Financial Information - RBC](#).

DISCLOSURE MAP (continued)

Pillar 3 Requirement	Pillar 3 Requirement	2024 Annual Report section	Sub-section	2024 Annual Report Reference	
Credit risk (continued)	CRB (continued)	c) Description of methods used for determining accounting provisions for credit losses	Consolidated Financial Statements	Note 2 – Summary of significant accounting policies, estimates and judgments - Allowance for credit losses	157
		Description of the categorization of ECL accounting provisions (general and specific) for standardized approach exposures	n/a	n/a – For regulatory calculations under both the Standardized and IRB approaches, the IFRS 9 stage 3 allowances are considered to be specific allowances and the IFRS 9 stage 1 and stage 2 allowances are considered to be general allowances	
		d) Definition of a restructured exposure	Consolidated Financial Statements	Note 2 – Summary of significant accounting policies, estimates and judgments - Allowance for credit losses - <i>Modifications</i>	160
		e) Breakdown of exposures by geographical areas, industry and residual maturity			
		f) Amounts of impaired exposures (according to the definition used by the bank for accounting purposes) and related allowances and write-offs, broken down by geographical areas and industry			
		g) Ageing analysis of accounting past-due exposures			
		h) Breakdown of restructured exposures between impaired and not impaired exposures			
		CRC	a) Core features of policies and processes for, and an indication of the extent to which the bank makes use of, on- and off-balance sheet netting	Credit risk	Credit risk assessment – <i>Counterparty credit risk</i>
	Consolidated Financial Statements			Note 9 – Derivative financial instruments and hedging activities - <i>Derivative-related credit risk</i> Note 29 – Offsetting financial assets and financial liabilities	204 242-243
	b) Core features of policies and processes for collateral evaluation and management		Credit risk	Credit risk mitigation - <i>Collateral</i>	78-79
	c) Information about market or credit risk concentrations under the credit risk mitigation instruments used		Credit risk	Credit risk mitigation	78-79
			Consolidated Financial Statements	Credit risk approval - <i>Credit risk limits</i> Note 9 – Derivative financial instruments and hedging activities	79 200-211
	CR3				
	CR4				
	CR5				
	CR6				
	CR7				
	CR8				
	CR9 ³				
CR10		n/a	n/a	n/a	

³ Requirement for disclosure of this table is only annual.

DISCLOSURE MAP (continued)

Pillar 3 Requirement	Pillar 3 Requirement	2024 Annual Report section	Sub-section	2024 Annual Report Reference	
Counterparty credit risk	CCRA	a) Risk management objectives and policies related to counterparty credit risk	Credit risk	Credit risk assessment – <i>Counterparty credit risk</i>	77-78
			Consolidated Financial Statements	Note 9 – Derivative financial instruments and hedging activities - <i>Derivative-related credit risk</i>	204
		b) The method used to assign the operating limits defined in terms of internal capital for counterparty credit exposures and for CCP exposures	Credit risk	Credit risk assessment – <i>Counterparty credit risk</i>	77-78
		c) Policies relating to guarantees and other risk mitigants and assessments concerning counterparty credit risk, including exposures towards CCPs	Credit risk	Credit risk assessment – <i>Counterparty credit risk</i>	77-78
			Consolidated Financial Statements	Note 9 – Derivative financial instruments and hedging activities - <i>Derivative-related credit risk</i>	204
			Consolidated Financial Statements	Note 29 – Offsetting financial assets and financial liabilities	242-243
		d) Policies with respect to wrong-way risk exposures	Credit risk	Credit risk assessment – <i>Wrong-way risk</i>	78
	e) The impact in terms of the amount of collateral that the bank would be required to provide given a credit rating downgrade	Liquidity and funding risk	Credit ratings	97	
	CCR1				
	CCR3				
	CCR4				
CCR5					
CCR6					
CCR8	f) Exposures to central counterparties				
Credit Valuation Adjustment (CVA)	CVAA	a) Risk management activities related to CVA, including hedging	n/a	n/a	n/a
		b) Whether the bank has made election to set CVA capital requirements equivalent to Counterparty credit risk	n/a	n/a	n/a
	CVA2				
Securitization	SECA	a) Objectives in relation to securitization activities	Off-balance sheet arrangements	Off-balance sheet arrangements	64-66
			Consolidated Financial Statements	Note 7 – Derecognition of financial assets	195-196
		Consolidated Financial Statements	Note 8 – Structured entities	196-200	
	b) List of SPEs where RBC is sponsor / provides implicit support	Consolidated Financial Statements	Note 8 – Structured entities	196-200	
	c) Accounting policies for securitization	Consolidated Financial Statements	Note 2 – Summary of significant accounting policies, estimates and judgments – <i>Basis of consolidation</i>	153-154	
			Note 2 – Summary of significant accounting policies, estimates and judgments – <i>Derecognition of financial assets</i>	161	
		Critical accounting policies and estimates	Consolidation of structured entities	127	
	d) The names of external credit assessment institutions (ECAIs) used for securitizations and the types of securitization exposure for which each agency is used	Capital management (also refer to CRD in this document)	Regulatory capital approach for securitization exposures	124-125	
e) Use of Basel IAA for capital purposes	Credit risk	n/a	75-85		
	Capital management	Regulatory capital approach for securitization exposures	124-125		

DISCLOSURE MAP (continued)

Pillar 3 Requirement	Pillar 3 Requirement		2024 Annual Report section	Sub-section	2024 Annual Report Reference
Securitization (continued)	SECA (continued)	f) Use of other internal assessment for capital purposes	Credit risk	Credit risk assessment	77-78
	SEC1	Securitization exposures in the banking book			
	SEC2	Securitization activities in the trading book			
	SEC3	Securitization exposures in the banking book and associated regulatory capital requirements - bank acting as originator or as sponsor			
	SEC4	Securitization exposures in the banking book and associated capital requirements - bank acting as investor			
Market risk	MRA	a) Strategies and processes implemented to identify, measure, monitor and control the bank's market risks	Market risk	Market risk controls – FVTPL positions, including trading portfolios	85
				Stress tests	85
				Market risk measures – FVTPL positions	86-87
				Market risk measures for assets and liabilities of RBC Insurance	87
				Market risk controls – Interest Rate Risk in the Banking Book (IRRBB) positions	87
				IRRBB measurement	87
				Market risk measures – IRRBB Sensitivities	87-88
				Market risk measures for other material non-trading portfolios	88
		Policies for hedging risk and strategies/processes for monitoring the continuing effectiveness of hedges	Consolidated Financial Statements	Note 2 – Summary of significant accounting policies, estimates and judgements – <i>Hedge accounting</i> Note 9 – Derivative financial instruments and hedging activities	162 200-211
		Policies for designating positions as trading, including stale positions and monitoring these positions. Description of non-typical trading or banking book categorization and any moves between banking book and trading. Description of internal risk transfers and types of internal risk transfer desks.	n/a	n/a	n/a
		b) Description of the market risk governance structure established to implement the strategies and processes of the bank	Enterprise risk management	Risk governance	70-71
	Risk appetite			72	
	Risk measurement			72-73	
	Risk control			73-75	
			Risk measurement – <i>Stress testing</i>	73	
			Operational risk	Culture and conduct risk	106
				Risk measurement	72-73
			c) Scope and nature of risk reporting and/or measurement systems	Enterprise risk management	Risk control
		Risk measurement – <i>Stress testing</i>			73
		Market risk			Market risk controls – FVTPL positions, including trading portfolios
	Stress tests				85
	Market risk measures – FVTPL positions			86-87	
	Market risk measures for assets and liabilities of RBC Insurance			87	
	Market risk controls – Interest Rate Risk in the Banking Book (IRRBB) positions	87			
	IRRBB measurement	87			
	Market risk measures – IRRBB Sensitivities	87-88			
	Market risk measures for other material non-trading portfolios	88			

DISCLOSURE MAP (continued)

Pillar 3 Requirement	Pillar 3 Requirement	2024 Annual Report section	Sub-section	2024 Annual Report Reference		
Market risk (continued)	MR1					
Prudential valuation adjustments	PV1 ³	Prudential valuation adjustments made for assets valued at fair value				
Operational Risk	ORA	a) Policies, frameworks and guidelines for the management of operational risk	Operational risk	Overview	104	
				Operational risk framework	104-105	
		b) The structure and organisation of their operational risk management and control function	Operational risk	Operational risk	Overview	104
					Operational risk framework	104-105
		(c) Operational risk measurement system	Operational risk		Operational risk framework	104-105
					Operational risk capital	106
	(d) The scope and main context of the reporting framework on operational risk to executive management and to the board of directors	Operational risk		Operational risk framework	104-105	
				Culture and conduct risk	106	
	(e) The risk mitigation and risk transfer used in the management of operational risk including mitigation by policy, divesting from high-risk businesses, and by the establishment of controls	Operational risk		Operational risk framework	104-105	
	OR1 ³					
OR2 ³						
OR3 ³						
Standardized Risk Weighted Comparison	CMS1	Comparison of modelled and standardised RWA at risk level				
	CMS2	Comparison of modelled and standardised RWA for credit risk at asset class level				
Countercyclical Capital Buffer	CCyB	Geographical distribution of credit exposures used in the countercyclical buffer				
Leverage	LR1					
	LR2					
Total loss absorbing capacity	KM2					
	TLAC1					
	TLAC2					
	TLAC3					

³ Requirement for disclosure of this table is only annual.



DISCLOSURE MAP (continued)

Pillar 3 Requirement	Pillar 3 Requirement		2024 Annual Report section	Sub-section	2024 Annual Report Reference
Liquidity	LIQA ⁴	Liquidity and Funding Risk Management	Liquidity and Funding Risk		90-103
	LIQ1 ⁴	Liquidity Coverage Ratio (LCR)		Liquidity Coverage Ratio (LCR)	98-99
	LIQ2 ⁴	Net Stable Funding Ratio (NSFR)		Net Stable Funding Ratio (NSFR)	99-101
	ENC ⁴	Asset Encumbrance		Asset Encumbrance	94
Remuneration	REMA ⁵	Remuneration policy			
	REM1 ⁵	Remuneration awarded during the financial year			
	REM2 ⁵	Special payments			
	REM3 ⁵	Deferred remuneration			
Interest rate risk in the banking book			Market risk	Market risk	85-90

⁴ Liquidity Pillar 3 disclosures are further updated in our Liquidity and funding risk section of our 2024 Annual Report.

⁵ Remuneration related disclosures are included in our 2024 Management Proxy Circular on pages 97-98 which is available at [Management Proxy Circular \(rbc.com\)](https://www.rbc.com/management-proxy-circular).



OVERVIEW OF KEY METRICS, RISK MANAGEMENT AND RWA

KM1: Key Capital and Leverage metrics (at consolidated group level)

		a	b	c	d	e	f
	(Millions of Canadian dollars)	October 31 2024	July 31 2024	April 30 2024 ³	January 31 2024 ⁴	October 31 2023	YoY Change (a-e)
	Available capital (amounts)						
1	Common Equity Tier 1 (CET1)	88,936	86,230	83,497	88,106	86,611	2,325
2	Tier 1	97,952	95,724	92,444	96,140	93,904	4,048
3	Total capital	110,487	108,079	105,353	106,865	104,952	5,535
	Risk-weighted assets (amounts)						
4	Total risk-weighted assets (RWA)	672,282	661,177	653,702	590,257	596,223	76,059
4a	Total risk-weighted assets (pre-floor)	672,282	661,177	653,702	590,257	596,223	76,059
	Risk-based capital ratios as a percentage of RWA						
5	CET1 ratio (%)	13.2%	13.0%	12.8%	14.9%	14.5%	(1.3)%
5a	CET1 ratio (%) (pre-floor ratio)	13.2%	13.0%	12.8%	14.9%	14.5%	(1.3)%
6	Tier 1 ratio (%)	14.6%	14.5%	14.1%	16.3%	15.7%	(1.1)%
6a	Tier 1 ratio (%) (pre-floor ratio)	14.6%	14.5%	14.1%	16.3%	15.7%	(1.1)%
7	Total capital ratio (%)	16.4%	16.3%	16.1%	18.1%	17.6%	(1.2)%
7a	Total capital ratio (%) (pre-floor ratio)	16.4%	16.3%	16.1%	18.1%	17.6%	(1.2)%
	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 (%) ¹	0.1%	0.1%	0.1%	0.1%	0.1%	-
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)	3.6%	3.6%	3.6%	3.6%	3.6%	-
12	CET1 available after meeting the bank's minimum capital requirements (row 5 - 8.1%) (%) ²	5.1%	4.9%	4.7%	6.8%	6.4%	(1.3)%
	Basel III leverage ratio						
13	Total Basel III leverage ratio exposure measure	2,344,228	2,271,007	2,219,019	2,173,419	2,179,590	164,638
14	Basel III leverage ratio (row 2 / row 13)	4.2%	4.2%	4.2%	4.4%	4.3%	(0.1)%

¹ Bank specific countercyclical buffer requirement is the amount which is determined based on our weighted average private sector exposures in jurisdictions identified by the BCBS (Q4/24 0.08%, Q3/24 0.07%, Q2/24 0.05%, Q1/24 to Q4/23 0.06%).

² 8.1% reflects minimum capital requirements which includes D-SIB/G-SIB surcharge and countercyclical buffer and excludes the OSFI Domestic Stability Buffer of 3.5% effective November 1, 2023 (3.0% previously effective February 1, 2023). Refer to the Capital management section of our 2024 Annual Report.

³ On March 28, 2024, we completed the HSBC Canada acquisition. HSBC Canada portfolios have been consolidated from the closing date, and are included in our April 30, 2024 and subsequent metrics.

⁴ On November 1, 2023 we adopted the revised market risk and CVA frameworks that came into effect under the CAR guidelines.

2024 vs. 2023

Our CET1 ratio was 13.2%, down 130 bps from last year, primarily reflecting the impact of the HSBC Canada acquisition of 240 bps and RWA growth (excluding FX), partially offset by net internal capital generation and share issuances under the Dividend reinvestment plan (DRIP). Refer to the Financial performance section of our 2024 Annual Report.

Our Tier 1 capital ratio of 14.6% was down 110 bps, mainly reflecting the factors noted under the CET1 ratio, partially offset by the net issuance of preferred shares and limited recourse capital notes (LRCNs).



Our Total capital ratio of 16.4% was down 120 bps, mainly reflecting the factors noted above under the Tier 1 capital ratio, partially offset by the net issuance of subordinated debentures.

Total RWA was up \$76 billion from last year, driven by the \$44 billion impact of the HSBC Canada acquisition, which was primarily reflected in credit and operational risk. Business growth primarily reflected in retail and commercial lending in Canada, and in operational risk as well as the impact of net credit migration also contributed to the increase. These factors were partially offset by the net impact of regulatory updates that were effective as of Q1 2024. In our CET1 ratio, the impact of foreign exchange translation on RWA is largely mitigated with economic hedges.

Our Leverage ratio of 4.2% was down 10 bps, primarily due to the impact of the HSBC Canada acquisition of 57 bps and higher business-driven growth in leverage exposures. These factors were partially offset by net internal capital generation and share issuances under the DRIP, and the net issuances of preferred shares and LRCNs.

Leverage exposures increased by \$165 billion, driven by the \$116 billion impact of the HSBC Canada acquisition, as well as business growth primarily in retail and wholesale lending.

OVA: Bank risk management approach

The table below presents an overview of Pillar 3 disclosure requirements that have been met within our 2024 Annual Report and incorporated by reference into this Pillar 3 report. Our 2024 Annual Report is available free of charge on our website at <http://www.rbc.com/investorrelations>.

Pillar 3 disclosures requirement		2024 Annual Report section	Sub-section
a)	Business model and risk profile	Top and emerging risks	Top and emerging risks
		Risk management overview	Risk management principles
			Principal Risks
		Enterprise risk management	Risk governance
			Risk appetite
			Risk measurement
			Risk control
b)	Risk governance structure	Enterprise risk management	Risk governance
			Risk control
c)	Communication and enforcement of risk culture within the bank	Operational risk	Culture and conduct risk
d)	Scope and main features of risk measurement systems	Enterprise risk management	Risk measurement
e)	Risk information reporting	Enterprise risk management	Risk control - <i>Risk monitoring and reporting</i>
f)	Stress testing	Enterprise risk management	Risk measurement - <i>Stress testing</i>
		Market risk	Stress tests
		Systemic risk	Systemic risk
g)	Strategies and processes applied to manage, hedge and mitigate risks	Enterprise risk management	Risk appetite
			Risk measurement
			Risk control
		Credit risk	Overview
			Credit risk measurement
			Credit risk assessment
			Credit risk mitigation
			Credit risk approval
			Credit risk administration
		Market risk	Market risk controls – FVTPL positions, including trading portfolios
			Stress tests
			Market risk controls - Interest Rate Risk in the Banking Book (IRRBB) positions
			IRRBB measurement
			Non-trading foreign exchange rate risk
		Liquidity and funding risk	Overview
			Governance of liquidity risk
			Liquidity risk mitigation strategies and techniques
Risk measurement and internal liquidity reporting			
Contingency liquidity risk management and funding plans			
Funding			
Liquidity Coverage Ratio (LCR)			
Net Stable Funding Ratio (NSFR)			



OVA: Bank risk management approach (continued)

Pillar 3 disclosures requirement	2024 Annual Report section	Sub-section
g) Strategies and processes applied to manage, hedge and mitigate risks (continued)	Insurance risk	Insurance risk
	Operational risk	Overview
		Operational risk framework
	Compliance risk	Compliance risk
	Strategic risk	Strategic risk
	Reputation risk	Reputation risk
	Legal and regulatory environment risk	Legal and regulatory environment risk
	Competitive risk	Competitive risk
	Systemic risk	Systemic risk
	Environmental and social risk	Environmental and social risk (including climate change)
	Consolidated Financial Statements	
Note 9 - Derivative financial instruments and hedging activities - <i>Derivatives issued for other-than-trading purposes</i>		
Note 9 - Derivative financial instruments and hedging activities - <i>Derivative-related credit risk</i>		



OV1: Overview of risk weighted assets (RWA)

The following table presents an overview of our RWA and the related minimum capital requirements by risk type.

	(Millions of Canadian dollars)	a	b	b1	b2	b3	c	d
		RWA					Minimum capital requirement ¹	RWA
		October 31 2024	July 31 2024	April 30 2024 ⁴	January 31 2024 ⁵	October 31 2023	October 31 2024	YoY Change (a-b3)
1	Credit risk (excluding counterparty credit risk)	459,721	456,537	447,719	398,435	397,899	37,237	61,822
2	Of which: standardized approach (SA)	121,812	123,493	117,879	112,631	112,195	9,867	9,617
3	Of which: foundation internal ratings-based (F-IRB) approach	99,490	98,642	98,189	86,871	83,853	8,058	15,637
4	Of which: supervisory slotting approach							
5	Of which: advanced internal rating-based (A-IRB) approach	238,419	234,402	231,651	198,933	201,851	19,312	36,568
6	Counterparty credit risk (CCR)	27,012	25,049	25,669	22,992	27,912	2,188	(900)
7	Of which: standardized approach for counterparty credit risk (SA-CCR) ²	18,484	16,869	17,218	15,019	20,120	1,497	(1,636)
8	Of which: internal model method (IMM)							
9	Of which: other CCR	8,528	8,180	8,451	7,973	7,792	691	736
10	Credit valuation adjustment (CVA)	18,220	16,176	15,725	14,408	12,875	1,476	5,345
11	Equity investments in funds – look-through approach							
12	Equity investments in funds – mandate-based approach	4,110	3,869	4,344	4,295	4,540	333	(430)
13	Settlement risk	132	54	103	139	109	10	23
14	Securitization exposures in banking book	15,181	16,057	15,664	13,021	11,510	1,230	3,671
15	Of which: securitization IRB approach (SEC-IRBA)	353	359	370	1,031	183	29	170
16	Of which: securitization external ratings-based approach (SEC-ERBA), including internal assessment approach (IAA)	11,545	12,566	12,510	9,178	8,819	935	2,726
17	Of which: securitization standardized approach (SEC-SA)	3,283	3,132	2,784	2,812	2,508	266	775
18	Market risk	33,930	32,920	35,156	30,980	40,498	2,748	(6,568)
19	Of which: standardized approach (SA)	33,930	32,920	35,156	30,980	18,081	2,748	15,849
20	Of which: internal model approaches (IMA)	-	-	-	-	22,417	-	(22,417)
21	Capital charge for switch between trading book and banking book							
22	Operational risk	89,543	87,775	87,165	84,600	79,883	7,253	9,660
23	Amounts below the thresholds for deduction (subject to 250% risk weight)	24,433	22,740	22,157	21,387	20,997	1,979	3,436
24	Output floor applied ³	67.5%	67.5%	67.5%	67.5%	65%		
25	Floor adjustment	-	-	-	-	-		
26	N/A for D-SIBs	-	-	-	-	-		
27	Total (1 + 6 + 10 + 11 + 12 + 13 + 14 + 18 + 21 + 22 + 23 + 25)	672,282	661,177	653,702	590,257	596,223	54,454	76,059

¹ The minimum capital requirements for each category can be calculated by multiplying the total RWA by 8.1% as per OSFI CAR guidelines, inclusive of the countercyclical buffer.

² Includes RWA associated with CCP exposures, which Exposure at Default (EAD) is calculated based on SA-CCR.

³ The regulatory output floor is 67.5% for fiscal 2024 and 2025 and will be transitioned further over an additional two years, reflecting a regulatory capital floor requirement of 70% and 72.5% in, fiscal 2026 and 2027 respectively.

⁴ On March 28, 2024, we completed the HSBC Canada acquisition. HSBC Canada portfolios have been consolidated from the closing date, and are included in our April 30, 2024 and subsequent metrics.

⁵ On November 1, 2023 we adopted the revised market risk and CVA frameworks that came into effect under the CAR guidelines.



2024 vs. 2023

Total RWA increased by \$76 billion driven by the following:

Credit risk

RWA increased by \$62 billion, mainly driven by the \$39 billion impact of the acquisition of HSBC Canada assets, as well as net business growth primarily in retail and commercial lending in Canada. The impact of net credit migration mainly in our wholesale portfolios and the unfavourable impact of foreign exchange translation also contributed to the increase. The impact of foreign exchange translation on RWA is largely mitigated with economic hedges in our CET1 ratio.

Counterparty credit risk and CVA risk

CCR RWA decreased by \$0.9 billion, mainly driven by favourable derivative maturity cap changes on adoption of the Basic Approach for CVA under the Basel III reforms offset by the client activity. CVA RWA increased \$5.3 billion due to the regulatory adoption of the Basic Approach for CVA, foreign exchange rate changes and declining interest rates.

Securitization exposures in banking book

RWA increased \$3.7 billion, mainly due to client driven activity.

Market risk

RWA decreased \$6.6 billion, mainly driven by lower exposures in our fixed income portfolios and the adoption of the Standardized Approach for Market Risk (FRTB) under OSFI's Basel III reforms in Q1 2024.

Operational risk

RWA increased \$9.7 billion, mainly driven by the \$4 billion impact of the acquisition of HSBC Canada assets and business driven growth in operational risk.



RWA: Risk-Weighted Assets by Regulatory Approach

The following table provides details of our risk-weighted assets by type of risk and regulatory approach.

TOTAL CAPITAL RISK-WEIGHTED ASSETS ¹	Q4/2024							Q4/2024	Risk-weighted assets All-in Basis			
	Risk-weighted assets All-in Basis							Capital requirements	Risk-weighted assets All-in Basis			
	Exposure ²	Average of risk weights ³	Standardized Approach	Advanced Approach (A-IRB)	Foundation Approach (F-IRB)	Other	Total	Total ⁴	Q3/2024 Total	Q2/2024 Total	Q1/2024 Total	Q4/2023 Total
(Millions of Canadian dollars, except percentage and per share amounts)												
Credit risk ⁵												
Lending-related and other												
Residential mortgages	622,788	8%	4,396	47,532		-	51,928	4,206	49,981	50,029	45,613	44,864
Other retail (Personal, Credit cards and Small business treated as retail)	204,317	31%	7,245	55,434		-	62,679	5,077	61,799	59,828	57,827	61,714
Business (Corporate, Commercial, Medium-sized enterprises and Non-bank financial institutions)	560,902	50%	67,873	123,905	90,817	-	282,595	22,890	280,097	276,923	238,735	238,565
Sovereign (Government)	368,089	4%	2,568	11,548		-	14,116	1,143	14,002	13,952	14,494	14,018
Bank	45,522	42%	10,558	-	8,673	-	19,231	1,558	18,187	17,931	14,918	14,339
Total lending-related and other	1,801,618	24%	92,640	238,419	99,490	-	430,549	34,874	424,066	418,663	371,587	373,500
Trading - related												
Repo-style transactions	1,316,003	1%	264	322	7,821	121	8,528	691	8,180	8,451	7,973	7,792
Derivatives - including CVA	139,874	26%	1,044	2,405	14,438	18,817	36,704	2,973	33,045	32,943	29,427	32,995
Total trading-related	1,455,877	3%	1,308	2,727	22,259	18,938	45,232	3,664	41,225	41,394	37,400	40,787
Total lending-related and other and trading-related	3,257,495	15%	93,948	241,146	121,749	18,938	475,781	38,538	465,291	460,057	408,987	414,287
Banking book equities ⁶	6,118	197%	12,079	-		-	12,079	978	11,674	11,402	10,668	10,074
Securitization exposures	76,219	20%	6,356	8,825		-	15,181	1,230	16,057	15,664	13,021	11,510
Other assets	34,310	133%				45,768	45,768	3,707	47,460	44,258	42,001	39,971
Total credit risk	3,374,142	16%	112,383	249,971	121,749	64,706	548,809	44,453	540,482	531,381	474,677	475,842
Market risk ^{7,8}												
Interest rate			1,956				1,956	158	2,884	4,569	3,617	
Equity			3,656				3,656	296	3,096	3,101	2,910	
Foreign exchange			2,787				2,787	226	3,160	4,547	4,597	
Commodities			1,787				1,787	145	2,455	2,431	2,604	
Credit			8,374				8,374	678	6,248	6,404	4,896	
Default risk charge			10,898				10,898	883	10,635	10,243	9,481	
Other ⁸			4,472				4,472	362	4,442	3,861	2,875	
Total market risk			33,930				33,930	2,748	32,920	35,156	30,980	40,498
Operational risk			89,543				89,543	7,253	87,775	87,165	84,600	79,883
Total risk-weighted assets (RWA)	3,374,142		235,856	249,971	121,749	64,706	672,282	54,454	661,177	653,702	590,257	596,223

¹Calculated using OSFI CAR guidelines incorporating Basel III reforms.

²Total exposure represents exposure at default (EAD) which is the expected gross exposure upon the default of an obligor. This amount excludes any allowance against impaired loans or partial write-offs and does not reflect the impact of credit risk mitigation.

³Represents the average of counterparty risk weights within a particular category.

⁴The minimum capital requirements, inclusive of the countercyclical capital buffer for each category, can be calculated by multiplying the total RWA by 8.1% as per OSFI CAR guidelines.

⁵For credit risk, a majority of our portfolio use the A-IRB and F-IRB approaches under the Internal Ratings Based (IRB) Approach and the remainder use the Standardized Approach.



⁶ CAR guidelines define banking book equities based on the economic substance of the transaction rather than the legal form or accounting treatment associated with the financial instrument. As such, differences exist in the identification of equity securities held in the banking book and those reported in the financial statements. Banking book equities are financial instruments held for investment purposes and are not part of our trading book, consisting of publicly-traded and private equities, partnership units, venture capital and derivative instruments tied to equity interests.

As at Q4/24, the amount of publicly-traded equity exposures was \$2,962 million and private equity exposures amounted to \$3,158 million. Direct Equity exposure was risk weighted using as prescribed under section 4.1.8 of the CAR guideline (\$7,969 million RWA) and Equity Investments in Funds was risk weighted under section 4.1.22 of the CAR guideline using Mandate Based Approach (\$4,110 million RWA).

⁷ Starting November 1, 2023, we adopted the standardized approach for market risk RWA measurement reflecting Basel III reforms incorporating FRTB.

⁸ The Other category represents the Market Risk RWA for the "Residual Risk Add-On" charge under the standardized approach and the capital surcharge for movements between the trading book and banking book.



RWA1: Exposure at Default and Risk-Weighted Assets by Regulatory Approach

The following table provides details of our exposure at default and risk-weighted assets by type of risk and regulatory approach.

As at October 31, 2024

(Millions of Canadian dollars, except percentage and per share amounts)	Exposure at default (Post CRM) ¹					Risk-weighted assets ¹					Standardized Approach RWA Density	Internal Ratings Based RWA Density	Internal Ratings Based % (EAD)	
	Standardized Approach		Internal Ratings Based			Standardized Approach		Internal Ratings Based						
	On-B/S	Off-B/S	On-B/S	Off-B/S	Total	On-B/S	Off-B/S	On-B/S	Off-B/S	Total				
Risk-weighted assets														
Credit risk														
Lending-related and other														
Wholesale														
Sovereign	72,106	347	346,748	28,216	447,417	2,476	92	9,608	1,940	14,116	4%	3%	84%	
Bank	11,089	2,030	31,034	10,571	54,724	8,573	1,985	5,627	3,046	19,231	80%	21%	76%	
Corporate	63,926	10,417	269,436	173,494	517,273	57,609	10,264	142,780	71,942	282,595	91%	48%	86%	
Total wholesale	147,121	12,794	647,218	212,281	1,019,414	68,658	12,341	158,015	76,928	315,942	51%	27%		
Retail														
Residential Mortgages	7,089	4	429,211	124,739	561,043	4,394	2	39,490	8,042	51,928	62%	9%	99%	
Qualifying Revolving Retail Exposures (QRRE)	979	2,065	32,592	93,712	129,348	592	679	11,991	12,615	25,877	42%	19%	98%	
Other Retail	7,537	383	42,928	21,309	72,157	5,684	290	21,996	8,832	36,802	75%	48%	89%	
Total retail	15,605	2,452	504,731	239,760	762,548	10,670	971	73,477	29,489	114,607	64%	14%		
Total lending-related and other	162,726	15,246	1,151,949	452,041	1,781,962	79,328	13,312	231,492	106,417	430,549	52%	21%		
Counterparty credit risk														
Derivatives - including CVA					139,874					36,704				
Repo-style transactions					179,204					8,528				
Total counterparty credit risk					319,078					45,232				
Securitizations					76,179					15,181				
Subordinated-debt and Equities ²					6,120					12,082				
Other Assets					34,310					45,765				
Total credit risk³					2,217,649					548,809				
Market risk⁴					n.a.					33,930				
Operational risk⁴					n.a.					89,543				
Total risk-weighted assets (RWA)					2,217,649					672,282				

¹ Calculated using OSFI CAR guidelines incorporating Basel III reforms.

² Sub-Debt and Equities risk-weighting is determined as specified in CAR Chapter 4: Credit Risk Standardized Approach.

³ For credit risk, a majority of our portfolio use the A-IRB and F-IRB approaches under the Internal Ratings Based (IRB) Approach and the remainder use the Standardized Approach.

⁴ n.a. – not applicable based on regulatory capital methodology.



As at July 31, 2024

(Millions of Canadian dollars, except percentage and per share amounts)	Exposure at default (Post CRM) ¹					Risk-weighted assets ¹					Standardized Approach RWA Density	Internal Ratings Based RWA Density	Internal Ratings Based % (EAD)
	Standardized Approach		Internal Ratings Based		Total	Standardized Approach		Internal Ratings Based		Total			
	On-B/S	Off-B/S	On-B/S	Off-B/S		On-B/S	Off-B/S	On-B/S	Off-B/S				
Risk-weighted assets													
Credit risk													
Lending-related and other													
Wholesale													
Sovereign	68,162	381	336,217	28,181	432,941	2,373	108	9,625	1,896	14,002	4%	3%	84%
Bank	10,774	1,903	29,399	8,408	50,484	8,243	1,858	5,572	2,514	18,187	80%	21%	75%
Corporate	65,158	8,850	268,788	171,900	514,696	58,892	8,689	140,969	71,547	280,097	91%	48%	86%
Total wholesale	144,094	11,134	634,404	208,489	998,121	69,508	10,655	156,166	75,957	312,286	52%	28%	
Retail													
Residential Mortgages	6,976	5	423,663	123,624	554,268	3,782	2	38,226	7,971	49,981	54%	8%	99%
Qualifying Revolving Retail Exposures (QRRE)	945	2,028	32,014	93,724	128,711	572	660	11,867	12,684	25,783	41%	20%	98%
Other Retail	7,347	380	41,903	21,212	70,842	5,555	288	21,310	8,863	36,016	76%	48%	89%
Total retail	15,268	2,413	497,580	238,560	753,821	9,909	950	71,403	29,518	111,780	61%	14%	
Total lending-related and other	159,362	13,547	1,131,984	447,049	1,751,942	79,417	11,605	227,569	105,475	424,066	53%	21%	
Counterparty credit risk													
Derivatives - including CVA					127,098					33,045			
Repo-style transactions					193,361					8,180			
Total counterparty credit risk					320,459					41,225			
Securizations					76,076					16,057			
Subordinated-debt and Equities ²					5,646					11,674			
Other Assets					40,556					47,460			
Total credit risk³					2,194,679					540,482			
Market risk⁴					n.a.					32,920			
Operational risk⁴					n.a.					87,775			
Total risk-weighted assets (RWA)					2,194,679					661,177			

¹ Calculated using OSFI CAR guidelines incorporating Basel III reforms.

² Sub-Debt and Equities risk-weighting is determined as specified in CAR Chapter 4: Credit Risk Standardized Approach.

³ For credit risk, a majority of our portfolio use the A-IRB and F-IRB approaches under the Internal Ratings Based (IRB) Approach and the remainder use the Standardized Approach.

⁴ n.a. – not applicable based on regulatory capital methodology.

LINKAGES BETWEEN FINANCIAL STATEMENTS AND REGULATORY EXPOSURES
LI1: Differences between accounting and regulatory scopes of consolidation and mapping of financial statement categories with regulatory risk categories

The following table provides the differences between carrying values presented in our financial statements prepared in accordance with International Financial Reporting Standards (IFRS) and our regulatory exposures. It further breaks down the amounts in our financial statements into regulatory risk categories.

As at October 31, 2024

	a	b	c	d	e	f	g
	Carrying values as reported in published financial statements	Carrying values under scope of regulatory consolidation	Carrying values of items: ¹				Not subject to capital requirements or subject to deduction from capital
			Subject to credit risk framework	Subject to counterparty credit risk framework	Subject to the securitization framework	Subject to the market risk framework	
<i>(Millions of Canadian dollars)</i>							
Assets							
Cash and due from banks	56,723	56,714	56,531	-	-	-	183
Interest-bearing deposits with banks	66,020	66,016	66,016	-	-	-	-
Securities							
Trading	183,300	168,428	8,681	-	64	159,653	30
Investment, net of applicable allowance	256,618	253,386	241,491	-	11,909	-	(14)
	439,918	421,814	250,172	-	11,973	159,653	16
Assets purchased under reverse repurchase agreements and securities borrowed²	350,803	350,803	-	350,804	-	299,032	(1)
Loans							
Retail	626,978	626,059	620,118	-	-	-	5,941
Wholesale	360,439	357,608	334,963	2,114	14,838	3,152	2,541
	987,417	983,667	955,081	2,114	14,838	3,152	8,482
Allowance for loan losses	(6,037)	(6,037)	-	-	-	-	(6,037)
	981,380	977,630	955,081	2,114	14,838	3,152	2,445
Other							
Customers' liability under acceptances	35	35	35	-	-	-	-
Derivatives ²	150,612	150,564	-	150,564	-	147,017	-
Premises and equipment, net	6,852	6,841	6,841	-	-	-	-
Goodwill	19,286	19,285	-	-	-	-	19,285
Other intangibles	7,798	7,639	-	-	-	-	7,639
Other assets ²	92,155	91,262	35,660	30,546	425	42,152	4,127
	276,738	275,626	42,536	181,110	425	189,169	31,051
Total assets²	2,171,582	2,148,603	1,370,336	534,028	27,236	651,006	33,694
Liabilities and equity							
Deposits							
Personal	522,139	522,138	-	-	-	34,045	488,093
Business and government	839,670	840,364	-	-	-	18,189	822,175
Bank	47,722	47,722	-	-	-	11,473	36,249
	1,409,531	1,410,224	-	-	-	63,707	1,346,517
Other							
Acceptances	35	35	-	-	-	-	35
Obligations related to securities sold short	35,286	35,286	-	-	-	34,985	301
Obligations related to assets sold under repurchase agreements and securities loaned ²	305,321	305,321	-	305,321	-	280,386	-
Derivatives ²	163,763	163,763	-	163,763	-	157,587	-
Insurance contract liabilities	22,231	-	-	-	-	-	-
Other liabilities	94,677	91,865	-	-	-	39,802	52,063
	621,313	596,270	-	469,084	-	512,760	52,399
Subordinated debentures	13,546	13,546	-	-	-	-	13,546
Total liabilities²	2,044,390	2,020,040	-	469,084	-	576,467	1,412,462
Equity attributable to shareholders							
Preferred shares	9,031	9,031	-	-	-	-	9,031
Common shares	20,952	20,952	-	-	-	-	20,952
Retained earnings	88,608	89,989	-	-	-	-	89,989
Other components of equity	8,498	8,488	-	-	-	-	8,488
	127,089	128,460	-	-	-	-	128,460
Non-controlling interests	103	103	-	-	-	-	103
Total equity	127,192	128,563	-	-	-	-	128,563
Total liabilities and equity²	2,171,582	2,148,603	-	469,084	-	576,467	1,541,025

¹ Column c to g reflect a further breakout of column b by providing the respective CAR guideline frameworks utilized.

² These items contain exposures that are subject to both counterparty credit risk and market risk framework - hence column b will not equal to the sum of column c to g.

LI2: Main sources of differences between regulatory exposure amounts and carrying values in financial statements

The following table provides the key differences between the exposure amounts for regulatory purposes and the accounting carrying values as presented in our financial statements that are within the scope of regulatory consolidation.

As at October 31, 2024

	a	b	c	d	e
(Millions of Canadian dollars)	Total	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 L11)¹	2,114,909	1,370,336	27,236	534,028	651,006
2 Liabilities carrying value amount under regulatory scope of consolidation (as per template L11) ¹	607,578	-	-	469,084	576,467
3 Total net amount under regulatory scope of consolidation	1,507,331	1,370,336	27,236	64,944	74,539
4 Off-balance sheet amounts ²	601,304	472,150	47,785	81,369	-
5 Differences due to Fair Value adjustment	(562)	(549)	-	(13)	-
6 Differences due to different netting rules, other than those already included in row 2, and valuation methodologies	1,311,836	2,259	-	1,309,577	-
7 Differences due to consideration of provisions	-	-	-	-	-
8 Differences due to prudential filters	-	-	-	-	-
9 Difference due to accounting and risk treatment of securitizations and other items	(951)	(2,149)	1,198	-	-
10 Exposure amounts considered for regulatory purposes	3,418,958	1,842,047	76,219	1,455,877	74,539

¹ Amount reflects Table L11 columns (c), (d), (e) and (f) from the previous page. Derivative assets and liabilities are subject to both counterparty credit risk and market risk framework – hence column a will not equal to the sum of column b to e.

² Off-balance sheet amounts reflect the application of credit conversion factors.

LIA: Explanations of differences between accounting and regulatory exposure amounts

Our consolidated balance sheet (“accounting balance sheet”) is prepared in compliance with IFRS as issued by the International Accounting Standards Board. We leverage our accounting balance sheet to apply the required regulatory requirements prescribed by OSFI to determine our regulatory capital consolidated balance sheet.

In Template LI1: Differences between accounting and regulatory scopes of consolidation and mapping of financial statement categories with regulatory risk categories, we identify the differences between our IFRS consolidated accounting balance sheet (column a in LI1) and our regulatory capital consolidated balance sheet (column b in LI1). Our regulatory capital consolidated balance sheet, on which capital adequacy requirements are determined, reflects all of our consolidated subsidiaries except for our insurance subsidiaries as prescribed by OSFI’s CAR guidelines.

In Template LI2: Main sources of differences between regulatory exposure amounts and carrying values in financial statements, we quantify measurement differences other than regulatory consolidation.

Our banking book regulatory carrying values reflect our IFRS accounting balance sheet values except for our fair valued loans and debt securities carried at fair value through other comprehensive income (FVOCI), which under OSFI’s Credit risk framework, are measured at amortized cost. Off-balance sheet regulatory asset values reflect prescribed conversion factors and undrawn amounts.

Regulatory carrying values for our Counterparty credit risk related to our derivative assets and liabilities, assets purchased under reverse repurchase agreements and securities borrowed, and obligations related to assets sold under repurchase agreements and securities loaned are determined using OSFI’s CAR guidelines Chapter 7 Settlement and Counterparty risk framework. On November 1, 2018, OSFI adopted the BCBS Standardized Approach for measuring Counterparty credit risk (SA-CCR) for derivative regulatory exposures and we adopted this methodology for our derivative regulatory exposures. OSFI further updated SA-CCR for the Basel III reforms as released by OSFI on January 31, 2022, and further updated on October 20, 2023. The main differences between the accounting and regulatory amounts for Counterparty credit risk relate to regulatory inclusion of potential future exposure amounts and differences in allowed IFRS and regulatory netting rules, and the application of financial collateral in the calculation of regulatory exposure amount.

Credit valuation adjustment (CVA) is the market value of counterparty credit risk associated with a portfolio of derivative trades with a given counterparty. Effective November 1, 2023, our regulatory carrying values for CVA risk are determined as prescribed under the CAR guideline’s Chapter 8 Credit Valuation Adjustment Risk. Regulatory CVA differs from accounting CVA as it excludes the effect of our own default while also including some constraints not mandated by IFRS accounting rules.

The regulatory carrying value of exposures subject to the securitization framework includes our on-balance sheet third party securitization holdings as well as our securitized credit card exposures which meet the risk transference requirements under the CAR guidelines Chapter 6 Securitization but are not considered securitized for the purposes of our IFRS accounting balance sheet. Our regulatory carrying values are determined based on the BCBS revised securitization framework adopted by OSFI on November 1, 2018, and further updated for the Basel III reforms as released by OSFI on January 31, 2022, and further updated on October 20, 2023.

Our trading book regulatory carrying values are determined as prescribed under the CAR guideline’s Chapter 9 Market Risk. We employ OSFI’s prudent valuation guidance requirements, as stated in the CAR guideline’s Chapter 9 Market Risk to our trading book and banking book and as disclosed annually in table PV1 included in this report. Refer to our 2024 Annual Report - Risk management section which provides further insight into how we measure our market risk and the linkage of market risk to selected balance sheet items.



CAPITAL

CC1: Composition of Capital

The following table provides details of our regulatory capital and required regulatory adjustments under OSFI's CAR guidelines. Reconciliation references to CC2 of where these items are located on our IFRS and regulatory balance sheet are also included.

Composition of Capital Template		Cross Reference of Current Quarter to Regulatory Capital Balance Sheet (CC2)	Q4/24	Q3/24	Q2/24	Q1/24	Q4/23
(Millions of Canadian dollars, except percentage and otherwise noted)							
Common Equity Tier 1 capital (CET1): Instruments and Reserves							
1	Directly issued qualifying common share capital (and equivalent for non-joint stock companies) plus related stock surplus	a+b	21,243	21,003	21,059	20,291	19,365
2	Retained earnings		88,317	85,847	83,562	81,831	84,130
2a	Contractual service margins regulatory adjustment ¹		1,526	1,568	1,621	1,670	
3	Accumulated other comprehensive income (and other reserves)	c-d	8,498	8,049	7,444	6,238	6,852
4	<i>N/A for D-SIBs</i>		-	-	-	-	-
5	Common share capital issued by subsidiaries and held by third parties (amount allowed in group CET1)	e	11	11	11	11	11
6	Common Equity Tier 1 capital before regulatory adjustments		119,595	116,478	113,697	110,041	110,358
Common Equity Tier 1 capital: Regulatory adjustments							
7	Prudential valuation adjustments		192	193	182	181	184
8	Goodwill (net of related tax liability) ²	f-g	19,136	18,978	18,885	12,288	12,448
9	Other intangibles other than mortgage-servicing rights (net of related tax liability) ²	h+i-j	6,120	6,430	6,498	4,771	4,855
10	Deferred tax assets excluding those arising from temporary differences (net of related tax liability)	k	325	122	239	238	244
11	Cash flow hedge reserve	l	2,267	2,226	2,138	1,973	2,756
12	Shortfall of provisions to expected losses		-	-	-	-	-
13	Securitization gain on sale		-	-	-	-	-
14	Gains and losses due to changes in own credit risk on fair valued liabilities	m	35	(4)	51	386	1,251
15	Defined benefit pension fund net assets (net of related tax liability)	n-o	2,573	2,285	2,188	2,138	1,991
16	Investments in own shares (if not already netted off paid-in capital on reported balance sheet)		-	-	-	-	-
17	Reciprocal cross holdings in common equity		-	-	-	-	-
18	Non-significant investments in the capital of banking, financial and insurance entities, net of eligible short positions (amount above 10% threshold)		-	-	-	-	-
19	Significant investments in the common stock of banking, financial and insurance entities that are outside the scope of regulatory consolidation, net of eligible short positions (amount above 10% threshold)		-	-	-	-	-
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		-	-	-	-	-
24	of which: mortgage servicing rights		-	-	-	-	-
25	of which: deferred tax assets arising from temporary differences		-	-	-	-	-
26	Other deductions or regulatory adjustments to CET1 as determined by OSFI		11	18	19	(40)	18
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		30,659	30,248	30,200	21,935	23,747
29	Common Equity Tier 1 capital (CET1)		88,936	86,230	83,497	88,106	86,611
Additional Tier 1 capital (AT1): Instruments							
30	Directly issued qualifying Additional Tier 1 instruments plus related stock surplus		9,014	9,492	8,945	8,032	7,291
31	of which: classified as equity under applicable accounting standards	p+q	9,014	9,492	8,945	8,032	7,291
32	of which: classified as liabilities under applicable accounting standards		-	-	-	-	-



Composition of Capital Template <i>continued</i>		Cross Reference of Current Quarter to Regulatory Capital Balance Sheet (CC2)	Q4/24	Q3/24	Q2/24	Q1/24	Q4/23
(Millions of Canadian dollars, except percentage and otherwise noted)							
33	<i>N/A for D-SIBs</i>		-	-	-	-	-
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)	s	2	2	2	2	2
35	<i>N/A for D-SIBs</i>		-	-	-	-	-
36	Additional Tier 1 capital before regulatory adjustments		9,016	9,494	8,947	8,034	7,293
Additional Tier 1 capital: Regulatory adjustments							
37	Investments in own Additional Tier 1 instruments		-	-	-	-	-
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		-	-	-	-	-
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		-	-	-	-	-
44	Additional Tier 1 Capital (AT1)		9,016	9,494	8,947	8,034	7,293
45	Tier 1 capital (T1 = CET1 + AT1)		97,952	95,724	92,444	96,140	93,904
Tier 2 Capital: Instruments and Provisions							
46	Directly issued qualifying Tier 2 instruments plus related stock surplus	t+u	11,412	11,320	11,818	9,464	9,683
47	<i>N/A for D-SIBs</i>		-	-	-	-	-
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)	v	3	3	3	3	3
49	<i>N/A for D-SIBs</i>		-	-	-	-	-
50	Collective allowances	w	1,120	1,032	1,088	1,258	1,362
51	Tier 2 capital before regulatory adjustments		12,535	12,355	12,909	10,725	11,048
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)		-	-	-	-	-
54a	Non-significant investments in the other TLAC-eligible instruments issued by G-SIBs and Canadian D-SIBs, where the institution does not own more than 10% of the issued common share capital of the entity: amount previously designated for the 5% threshold but that no longer meets the conditions		-	-	-	-	-
55	Significant investments in the capital of banking, financial and insurance entities and Other TLAC-eligible instruments issued by G-SIBs and Canadian D-SIBs that are outside the scope of regulatory consolidation		-	-	-	-	-
56	Other deductions from Tier 2 capital		-	-	-	-	-
57	Total regulatory adjustments to Tier 2 capital		-	-	-	-	-
58	Tier 2 capital (T2)		12,535	12,355	12,909	10,725	11,048
59	Total capital (TC = T1 + T2)		110,487	108,079	105,353	106,865	104,952
60	Total risk-weighted assets		672,282	661,177	653,702	590,257	596,223



Composition of Capital Template <i>continued</i>		Cross Reference of Current Quarter to Regulatory Capital Balance Sheet (CC2)	Q4/24	Q3/24	Q2/24	Q1/24	Q4/23
(Millions of Canadian dollars, except percentage and otherwise noted)							
Capital ratios							
61	Common Equity Tier 1 (as a percentage of risk-weighted assets)		13.2%	13.0%	12.8%	14.9%	14.5%
62	Tier 1 (as a percentage of risk-weighted assets)		14.6%	14.5%	14.1%	16.3%	15.7%
63	Total capital (as a percentage of risk-weighted assets)		16.4%	16.3%	16.1%	18.1%	17.6%
64	Buffer (minimum CET1 requirement plus capital conservation buffer plus G-SIB buffer requirement plus D-SIB buffer expressed as a percentage of risk-weighted assets)		8.1%	8.1%	8.1%	8.1%	8.1%
65	of which: capital conservation buffer		2.5%	2.5%	2.5%	2.5%	2.5%
66	of which: bank-specific countercyclical buffer ³		0.1%	0.1%	0.1%	0.1%	0.1%
67	of which: G-SIB buffer ⁴		1.0%	1.0%	1.0%	1.0%	1.0%
67a	of which: D-SIB buffer		0.0%	0.0%	0.0%	0.0%	0.0%
68	Common Equity Tier 1 available to meet buffers (as a percentage of risk-weighted assets)		5.1%	4.9%	4.7%	6.8%	6.4%
OSFI target (minimum + capital conservation buffer + D-SIB surcharge (if applicable))							
69	Common Equity Tier 1 target ratio		8.1%	8.1%	8.1%	8.1%	8.1%
70	Tier 1 capital target ratio		9.6%	9.6%	9.6%	9.6%	9.6%
71	Total capital target ratio		11.6%	11.6%	11.6%	11.6%	11.6%
Amounts below the thresholds for deduction (before risk-weighting)							
72	Non-significant investments in the capital and Other TLAC-eligible instruments of other financials entities		667	578	789	602	990
73	Significant investments in the common stock of financials		6,096	6,003	5,839	6,072	6,287
74	Mortgage servicing rights (net of related tax liability)		-	-	-	-	-
75	Deferred tax assets arising from temporary differences (net of related tax liability)		3,031	2,451	2,681	2,155	1,796
Applicable caps on the inclusion of allowances in Tier 2							
76	Allowances eligible for inclusion in Tier 2 in respect of exposures subject to standardized approach (prior to application of cap)		515	557	548	803	836
77	Cap on inclusion of allowances in Tier 2 under standardized approach		515	557	548	803	836
78	Allowances eligible for inclusion in Tier 2 in respect of exposures subject to internal ratings-based approach (prior to application of cap)		4,104	3,859	3,813	3,286	3,419
79	Cap on inclusion of allowances in Tier 2 under internal ratings-based approach		4,104	3,859	3,813	3,286	3,419

¹ Effective November 1, 2023, Contractual Service Margins (CSM) related to our Insurance subsidiaries is included as a component of CET1 per CAR Chapter 2. Prior to the adoption of IFRS 17 it was included as part of our Retained Earnings.

² Goodwill and intangibles associated with our HSBC Canada acquisition in Q2 2024 is \$6.4 billion and \$1.7 billion net of applicable tax liabilities, respectively.

³ Bank specific countercyclical buffer requirement is the amount which is determined based on our weighted average private sector exposures in jurisdictions identified by the BCBS (Q4/24 0.08%, Q3/24 0.07%, Q2/24 0.05%, Q1/24 0.06%, Q4/23 0.06%).

⁴ Capital surcharge, equal to the higher of our D-SIB surcharge and the BCBS's G-SIB surcharge, is applicable to risk-weighted capital.



CC2: Regulatory capital balance sheet

The following table provides a reconciliation of our regulatory capital elements as reported in CC1 with our balance sheet prepared in accordance with IFRS and our regulatory balance sheet.

Regulatory capital balance sheet (Millions of Canadian dollars)	Cross Reference to Basel III Regulatory Capital Components (CC1)	Q4/24	
		Balance sheet	Under regulatory scope of consolidation
Assets			
Cash and due from banks		56,723	56,714
Interest-bearing deposits with banks		66,020	66,016
Securities, net of applicable allowance		439,918	421,814
<i>Non-significant investments in capital of other financial institutions not exceeding regulatory thresholds</i>			667
<i>Other securities</i>			421,147
Assets purchased under reverse repurchase agreements and securities borrowed		350,803	350,803
Loans			
Retail		626,978	626,059
Wholesale		360,439	357,608
Allowance for loan losses		(6,037)	(6,037)
<i>Collective allowance reflected in Tier 2 regulatory capital ¹</i>	w		(1,120)
<i>Shortfall of allowances to expected loss ²</i>			-
<i>Allowances not reflected in regulatory capital</i>			(4,917)
		981,380	977,630
Segregated fund net assets		-	-
Other			
Customers' liability under acceptances		35	35
Derivatives		150,612	150,564
Premises and equipment, net		6,852	6,841
Goodwill	f	19,286	19,285
<i>Goodwill related to insurance and joint ventures</i>			-
Other intangibles	h	7,798	7,639
<i>Other intangibles related to insurance and joint ventures</i>	i		159
Other		92,155	91,262
<i>Significant investments in other financial institutions and insurance subsidiaries</i>			6,096
<i>of which: exceeding regulatory thresholds</i>			-
<i>of which: not exceeding regulatory thresholds</i>			6,096
<i>Defined - benefit pension fund net assets</i>	n		3,537
<i>Deferred tax assets</i>			3,748
<i>of which: deferred tax assets excluding those arising from temporary differences</i>	k		325
<i>of which: deferred tax assets arising from temporary differences exceeding regulatory thresholds</i>			-
<i>of which: deferred tax liabilities related to permitted tax netting</i>			(2,259)
<i>of which: deferred tax assets - other temporary differences</i>			5,682
<i>Other assets</i>			77,881
<i>of which: relates to assets of operations held for sale – Goodwill</i>			-
<i>of which: relates to assets of operations held for sale – Intangibles</i>			-
Total assets		2,171,582	2,148,603

¹ Collective allowance includes Stage 1 and Stage 2 ACL on financial assets.

² Expected loss as defined under the Basel III framework.



Regulatory capital balance sheet <i>continued</i>	Cross Reference to Basel III Regulatory Capital Components (CC1)	Q4/24	
		Balance sheet	Under regulatory scope of consolidation
(Millions of Canadian dollars)			
Liabilities			
Deposits			
Personal		522,139	522,138
Business and government		839,670	840,364
Bank		47,722	47,722
		1,409,531	1,410,224
Segregated fund net liabilities		-	-
Other			
Acceptances		35	35
Obligations related to securities sold short		35,286	35,286
Obligations related to assets sold under repurchase agreements and securities loaned		305,321	305,321
Derivatives		163,763	163,763
Insurance claims and policy benefit liabilities		22,231	-
Other liabilities		94,677	91,865
<i>Gains and losses due to changes in own credit risk on fair value liabilities</i>	m		35
<i>Deferred tax liabilities</i>			542
<i>of which: related to goodwill</i>	g		149
<i>of which: related to intangibles</i>	j		1,678
<i>of which: related to pensions</i>	o		964
<i>of which: relates to permitted tax netting</i>			(2,249)
<i>of which: other deferred tax liabilities</i>			-
<i>Other Liabilities</i>			91,288
Subordinated debentures		13,546	13,546
<i>Regulatory capital amortization of maturing debentures</i>	u		(1,670)
<i>Subordinated debentures not allowed for regulatory capital</i>			2,134
<i>Subordinated debentures used for regulatory capital:</i>			13,082
<i>of which: are qualifying</i>	t		13,082
<i>of which: are subject to phase out directly issued capital:</i>			-
<i>of which: are subject to phase out issued by subsidiaries and held by 3rd party</i>			-
Total liabilities		2,044,390	2,020,040
Equity attributable to shareholders		127,089	128,460
Common shares	a	20,952	20,952
<i>of which are treasury - common shares</i>			(61)
Retained earnings		88,608	89,989
<i>of which relates to contributed surplus</i>	b		291
<i>of which relates to retained earnings for capital purposes</i>			89,698
<i>of which relates to insurance and joint ventures</i>			145
Other components of equity	c	8,498	8,488
<i>Gains and losses on derivatives designated as cash flow hedges</i>	l		2,267
<i>Unrealized foreign currency translation gains and losses, net of hedging activities</i>			7,128
<i>Other reserves allowed for regulatory capital</i>			(907)
<i>of which relates to Insurance</i>	d		(10)
Preferred shares and other equity instruments		9,031	9,031
<i>of which: are qualifying</i>	p		9,020
<i>of which: are subject to phase out</i>			-
<i>of which portion are not allowed for regulatory capital</i>			-
<i>of which: are qualifying treasury - preferred shares</i>	q		(6)
<i>of which: are qualifying treasury - other</i>			17
<i>of which: are subject to phase out treasury - preferred shares</i>			-



Regulatory capital balance sheet <i>continued</i>	Cross Reference to Basel III Regulatory Capital Components (CC1)	Q4/24	
		Balance sheet	Under regulatory scope of consolidation
(Millions of Canadian dollars)			
Non-controlling interests		103	103
<i>of which: are qualifying</i>			
<i>portion allowed for inclusion into CET1</i>	e		11
<i>portion allowed for inclusion into Tier 1 capital</i>	s		2
<i>portion allowed for inclusion into Tier 2 capital</i>	v		3
<i>of which: are subject to phase out</i>			-
<i>of which: portion not allowed for regulatory capital</i>			87
Total equity		127,192	128,563
Total liabilities and equity		2,171,582	2,148,603

		Equity	Assets
Insurance subsidiaries ¹	Principal activities		
Assured Assistance Inc.	Service provider for insurance claims	1	-
Royal Bank of Canada Insurance Company Limited	Life, annuity, trade credit, title and property reinsurance company provides coverage to international clients	1,301	1,571
RBC (Barbados) Services Company Ltd	Investment management, reinsurance transaction support and corporate services to Royal Bank of Canada Insurance Company Ltd.	(2)	-
RBC Insurance Agency Ltd.	Distribution of H&A products through AVIVA	78	36
RBC Insurance Company (Cayman) Limited	Life, annuity reinsurance company provides coverage to international clients	-	-
RBC Insurance Company of Canada	Property and casualty insurance company	129	144
RBC Insurance Holdings Inc.	Holding company	1	-
RBC Insurance Services Inc.	Service provider for insurance companies listed and the bank (creditor)	79	104
RBC Life Insurance Company	Life and health insurance company	3,090	27,327
RBC Commercial Insurance Agency Inc.	Provides commercial insurance policies for basic contents, commercial liability, errors and omissions, and cybersecurity coverage	-	-
Total		4,677	29,182

¹ The list of legal entities that are included within the accounting scope of consolidation but excluded from the regulatory scope of consolidation.



CREDIT RISK

CRA: General qualitative information about credit risk

The table below presents an overview of Pillar 3 disclosure requirements that have been met within our 2024 Annual Report and incorporated by reference into this Pillar 3 report. Our 2024 Annual Report is available free of charge on our website at <http://www.rbc.com/investorrelations>.

Pillar 3 disclosures requirement		2024 Annual Report section	Sub-section
a)	Translation of the business model into the components of the bank's credit risk profile	Credit risk	Overview
			Measurement of economic and regulatory capital - <i>Gross credit risk exposure</i>
b)	Criteria and approach used for defining credit risk management policy and for setting credit risk limits	Enterprise risk management	Risk governance
			Risk appetite
			Risk measurement
			Risk control – <i>Risk appetite, risk approval authorities and risk limits</i>
		Credit risk	Overview
			Credit risk assessment
			Credit risk mitigation
			Credit risk approval
c)	Structure and organization of the credit risk management and control function	Enterprise risk management	Risk governance
			Risk control
d)	Interaction between the credit risk management, risk control, compliance and internal audit functions	Enterprise risk management	Risk governance
e)	Scope and content of the reporting on credit risk exposure to the executive management and to the board of directors	Enterprise risk management	Risk governance
			Risk control – <i>Risk monitoring and reporting</i>

CR1: Credit quality of assets

The following table presents a comprehensive view of the credit quality of our on- and off-balance sheet assets.

As at October 31, 2024

		a	b	c	d		e	f	g
		Gross carrying values of		Allowances/ impairments ²	Of which ECL accounting provisions for credit losses on SA exposures		Of which ECL accounting provisions for credit losses on IRB exposures	Net values (a+b-c)	
		Defaulted exposures ¹	Non-defaulted exposures		Allocated in regulatory category of Specific ³	Allocated in regulatory category of General ³			
	(Millions of Canadian dollars)								
1	Loans	6,393	948,688	6,037	165	515	5,357	949,044	
2	Debt Securities	-	247,169	14	-	-	14	247,155	
2a	Equity Securities		3,003					3,003	
3	Off-Balance Sheet exposures ⁴	123	374,776	343	-	-	343	374,556	
4	Total	6,516	1,573,636	6,394	165	515	5,714	1,573,758	

¹ Definition of default as per the CAR guidelines.

² Reflects Stage 1, 2 and 3 allowances under IFRS 9, excluding ACL on fair value through OCI on financial instruments.

³ Regulatory category of specific allowance reflects IFRS 9 Stage 3 allowances. Regulatory category of general allowances reflects Stage 1 & 2 allowances.

⁴ Off balance sheet amounts are before the application of credit conversion factors and reflect guarantees given and irrevocable loan commitments. Revocable loan commitments are excluded as per BCBS requirements.

As at July 31, 2024

		a	b	c	d		e	f	g
		Gross carrying values of		Allowances/ impairments ²	Of which ECL accounting provisions for credit losses on SA exposures		Of which ECL accounting provisions for credit losses on IRB exposures	Net values (a+b-c)	
		Defaulted exposures ¹	Non-defaulted exposures		Allocated in regulatory category of Specific ³	Allocated in regulatory category of General ³			
	(Millions of Canadian dollars)								
1	Loans	6,359	941,058	5,798	183	557	5,058	941,619	
2	Debt Securities	-	238,018	19	-	-	19	237,999	
2a	Equity Securities		2,895					2,895	
3	Off-Balance Sheet exposures ⁴	154	367,325	336	-	-	336	367,143	
4	Total	6,513	1,549,296	6,153	183	557	5,413	1,549,656	

¹ Definition of default as per the CAR guidelines.

² Reflects Stage 1, 2 and 3 allowances under IFRS 9, excluding ACL on fair value through OCI on financial instruments.

³ Regulatory category of specific allowance reflects IFRS 9 Stage 3 allowances. Regulatory category of general allowances reflects Stage 1 & 2 allowances.

⁴ Off balance sheet amounts are before the application of credit conversion factors and reflect guarantees given and irrevocable loan commitments. Revocable loan commitments are excluded as per BCBS requirements.



CR2: Changes in stock of defaulted loans and debt securities

The following table presents our defaulted exposure balances, the flows between non-defaulted and defaulted exposure categories and reductions in the defaulted exposure balances due to write-offs.

For the three months ended October 31, 2024

	(Millions of Canadian dollars)	a
1	Defaulted loans and debt securities at the end of July 31, 2024	6,359
2	Loans and debt securities that have defaulted since the last reporting period	1,345
3	Returned to non-defaulted status	(379)
4	Amounts written off	(721)
5	Other changes	(211)
6	Defaulted loans and debt securities at the end of October 31, 2024 (1+2-3-4+5)	6,393

For the three months ended July 31, 2024

	(Millions of Canadian dollars)	a
1	Defaulted loans and debt securities at the end of April 30, 2024	5,706
2	Loans and debt securities that have defaulted since the last reporting period	1,448
3	Returned to non-defaulted status	(246)
4	Amounts written off	(644)
5	Other changes	95
6	Defaulted loans and debt securities at the end of July 31, 2024 (1+2-3-4+5)	6,359

CRB: Additional disclosure related to the credit quality of assets

The table below presents an overview of Pillar 3 disclosure requirements that have been met within our 2024 Annual Report and incorporated by reference into this Pillar 3 report. Our 2024 Annual Report is available free of charge on our website at <http://www.rbc.com/investorrelations>.

Pillar 3 disclosures requirement		2024 Annual Report section	Sub-section
a)	Definitions of past due	Consolidated Financial Statements	Note 2 - Summary of significant accounting policies, estimates and judgments - Allowance for credit losses - <i>Definition of default</i> <i>Credit impaired financial assets (Stage 3)</i> Note 5 - <i>Loans and allowances for credit losses - Loans past due but not impaired</i>
b)	Extent of past due exposures	Consolidated Financial Statements	Note 5 - <i>Loans and allowances for credit losses - Loans past due but not impaired</i>
c)	Description of methods used for determining accounting provisions for credit losses Description of the categorization of ECL accounting provisions (general and specific) for standardized approach exposures	Consolidated Financial Statements n/a	Note 2 - Summary of significant accounting policies, estimates and judgments - Allowance for credit losses n/a - For regulatory calculations under both the Standardized and IRB approaches, the IFRS 9 stage 3 allowances are considered to be specific allowances and the IFRS 9 stage 1 and stage 2 allowances are considered to be general allowances
d)	Definition of a restructured exposure	Consolidated Financial Statements	Note 2 - Summary of significant accounting policies, estimates and judgments - Allowance for credit losses - <i>Modifications</i>

CRB: Additional disclosure related to the credit quality of assets (continued)

(e) Breakdown of exposures by geographical areas, industry and residual maturity

The following table provides a breakdown of our credit risk exposures by industry, geographical areas and residual maturity. Our classification below reflects the Basel regulatory defined exposure classes. Amounts shown below reflect Exposures at default (EAD), which is the amount expected to be owed by an obligor at the time of default.

As at October 31, 2024

(Millions of Canadian dollars)	a	b		c	d	e
	On-balance sheet amount	Credit Risk ^{1,2}		Other ⁴	Repo-style Transaction	Counterparty Credit Risk ⁵ Derivatives
		Undrawn	Off-balance sheet amount ³			
Retail						
Residential secured ⁶	498,014	124,743				
Qualifying revolving	33,571	95,776				
Other retail	53,257	21,530	162			
Total Retail	584,842	242,049	162			
Wholesale						
Agriculture	13,257	3,241	77		-	210
Automotive	14,424	9,605	639		-	1,454
Banking	87,601	3,187	2,967	91,791		32,949
Consumer Discretionary	24,516	11,719	918		-	1,242
Consumer Staples	10,094	8,631	795		-	1,907
Oil and Gas	6,365	8,688	2,002		-	2,052
Financial Services	51,313	23,405	4,103	73,020		29,958
Financing Products	3,945	1,235	2,388	604		1,684
Forest Products	2,225	1,589	387		-	84
Governments	283,893	7,891	2,149	13,334		7,933
Industrial Products	15,526	12,463	940		-	1,052
Information Technology	6,353	7,892	251	42		976
Investments	30,015	7,151	786	103		99
Mining and Metals	2,821	3,950	1,684		-	427
Public Works and Infrastructure	2,871	2,329	1,383		-	300
Real Estate and Related	115,332	26,197	2,209	83		1,115
Other Services	35,980	15,870	3,461		-	1,236
Telecommunication and Media	7,814	7,210	159		-	2,874
Transportation	10,517	7,235	1,533		-	2,470
Utilities	14,652	21,110	5,993		-	5,451
Other Sectors	11,119	2,578	1,887	227		24,520
Total Wholesale	750,633	193,176	36,711	179,204		119,993
Total Exposure¹	1,335,475	435,225	36,873	179,204		119,993
By Geography⁷						
Canada	845,343	320,434	15,533	72,852		51,427
United States	360,803	84,633	15,277	56,415		22,201
Europe	55,936	21,879	3,432	31,987		31,555
Other International	73,393	8,279	2,631	17,950		14,810
Total Exposure^{1,7}	1,335,475	435,225	36,873	179,204		119,993
By Maturity						
Unconditionally cancellable	52,638	291,113	-	-		-
Within 1 year	397,552	29,523	22,346	179,204		61,049
1 to 5 year	734,343	106,784	12,332	-		40,473
Over 5 years	150,942	7,805	2,195	-		18,471
Total Exposure¹	1,335,475	435,225	36,873	179,204		119,993

¹ Excludes securitization and other assets not subject to standardized or IRB approach.

² EAD for Standardized exposures are reported net of Stage 3 allowances and EAD for IRB exposures are reported gross of all allowances for credit loss and partial write-off as per regulatory definitions.

³ EAD for Undrawn credit commitments and other off-balance sheet amounts are reported after the application of credit conversion factors.

⁴ Includes other off-balance sheet exposures such as letters of credit & guarantees.

⁵ Counterparty credit risk EAD reflects exposure amount after netting. Collateral is included in EAD for repo-style transactions to the extent allowed by regulatory guidelines. Default fund contributions to qualifying central counterparties are not reflected in the EAD exposures. Exchange traded derivatives are included in Other Sectors.

⁶ Includes residential mortgages and HELOC.

⁷ Geographic profile is based on the country of residence of the borrower.

CRB: Additional disclosure related to the credit quality of assets (continued)

As at July 31, 2024

(Millions of Canadian dollars)	a	b	c	d	e
	On-balance sheet amount	Credit Risk ^{1,2}		Counterparty Credit Risk ⁵	
		Off-balance sheet amount ³		Repo-style Transaction	Derivatives
Undrawn	Other ⁴				
Retail					
Residential secured ⁶	493,150	123,629			
Qualifying revolving	32,960	95,752			
Other retail	52,052	21,433	158		
Total Retail	578,162	240,814	158		
Wholesale					
Agriculture	12,975	3,232	72	-	181
Automotive	14,583	9,280	829	-	1,356
Banking	85,235	2,997	1,741	97,434	33,092
Consumer Discretionary	24,180	12,211	877	-	1,328
Consumer Staples	10,201	8,277	795	-	1,989
Oil and Gas	6,280	8,886	1,604	-	2,184
Financial Services	48,621	22,234	3,932	79,731	24,831
Financing Products	4,036	1,077	1,709	657	1,623
Forest Products	2,309	1,488	399	-	75
Governments	270,471	8,898	2,724	15,214	7,531
Industrial Products	15,868	13,133	1,055	-	997
Information Technology	6,618	8,375	268	37	940
Investments	28,985	4,673	752	90	294
Mining and Metals	2,749	4,082	1,738	-	436
Public Works and Infrastructure	2,840	2,138	1,408	-	276
Real Estate and Related	115,100	25,470	2,178	82	1,048
Other Services	35,098	14,781	3,464	-	1,169
Telecommunication and Media	8,559	6,767	123	-	2,802
Transportation	12,249	7,027	1,384	-	2,473
Utilities	14,765	21,208	5,581	-	5,564
Other Sectors	10,902	2,151	845	116	18,089
Total Wholesale	732,624	188,385	33,478	193,361	108,278
Total Exposure¹	1,310,786	429,199	33,636	193,361	108,278
By Geography⁷					
Canada	829,651	319,605	14,419	76,335	43,170
United States	348,779	80,268	14,598	66,927	23,008
Europe	59,931	21,853	2,425	32,776	29,328
Other International	72,425	7,473	2,194	17,323	12,772
Total Exposure^{1,7}	1,310,786	429,199	33,636	193,361	108,278
By Maturity					
Unconditionally cancellable	51,819	285,686	-	-	-
Within 1 year	369,102	30,293	19,917	193,361	49,923
1 to 5 year	752,583	106,043	12,442	-	37,890
Over 5 years	137,282	7,177	1,277	-	20,465
Total Exposure¹	1,310,786	429,199	33,636	193,361	108,278

¹ Excludes securitization and other assets not subject to standardized or IRB approach.

² EAD for Standardized exposures are reported net of Stage 3 allowances and EAD for IRB exposures are reported gross of all allowances for credit loss and partial write-off as per regulatory definitions.

³ EAD for Undrawn credit commitments and other off-balance sheet amounts are reported after the application of credit conversion factors.

⁴ Includes other off-balance sheet exposures such as letters of credit & guarantees.

⁵ Counterparty credit risk EAD reflects exposure amount after netting. Collateral is included in EAD for repo-style transactions to the extent allowed by regulatory guidelines. Exchange traded derivatives are included in Other Sectors.

⁶ Includes residential mortgages and HELOC.

⁷ Geographic profile is based on the country of residence of the borrower.

CRB: Additional disclosure related to the credit quality of assets (continued)

(f) Amounts of impaired exposures (according to the definition used by the bank for accounting purposes) and related allowances and write-offs, broken down by geographical areas and industry

The following tables provide a breakdown of impaired exposures by geographical areas and industry.

As at October 31, 2024

Impaired exposures by geography ¹ and portfolio (Millions of Canadian dollars)	Gross impaired exposures	Allowance ²	Net impaired exposures
Canada			
Retail	1,682	453	1,229
Wholesale	2,451	643	1,808
Securities	-	-	-
Total - Canada	4,133	1,096	3,037
United States			
Retail	126	19	107
Wholesale	1,165	237	928
Securities	-	-	-
Total - United States	1,291	256	1,035
Other International			
Retail	154	76	78
Wholesale	289	88	201
Securities	143	(41)	184
Total - Other International	586	123	463
Total			
Retail	1,962	548	1,414
Wholesale	3,905	968	2,937
Securities	143	(41)	184
Total impaired exposures	6,010	1,475	4,535

¹ Geographic information is based on residence of borrower.

² Allowance reflects only Stage 3 IFRS 9 allowances and includes allowances on acquired credit-impaired loans and securities.

As at July 31, 2024

Impaired exposures by geography ¹ and portfolio (Millions of Canadian dollars)	Gross impaired exposures	Allowance ²	Net impaired exposures
Canada			
Retail	1,538	433	1,105
Wholesale	2,236	535	1,701
Securities	-	-	-
Total - Canada	3,774	968	2,806
United States			
Retail	96	10	86
Wholesale	1,274	354	920
Securities	-	-	-
Total - United States	1,370	364	1,006
Other International			
Retail	166	82	84
Wholesale	375	106	269
Securities	146	(40)	186
Total - Other International	687	148	539
Total			
Retail	1,800	525	1,275
Wholesale	3,885	995	2,890
Securities	146	(40)	186
Total impaired exposures	5,831	1,480	4,351

¹ Geographic information is based on residence of borrower.

² Allowance reflects only Stage 3 IFRS 9 allowances and includes allowances on acquired credit-impaired loans and securities.



CRB: Additional disclosure related to the credit quality of assets (continued)

Net write-offs by geography ¹ and portfolio (Millions of Canadian dollars)	For the three months ended October 31, 2024	For the three months ended July 31, 2024
Canada		
Retail	389	327
Wholesale	68	15
Total Canada	457	342
United States²		
Retail	5	10
Wholesale	151	186
Total United States	156	196
Other International		
Retail	2	(2)
Wholesale ²	(3)	1
Total Other International	(1)	(1)
Total		
Retail	396	335
Wholesale	216	202
Total net write-offs	612	537

¹ Geographic information is based on residence of borrower.

² Includes acquired credit-impaired loans related to the acquisition of City National.

CRB: Additional disclosure related to the credit quality of assets (continued)

As at October 31, 2024

Impaired exposures by portfolio and sector	Gross impaired exposures	Allowance ¹	Net impaired exposures
(Millions of Canadian dollars)			
Retail			
Residential mortgages	1,233	231	1,002
Personal	408	211	197
Small business	321	106	215
Total Retail	1,962	548	1,414
Wholesale			
Agriculture	127	27	100
Automotive	263	108	155
Banking	54	35	19
Consumer Discretionary	400	67	333
Consumer Staples	138	63	75
Oil and Gas ²	9	1	8
Financial Services	120	42	78
Financial Products	228	40	188
Forest Products	147	46	101
Governments	12	2	10
Industrial Products	235	91	144
Information Technology	74	27	47
Investments	82	10	72
Mining and Metals	3	1	2
Public Works and Infrastructure	11	6	5
Real Estate and Related	1,399	244	1,155
Other Services	263	62	201
Telecommunication and Media	105	35	70
Transportation	172	57	115
Utilities	30	3	27
Other	33	1	32
Total Wholesale	3,905	968	2,937
Total impaired loans and acceptances	5,867	1,516	4,351
Securities	143	(41)	184
Total impaired exposures	6,010	1,475	4,535

¹ Allowance reflects only Stage 3 IFRS 9 allowances and includes allowances on acquired credit-impaired loans and securities.

² Allowance includes expected credit losses for undrawn letters of credit.

CRB: Additional disclosure related to the credit quality of assets (continued)

As at July 31, 2024

Impaired exposures by portfolio and sector	Gross impaired exposures	Allowance ¹	Net impaired exposures
(Millions of Canadian dollars)			
Retail			
Residential mortgages	1,102	237	865
Personal	406	199	207
Small business	292	89	203
Total Retail	1,800	525	1,275
Wholesale			
Agriculture	83	24	59
Automotive	221	67	154
Banking	67	35	32
Consumer Discretionary	395	96	299
Consumer Staples	186	68	118
Oil and Gas ²	8	3	5
Financial Services	116	42	74
Financial Products	250	32	218
Forest Products	160	33	127
Governments	3	1	2
Industrial Products	241	80	161
Information Technology	54	21	33
Investments	94	12	82
Mining and Metals	3	1	2
Public Works and Infrastructure	9	6	3
Real Estate and Related	1,425	330	1,095
Other Services	204	51	153
Telecommunication and Media	139	46	93
Transportation	155	41	114
Utilities	31	5	26
Other	41	1	40
Total Wholesale	3,885	995	2,890
Total impaired loans and acceptances	5,685	1,520	4,165
Securities	146	(40)	186
Total impaired exposures	5,831	1,480	4,351

¹ Allowance reflects only Stage 3 IFRS 9 allowances and includes allowances on acquired credit-impaired loans and securities.

² Allowance includes expected credit losses for undrawn letters of credit.



CRB: Additional disclosure related to the credit quality of assets (continued)

(g) Ageing analysis of accounting past-due exposures

The following table provides the ageing of our retail and wholesale past due exposures. Amounts presented may include loans past due as a result of administrative processes, such as mortgage loans on which payments are restrained pending payout due to sale or refinance, which can fluctuate based on business volumes. Past due loans arising from administrative processes are not representative of the borrowers' ability to meet their payment obligations. The table excludes loans less than 30 days past due as they are not generally representative of the borrowers' ability to meet their payment obligations.

As at October 31, 2024

(Millions of Canadian dollars)	30 to 89 days	90 days and greater	Total
Retail	2,542	263	2,805
Wholesale	1,454	4	1,458
Total	3,996	267	4,263

As at July 31, 2024

(Millions of Canadian dollars)	30 to 89 days	90 days and greater	Total
Retail	2,335	250	2,585
Wholesale	1,278	57	1,335
Total	3,613	307	3,920

(h) Breakdown of restructured exposures between impaired and not impaired exposures

Restructured exposures actively benefitting from modified contractual terms as at Oct 31, 2024 are not material (Jul 31, 2024 – not material).



CRC: Qualitative disclosure requirements related to credit risk mitigation techniques

The table below presents an overview of Pillar 3 disclosure requirements that have been met within our 2024 Annual Report and incorporated by reference into this Pillar 3 report. Our 2024 Annual Report is available free of charge on our website at <http://www.rbc.com/investorrelations>.

Pillar 3 disclosures requirement		2024 Annual Report section	Sub-section
a)	Core features of policies and processes for, and an indication of the extent to which the bank makes use of, on- and off-balance sheet netting	Credit risk	Credit risk assessment – <i>Counterparty credit risk</i>
		Consolidated Financial Statements	Note 9 - Derivative financial instruments and hedging activities – <i>Derivative-related credit risk</i>
			Note 29 - Offsetting financial assets and financial liabilities
b)	Core features of policies and processes for collateral evaluation and management	Credit risk	Credit risk mitigation – <i>Collateral</i>
c)	Information about market or credit risk concentrations under the credit risk mitigation instruments used	Credit risk	Credit risk mitigation
			Credit risk approval – <i>Credit risk limits</i>
		Consolidated Financial Statements	Note 9 - Derivative financial instruments and hedging activities

CR3: Credit risk mitigation techniques – overview

We utilize allowed regulatory credit mitigation techniques to reduce capital requirements associated with our balance sheet exposures. The following table presents a detailed breakdown of our unsecured and secured loan and debt and equity securities exposures. Secured exposures are mitigated by way of additional collateral or guarantees being requested of the borrower. We sometimes also utilize credit derivatives to mitigate our on-balance sheet exposures.

As at October 31, 2024

		a	b	c	d	f
	(Millions of Canadian dollars)	Exposures unsecured: carrying amount	Exposures to be secured ¹	Exposures secured by collateral ¹	Exposures secured by financial guarantees ^{1,2}	Exposures secured by credit derivatives
1	Loans ³	176,923	772,121	552,778	219,343	-
2	Debt securities	213,279	33,876	23,157	10,719	-
2a	Equity securities	3,003	-	-	-	-
3	Total	390,203	805,996	575,934	230,062	-
4	Of which defaulted ⁴	2,595	2,502	2,040	462	-

¹ Column c and d are a subset of column b (b = c + d).

² Credit mitigation allocation for multi-secured exposures is made by way of order of priority of available mitigation to be utilized: financial guarantees portion first followed by collateral for any remaining balance.

³ Securitized mortgages that do not qualify as securitized under IFRS or regulatory capital requirements are recognized as collateralized in column c.

⁴ Defaulted exposures are net of Stage 3 allowances.

As at July 31, 2024

		a	b	c	d	f
	(Millions of Canadian dollars)	Exposures unsecured: carrying amount	Exposures to be secured ¹	Exposures secured by collateral ¹	Exposures secured by financial guarantees ^{1,2}	Exposures secured by credit derivatives
1	Loans ³	188,888	752,731	556,492	196,239	-
2	Debt securities	218,309	19,690	18,844	846	-
2a	Equity securities	2,895	-	-	-	-
3	Total	407,195	772,421	575,336	197,085	-
4	Of which defaulted ⁴	2,332	2,727	2,164	564	-

¹ Column c and d are a subset of column b (b = c + d).

² Credit mitigation allocation for multi-secured exposures is made by way of order of priority of available mitigation to be utilized: financial guarantees portion first followed by collateral for any remaining balance.

³ Securitized mortgages that do not qualify as securitized under IFRS or regulatory capital requirements are recognized as collateralized in column c.

⁴ Defaulted exposures are net of Stage 3 allowances.

CRD: Qualitative disclosures on banks' use of external credit ratings under the standardized approach for credit risk

As detailed in tables CR4 and CR5, certain of our portfolios' RWA amounts are calculated as per OSFI's CAR Guideline, Chapter 4 Standardized Approach requirements. OSFI's Standardized Approach methodology allows for the reliance on the external credit ratings of counterparties, issued by independent rating agencies, for the determination of RWA. Five external rating agencies ratings, namely, Standard & Poor's (S&P), Moody's Investors Service (Moody's), Fitch Rating Services (Fitch), DBRS and Kroll Bond Rating Agency, Inc. (Kroll) have been approved by OSFI. Currently, external ratings are used to determine the RWA amounts associated with our wholesale exposures under the asset classes of corporate, sovereign, public sector entities, multilateral development banks, banks, and securities firms. As well, external ratings are used for determining the risk weighting for certain of our securitization's exposures.

External ratings utilized from the above-mentioned rating agencies are either an issuer rating or an issue-specific rating. We rely on an issue-specific rating if it is available for the purposes of determining RWA for the exposures we hold. We utilize the issuer rating only for our exposures which rank pari-passu with senior claims of the issuer.

OSFI specifies in its CAR guideline the required standard mapping of long-term external ratings of the above rating agencies to an equivalent risk weight. We rely on OSFI's mapping to determine the appropriate risk buckets for our Standardized Approach portfolios under the guideline. OSFI's current mapping of external rating agencies rating is reflected in the table below:

Standardized Risk Weight Category	Long-term rating				
	S&P	Moody's	Fitch	DBRS	Kroll
Long Term					
(AAA to AA-)	AAA to AA-	Aaa to Aa3	AAA to AA-	AAA to AA (low)	AAA to AA-
(A+ to A-)	A+ to A-	A1 to A3	A+ to A-	A(high) to A(low)	A+ to A-
(BBB+ to BBB-)	BBB+ to BBB-	Baa1 to Baa3	BBB+ to BBB-	BBB(high) to BBB(low)	BBB+ to BBB-
(BB+ to BB-)	BB+ to BB-	Ba1 to Ba3	BB+ to BB-	BB(high) to BB(low)	BB+ to BB-
(B+ to B-)	B+ to B-	B1 to B3	B+ to B-	B(high) to B(low)	B+ to B-
(Below B-)	Below B-	Below B3	Below B-	CCC or lower	Below B-

We understand that OSFI reviews the list of acceptable rating agencies and will reflect any changes in allowed rating agencies in its update of the CAR guidelines.

CR4: Standardized approach – credit risk exposure and credit risk mitigation (CRM) effects

The following table provides the effect of CRM on the calculation of capital requirements under the standardized approach. It presents on-balance sheet and off-balance sheet exposures before and after credit conversion factors (CCF) and CRM as well as associated RWA and RWA density by asset classes. As noted in CRD, the external ratings of the counterparty is relied on to determine the prescribed regulatory risk weight to be assigned.

As at October 31, 2024

	(Millions of Canadian dollars, except as otherwise noted)	a	b	c	d	e	f
		Exposures before CCF and CRM		Exposures post-CCF and CRM		RWA and RWA density	
Asset 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 ¹	40,495	300	41,045	30	66	0.2%
2	Public sector entities (PSEs)	11,424	835	27,460	317	2,502	9.0%
3	Multilateral development banks	3,625	-	3,625	-	5	0.1%
4	Banks	8,263	7,712	9,666	2,030	10,260	87.7%
	Of which: securities firms and other financial institutions treated as banks	5,891	7,377	7,357	1,929	8,464	91.1%
5	Covered bonds	1,390	-	1,390	-	278	20.0%
6	Corporates ¹	65,304	75,953	49,626	10,244	55,523	92.7%
	Of which: securities firms and other financial institutions treated as corporates	1,474	265	1,817	85	1,119	58.8%
	Of which: specialised lending	-	-	-	-	-	-
7	Subordinated debt, equity and other capital	3,402	1,243	3,402	494	7,971	204.6%
8	Retail	8,066	10,647	8,066	2,444	6,865	65.3%
9	Real estate ¹	38,793	1,652	21,275	177	16,359	76.3%
	Of which: general RRE	20,764	21	3,523	4	1,768	50.1%
	Of which: IPRRE	3,723	-	3,462	-	2,509	72.5%
	Of which: other RRE	-	-	-	-	-	-
	Of which: general CRE	9,691	-	9,675	-	6,715	69.4%
	Of which: IPCRE	42	-	42	-	44	104.8%
	Of which: land acquisition, development and construction	4,572	1,631	4,573	173	5,323	112.2%
10	Reverse mortgages	-	-	-	-	-	-
11	Mortgage-backed securities ²						
12	Defaulted exposures	616	26	574	4	782	135.3%
13	Other assets	23,364	-	23,364	-	21,201	90.7%
14	Total	204,742	98,368	189,493	15,740	121,812	59.4%

¹ When CRM is available in the form of an eligible guarantee, the portion that is covered by the guarantee will attract the risk weight of the protection provider and will be reflected in the protection provider's asset class in column c and d.

² Mortgage-backed securities exposure and RWA are included in Sovereign or PSE to reflect ultimate risk.



As at July 31, 2024

	(Millions of Canadian dollars, except as otherwise noted)	a	b	c	d	e	f
		Exposures before CCF and CRM		Exposures post-CCF and CRM		RWA and RWA density	
Asset 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 ¹	37,181	415	37,454	41	79	0.2%
2	Public sector entities (PSEs)	11,051	879	27,072	339	2,398	8.7%
3	Multilateral development banks	3,657	-	3,657	-	5	0.1%
4	Banks	7,943	7,223	9,362	1,904	9,800	87.0%
	Of which: securities firms and other financial institutions treated as banks	5,566	6,897	7,042	1,807	8,021	90.6%
5	Covered bonds	1,375	-	1,375	-	275	20.0%
6	Corporates ¹	63,741	44,347	49,285	8,659	54,068	93.3%
	Of which: securities firms and other financial institutions treated as corporates	953	294	1,303	98	1,077	76.9%
	Of which: specialised lending	-	-	-	-	-	-
7	Subordinated debt, equity and other capital	3,435	1,092	3,435	434	7,808	201.8%
8	Retail	7,880	10,498	7,880	2,403	6,708	65.2%
9	Real estate ¹	40,042	1,864	22,536	195	16,635	73.2%
	Of which: general RRE	20,656	24	3,430	4	1,415	41.2%
	Of which: IPRRE	3,709	-	3,437	-	2,218	64.5%
	Of which: other RRE	-	-	-	-	-	-
	Of which: general CRE	10,899	-	10,890	-	7,489	68.8%
	Of which: IPCRE	40	-	40	-	42	105.0%
	Of which: land acquisition, development and construction	4,738	1,840	4,738	191	5,471	111.0%
10	Reverse mortgages	-	-	-	-	-	-
11	Mortgage-backed securities ²						
12	Defaulted exposures	785	28	744	4	1,053	140.8%
13	Other assets	30,321	-	30,321	-	24,664	81.3%
14	Total	207,411	66,346	193,121	13,979	123,493	59.6%

¹ When CRM is available in the form of an eligible guarantee, the portion that is covered by the guarantee will attract the risk weight of the protection provider and will be reflected in the protection provider's asset class in column c and d.

² Mortgage-backed securities exposure and RWA are included in Sovereign or PSE to reflect ultimate risk.

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

The following table presents the breakdown of credit risk exposures under the standardized approach by asset classes and risk weight.

As at October 31, 2024 (in millions of Canadian dollars)

		0%	20%	50%	100%	150%	Other	Total credit exposures amount (post CCF and post-CRM)				
1	Sovereigns and their central banks	40,991	-	36	48	-	-	41,075				
2	Public sector entities (PSEs)	0%	20%	50%	100%	150%	Other	Total credit exposures amount (post CCF and post-CRM)				
		16,037	11,548	-	192	-	-	27,777				
3	Multilateral development banks	0%	20%	30%	50%	100%	150%	Other	Total credit exposures amount (post CCF and post-CRM)			
		3,601	24	-	-	-	-	3,625				
4	Banks	20%	30%	40%	50%	75%	100%	150%	Other	Total credit exposures amount (post CCF and post-CRM)		
		99	592	-	244	-	9,296	-	1,465	11,696		
	Of which: securities firms and other financial institutions	1	-	-	-	-	7,820	-	1,465	9,286		
5	Covered bonds	20%	30%	40%	50%	75%	100%	150%	Other	Total credit exposures amount (post CCF and post-CRM)		
		1,386	4	-	-	-	-	-	-	1,390		
6	Corporates	20%	50%	65%	75%	80%	85%	100%	130%	150%	Other	Total credit exposures amount (post CCF and post-CRM)
		2,374	124	-	707	-	17,450	38,397	-	818	-	59,870
	Of which: securities firms and other financial institutions	900	-	-	-	-	418	584	-	-	-	1,902
	Of which: specialised lending	-	-	-	-	-	-	-	-	-	-	-
7	Subordinated debt, equity and other capital	0%	20%	100%	250%	400%	Other	Total credit exposures amount (post CCF and post-CRM)				
		274	30	841	2,584	165	2	3,896				
8	Retail	15%	75%	100%	Other	Total credit exposures amount (post CCF and post-CRM)						
		1,697	8,813	-	-	10,510						



As at October 31, 2024 (in millions of Canadian dollars)

		20%	25%	30%	35%	40%	45%	50%	55%	60%	65%	70%	75%	85%	90%	100%	105%	110%	150%	Other ¹	Total credit exposure amount (post-CCF and post-CRM)		
9	Real estate	98	79	400	249	1	141	68	-	6,879	-	898	2,938	1,249	5	5,053	-	34	1,157	2,203	21,452		
	Of which: general RRE	98	79	398	247	1		55			-	895	10	-					-	1,744	3,527		
	Of which: IPRRE			2	2		141	14					2,842							3	458	3,462	
	Of which: other RRE			-	-		-													-	-	-	
	Of which: general CRE	-		-						-	6,879			86	1,249		1,461				-	-	9,675
	Of which: IPCRE												3						35		-	-	42
	Of which: land acquisition, development and construction																3,592				1,154	-	4,746

¹ Other reflects items whose risk weight are required to be multiplied by a 1.5 times multiplier as prescribed under CAR Chapter 4.1.16 resulting in risk-weights not included in the disclosure range prescribed to be disclosed.

10	Reverse mortgages	20%	25%	30%	35%	40%	45%	50%	55%	60%	65%	70%	75%	85%	90%	100%	105%	110%	150%	Other	Total credit exposure amount (post-CCF and post-CRM)	

11	Mortgage-backed securities ¹	20%	25%	30%	35%	40%	45%	50%	55%	60%	65%	70%	75%	85%	90%	100%	105%	110%	150%	Other	Total credit exposure amount (post-CCF and post-CRM)	
				-	-											-				-	-	-

¹ Mortgage-backed securities exposure and RWA are included in Sovereign or PSE to reflect ultimate risk.

		50%			100%			150%			Other	Total credit exposures amount (post CCF and post-CRM)
12	Defaulted exposures	-			170			408			-	578

		0%		20%		100%		1250%		Others		Total credit exposures amount (post CCF and post-CRM)
13	Other assets	1,980		229		21,155		-		-		23,364



As at October 31, 2024 (in millions of Canadian dollars)

Exposure amounts and CCFs applied to off-balance sheet exposures, categorised based on risk bucket of converted exposures					
		a	b	c	d
		On-balance sheet exposure	Off-balance sheet exposure (pre-CCF)	Weighted average CCF*	Exposure (post-CCF and post-CRM)
1	Less than 40%	78,334	6,795	26.6%	81,896
2	40 - 70%	12,708	173	29.1%	11,821
3	75 - 80%	11,309	5,326	21.8%	12,458
4	85%	18,249	4,082	28.2%	18,699
5	90 - 100%	79,021	81,453	19.2%	75,172
6	105 - 130%	52	-	-	52
7	150%	2,320	529	26.0%	2,385
8	250%	2,584	10	11.0%	2,585
9	400%	165	-	-	165
10	1250%				
11	Total exposures	204,742	98,368	20.5%	205,233

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



As at July 31, 2024 (in millions of Canadian dollars)

		0%	20%	50%	100%	150%	Other	Total credit exposures amount (post CCF and post-CRM)				
1	Sovereigns and their central banks	37,397	-	37	61	-	-	37,495				
2	Public sector entities (PSEs)	0%	20%	50%	100%	150%	Other	Total credit exposures amount (post CCF and post-CRM)				
		16,021	11,241	-	149	-	-	27,411				
3	Multilateral development banks	0%	20%	30%	50%	100%	150%	Other	Total credit exposures amount (post CCF and post-CRM)			
		3,633	24	-	-	-	-	-	3,657			
4	Banks	20%	30%	40%	50%	75%	100%	150%	Other	Total credit exposures amount (post CCF and post-CRM)		
		93	662	-	203	-	8,832	-	1,476	11,266		
	Of which: securities firms and other financial institutions	2	-	-	-	-	7,372	-	1,476	8,850		
5	Covered bonds	20%	30%	40%	50%	75%	100%	150%	Other	Total credit exposures amount (post CCF and post-CRM)		
		1,371	4	-	-	-	-	-	-	1,375		
6	Corporates	20%	50%	65%	75%	80%	85%	100%	130%	150%	Other	Total credit exposures amount (post CCF and post-CRM)
		1,641	56	-	560	-	17,526	37,692	-	469	-	57,944
	Of which: securities firms and other financial institutions	350	-	-	-	-	296	755	-	-	-	1,401
	Of which: specialised lending	-	-	-	-	-	-	-	-	-	-	-
7	Subordinated debt, equity and other capital	0%	20%	100%	250%	400%	Other	Total credit exposures amount (post CCF and post-CRM)				
		271	30	903	2,505	158	2	3,869				
8	Retail	15%	75%	100%	Other	Total credit exposures amount (post CCF and post-CRM)						
		1,673	8,610	-	-	10,283						



As at July 31, 2024 (in millions of Canadian dollars)

		20%	25%	30%	35%	40%	45%	50%	55%	60%	65%	70%	75%	85%	90%	100%	105%	110%	150%	Other	Total credit exposure amount (post-CCF and post-CRM)	
9	Real estate	347	275	585	1,554	5	296	692	-	6,829	1,345	873	2,307	1,231	5	5,266	3	33	1,085	-	22,731	
	Of which: general RRE	347	275	447	1,424	5		66			-	870	-	-		-			-	-	-	3,434
	Of which: IPRRE			138	130		296	625		15			2,230					3		-	-	3,437
	Of which: other RRE			-	-		-		-	-			-					-		-	-	-
	Of which: general CRE	-		-		-		-	-	6,814	1,345		77	1,231		1,423				-	-	10,890
	Of which: IPCRE											3			4			33	-	-		40
	Of which: land acquisition, development and construction															3,844			1,085	-	4,929	

10	Reverse mortgages	20%	25%	30%	35%	40%	45%	50%	55%	60%	65%	70%	75%	85%	90%	100%	105%	110%	150%	Other	Total credit exposure amount (post-CCF and post-CRM)

11	Mortgage-backed securities ¹	20%	25%	30%	35%	40%	45%	50%	55%	60%	65%	70%	75%	85%	90%	100%	105%	110%	150%	Other	Total credit exposure amount (post-CCF and post-CRM)
				-	-		-			-						-			-	-	-

¹ Mortgage-backed securities exposure and RWA are included in Sovereign or PSE to reflect ultimate risk.

		50%			100%			150%			Other	Total credit exposures amount (post CCF and post-CRM)
12	Defaulted exposures	-			136			612			-	748

13	Other assets	0%		20%		100%		1250%		Others		Total credit exposures amount (post CCF and post-CRM)
		5,657		-		24,664		-		-		30,321



As at July 31, 2024 (in millions of Canadian dollars)

Exposure amounts and CCFs applied to off-balance sheet exposures, categorised based on risk bucket of converted exposures					
		a	b	c	d
		On-balance sheet exposure	Off-balance sheet exposure (pre-CCF)	Weighted average CCF*	Exposure (post-CCF and post-CRM)
1	Less than 40%	75,559	6,809	26.7%	82,479
2	40 - 70%	16,309	137	28.5%	11,812
3	75 - 80%	10,362	5,159	21.9%	11,477
4	85%	18,323	4,116	28.2%	18,756
5	90 - 100%	82,041	49,585	23.1%	77,710
6	105 - 130%	36	-	-	36
7	150%	2,119	532	22.4%	2,167
8	250%	2,504	8	22.4%	2,505
9	400%	158	-	-	158
10	1250%				
11	Total exposures	207,411	66,346	23.7%	207,100

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

CRE: Qualitative disclosures related to internal risk-based (IRB) models

In measuring credit risk to determine regulatory capital, two principal approaches applied are: the Internal Ratings Based (IRB) approach and the Standardized approach. The majority of our credit risk exposures are reported under the IRB approach, as approved by the Office of the Superintendent of Financial Institutions (OSFI). The remainder of our portfolios are reported under the Standardized approach. The Standardized approach uses risk weights prescribed by OSFI to calculate RWA for credit risk exposures.

Under the IRB approach, we determine our own estimates for Probability of Default (PD), Loss Given Default (LGD) and Exposure at Default (EAD). They are the key credit parameters that form the basis of our credit risk measures. Internal ratings for borrower facilities and their corresponding estimates are used for credit approval, risk management, internal capital allocations, and corporate governance functions. In addition, the IRB parameter estimates are critical inputs for enterprise and regulatory stress-testing.

In accordance with the IRB approach for credit risk, models are designed for wholesale and retail portfolios. For Wholesale portfolios, a PD is estimated for each internal borrower grade and LGD and EAD parameters are estimated for each credit facility. For Retail portfolios, borrowers are risk rated using internal credit scoring models. Credit scores are one of the key drivers for segmentation of the portfolios into pools. Retail PD, EAD and LGD parameters are estimated at the pool level. All IRB approach regulatory capital models for wholesale and retail credit risk are subject to approval by OSFI.

Credit parameter estimates are based on our internal historical default and loan loss experience and are augmented by external data where appropriate. We employ a two-dimensional risk rating system for the majority of our credit portfolios. The first dimension is oriented to the risk of borrower default and quantified through the PD assigned to the borrower. The second dimension captures transaction-specific factors such as collateral, product type, and seniority, and is quantified by LGD and EAD estimates that apply at the credit facility level.

PD is an estimated percentage that represents the likelihood of default of an obligor within a given time period for a specific rating grade or for a particular pool of exposure. Each wholesale obligor is assigned a Borrower Risk Rating (BRR), reflecting an assessment of the credit quality of the obligor and each BRR has a PD calibrated against it. The assignment of BRRs is based on the evaluation of the obligor's business risk and financial risk and is based on fundamental credit analysis, as well as data-driven modelling. PD estimates are designed to be a long-run average of our experience across the economic cycle with margins of conservatism related to the likely range of errors. The BRR differentiates the riskiness of obligors and represents our evaluation of the obligors' ability and willingness to meet their contractual obligations on time over a three-year time horizon.

EAD is an amount expected to be owed by an obligor at the time of default. EAD is estimated based on the current exposure to the obligor and the possible future changes in that exposure driven by factors such as the nature of the credit commitment. Rates are estimated to reflect an economic downturn, with added conservatism to reflect data and statistical uncertainties identified in the modelling process.

LGD is an estimated percentage of EAD that is not expected to be recovered during the collection and recovery process. Each credit facility is assigned an LGD rate reflective of the extent of losses anticipated in the event the obligor defaults. Factors used in estimating LGD include seniority of debt, collateral security, and the industry sector in which the obligor operates. Estimated LGD rates draw primarily on internal loss experience and appropriate external data is used to supplement the estimation process when necessary. LGD rates are estimated to reflect conditions that might be expected to prevail in an economic downturn, with additional conservatism added to reflect data limitations and statistical uncertainties identified in the estimation process.

The IRB credit risk parameters are reviewed, at a minimum, annually and more frequently if deemed necessary by an independent validation team within the bank. In addition, quarterly monitoring and back-testing procedures are performed to compare the realized results with established estimates by the model development team.

CRE: Qualitative disclosures related to internal risk-based (IRB) models (continued)
EAD Covered by the Various Approaches

The following table outlines the percentage of our EAD covered by the IRB and Standardized approaches for each of our portfolios. This table reflects the methodology outlined by OSFI for IRB banks to determine whether they are meeting the 80% threshold calculation minimum requirement.

As at October 31, 2024

EAD (in %)	EAD covered by the various approaches			
	Standardized Approach ¹	Advanced Approach (A-IRB)	Foundation Approach (F-IRB)	Other
Retail				
Residential secured	1%	99%	-	-
Qualifying revolving	2%	98%	-	-
Other retail	11%	89%	-	-
Wholesale				
Corporate	14%	46%	40%	-
Sovereign	16%	84%	-	-
Bank	24%	-	76%	-
Equity	100%	-	-	-
Total credit risk	10%	77%	13%	-
Counterparty credit risk	-	16%	68%	16%
Securitization	40%	60%	-	-
Other assets not subject to Standardized or IRB Approaches	-	-	-	100%
Total²	10%	68%	22%	-

¹ Standardized Approach includes assumptions and waivers granted by OSFI based on an OSFI approved rollout plan.

² The total for this table is calculated using OSFI's guidance on the exposures to be included in the 80% EAD Threshold Calculation for IRB banks.

As at July 31, 2024

EAD (in %)	EAD covered by the various approaches			
	Standardized Approach ¹	Advanced Approach (A-IRB)	Foundation Approach (F-IRB)	Other
Retail				
Residential secured	1%	99%	-	-
Qualifying revolving	2%	98%	-	-
Other retail	11%	89%	-	-
Wholesale				
Corporate	14%	46%	40%	-
Sovereign	16%	84%	-	-
Bank	25%	-	75%	-
Equity	100%	-	-	-
Total credit risk	10%	77%	13%	-
Counterparty credit risk	-	16%	70%	14%
Securitization	37%	63%	-	-
Other assets not subject to Standardized or IRB Approaches	-	-	-	100%
Total²	10%	68%	22%	-

¹ Standardized Approach includes assumptions and waivers granted by OSFI based on an OSFI approved rollout plan.

² The total for this table is calculated using OSFI's guidance on the exposures to be included in the 80% EAD Threshold Calculation for IRB banks.

CRE: Qualitative disclosures related to internal risk-based (IRB) models (continued)**Parameters Governance**

The techniques used to develop models are in accordance with banking industry standards and regulatory requirements. We calibrate our models to ensure that variations of default rates through an economic cycle are included in the underlying data. We also build conservatism into our model development process to reflect statistical uncertainties.

Our models have Model Development Owners (MDO) who are accountable for the development and performance of models within the framework set by our policies, standards and procedures. MDOs are responsible for collecting, defining and documenting model requirements, collecting and reviewing data, testing and evaluating, designing model performance monitoring, and documenting.

Our models are required to be independently reviewed and comprehensively evaluated by the Enterprise Model Risk Management (EMRM) team. EMRM is responsible for the review and challenge of the methodology underpinning the estimation of the parameters. EMRM issues a report at the end of each validation exercise that documents the scope, approach and findings of the review. The parameters reviewed by EMRM are presented to the Credit Models Governance Committee and approved by RBC's senior risk management committee.

Back-testing of Parameters and Model Performance

The IRB credit risk parameters are reviewed, at a minimum, annually and more frequently if deemed necessary. In order to ensure that any material events are identified in a timely fashion, we engage in regular monitoring of realized results against established estimates. In cases where the actual results exceed predefined thresholds, a review of the results will be conducted and documented which may lead to a re-calibration of the parameters. Any recommended changes to the parameters would be approved by the Credit Models Governance Committee, and OSFI as applicable.

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

The following table provides the key parameters used for the calculation of capital requirements for credit risk exposures under the A-IRB approach, broken down by asset class and PD range.

As at October 31, 2024

		a	b	c	d	e	f	g	h	i	j	k	l
	PD scale ¹	Original on-balance sheet gross exposure	Off-balance sheet exposures pre CCF	Average CCF (%)	EAD post CRM and post-CCF	Average PD (%)	Number of obligors ²	Average LGD (%)	Average maturity (in years)	RWA	RWA density (%)	EL	Provisions ³
(Millions of Canadian dollars, except as otherwise noted)													
Asset Classes													
1	Sovereigns												
	0.00 to < 0.15	287,702	35,189	67.79	374,313	0.02	1,066	12.69	2.43	11,351	3.0	10	
	0.15 to < 0.25	53	28	66.44	72	0.24	42	29.98	2.21	22	30.0	-	
	0.25 to < 0.50	442	35	54.58	461	0.46	261	18.11	2.72	128	27.8	-	
	0.50 to < 0.75	-	-	-	-	-	-	-	-	-	-	-	
	0.75 to < 2.50	64	16	63.84	71	1.14	35	27.02	2.37	40	56.4	-	
	2.50 to < 10.00	6	3	60.31	7	3.70	11	22.15	1.46	4	60.6	-	
	10.00 to < 100.00	-	1	65.53	1	18.93	5	61.65	1.03	3	300.0	-	
	100.00 (default)	39	-	-	39	100.00	6	44.99	2.50	-	0.2	35	
	Total Sovereigns	288,306	35,272	67.78	374,964	0.03	1,426	12.71	2.43	11,548	3.1	45	36
2	Corporates												
	0.00 to < 0.15	23,952	31,293	63.06	44,603	0.09	18,198	34.00	1.78	6,875	15.4	14	
	0.15 to < 0.25	18,342	12,556	55.29	24,266	0.24	9,016	33.90	1.81	6,746	27.8	20	
	0.25 to < 0.50	21,318	12,939	53.98	27,023	0.44	9,433	33.94	1.87	10,845	40.1	40	
	0.50 to < 0.75	-	-	-	-	-	-	-	-	-	-	-	
	0.75 to < 2.50	70,337	43,410	52.98	84,789	1.25	25,993	33.97	1.87	52,576	62.0	361	
	2.50 to < 10.00	15,059	9,528	54.30	17,120	4.08	8,814	35.78	1.93	15,981	93.3	252	
	10.00 to < 100.00	2,432	907	60.28	2,737	24.99	2,454	38.35	1.81	4,882	178.4	259	
	100.00 (default)	3,009	38	67.10	2,894	100.00	1,561	38.24	1.84	7,980	275.8	588	
	Total Corporates	154,449	110,671	56.39	203,432	2.73	75,469	34.23	1.85	105,885	52.0	1,534	1,794
3	Corporate – Specialised Lending												
	0.00 to < 0.15	3,669	2,355	55.56	4,738	0.10	69	35.47	2.68	1,143	24.1	2	
	0.15 to < 0.25	3,293	2,182	51.99	4,450	0.24	66	27.56	2.92	1,455	32.7	3	
	0.25 to < 0.50	5,962	1,984	57.25	6,820	0.46	153	32.02	2.84	3,323	48.7	10	
	0.50 to < 0.75	-	-	-	-	-	-	-	-	-	-	-	
	0.75 to < 2.50	13,085	4,700	51.50	14,201	1.24	557	29.11	2.05	8,667	61.0	52	
	2.50 to < 10.00	3,187	1,435	56.18	2,556	4.35	140	30.08	2.20	2,142	83.8	34	
	10.00 to < 100.00	73	3	19.67	74	31.51	3	37.15	1.00	144	195.0	9	
	100.00 (default)	538	-	-	538	100.00	14	36.41	1.61	1,146	212.8	107	
	Total Corporate – Specialised Lending	29,807	12,659	53.76	33,377	2.68	1,002	30.61	2.42	18,020	54.0	217	321
4	Total Wholesale	472,562	158,602	58.71	611,773	1.07	77,897	20.84	2.24	135,453	22.1	1,796	2,151

¹ Refer to the "Internal ratings map" under the Credit risk assessment subsection of the Risk management section in our 2024 Annual Report.

² Number of obligors is defined as the number of borrowers in each PD band. For Retail exposures, a borrower can appear in multiple PD bands if the borrower has more than one type of product with the bank. In addition, Retail obligors include borrowers where the portion of the exposure has been securitized given CAR guideline requirements related to retained interests. Wholesale obligors are reflected as unique borrowers. For example, sovereign obligors include central banks or agencies, public sector entities and multilateral development banks which are each reflected as unique borrowers in the sovereign asset class. Retail borrowers with both Visa and Mastercard are counted as one borrower in the asset class qualifying revolving retail.

³ Provisions reflect IFRS 9, Stage 1, 2 & 3 allowances under IRB portfolio.



CR6: A-IRB – Credit risk exposures by portfolio and PD range (continued)

As at October 31, 2024

		a	b	c	d	e	f	g	h	i	j	k	l
(Millions of Canadian dollars, except as otherwise noted)	PD scale ¹	Original on-balance sheet gross exposure	Off-balance sheet exposures pre CCF	Average CCF (%)	EAD post CRM and post-CCF	Average PD (%)	Number of obligors ²	Average LGD (%)	Average maturity (in years)	RWA	RWA density (%)	EL	Provisions ³
Asset Classes													
5	Retail - Residential mortgage exposures												
	0.00 to < 0.15	359,488	140,264	86.54	480,867	0.12	1,702,423	20.08		27,126	5.6	118	
	0.15 to < 0.25	12,473	55	100.00	7,283	0.15	81,694	16.16		387	5.3	2	
	0.25 to < 0.50	47,938	459	100.00	19,004	0.35	172,867	14.29		1,700	8.9	10	
	0.50 to < 0.75	792	-	-	792	0.51	2,580	21.69		136	17.2	1	
	0.75 to < 2.50	34,921	2,473	89.90	31,371	0.90	127,312	20.69		7,632	24.3	58	
	2.50 to < 10.00	12,041	487	90.39	9,600	4.07	54,718	19.72		5,393	56.2	76	
	10.00 to < 100.00	4,524	167	109.06	3,974	28.12	14,011	20.77		4,168	104.9	234	
	100.00 (default)	1,245	5	8.39	1,059	100.00	3,957	21.02		990	93.5	154	
	Total Retail - Residential mortgage exposures	473,422	143,910	86.68	553,950	0.64	2,159,562	19.86		47,532	8.6	653	490
5a	Of which: Retail - Insured exposure secured by real estate												
	0.00 to < 0.15	-	-	-	-	-	-	-		-	-	-	-
	0.15 to < 0.25	12,353	-	-	7,108	0.15	81,610	15.02		349	4.9	2	
	0.25 to < 0.50	42,977	-	-	13,583	0.33	168,677	11.73		929	6.8	5	
	0.50 to < 0.75	-	-	-	-	-	-	-		-	-	-	-
	0.75 to < 2.50	5,795	-	-	22	1.13	24,714	14.31		4	19.3	-	
	2.50 to < 10.00	2,886	-	-	4	4.29	15,276	14.03		2	41.3	-	
	10.00 to < 100.00	735	-	-	4	39.30	3,128	14.81		3	70.8	-	
	100.00 (default)	190	-	-	3	100.00	1,055	14.52		6	181.4	-	
	Total Retail – Insured exposure secured by real estate	64,936			20,724	0.29	294,460	12.86		1,293	6.2	7	10
5b	Of which: Retail - Uninsured mortgages												
	0.00 to < 0.15	325,276	459	100.00	325,734	0.14	827,988	18.21		18,326	5.6	82	
	0.15 to < 0.25	120	55	100.00	175	0.16	84	62.93		38	21.7	-	
	0.25 to < 0.50	4,658	158	100.00	4,815	0.41	3,451	20.02		657	13.6	4	
	0.50 to < 0.75	792	-	-	792	0.51	2,580	21.69		136	17.2	1	
	0.75 to < 2.50	26,659	257	100.00	26,917	0.92	63,060	19.76		6,384	23.7	49	
	2.50 to < 10.00	8,106	24	100.00	8,129	4.03	23,959	18.70		4,309	53.0	60	
	10.00 to < 100.00	3,380	-	-	3,380	28.12	7,338	19.92		3,395	100.5	191	
	100.00 (default)	908	-	-	908	100.00	1,961	20.29		896	98.7	120	
	Total Retail – Uninsured mortgages	369,899	953	100.00	370,850	0.78	930,421	18.41		34,141	9.2	507	380

¹ Refer to the "Internal ratings map" under the Credit risk assessment subsection of the Risk management section in our 2024 Annual Report.

² Number of obligors is defined as the number of borrowers in each PD band. For Retail exposures, a borrower can appear in multiple PD bands if the borrower has more than one type of product with the bank. In addition, Retail obligors include borrowers where the portion of the exposure has been securitized given CAR guideline requirements related to retained interests. Wholesale obligors are reflected as unique borrowers. For example, sovereign obligors include central banks or agencies, public sector entities and multilateral development banks which are each reflected as unique borrowers in the sovereign asset class. Retail borrowers with both Visa and Mastercard are counted as one borrower in the asset class qualifying revolving retail.

³ Provisions reflect IFRS 9, Stage 1, 2 & 3 allowances under IRB portfolio.



CR6: A-IRB – Credit risk exposures by portfolio and PD range (continued)

As at October 31, 2024

		a	b	c	d	e	f	g	h	i	j	k	l	
	(Millions of Canadian dollars, except as otherwise noted)	PD scale ¹	Original on-balance sheet gross exposure	Off-balance sheet exposures pre CCF	Average CCF (%)	EAD post CRM and post-CCF	Average PD (%)	Number of obligors ²	Average LGD (%)	Average maturity (in years)	RWA	RWA density (%)	EL	Provisions ³
Asset Classes														
5c	Of which: HELOCs													
		0.00 to < 0.15	34,212	139,805	86.49	155,133	0.10	874,435	23.98		8,800	5.7	36	
		0.15 to < 0.25	-	-	-	-	-	-	-		-	-	-	
		0.25 to < 0.50	304	301	100.00	605	0.34	763	26.13		114	18.8	1	
		0.50 to < 0.75	-	-	-	-	-	-	-		-	-	-	
		0.75 to < 2.50	2,467	2,216	88.73	4,433	0.77	39,540	26.36		1,243	28.0	9	
		2.50 to < 10.00	1,050	463	89.90	1,466	4.29	15,483	25.38		1,083	73.9	16	
		10.00 to < 100.00	409	167	109.06	591	28.04	3,545	25.68		771	130.5	43	
		100.00 (default)	147	5	8.39	148	100.00	941	25.66		88	59.5	34	
	Total HELOC		38,589	142,957	86.59	162,376	0.35	934,707	24.08		12,099	7.5	139	100
6	Qualifying revolving retail													
		0.00 to < 0.15	6,723	46,131	89.33	47,932	0.09	6,021,498	93.04		2,378	5.0	39	
		0.15 to < 0.25	10,511	40,808	85.11	45,242	0.18	2,070,324	89.99		3,933	8.7	72	
		0.25 to < 0.50	648	4,583	89.05	4,729	0.36	3,801,935	89.22		708	15.0	15	
		0.50 to < 0.75	2,201	6,067	88.88	7,593	0.61	1,112,899	94.69		1,872	24.7	44	
		0.75 to < 2.50	7,737	6,874	88.90	13,848	1.61	2,225,665	90.97		6,884	49.7	203	
		2.50 to < 10.00	3,430	1,961	91.79	5,230	4.39	1,199,524	91.74		5,189	99.2	211	
		10.00 to < 100.00	1,238	346	112.23	1,626	31.67	608,193	90.30		3,470	213.3	472	
		100.00 (default)	104	1	5.20	104	100.00	57,516	87.44		172	165.1	77	
	Total Qualifying revolving retail		32,592	106,771	87.77	126,304	1.00	17,097,554	91.58		24,606	19.5	1,133	1,659
7	Retail - SME													
		0.00 to < 0.15	603	4,481	102.76	5,208	0.06	251,027	99.51		886	17.0	3	
		0.15 to < 0.25	549	4,902	93.12	5,113	0.22	128,053	69.92		1,544	30.2	8	
		0.25 to < 0.50	412	1,508	104.69	1,991	0.30	137,977	99.31		1,034	52.0	6	
		0.50 to < 0.75	2,556	68	99.06	2,299	0.55	14,147	36.76		641	27.9	5	
		0.75 to < 2.50	6,428	2,789	94.76	8,107	1.17	219,591	60.02		5,182	63.9	55	
		2.50 to < 10.00	2,650	831	99.44	3,052	5.57	127,740	59.96		2,708	88.7	96	
		10.00 to < 100.00	568	202	97.20	686	27.41	35,210	71.56		967	141.0	133	
		100.00 (default)	301	46	11.89	104	100.00	7,146	65.15		138	132.2	67	
	Total Retail - SME		14,067	14,827	97.71	26,560	2.22	920,891	70.91		13,100	49.3	373	306
8	Other retail													
		0.00 to < 0.15	3,517	1,398	86.91	4,732	0.07	9,397	39.68		352	7.4	1	
		0.15 to < 0.25	2,862	5,551	89.27	7,817	0.19	30,389	85.42		2,597	33.2	13	
		0.25 to < 0.50	9,797	2	100.24	9,798	0.30	342,337	66.78		3,503	35.8	20	
		0.50 to < 0.75	4	13	89.79	16	0.65	118	94.26		13	78.0	-	
		0.75 to < 2.50	12,412	620	93.17	12,420	1.11	329,594	61.11		8,158	65.7	88	
		2.50 to < 10.00	2,380	55	91.11	2,336	4.28	91,972	67.49		2,273	97.3	66	
		10.00 to < 100.00	575	11	89.68	469	37.74	24,439	71.86		747	159.2	125	
		100.00 (default)	106	-	5.00	89	100.00	4,402	69.16		85	95.1	56	
	Total Other retail		31,653	7,650	89.17	37,677	1.46	832,648	65.50		17,728	47.1	369	532
9	Total retail		551,734	273,158	87.77	744,491	0.80	21,010,655	36.16		102,966	13.8	2,528	2,987
10	Total A-IRB		1,024,296	431,760	77.10	1,356,264	0.92	21,088,552	29.25	2.24	238,419	17.6	4,324	5,138

¹ Refer to the "Internal ratings map" under the Credit risk assessment subsection of the Risk management section in our 2024 Annual Report.

² Number of obligors is defined as the number of borrowers in each PD band. For Retail exposures, a borrower can appear in multiple PD bands if the borrower has more than one type of product with the bank. In addition, Retail obligors include borrowers where the portion of the exposure has been securitized given CAR guideline requirements related to retained interests. Wholesale obligors are reflected as unique borrowers. For example, sovereign obligors include central banks or agencies, public sector entities and multilateral development banks which are each reflected as unique borrowers in the sovereign asset class. Retail borrowers with both Visa and Mastercard are counted as one borrower in the asset class qualifying revolving retail.

³ Provisions reflect IFRS 9, Stage 1, 2 & 3 allowances under IRB portfolio.



CR6: A-IRB – Credit risk exposures by portfolio and PD range (continued)

As at July 31, 2024

		a	b	c	d	e	f	g	h	i	j	k	l	
	(Millions of Canadian dollars, except as otherwise noted)	PD scale ¹	Original on-balance sheet gross exposure	Off-balance sheet exposures pre CCF	Average CCF (%)	EAD post CRM and post-CCF	Average PD (%)	Number of obligors ²	Average LGD (%)	Average maturity (in years)	RWA	RWA density (%)	EL	Provisions ³
Asset Classes														
1	Sovereigns													
		0.00 to < 0.15	276,868	35,909	67.28	363,749	0.02	1,057	12.69	2.47	11,325	3.1	10	
		0.15 to < 0.25	53	31	59.62	72	0.24	42	29.94	2.26	22	30.3	-	
		0.25 to < 0.50	422	32	53.45	440	0.46	242	18.18	2.69	123	27.9	-	
		0.50 to < 0.75	-	-	-	-	-	-	-	-	-	-	-	
		0.75 to < 2.50	65	44	60.20	91	1.27	38	23.15	2.63	47	51.0	-	
		2.50 to < 10.00	4	5	63.27	7	2.81	8	25.78	1.38	4	65.1	-	
		10.00 to < 100.00	-	-	61.75	-	29.33	4	40.00	1.41	-	210.5	-	
		100.00 (default)	39	-	-	39	100.00	7	44.75	2.50	-	0.4	35	
	Total Sovereigns		277,451	36,021	67.26	364,398	0.03	1,398	12.70	2.47	11,521	3.2	45	36
2	Corporates													
		0.00 to < 0.15	24,962	30,679	62.66	45,343	0.09	20,589	33.87	1.75	6,866	15.1	14	
		0.15 to < 0.25	17,516	11,909	57.38	24,225	0.24	9,070	34.36	1.87	7,021	29.0	20	
		0.25 to < 0.50	22,137	14,250	54.66	28,195	0.44	8,851	33.94	1.89	11,446	40.6	42	
		0.50 to < 0.75	-	-	-	-	-	-	-	-	-	-	-	
		0.75 to < 2.50	69,631	43,645	53.10	84,035	1.26	23,038	33.92	1.89	52,325	62.3	360	
		2.50 to < 10.00	14,893	9,609	54.33	16,994	4.10	7,671	35.72	1.97	15,947	93.8	250	
		10.00 to < 100.00	2,305	1,069	61.42	2,683	24.89	1,909	37.34	1.77	4,637	172.9	248	
		100.00 (default)	2,731	66	66.13	2,639	100.00	1,468	39.88	1.77	7,470	283.1	570	
	Total Corporates		154,175	111,227	56.59	204,114	2.59	72,596	34.23	1.86	105,712	51.8	1,504	1,704
3	Corporate – Specialised Lending													
		0.00 to < 0.15	3,528	2,458	53.73	4,654	0.10	64	35.47	2.78	1,147	24.6	2	
		0.15 to < 0.25	3,287	2,316	50.87	4,643	0.24	51	27.23	2.93	1,477	31.8	3	
		0.25 to < 0.50	6,893	2,054	55.99	7,960	0.46	337	29.99	2.32	3,382	42.5	11	
		0.50 to < 0.75	-	-	-	-	-	-	-	-	-	-	-	
		0.75 to < 2.50	11,328	4,514	50.19	12,519	1.28	367	28.48	2.07	7,506	59.9	46	
		2.50 to < 10.00	2,324	1,278	51.55	2,026	4.53	114	29.98	2.29	1,723	85.1	29	
		10.00 to < 100.00	-	-	-	-	-	-	-	-	-	-	-	
		100.00 (default)	523	-	-	523	100.00	6	36.15	1.75	1,013	193.5	109	
	Total Corporate – Specialised Lending		27,883	12,620	52.08	32,325	2.56	939	29.90	2.36	16,248	50.3	200	316
4	Total Wholesale		459,509	159,868	58.64	600,837	1.04	74,933	20.94	2.26	133,481	22.2	1,749	2,056

¹ Refer to the "Internal ratings map" under the Credit risk assessment subsection of the Risk management section in our 2023 Annual Report.

² Number of obligors is defined as the number of borrowers in each PD band. For Retail exposures, a borrower can appear in multiple PD bands if the borrower has more than one type of product with the bank. In addition, Retail obligors include borrowers where the portion of the exposure has been securitized given CAR guideline requirements related to retained interests. Wholesale obligors are reflected as unique borrowers. For example, sovereign obligors include central banks or agencies, public sector entities and multilateral development banks which are each reflected as unique borrowers in the sovereign asset class. Retail borrowers with both Visa and Mastercard are counted as one borrower in the asset class qualifying revolving retail.

³ Provisions reflect IFRS 9, Stage 1, 2 & 3 allowances under IRB portfolio.

CR6: A-IRB – Credit risk exposures by portfolio and PD range (continued)

As at July 31, 2024

		a	b	c	d	e	f	g	h	i	j	k	l	
	(Millions of Canadian dollars, except as otherwise noted)	PD scale ¹	Original on-balance sheet gross exposure	Off-balance sheet exposures pre CCF	Average CCF (%)	EAD post CRM and post-CCF	Average PD (%)	Number of obligors ²	Average LGD (%)	Average maturity (in years)	RWA	RWA density (%)	EL	Provisions ³
Asset Classes														
5	Retail - Residential mortgage exposures													
		0.00 to < 0.15	354,887	138,756	86.56	475,000	0.12	1,695,295	19.97		26,630	5.6	116	
		0.15 to < 0.25	12,895	46	100.00	7,762	0.15	84,754	15.99		408	5.3	2	
		0.25 to < 0.50	47,369	497	100.00	17,697	0.35	174,099	14.20		1,565	8.8	9	
		0.50 to < 0.75	848	-	-	848	0.51	2,706	21.66		146	17.2	1	
		0.75 to < 2.50	35,318	2,622	90.30	31,873	0.89	130,264	20.45		7,639	24.0	58	
		2.50 to < 10.00	11,737	459	90.39	9,227	4.06	54,838	19.50		5,111	55.4	72	
		10.00 to < 100.00	4,482	169	109.31	3,933	27.28	14,112	20.62		4,122	104.8	223	
		100.00 (default)	1,139	2	5.00	946	100.00	3,730	20.70		576	60.9	166	
	Total Retail - Residential mortgage exposures		468,675	142,551	86.72	547,287	0.61	2,159,798	19.76		46,197	8.4	647	522
5a	Of which: Retail - Insured exposure secured by real estate													
		0.00 to < 0.15	-	-	-	-	-	-	-		-	-	-	
		0.15 to < 0.25	12,782	-	-	7,603	0.15	84,677	15.01		374	4.9	2	
		0.25 to < 0.50	43,031	-	-	12,862	0.33	170,099	11.84		888	6.9	5	
		0.50 to < 0.75	-	-	-	-	-	-	-		-	-	-	
		0.75 to < 2.50	5,834	-	-	21	1.12	25,336	14.47		4	19.5	-	
		2.50 to < 10.00	2,929	-	-	4	4.29	15,773	14.07		2	41.5	-	
		10.00 to < 100.00	738	-	-	4	38.31	3,159	15.23		3	72.4	-	
		100.00 (default)	196	-	-	3	100.00	1,071	14.23		6	177.9	-	
	Total Retail – Insured exposure secured by real estate		65,510			20,497	0.29	300,115	13.02		1,277	6.2	7	9
5b	Of which: Retail - Uninsured mortgages													
		0.00 to < 0.15	321,080	756	100.00	321,836	0.14	822,128	18.06		17,940	5.6	80	
		0.15 to < 0.25	113	46	100.00	159	0.16	77	62.93		34	21.7	-	
		0.25 to < 0.50	4,059	247	100.00	4,306	0.41	3,354	19.81		580	13.5	4	
		0.50 to < 0.75	848	-	-	848	0.51	2,706	21.66		146	17.2	1	
		0.75 to < 2.50	27,039	400	100.00	27,439	0.91	64,479	19.51		6,400	23.3	49	
		2.50 to < 10.00	7,771	21	100.00	7,792	4.02	23,638	18.43		4,059	52.1	57	
		10.00 to < 100.00	3,318	-	-	3,318	27.33	7,314	19.78		3,329	100.4	181	
		100.00 (default)	803	-	-	803	100.00	1,780	19.78		501	62.4	131	
	Total Retail – Uninsured mortgages		365,031	1,470	100.00	366,501	0.75	925,476	18.24		32,989	9.0	503	401

¹ Refer to the "Internal ratings map" under the Credit risk assessment subsection of the Risk management section in our 2023 Annual Report.

² Number of obligors is defined as the number of borrowers in each PD band. For Retail exposures, a borrower can appear in multiple PD bands if the borrower has more than one type of product with the bank. In addition, Retail obligors include borrowers where the portion of the exposure has been securitized given CAR guideline requirements related to retained interests. Wholesale obligors are reflected as unique borrowers. For example, sovereign obligors include central banks or agencies, public sector entities and multilateral development banks which are each reflected as unique borrowers in the sovereign asset class. Retail borrowers with both Visa and Mastercard are counted as one borrower in the asset class qualifying revolving retail.

³ Provisions reflect IFRS 9, Stage 1, 2 & 3 allowances under IRB portfolio.

CR6: A-IRB – Credit risk exposures by portfolio and PD range (continued)

As at July 31, 2024

		a	b	c	d	e	f	g	h	i	j	k	l	
	(Millions of Canadian dollars, except as otherwise noted)	PD scale ¹	Original on-balance sheet gross exposure	Off-balance sheet exposures pre CCF	Average CCF (%)	EAD post CRM and post-CCF	Average PD (%)	Number of obligors ²	Average LGD (%)	Average maturity (in years)	RWA	RWA density (%)	EL	Provisions ³
Asset Classes														
5c	Of which: HELOCs													
		0.00 to < 0.15	33,806	138,000	86.49	153,164	0.10	873,167	23.99		8,690	5.7	36	
		0.15 to < 0.25	-	-	-	-	-	-	-		-	-	-	
		0.25 to < 0.50	279	250	100.00	529	0.34	677	26.08		97	18.3	-	
		0.50 to < 0.75	-	-	-	-	-	-	-		-	-	-	
		0.75 to < 2.50	2,445	2,222	88.56	4,413	0.77	40,451	26.38		1,235	28.0	9	
		2.50 to < 10.00	1,038	438	89.93	1,431	4.27	15,427	25.32		1,050	73.4	15	
		10.00 to < 100.00	427	169	109.31	612	26.90	3,639	25.20		790	129.2	42	
		100.00 (default)	140	2	5.00	140	100.00	879	26.15		69	49.6	34	
	Total HELOC		38,135	141,081	86.58	160,289	0.34	934,240	24.08		11,931	7.4	136	92
6	Qualifying revolving retail													
		0.00 to < 0.15	6,564	44,532	89.34	46,349	0.09	5,947,886	92.99		2,298	5.0	37	
		0.15 to < 0.25	10,267	42,609	85.18	46,562	0.18	2,158,200	89.98		4,049	8.7	74	
		0.25 to < 0.50	621	4,498	89.11	4,629	0.36	3,774,563	89.14		694	15.0	15	
		0.50 to < 0.75	2,156	5,984	88.87	7,474	0.61	1,100,434	94.69		1,843	24.7	43	
		0.75 to < 2.50	7,692	6,887	88.87	13,813	1.61	2,239,795	90.93		6,862	49.7	202	
		2.50 to < 10.00	3,402	1,947	91.81	5,190	4.36	1,195,604	91.69		5,126	98.8	207	
		10.00 to < 100.00	1,210	363	112.92	1,620	31.19	592,636	90.04		3,455	213.2	462	
		100.00 (default)	102	1	5.15	102	100.00	56,662	87.40		224	219.3	71	
	Total Qualifying revolving retail		32,014	106,821	87.74	125,739	0.99	17,065,780	91.51		24,551	19.5	1,111	1,562
7	Retail - SME													
		0.00 to < 0.15	584	4,464	102.78	5,172	0.06	253,024	99.38		884	17.1	3	
		0.15 to < 0.25	559	4,826	93.13	5,054	0.22	1,260,093	69.90		1,526	30.2	8	
		0.25 to < 0.50	410	1,499	104.79	1,981	0.30	135,133	99.20		1,035	52.3	6	
		0.50 to < 0.75	2,576	67	99.15	2,308	0.55	13,992	36.62		641	27.8	5	
		0.75 to < 2.50	6,559	2,913	95.24	8,367	1.17	221,751	59.97		5,344	63.9	57	
		2.50 to < 10.00	2,535	853	99.39	2,991	5.64	125,545	59.92		2,657	88.8	95	
		10.00 to < 100.00	563	193	97.61	667	29.48	33,014	70.37		916	137.3	135	
		100.00 (default)	272	42	12.02	86	100.00	6,584	66.10		117	135.5	55	
	Total Retail - SME		14,058	14,857	97.84	26,626	2.19	915,136	70.68		13,120	49.3	364	272
8	Other retail													
		0.00 to < 0.15	3,416	1,379	86.96	4,616	0.07	9,391	39.74		345	7.5	1	
		0.15 to < 0.25	2,892	5,428	89.36	7,742	0.19	30,380	85.46		2,580	33.3	13	
		0.25 to < 0.50	9,548	1	101.63	9,548	0.31	342,412	66.83		3,419	35.8	20	
		0.50 to < 0.75	4	13	89.63	16	0.65	111	94.26		13	78.1	-	
		0.75 to < 2.50	11,864	595	92.92	11,817	1.11	321,927	60.90		7,737	65.5	84	
		2.50 to < 10.00	2,282	52	91.69	2,232	4.26	92,835	68.25		2,195	98.3	64	
		10.00 to < 100.00	531	13	91.77	428	38.98	23,444	72.39		679	158.6	118	
		100.00 (default)	110	-	5.00	88	100.00	4,870	69.41		85	96.8	55	
	Total Other retail		30,647	7,481	89.22	36,487	1.45	825,370	65.61		17,053	46.7	355	494
9	Total retail		545,394	271,710	87.80	736,139	0.77	20,966,084	36.13		100,921	13.7	2,477	2,850
10	Total A-IRB		1,004,903	431,578	77.00	1,336,976	0.89	21,041,017	29.30	2.26	234,402	17.5	4,226	4,906

¹ Refer to the "Internal ratings map" under the Credit risk assessment subsection of the Risk management section in our 2023 Annual Report.

² Number of obligors is defined as the number of borrowers in each PD band. For Retail exposures, a borrower can appear in multiple PD bands if the borrower has more than one type of product with the bank. In addition, Retail obligors include borrowers where the portion of the exposure has been securitized given CAR guideline requirements related to retained interests. Wholesale obligors are reflected as unique borrowers. For example, sovereign obligors include central banks or agencies, public sector entities and multilateral development banks which are each reflected as unique borrowers in the sovereign asset class. Retail borrowers with both Visa and Mastercard are counted as one borrower in the asset class qualifying revolving retail.

³ Provisions reflect IFRS 9, Stage 1, 2 & 3 allowances under IRB portfolio.

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

The following table provides the key parameters used for the calculation of capital requirements for credit risk exposures under the F-IRB approach adopted in Q2 2023, broken down by asset class and PD range. Only Banks and Large Corporates are currently required to follow the Foundation Approach under the CAR guidelines with all other IRB exposures allowed under A-IRB.

As at October 31, 2024

		a	b	c	d	e	f	g	h	i	j	k	l
	(Millions of Canadian dollars, except as otherwise noted)	Original on-balance sheet gross exposure	Off-balance sheet exposures pre CCF	Average CCF (%)	EAD post CRM and post-CCF	Average PD (%)	Number of obligors ²	Average LGD (%)	Average maturity (in years)	RWA	RWA density (%)	EL	Provisions ³
	PD scale ¹												
	Asset Classes												
1	Banks												
	0.00 to < 0.15	29,398	8,062	45.83	40,889	0.06	442	35.67	2.09	8,156	19.9	9	
	0.15 to < 0.25	233	112	29.83	320	0.24	15	43.67	2.10	153	47.9	-	
	0.25 to < 0.50	89	322	26.06	100	0.46	35	31.58	1.61	50	49.9	-	
	0.50 to < 0.75	-	-	-	-	-	-	-	-	-	-	-	
	0.75 to < 2.50	191	224	29.38	286	0.96	42	58.42	1.56	300	104.6	2	
	2.50 to < 10.00	3	62	10.84	10	5.27	13	41.26	1.32	14	140.9	-	
	10.00 to < 100.00	-	-	-	-	20.22	2	45.00	1.00	-	250.6	-	
	100.00 (default)	-	-	-	-	100.00	3	45.00	2.49	-	562.5	-	
	Total Banks	29,914	8,782	44.23	41,605	0.07	552	35.88	2.08	8,673	20.8	11	4
2	Corporates												
	0.00 to < 0.15	53,863	204,190	39.45	134,354	0.08	5,074	41.27	2.38	34,585	25.7	44	
	0.15 to < 0.25	12,145	21,342	36.17	18,674	0.24	904	40.11	2.66	9,226	49.4	18	
	0.25 to < 0.50	7,973	14,634	41.65	13,412	0.46	796	39.29	2.31	7,849	58.8	24	
	0.50 to < 0.75	-	-	-	-	-	-	-	-	-	-	-	
	0.75 to < 2.50	17,415	40,518	39.05	30,068	1.30	2,137	36.37	2.91	25,849	86.0	142	
	2.50 to < 10.00	4,081	10,412	41.82	6,839	4.26	1,166	34.47	2.76	7,544	110.3	99	
	10.00 to < 100.00	1,872	1,311	49.74	2,325	21.14	158	36.50	1.63	4,296	184.8	174	
	100.00 (default)	391	81	95.86	450	100.00	50	43.58	2.81	1,468	325.9	93	
	Total Corporates	97,740	292,488	39.41	206,122	0.89	10,285	40.05	2.48	90,817	44.1	594	419
3	Total F-IRB	127,654	301,270	39.55	247,727	0.75	10,837	39.35	2.41	99,490	40.2	605	423

¹ Refer to the "Internal ratings map" under the Credit risk assessment subsection of the Risk management section in our 2024 Annual Report.

² Number of obligors is defined as the number of borrowers in each PD band. Wholesale obligors are reflected as unique borrowers.

³ Provisions reflect IFRS 9, Stage 1, 2 & 3 allowances under IRB portfolio.

CR6: F-IRB – Credit risk exposures by portfolio and PD range (continued)

As at July 31, 2024

		a	b	c	d	e	f	g	h	i	j	k	l
	(Millions of Canadian dollars, except as otherwise noted)	Original on-balance sheet gross exposure	Off-balance sheet exposures pre CCF	Average CCF (%)	EAD post CRM and post-CCF	Average PD (%)	Number of obligors ²	Average LGD (%)	Average maturity (in years)	RWA	RWA density (%)	EL	Provisions ³
Asset Classes													
1	Banks												
	0.00 to < 0.15	28,001	5,341	37.01	37,293	0.06	297	36.30	2.19	7,658	20.5	8	
	0.15 to < 0.25	79	90	34.13	144	0.24	15	63.63	2.55	106	73.2	-	
	0.25 to < 0.50	60	289	31.53	84	0.46	29	26.17	1.22	29	34.9	-	
	0.50 to < 0.75	-	-	-	-	-	-	-	-	-	-	-	
	0.75 to < 2.50	181	251	27.37	277	1.00	41	58.81	1.30	279	100.7	2	
	2.50 to < 10.00	-	46	18.82	9	7.75	9	45.06	0.20	14	151.3	-	
	10.00 to < 100.00	-	-	-	-	20.32	2	45.00	1.00	-	250.7	-	
	100.00 (default)	-	-	-	-	100.00	3	45.00	2.50	-	562.5	-	
	Total Banks	28,321	6,017	36.16	37,807	0.07	396	36.54	2.18	8,086	21.4	10	4
2	Corporates												
	0.00 to < 0.15	52,647	200,420	39.50	131,438	0.08	5,268	41.59	2.39	34,296	26.1	44	
	0.15 to < 0.25	13,475	22,021	36.48	20,342	0.24	939	40.77	2.58	10,134	49.8	20	
	0.25 to < 0.50	7,547	13,009	42.55	11,576	0.46	805	38.26	2.38	6,683	57.8	20	
	0.50 to < 0.75	-	-	-	-	-	-	-	-	-	-	-	
	0.75 to < 2.50	20,475	37,682	40.06	32,905	1.29	2,006	37.42	2.90	28,871	87.7	159	
	2.50 to < 10.00	3,714	10,042	41.34	6,644	4.32	1,170	33.07	2.58	6,997	105.3	95	
	10.00 to < 100.00	304	1,118	46.17	672	27.01	142	31.92	2.44	1,163	173.0	56	
	100.00 (default)	593	83	94.98	672	100.00	58	43.31	3.19	2,412	358.8	110	
	Total Corporates	98,755	284,375	39.59	204,249	0.87	10,388	40.34	2.50	90,556	44.4	504	331
3	Total F-IRB	127,076	290,392	39.52	242,056	0.74	10,784	39.75	2.45	98,642	40.8	514	335

¹ Refer to the "Internal ratings map" under the Credit risk assessment subsection of the Risk management section in our 2023 Annual Report.

² Number of obligors is defined as the number of borrowers in each PD band. Wholesale obligors are reflected as unique borrowers.

³ Provisions reflect IFRS 9, Stage 1, 2 & 3 allowances under IRB portfolio.

CR7: IRB – Effect on RWA of credit derivatives used as CRM techniques

The following table provides the effect of credit derivatives used as mitigation techniques in determining RWA amounts. Currently no credit derivatives are used for mitigation.

As at October 31, 2024

	(Millions of Canadian dollars)	a	b
		Pre-credit derivatives RWA	Actual RWA
1	Sovereign - F-IRB	-	-
2	Sovereign - A-IRB	-	-
3	Banks - F-IRB	-	-
4	Banks - A-IRB	-	-
5	Other securities firms treated as Bank - F-IRB	-	-
6	Other securities firms treated as Bank - A-IRB	-	-
7	Corporate - F-IRB	-	-
8	Corporate - A-IRB	-	-
9	Other securities firms treated as Corporate - F-IRB	-	-
10	Other securities firms treated as Corporate - A-IRB	-	-
11	Specialised lending - F-IRB	-	-
12	Specialised lending - A-IRB	-	-
13	Retail - qualifying revolving (QRRE)	-	-
14	Retail - residential mortgage exposures	-	-
15	Retail - SME	-	-
16	Other retail exposures	-	-
17	Equity - F-IRB	-	-
18	Equity - A-IRB	-	-
19	Purchased receivables - F-IRB	-	-
20	Purchased receivables - A-IRB	-	-
21	Total	-	-

As at July 31, 2024

	(Millions of Canadian dollars)	a	b
		Pre-credit derivatives RWA	Actual RWA
1	Sovereign - F-IRB	-	-
2	Sovereign - A-IRB	-	-
3	Banks - F-IRB	-	-
4	Banks - A-IRB	-	-
5	Other securities firms treated as Bank - F-IRB	-	-
6	Other securities firms treated as Bank - A-IRB	-	-
7	Corporate - F-IRB	-	-
8	Corporate - A-IRB	-	-
9	Other securities firms treated as Corporate - F-IRB	-	-
10	Other securities firms treated as Corporate - A-IRB	-	-
11	Specialised lending - F-IRB	-	-
12	Specialised lending - A-IRB	-	-
13	Retail - qualifying revolving (QRRE)	-	-
14	Retail - residential mortgage exposures	-	-
15	Retail - SME	-	-
16	Other retail exposures	-	-
17	Equity - F-IRB	-	-
18	Equity - A-IRB	-	-
19	Purchased receivables - F-IRB	-	-
20	Purchased receivables - A-IRB	-	-
21	Total	-	-



CR8: RWA flow statements of credit risk exposures

The following table presents the changes in Standardized and IRB RWA amounts over the reporting period for the key drivers of credit risk.

		RWA amounts ¹	
(Millions of Canadian dollars)		As at October 31, 2024	As at July 31, 2024
1	RWA as at end of previous reporting period	499,257	489,986
2	Asset size ²	(1,185)	3,601
3	Asset quality ³	3,376	3,207
4	Model updates ⁴	-	780
5	Methodology and policy ⁵	-	-
6	Acquisitions and disposals	-	-
7	Foreign exchange movements	1,759	1,313
8	Other ⁶	370	370
9	RWA as at end of reporting period	503,577	499,257

¹ RWA flow amounts include both IRB and Standardized Approach figures reflecting our approved roll-out plan for transition to IRB.

² Organic changes in portfolio size and composition (including new business and maturing loans).

³ Quality of book changes caused by experience such as underlying customer behaviour or demographics and credit mitigation.

⁴ Updates to the model to reflect recent experience, model implementation, change in model scope or any change to address model malfunctions including changes through model calibrations/realignments.

⁵ Methodology changes to the calculations driven by regulatory policy changes.

⁶ Other includes the impact of credit card securitization.



CR9: A-IRB – Credit risk exposures by portfolio and PD range

The following table presents a comparison of the PD used in our IRB models with the effective default rates of the bank’s obligors in order to validate the reliability of our PD calculations for our exposures under the Advanced Rating Based Approach.

As at October 31, 2024

Asset Classes	a (Millions of Canadian dollars, except as otherwise noted)	b PD Range ¹	c External rating equivalent					d Weighted average PD ²	e Arithmetic average PD by obligors ²	f Number of obligors ³		g Defaulted obligors in the year ^{4,6}	h of which: new defaulted obligors in the year ^{5,6}	i Average historical annual default rate
			S&P	Moody's	Fitch	DBRS	Kroll			End of previous year	End of the year			
1 Sovereigns														
	0.00 to < 0.15	AAA to A-	Aaa to A3	AAA to A-	AAA to AL	AAA to A-	0.02%	0.02%	1,056	1,066	-	-	0.07%	
	0.15 to < 0.25	BBB+ to BBB	Baa1 to Baa2	BBB+ to BBB	BBBH to BBB	BBB+ to BBB	0.24%	0.24%	36	42	-	-	0.00%	
	0.25 to < 0.50	BBB- to BB+	Baa3 to Ba1	BBB- to BB+	BBBL to BBH	BBB- to BB+	0.46%	0.46%	228	261	-	-	0.00%	
	0.50 to < 0.75	BB	Ba2	BB	BB	BB	0.00%	0.00%	-	-	-	-	0.00%	
	0.75 to < 2.50	BB- to B+	Ba3 to B1	BB- to B+	BBL to BH	BB- to B+	1.14%	1.08%	26	35	-	-	0.00%	
	2.50 to < 10.00	B to CCC+	B2 to Caa1	B to CCC+	BL to CCCH	B to CCC+	3.70%	4.96%	11	11	-	-	1.90%	
	10.00 to < 100.00	CCC to CC	Caa2 to Ca	CCC or CC	CCC or CC	CCC or CC	18.93%	26.28%	2	5	-	-	0.00%	
	100.00 (default)	C or lower	C or lower	C or lower	C or lower	C or lower	100.00%	100.00%	5	6	-	-	-	
Total Sovereigns							0.03%	0.02%	1,364	1,426	-	-	-	
2 Corporates														
	0.00 to < 0.15	AAA to A-	Aaa to A3	AAA to A-	AAA to AL	AAA to A-	0.09%	0.09%	22,001	18,198	16	1	0.04%	
	0.15 to < 0.25	BBB+ to BBB	Baa1 to Baa2	BBB+ to BBB	BBBH to BBB	BBB+ to BBB	0.24%	0.24%	7,846	9,016	13	2	0.06%	
	0.25 to < 0.50	BBB- to BB+	Baa3 to Ba1	BBB- to BB+	BBBL to BBH	BBB- to BB+	0.44%	0.45%	7,797	9,433	29	3	0.22%	
	0.50 to < 0.75	BB	Ba2	BB	BB	BB	0.00%	0.00%	-	-	-	-	0.00%	
	0.75 to < 2.50	BB- to B+	Ba3 to B1	BB- to B+	BBL to BH	BB- to B+	1.25%	1.28%	21,229	25,993	171	6	0.50%	
	2.50 to < 10.00	B to CCC+	B2 to Caa1	B to CCC+	BL to CCCH	B to CCC+	4.08%	4.11%	6,077	8,814	164	1	1.85%	
	10.00 to < 100.00	CCC to CC	Caa2 to Ca	CCC or CC	CCC or CC	CCC or CC	24.99%	24.74%	1,801	2,454	159	1	14.74%	
	100.00 (default)	C or lower	C or lower	C or lower	C or lower	C or lower	100.00%	100.00%	1,448	1,561	-	-	-	
Total Corporates							2.73%	3.88%	68,199	75,469	552	14	-	

¹ Refer to "Internal ratings map" under the Credit risk assessment subsection of the Risk management section in our 2024 Annual Report

² Weighted average PD means PD (after CRM) weighted by EAD as at October 31, 2024. Arithmetic average PD is the sum of all the PDs (after CRM) over the number of accounts as at October 31, 2024.

³ Number of obligors is defined as the number of borrowers in each PD band. For Retail exposures, a borrower can appear in multiple PD bands if the borrower has more than one type of product with the bank. Wholesale obligors are reflected as unique borrowers. For example, sovereign obligors include central banks or agencies, public sector entities and multilateral development banks which are each reflected as unique borrowers in the sovereign asset class.

⁴ Number of defaulted obligors in the year includes i) existing obligors not in default at the beginning of the year who went into default during the year; and ii) new obligors in the year who went into default.

⁵ Number of new defaulted obligors in the year reflects the amount in column h that relates to new obligors in the year who went into default.

⁶ Defaulted obligors reflect obligors who were in default after 90 days that have either returned to performing status or were written-off. For example, unadvised overdraft facilities have been included that returned to performing status.



CR9: A-IRB – Credit risk exposures by portfolio and PD range (continued)

As at October 31, 2024

Asset Classes	a (Millions of Canadian dollars, except as otherwise noted)	b PD Range ¹	c External rating equivalent					d Weighted average PD ²	e Arithmetic average PD by obligors ²	f Number of obligors ³		g Defaulted obligors in the year ^{4,6}	h of which: new defaulted obligors in the year ^{5,6}	i Average historical annual default rate
			S&P	Moody's	Fitch	DBRS	Kroll			End of previous year	End of the year			
3 Corporates - Specialised Lending														
	0.00 to < 0.15	AAA to A-	Aaa to A3	AAA to A-	AAA to AL	AAA to A-	0.10%	0.10%	113	69	-	-	0.00%	
	0.15 to < 0.25	BBB+ to BBB	Baa1 to Baa2	BBB+ to BBB	BBBH to BBB	BBB+ to BBB	0.24%	0.24%	159	66	-	-	0.00%	
	0.25 to < 0.50	BBB- to BB+	Baa3 to Ba1	BBB- to BB+	BBBL to BBH	BBB- to BB+	0.46%	0.46%	284	153	-	-	0.00%	
	0.50 to < 0.75	BB	Ba2	BB	BB	BB	0.00%	0.00%	-	-	-	-	0.00%	
	0.75 to < 2.50	BB- to B+	Ba3 to B1	BB- to B+	BBL to BH	BB- to B+	1.24%	1.17%	235	557	2	-	0.24%	
	2.50 to < 10.00	B to CCC+	B2 to Caa1	B to CCC+	BL to CCCH	B to CCC+	4.35%	3.96%	6	140	-	-	0.00%	
	10.00 to < 100.00	CCC to CC	Caa2 to Ca	CCC or CC	CCC or CC	CCC or CC	31.51%	27.15%	-	3	-	-	0.00%	
	100.00 (default)	C or lower	C or lower	C or lower	C or lower	C or lower	100.00%	100.00%	6	14	-	-	0.00%	
Total Corporates - Specialised Lending							2.68%	2.76%	803	1,002	2	-		
4 Total Wholesale							1.07%	0.81%	70,366	77,897	554	14		
5 Retail residential mortgages														
	0.00 to < 0.15	AAA to A-	Aaa to A3	AAA to A-	AAA to AL	AAA to A-	0.12%	0.12%	1,609,813	1,702,423	1,219	22	0.06%	
	0.15 to < 0.25	BBB+ to BBB	Baa1 to Baa2	BBB+ to BBB	BBBH to BBB	BBB+ to BBB	0.15%	0.15%	84,651	81,694	78	-	0.07%	
	0.25 to < 0.50	BBB- to BB+	Baa3 to Ba1	BBB- to BB+	BBBL to BBH	BBB- to BB+	0.35%	0.33%	174,193	172,867	182	-	0.08%	
	0.50 to < 0.75	BB	Ba2	BB	BB	BB	0.51%	0.51%	2,529	2,580	-	-	0.00%	
	0.75 to < 2.50	BB- to B+	Ba3 to B1	BB- to B+	BBL to BH	BB- to B+	0.90%	0.91%	121,321	127,312	922	21	0.46%	
	2.50 to < 10.00	B to CCC+	B2 to Caa1	B to CCC+	BL to CCCH	B to CCC+	4.07%	4.40%	53,475	54,718	1,859	10	2.25%	
	10.00 to < 100.00	CCC to CC	Caa2 to Ca	CCC or CC	CCC or CC	CCC or CC	28.12%	28.08%	12,314	14,011	2,779	7	18.27%	
	100.00 (default)	C or lower	C or lower	C or lower	C or lower	C or lower	100.00%	100.00%	2,980	3,957	-	-		
Total Retail residential mortgages							0.64%	0.66%	2,061,276	2,159,562	7,039	60		
5a Of which: Retail - Insured exposure secured by real estate														
	0.00 to < 0.15	AAA to A-	Aaa to A3	AAA to A-	AAA to AL	AAA to A-	0.00%	0.00%	-	-	-	-	0.00%	
	0.15 to < 0.25	BBB+ to BBB	Baa1 to Baa2	BBB+ to BBB	BBBH to BBB	BBB+ to BBB	0.15%	0.15%	84,563	81,610	77	-	0.07%	
	0.25 to < 0.50	BBB- to BB+	Baa3 to Ba1	BBB- to BB+	BBBL to BBH	BBB- to BB+	0.33%	0.33%	170,847	168,677	182	-	0.08%	
	0.50 to < 0.75	BB	Ba2	BB	BB	BB	0.00%	0.00%	-	-	-	-	0.00%	
	0.75 to < 2.50	BB- to B+	Ba3 to B1	BB- to B+	BBL to BH	BB- to B+	1.13%	1.21%	25,722	24,714	153	2	0.44%	
	2.50 to < 10.00	B to CCC+	B2 to Caa1	B to CCC+	BL to CCCH	B to CCC+	4.29%	4.36%	16,478	15,276	421	-	1.89%	
	10.00 to < 100.00	CCC to CC	Caa2 to Ca	CCC or CC	CCC or CC	CCC or CC	39.30%	31.31%	3,113	3,128	781	-	22.09%	
	100.00 (default)	C or lower	C or lower	C or lower	C or lower	C or lower	100.00%	100.00%	986	1,055	-	-		
Total Retail - Insured exposure secured by real estate							0.29%	1.25%	301,709	294,460	1,614	2		

¹ Refer to "Internal ratings map" under the Credit risk assessment subsection of the Risk management section in our 2024 Annual Report

² Weighted average PD means PD (after CRM) weighted by EAD as at October 31, 2024. Arithmetic average PD is the sum of all the PDs (after CRM) over the number of accounts as at October 31, 2024.

³ Number of obligors is defined as the number of borrowers in each PD band. For Retail exposures, a borrower can appear in multiple PD bands if the borrower has more than one type of product with the bank. Wholesale obligors are reflected as unique borrowers. For example, sovereign obligors include central banks or agencies, public sector entities and multilateral development banks which are each reflected as unique borrowers in the sovereign asset class.

⁴ Number of defaulted obligors in the year includes i) existing obligors not in default at the beginning of the year who went into default during the year; and ii) new obligors in the year who went into default.

⁵ Number of new defaulted obligors in the year reflects the amount in column h that relates to new obligors in the year who went into default.

⁶ Defaulted obligors reflect obligors who were in default after 90 days that have either returned to performing status or were written-off. For example, unadvised overdraft facilities have been included that returned to performing status.



CR9: A-IRB – Credit risk exposures by portfolio and PD range (continued)

As at October 31, 2024

Asset Classes	a	b	c					d	e	f		g	h	i
	(Millions of Canadian dollars, except as otherwise noted)	PD Range ¹	External rating equivalent					Weighted average PD ²	Arithmetic average PD by obligors ²	Number of obligors ³		Defaulted obligors in the year ^{4,6}	of which: new defaulted obligors in the year ^{5,6}	Average historical annual default rate
	S&P		Moody's	Fitch	DBRS	Kroll	End of previous year			End of the year				
5b	Of which: Retail - Uninsured residential mortgages													
		0.00 to < 0.15	AAA to A-	Aaa to A3	AAA to A-	AAA to AL	AAA to A-	0.14%	0.14%	763,986	827,988	716	19	0.06%
		0.15 to < 0.25	BBB+ to BBB	Baa1 to Baa2	BBB+ to BBB	BBBH to BBB	BBB+ to BBB	0.16%	0.16%	88	84	1	-	0.16%
		0.25 to < 0.50	BBB- to BB+	Baa3 to Ba1	BBB- to BB+	BBBL to BBH	BBB- to BB+	0.41%	0.41%	2,872	3,451	-	-	0.00%
		0.50 to < 0.75	BB	Ba2	BB	BB	BB	0.51%	0.51%	2,529	2,580	-	-	0.00%
		0.75 to < 2.50	BB- to B+	Ba3 to B1	BB- to B+	BBL to BH	BB- to B+	0.92%	0.90%	57,023	63,060	466	19	0.44%
		2.50 to < 10.00	B to CCC+	B2 to Caa1	B to CCC+	BL to CCCH	B to CCC+	4.03%	4.25%	22,225	23,959	813	10	2.24%
		10.00 to < 100.00	CCC to CC	Caa2 to Ca	CCC or CC	CCC or CC	CCC or CC	28.12%	26.97%	6,093	7,338	1,295	5	16.42%
		100.00 (default)	C or lower	C or lower	C or lower	C or lower	C or lower	100.00%	100.00%	1,230	1,961	-	-	
	Total Retail - Uninsured residential mortgages							0.78%	0.72%	856,046	930,421	3,291	53	
5c	Of which: HELOCs													
		0.00 to < 0.15	AAA to A-	Aaa to A3	AAA to A-	AAA to AL	AAA to A-	0.10%	0.10%	845,827	874,435	503	3	0.05%
		0.15 to < 0.25	BBB+ to BBB	Baa1 to Baa2	BBB+ to BBB	BBBH to BBB	BBB+ to BBB	0.00%	0.00%	-	-	-	-	0.00%
		0.25 to < 0.50	BBB- to BB+	Baa3 to Ba1	BBB- to BB+	BBBL to BBH	BBB- to BB+	0.34%	0.34%	492	763	-	-	0.00%
		0.50 to < 0.75	BB	Ba2	BB	BB	BB	0.00%	0.00%	-	-	-	-	0.00%
		0.75 to < 2.50	BB- to B+	Ba3 to B1	BB- to B+	BBL to BH	BB- to B+	0.77%	0.76%	38,579	39,540	303	-	0.49%
		2.50 to < 10.00	B to CCC+	B2 to Caa1	B to CCC+	BL to CCCH	B to CCC+	4.29%	4.67%	14,774	15,483	625	-	2.69%
		10.00 to < 100.00	CCC to CC	Caa2 to Ca	CCC or CC	CCC or CC	CCC or CC	28.04%	27.55%	3,108	3,545	703	2	16.85%
		100.00 (default)	C or lower	C or lower	C or lower	C or lower	C or lower	100.00%	100.00%	764	941	-	-	
	Total HELOCs							0.35%	0.41%	903,544	934,707	2,134	5	
6	Qualifying revolving retail⁶													
		0.00 to < 0.15	AAA to A-	Aaa to A3	AAA to A-	AAA to AL	AAA to A-	0.09%	0.10%	5,768,951	6,021,498	6,306	104	0.08%
		0.15 to < 0.25	BBB+ to BBB	Baa1 to Baa2	BBB+ to BBB	BBBH to BBB	BBB+ to BBB	0.18%	0.18%	2,064,786	2,070,324	4,841	86	0.15%
		0.25 to < 0.50	BBB- to BB+	Baa3 to Ba1	BBB- to BB+	BBBL to BBH	BBB- to BB+	0.36%	0.45%	3,752,409	3,801,935	13,912	850	0.31%
		0.50 to < 0.75	BB	Ba2	BB	BB	BB	0.61%	0.59%	1,084,271	1,112,899	8,619	1,109	0.53%
		0.75 to < 2.50	BB- to B+	Ba3 to B1	BB- to B+	BBL to BH	BB- to B+	1.61%	1.63%	2,223,593	2,225,665	48,206	926	1.34%
		2.50 to < 10.00	B to CCC+	B2 to Caa1	B to CCC+	BL to CCCH	B to CCC+	4.39%	4.57%	1,197,533	1,199,524	68,693	785	3.29%
		10.00 to < 100.00	CCC to CC	Caa2 to Ca	CCC or CC	CCC or CC	CCC or CC	31.67%	33.91%	563,203	608,193	221,725	51,779	32.71%
		100.00 (default)	C or lower	C or lower	C or lower	C or lower	C or lower	100.00%	100.00%	49,266	57,516	-	-	
	Total Qualifying revolving retail							1.00%	2.29%	16,704,012	17,097,554	372,302	55,639	

¹ Refer to "Internal ratings map" under the Credit risk assessment subsection of the Risk management section in our 2024 Annual Report

² Weighted average PD means PD (after CRM) weighted by EAD as at October 31, 2024. Arithmetic average PD is the sum of all the PDs (after CRM) over the number of accounts as at October 31, 2024.

³ Number of obligors is defined as the number of borrowers in each PD band. For Retail exposures, a borrower can appear in multiple PD bands if the borrower has more than one type of product with the bank. Wholesale obligors are reflected as unique borrowers. For example, sovereign obligors include central banks or agencies, public sector entities and multilateral development banks which are each reflected as unique borrowers in the sovereign asset class.

⁴ Number of defaulted obligors in the year includes i) existing obligors not in default at the beginning of the year who went into default during the year; and ii) new obligors in the year who went into default.

⁵ Number of new defaulted obligors in the year reflects the amount in column h that relates to new obligors in the year who went into default.

⁶ Defaulted obligors reflect obligors who were in default after 90 days that have either returned to performing status or were written-off. For example, unadvised overdraft facilities have been included that returned to performing status.



CR9: A-IRB – Credit risk exposures by portfolio and PD range (continued)

As at October 31, 2024

Asset Classes	a	b	c					d	e	f		g	h	i
	(Millions of Canadian dollars, except as otherwise noted)	PD Range ¹	External rating equivalent					Weighted average PD ²	Arithmetic average PD by obligors ²	Number of obligors ³		Defaulted obligors in the year ^{4,6}	of which: new defaulted obligors in the year ^{5,6}	Average historical annual default rate
	S&P		Moody's	Fitch	DBRS	Kroll	End of previous year			End of the year				
7 Retail – SME														
	0.00 to < 0.15	AAA to A-	Aaa to A3	AAA to A-	AAA to AL	AAA to A-	0.06%	0.06%	238,822	251,027	97	-	0.04%	
	0.15 to < 0.25	BBB+ to BBB	Baa1 to Baa2	BBB+ to BBB	BBBH to BBB	BBB+ to BBB	0.22%	0.22%	113,916	128,053	118	16	0.10%	
	0.25 to < 0.50	BBB- to BB+	Baa3 to Ba1	BBB- to BB+	BBBL to BBH	BBB- to BB+	0.30%	0.29%	127,237	137,977	490	68	0.19%	
	0.50 to < 0.75	BB	Ba2	BB	BB	BB	0.55%	0.56%	9,425	14,147	33	9	0.16%	
	0.75 to < 2.50	BB- to B+	Ba3 to B1	BB- to B+	BBL to BH	BB- to B+	1.17%	1.12%	219,815	219,591	3,061	378	0.74%	
	2.50 to < 10.00	B to CCC+	B2 to Caa1	B to CCC+	BL to CCCH	B to CCC+	5.57%	5.03%	121,612	127,740	17,006	11,120	2.66%	
	10.00 to < 100.00	CCC to CC	Caa2 to Ca	CCC or CC	CCC or CC	CCC or CC	27.41%	25.88%	19,750	35,210	5,416	590	29.08%	
	100.00 (default)	C or lower	C or lower	C or lower	C or lower	C or lower	100.00%	100.00%	3,577	7,146	-	-		
Total Retail – SME							2.22%	2.83%	854,154	920,891	26,221	12,181		
8 Other retail														
	0.00 to < 0.15	AAA to A-	Aaa to A3	AAA to A-	AAA to AL	AAA to A-	0.07%	0.09%	16,423	9,397	14	-	0.07%	
	0.15 to < 0.25	BBB+ to BBB	Baa1 to Baa2	BBB+ to BBB	BBBH to BBB	BBB+ to BBB	0.19%	0.19%	21,596	30,389	15	-	0.07%	
	0.25 to < 0.50	BBB- to BB+	Baa3 to Ba1	BBB- to BB+	BBBL to BBH	BBB- to BB+	0.30%	0.31%	331,705	342,337	564	24	0.13%	
	0.50 to < 0.75	BB	Ba2	BB	BB	BB	0.65%	0.64%	1,505	118	12	1	0.66%	
	0.75 to < 2.50	BB- to B+	Ba3 to B1	BB- to B+	BBL to BH	BB- to B+	1.11%	1.19%	320,460	329,594	3,976	756	0.76%	
	2.50 to < 10.00	B to CCC+	B2 to Caa1	B to CCC+	BL to CCCH	B to CCC+	4.28%	4.44%	95,643	91,972	4,107	108	3.12%	
	10.00 to < 100.00	CCC to CC	Caa2 to Ca	CCC or CC	CCC or CC	CCC or CC	37.74%	32.57%	23,136	24,439	6,922	186	23.28%	
	100.00 (default)	C or lower	C or lower	C or lower	C or lower	C or lower	100.00%	100.00%	3,898	4,402	-	-		
Total Other retail							1.46%	2.58%	814,366	832,648	15,610	1,075		
9 Total retail							0.80%	2.16%	20,433,808	21,010,655	421,172	68,955		
Total							0.92%	2.13%	20,504,174	21,088,552	421,726	68,969		

¹ Refer to "Internal ratings map" under the Credit risk assessment subsection of the Risk management section in our 2024 Annual Report

² Weighted average PD means PD (after CRM) weighted by EAD as at October 31, 2024. Arithmetic average PD is the sum of all the PDs (after CRM) over the number of accounts as at October 31, 2024.

³ Number of obligors is defined as the number of borrowers in each PD band. For Retail exposures, a borrower can appear in multiple PD bands if the borrower has more than one type of product with the bank. Wholesale obligors are reflected as unique borrowers. For example, sovereign obligors include central banks or agencies, public sector entities and multilateral development banks which are each reflected as unique borrowers in the sovereign asset class.

⁴ Number of defaulted obligors in the year includes i) existing obligors not in default at the beginning of the year who went into default during the year; and ii) new obligors in the year who went into default.

⁵ Number of new defaulted obligors in the year reflects the amount in column h that relates to new obligors in the year who went into default.

⁶ Defaulted obligors reflect obligors who were in default after 90 days that have either returned to performing status or were written-off. For example, unadvised overdraft facilities have been included that returned to performing status.



CR9: F-IRB – Credit risk exposures by portfolio and PD range

The following table presents a comparison of the PD used in our IRB models with the effective default rates of the bank’s obligors in order to validate the reliability of our PD calculations for our exposures under the Foundation Approach.

As at October 31, 2024

	a (Millions of Canadian dollars, except as otherwise noted) Asset Classes	b PD Range ¹	c External rating equivalent					d Weighted average PD ²	e Arithmetic average PD by obligors ²	f Number of obligors ³		g Defaulted obligors in the year ^{4,6}	h of which: new defaulted obligors in the year ^{5,6}	i Average historical annual default rate
			S&P	Moody's	Fitch	DBRS	Kroll			End of previous year	End of the year			
1	Banks													
		0.00 to < 0.15	AAA to A-	Aaa to A3	AAA to A-	AAA to AL	AAA to A-	0.06%	0.07%	256	442	-	-	0.06%
		0.15 to < 0.25	BBB+ to BBB	Baa1 to Baa2	BBB+ to BBB	BBBH to BBB	BBB+ to BBB	0.24%	0.24%	16	15	-	-	0.56%
		0.25 to < 0.50	BBB- to BB+	Baa3 to Ba1	BBB- to BB+	BBBL to BBH	BBB- to BB+	0.46%	0.46%	30	35	-	-	0.68%
		0.50 to < 0.75	BB	Ba2	BB	BB	BB	0.00%	0.00%	-	-	-	-	0.00%
		0.75 to < 2.50	BB- to B+	Ba3 to B1	BB- to B+	BBL to BH	BB- to B+	0.95%	1.21%	31	42	-	-	0.00%
		2.50 to < 10.00	B to CCC+	B2 to Caa1	B to CCC+	BL to CCCH	B to CCC+	5.27%	4.19%	8	13	-	-	0.00%
		10.00 to < 100.00	CCC to CC	Caa2 to Ca	CCC or CC	CCC or CC	CCC or CC	20.22%	24.97%	3	2	-	-	0.00%
		100.00 (default)	C or lower	C or lower	C or lower	C or lower	C or lower	100.00%	100.00%	3	3	-	-	0.00%
	Total Banks							0.07%	0.26%	347	552	-	-	
2	Corporates													
		0.00 to < 0.15	AAA to A-	Aaa to A3	AAA to A-	AAA to AL	AAA to A-	0.08%	0.08%	4,310	5,074	2	-	0.00%
		0.15 to < 0.25	BBB+ to BBB	Baa1 to Baa2	BBB+ to BBB	BBBH to BBB	BBB+ to BBB	0.24%	0.24%	736	904	1	-	0.04%
		0.25 to < 0.50	BBB- to BB+	Baa3 to Ba1	BBB- to BB+	BBBL to BBH	BBB- to BB+	0.46%	0.46%	612	796	-	-	0.11%
		0.50 to < 0.75	BB	Ba2	BB	BB	BB	0.00%	0.00%	-	-	-	-	0.00%
		0.75 to < 2.50	BB- to B+	Ba3 to B1	BB- to B+	BBL to BH	BB- to B+	1.31%	1.30%	1,495	2,137	19	-	0.34%
		2.50 to < 10.00	B to CCC+	B2 to Caa1	B to CCC+	BL to CCCH	B to CCC+	4.26%	4.96%	908	1,166	22	-	1.43%
		10.00 to < 100.00	CCC to CC	Caa2 to Ca	CCC or CC	CCC or CC	CCC or CC	21.14%	27.37%	89	158	6	-	14.77%
		100.00 (default)	C or lower	C or lower	C or lower	C or lower	C or lower	100.00%	100.00%	49	50	-	-	0.00%
	Total Corporates							0.90%	1.79%	8,199	10,285	50	-	
3	Total F-IRB							0.76%	1.48%	8,546	10,837	50	-	

¹ Refer to the "Internal ratings map" under the Credit risk assessment subsection of the Risk management section in our 2024 Annual Report

² Weighted average PD means PD (after CRM) weighted by EAD as at October 31, 2024. Arithmetic average PD is the sum of all the PDs (after CRM) over the number of accounts as at October 31, 2024.

³ Number of obligors is defined as the number of borrowers in each PD band. Wholesale obligors are reflected as unique borrowers. For example, sovereign obligors include central banks or agencies, public sector entities and multilateral development banks which are each reflected as unique borrowers in the sovereign asset class.

⁴ Number of defaulted obligors in the year includes i) existing obligors not in default at the beginning of the year who went into default during the year; and ii) new obligors in the year who went into default.

⁵ Number of new defaulted obligors in the year reflects the amount in column h that relates to new obligors in the year who went into default.

⁶ Defaulted obligors reflect obligors who were in default after 90 days that have either returned to performing status or were written-off. For example, unadvised overdraft facilities have been included that returned to performing status.

COUNTERPARTY CREDIT RISK
CCRA: Qualitative disclosure related to counterparty credit risk

The table below presents an overview of Pillar 3 disclosure requirements that have been met within our 2024 Annual Report and incorporated by reference into this Pillar 3 report. Our 2024 Annual Report is available free of charge on our website at <http://www.rbc.com/investorrelations>.

Pillar 3 disclosures requirement		2024 Annual Report section	Sub-section
a)	Risk management objectives and policies related to counterparty credit risk	Credit risk	Credit risk assessment – <i>Counterparty credit risk</i>
		Consolidated Financial Statements	Note 9 - Derivative financial instruments and hedging activities – <i>Derivative-related credit risk</i>
b)	The method used to assign the operating limits defined in terms of internal capital for counterparty credit exposures and for CCP exposures	Credit risk	Credit risk assessment – <i>Counterparty credit risk</i>
c)	Policies relating to guarantees and other risk mitigants and assessments concerning counterparty credit risk, including exposures towards CCPs	Credit risk	Credit risk assessment – <i>Counterparty credit risk</i>
		Consolidated Financial Statements	Note 9 - Derivative financial instruments and hedging activities – <i>Derivative-related credit risk</i> Note 29 - Offsetting financial assets and financial liabilities
d)	Policies with respect to wrong-way risk exposures	Credit risk	Credit risk assessment – <i>Wrong-way risk</i>
e)	The impact in terms of the amount of collateral that the bank would be required to provide given a credit rating downgrade	Liquidity and funding risk	Credit ratings

CCR1: Analysis of counterparty credit risk (CCR) exposure by approach

The following table provides a comprehensive view of the methods used to calculate counterparty credit risk exposures and the main parameters used within each method, if applicable. Refer to CCR 8 for our central counterparty clearing house exposures. Figures below reflect both house and client trades. In Q1 2024 our adoption of the Basic Standardized Approach under the Basel III reforms CVA risk framework resulted in changes to SA-CCR RWA as included in our figures below.

As at October 31, 2024

		a	b	c	d	e	f
		Replacement Cost	Potential future exposure	EEPE	Alpha used for computing regulatory EAD	EAD post-CRM	RWA
	(Millions of Canadian dollars, except as otherwise noted)						
1	SA-CCR (for derivatives)	19,637	48,115		1.4	94,563	17,887
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)					173,766	8,407
5	Value-at-Risk (VaR) for SFTs						
6	Total						26,294

As at July 31, 2024

		a	b	c	d	e	f
		Replacement Cost	Potential future exposure	EEPE	Alpha used for computing regulatory EAD	EAD post-CRM	RWA
	(Millions of Canadian dollars, except as otherwise noted)						
1	SA-CCR (for derivatives)	17,274	44,711		1.4	86,453	16,360
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)					189,593	8,095
5	Value-at-Risk (VaR) for SFTs						
6	Total						24,455



CCR3: Standardized approach – CCR exposures by regulatory portfolio and risk weights

The following table presents a breakdown of counterparty credit risk exposures calculated according to the standardized approach by portfolio and risk weight.

As at October 31, 2024

	a	b	c	d	e	f	g	h	i	j	k	l	m	n
Risk weight	0%	10%	20%	30%	40%	50%	75%	80%	85%	100%	130%	150%	Others	Total credit exposure
Regulatory portfolio (Millions of Canadian dollars)														
Sovereigns	1	-	5	-	-	-	-	-	-	-	-	-	-	6
Non-central government public sector entities (PSEs)	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Multilateral development banks (MDBs)	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Banks	-	-	9	25	-	-	-	-	-	9	-	-	-	43
Securities firms and other financial institutions treated as Banks	-	-	-	-	-	-	-	-	-	256	-	-	-	256
Corporates	-	-	-	-	-	4	-	-	77	942	-	-	-	1,024
Of which: specialised lending	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Securities firms and other financial institutions treated as Corporate	-	-	-	-	-	-	-	-	-	21	-	-	-	21
Regulatory retail portfolios	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other assets	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	1	-	14	25	-	4	-	-	77	1,228	-	-	-	1,350



CCR3: Standardized approach – CCR exposures by regulatory portfolio and risk weights (continued)

As at July 31, 2024

	a	b	c	d	e	f	g	h	i	j	k	l	m	n
Risk weight	0%	10%	20%	30%	40%	50%	75%	80%	85%	100%	130%	150%	Others	Total credit exposure
Regulatory portfolio (Millions of Canadian dollars)														
Sovereigns	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Non-central government public sector entities (PSEs)	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Multilateral development banks (MDBs)	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Banks	-	-	7	6	-	-	-	-	-	69	-	-	-	83
Securities firms and other financial institutions treated as Banks	-	-	-	-	-	-	-	-	-	154	-	-	-	154
Corporates	-	-	41	-	-	4	-	-	81	848	-	-	-	975
Of which: specialised lending	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Securities firms and other financial institutions treated as Corporate	-	-	9	-	-	-	-	-	-	68	-	-	-	78
Regulatory retail portfolios	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other assets	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	-	-	57	6	-	4	-	-	81	1,139	-	-	-	1,290

CCR4: A-IRB – CCR exposures by portfolio and PD scale

The following table presents a detailed view of CCR exposures subject to A-IRB approach by asset classes and PD scale.

As at October 31, 2024

(Millions of Canadian dollars, except as otherwise noted)	PD scale ¹	a	b	c	d	e	f	g
		EAD post-CRM	Average PD (%)	Number of obligors	Average LGD (%)	Average maturity (in years)	RWA	RWA density (%)
Asset classes								
Sovereigns	0.00 to < 0.15	44,440	0.04	420	12.07	1.21	889	2.0
	0.15 to < 0.25	37	0.24	14	39.64	1.30	11	29.7
	0.25 to < 0.50	9	0.46	9	33.93	1.65	3	31.2
	0.50 to < 0.75	-	-	-	-	-	-	-
	0.75 to < 2.50	39	1.29	3	40.00	1.00	28	72.3
	2.50 to < 10.00	-	-	-	-	-	-	-
	10.00 to < 100.00	-	-	-	-	-	-	-
	100.00 (default)	27	100.00	1	15.00	1.00	50	187.5
Total sovereigns		44,552	0.10	447	12.13	1.21	981	2.2
Corporates								
	0.00 to < 0.15	3,463	0.07	700	26.27	1.96	255	7.4
	0.15 to < 0.25	296	0.24	263	34.82	3.36	73	24.7
	0.25 to < 0.50	279	0.46	223	42.62	2.38	127	45.5
	0.50 to < 0.75	-	-	-	-	-	-	-
	0.75 to < 2.50	1,334	1.25	598	36.98	2.05	841	63.1
	2.50 to < 10.00	317	4.18	191	42.61	2.29	365	115.2
	10.00 to < 100.00	5	24.61	16	38.39	1.70	8	182.0
	100.00 (default)	16	100.00	8	38.38	1.53	76	479.8
Total corporates		5,710	0.90	1,999	30.97	2.09	1,746	30.6
Total		50,262	0.20	2,446	14.27	1.31	2,727	5.4

¹ Refer to the "Internal ratings map" in the Credit risk assessment subsection of the Risk management section in our 2024 Annual Report.

CCR4: A-IRB – CCR exposures by portfolio and PD scale (continued)

As at July 31, 2024

(Millions of Canadian dollars, except as otherwise noted)	PD scale ¹	a	b	c	d	e	f	g
		EAD post-CRM	Average PD (%)	Number of obligors	Average LGD (%)	Average maturity (in years)	RWA	RWA density (%)
Asset classes								
Sovereigns	0.00 to < 0.15	44,961	0.04	418	9.68	1.14	731	1.6
	0.15 to < 0.25	73	0.24	15	39.53	1.17	22	29.6
	0.25 to < 0.50	35	0.46	7	17.22	0.43	5	15.6
	0.50 to < 0.75	-	-	-	-	-	-	-
	0.75 to < 2.50	45	1.29	3	40.00	1.00	32	72.3
	2.50 to < 10.00	-	-	-	-	-	-	-
	10.00 to < 100.00	-	-	-	-	-	-	-
	100.00 (default)	-	-	-	-	-	-	-
Total sovereigns		45,114	0.05	443	9.76	1.14	791	1.8
Corporates								
	0.00 to < 0.15	2,645	0.08	709	23.68	1.77	185	7.0
	0.15 to < 0.25	313	0.24	244	34.72	3.52	77	24.4
	0.25 to < 0.50	367	0.46	224	42.74	2.37	169	46.0
	0.50 to < 0.75	-	-	-	-	-	-	-
	0.75 to < 2.50	1,195	1.45	576	37.40	2.13	802	67.1
	2.50 to < 10.00	251	4.37	161	42.91	2.58	295	117.7
	10.00 to < 100.00	2	27.34	10	41.29	1.64	5	200.1
	100.00 (default)	15	100.00	9	37.90	1.74	73	473.7
Total corporates		4,789	1.02	1,933	30.35	2.06	1,605	33.5
Total		49,903	0.14	2,376	11.74	1.23	2,396	4.8

¹ Refer to the "Internal ratings map" in the Credit risk assessment subsection of the Risk management section in our 2023 Annual Report.

CCR4: F-IRB – CCR exposures by portfolio and PD scale

The following table presents a detailed view of CCR exposures subject to F-IRB approach adopted Q2 2023 by asset classes and PD scale. Only Banks and Large Corporates are currently required to follow the Foundation Approach under the CAR guidelines with all other IRB exposures allowed under A-IRB.

As at October 31, 2024

(Millions of Canadian dollars, except as otherwise noted)	PD scale ¹	a	b	c	d	e	f	g
		EAD post-CRM	Average PD (%)	Number of obligors	Average LGD (%)	Average maturity (in years)	RWA	RWA density (%)
Asset classes								
Banks								
	0.00 to < 0.15	105,320	0.07	285	13.87	0.71	5,335	5.1
	0.15 to < 0.25	334	0.24	23	28.98	0.94	83	24.9
	0.25 to < 0.50	1,540	0.46	23	7.03	0.56	115	7.5
	0.50 to < 0.75	-	-	-	-	-	-	-
	0.75 to < 2.50	1,145	0.92	20	3.07	0.57	60	5.3
	2.50 to < 10.00	25	2.63	2	45.00	0.04	23	92.8
	10.00 to < 100.00	-	-	-	-	-	-	-
	100.00 (default)	-	-	-	-	-	-	-
Total banks		108,364	0.08	353	13.71	0.71	5,616	5.2
Corporates								
	0.00 to < 0.15	100,124	0.06	7,093	38.93	0.84	11,420	11.4
	0.15 to < 0.25	2,514	0.24	293	42.79	1.27	904	36.0
	0.25 to < 0.50	1,556	0.46	157	42.37	1.59	809	52.0
	0.50 to < 0.75	-	-	-	-	-	-	-
	0.75 to < 2.50	3,666	1.15	221	42.35	1.04	2,832	77.3
	2.50 to < 10.00	399	3.50	72	41.49	1.04	434	108.6
	10.00 to < 100.00	74	18.58	3	40.00	4.50	144	194.3
	100.00 (default)	19	100.00	3	41.40	1.61	100	517.5
Total corporates		108,352	0.15	7,842	39.19	0.87	16,643	15.4
Total		216,716	0.12	8,195	26.45	0.79	22,259	10.3

¹ Refer to the "Internal ratings map" in the Credit risk assessment subsection of the Risk management section in our 2024 Annual Report.

CCR4: F-IRB – CCR exposures by portfolio and PD scale (continued)

As at July 31, 2024

(Millions of Canadian dollars, except as otherwise noted)	PD scale ¹	a	b	c	d	e	f	g
		EAD post-CRM	Average PD (%)	Number of obligors	Average LGD (%)	Average maturity (in years)	RWA	RWA density (%)
Asset classes								
Banks								
	0.00 to < 0.15	111,296	0.06	278	12.35	0.73	4,978	4.5
	0.15 to < 0.25	280	0.24	24	29.33	1.31	68	24.4
	0.25 to < 0.50	2,074	0.46	23	4.00	0.54	91	4.4
	0.50 to < 0.75	-	-	-	-	-	-	-
	0.75 to < 2.50	314	1.29	26	15.99	0.66	95	30.1
	2.50 to < 10.00	1	3.09	2	45.00	0.46	1	98.6
	10.00 to < 100.00	-	-	-	-	-	-	-
	100.00 (default)	-	-	-	-	-	-	-
Total banks		113,965	0.08	353	12.25	0.72	5,233	4.6
Corporates								
	0.00 to < 0.15	103,132	0.06	7,276	38.54	0.77	11,052	10.7
	0.15 to < 0.25	2,176	0.24	358	42.06	1.37	767	35.3
	0.25 to < 0.50	1,812	0.46	154	34.45	1.17	780	43.0
	0.50 to < 0.75	-	-	-	-	-	-	-
	0.75 to < 2.50	3,314	1.18	235	41.79	1.23	2,492	75.2
	2.50 to < 10.00	449	3.66	83	40.47	1.12	490	109.0
	10.00 to < 100.00	1	31.52	1	40.00	1.00	3	209.9
	100.00 (default)	3	100.00	2	45.00	3.33	18	562.5
Total corporates		110,887	0.12	8,109	38.65	0.80	15,602	14.1
Total		224,852	0.10	8,462	25.27	0.76	20,835	9.3

¹ Refer to the "Internal ratings map" in the Credit risk assessment subsection of the Risk management section in our 2023 Annual Report.

CCR5: Composition of collateral for CCR exposure

The following table presents a breakdown of collateral posted or received to support or reduce the CCR exposures related to derivative transactions or securities financing transactions (SFTs), including transactions cleared through a central counterparty clearing house (CCP).

As at October 31, 2024

(Millions of Canadian dollars)	a	b	c	d	e	f
	Collateral used in derivative transactions				Collateral used in SFTs	
	Fair value of collateral received		Fair value of posted collateral		Fair value of collateral received	Fair value of posted collateral
	Segregated	Unsegregated	Segregated	Unsegregated		
Cash - domestic currency	147	2,393	69	4,231	49,619	91,530
Cash - other currencies	4,679	18,341	5,673	20,766	442,359	445,711
Domestic sovereign debt	1,552	1,378	1,721	1,262	136,527	134,638
Other sovereign debt	6,220	3,167	9,145	5,453	358,513	341,394
Government agency debt	222	98	209	2,845	119,547	140,450
Corporate bonds	2,805	680	1,835	289	44,904	57,561
Equity securities	2,878	-	7,207	16,002	108,350	169,726
Other collateral	-	42	-	-	30,267	16,002
Total	18,503	26,099	25,859	50,848	1,290,086	1,397,012

As at July 31, 2024

(Millions of Canadian dollars)	a	b	c	d	e	f
	Collateral used in derivative transactions				Collateral used in SFTs	
	Fair value of collateral received		Fair value of posted collateral		Fair value of collateral received	Fair value of posted collateral
	Segregated	Unsegregated	Segregated	Unsegregated		
Cash - domestic currency	682	2,403	722	4,455	55,468	77,497
Cash - other currencies	5,336	16,172	11,508	17,227	393,060	394,877
Domestic sovereign debt	1,467	1,903	2,442	1,617	131,165	151,026
Other sovereign debt	5,165	2,808	7,553	3,974	315,590	294,563
Government agency debt	407	53	234	2,071	116,122	135,491
Corporate bonds	2,607	674	2,529	-	40,237	52,278
Equity securities	2,316	-	3,301	5,062	111,569	176,165
Other collateral	-	30	-	-	30,919	13,335
Total	17,980	24,043	28,289	34,406	1,194,130	1,295,232

CCR6: Credit derivatives exposures

The following table presents credit derivatives bought or sold by notional and fair values.

As at October 31, 2024

(Millions of Canadian dollars)	a	b
	Protection bought	Protection sold
Notionals		
Single-name credit default swaps	12,285	17,410
Index credit default swaps	72,128	53,457
Total return swaps		
Credit options	52,084	50,928
Other credit derivatives		
Total notionals	136,497	121,795
Fair values		
Positive fair value (asset)	102	171
Negative fair value (liability)	152	66

As at July 31, 2024

(Millions of Canadian dollars)	a	b
	Protection bought	Protection sold
Notionals		
Single-name credit default swaps	11,663	16,732
Index credit default swaps	38,659	21,560
Total return swaps	-	-
Credit options	44,266	46,990
Other credit derivatives	-	-
Total notionals	94,588	85,282
Fair values		
Positive fair value (asset)	79	138
Negative fair value (liability)	173	66

CCR8: Exposures to central counterparties

The following table presents a comprehensive view of our exposures to central counterparty clearing houses (CCPs), including due to operations, margins and contributions to default funds, and related RWA.

As at October 31, 2024

(Millions of Canadian dollars)		a	b
		EAD (post-CRM)	RWA
1	Exposures to QCCPs (total)	50,749	718
2	Exposures for trades at QCCPs (excluding initial margin and default fund contributions); of which	30,869	671
3	(i) OTC derivatives	6,408	169
4	(ii) Exchange-traded derivatives	19,023	380
5	(iii) Securities financing transactions	5,438	122
6	(iv) Netting sets where cross-product netting has been approved	-	-
7	Segregated initial margin	6,364	
8	Non-segregated initial margin ¹	3,032	-
9	Pre-funded default fund contributions	2,254	47
9a	Unfunded default fund contributions ²	8,230	-
10	Exposures to non-QCCPs (total)		
11	Exposures for trades at non-QCCPs (excluding initial margin and default fund contributions); of which		
12	(i) OTC derivatives		
13	(ii) Exchange-traded derivatives		
14	(iii) Securities financing transactions		
15	(iv) Netting sets where cross-product netting has been approved		
16	Segregated initial margin		
17	Non-segregated initial margin		

¹ Non-segregated initial margin pertaining to QCCPs is already embedded in the total trade exposure.

² Unfunded default fund contributions are risk weighted at 0%.



CCR8: Exposures to central counterparties (continued)

As at July 31, 2024

(Millions of Canadian dollars)		a	b
		EAD (post-CRM)	RWA
1	Exposures to QCCPs (total)	44,413	594
2	Exposures for trades at QCCPs (excluding initial margin and default fund contributions); of which	25,593	557
3	(i) OTC derivatives	7,816	192
4	(ii) Exchange-traded derivatives	14,009	280
5	(iii) Securities financing transactions	3,768	85
6	(iv) Netting sets where cross-product netting has been approved	-	-
7	Segregated initial margin	6,691	
8	Non-segregated initial margin ¹	2,518	-
9	Pre-funded default fund contributions	1,688	37
9a	Unfunded default fund contributions ²	7,923	-
10	Exposures to non-QCCPs (total)		
11	Exposures for trades at non-QCCPs (excluding initial margin and default fund contributions); of which		
12	(i) OTC derivatives		
13	(ii) Exchange-traded derivatives		
14	(iii) Securities financing transactions		
15	(iv) Netting sets where cross-product netting has been approved		
16	Segregated initial margin		
17	Non-segregated initial margin		

¹ Non-segregated initial margin pertaining to QCCPs is already embedded in the total trade exposure.

² Unfunded default fund contributions are risk weighted at 0%.

CREDIT VALUATION ADJUSTMENT RISK
CVAA: General qualitative disclosure requirements related to CVA

a) An explanation and/or a description of the D-SIB's processes implemented to identify, measure, monitor and control the D-SIB's CVA risks, including policies for hedging CVA risk and the processes for monitoring the continuing effectiveness of hedges.

Credit Valuation Adjustment (CVA) is the market value of counterparty credit risk associated with a portfolio of derivative trades with a given counterparty. The Counterparty Risk Trading desk (CRT), within RBC Capital Markets, has the responsibility for the measurement and management of CVA for all derivative products. The group regularly reviews the methodology and processes behind these calculations, closely follows market pricing behavior and regularly participates in third-party valuation services, industry surveys and reviews to ensure it is meeting market best practice.

CVA is measured using RBC's in-house systems with approved models and methodologies, CVA balance and risk sensitivities are calculated daily. CVA covers all types of OTC derivatives, is calculated at the counterparty level and uses loss-given-default, counterparty credit quality, and expected exposure as inputs. Expected exposure itself is driven by underlying trade details, market inputs (forward curves, volatilities, etc.) that are both observables and calibrated, as well as collateral/credit support document terms.

CVA Risk monitoring is carried out daily by Front Office (FO) and Group Risk Management (GRM), with risk limits established at the trading desk level, including Risk Sensitivity Limits and Loss Metric Limits.

CVA management focuses on managing P&L volatility and default risk within RBC's risk appetite, by executing hedges such that the net risk and PnL volatility are reduced. The hedging instruments and hedging activities are subject to applicable RBC policies and regulatory requirements.

RBC's internal policy outlines the roles and responsibilities of the three lines of defense in terms of management and hedging of CVA risk.

RBC monitors the effectiveness of hedge by ensuring PnL is decomposed and explained by first and second order risk factor moves, mitigation plan is discussed and implemented if a significant PnL fluctuation is observed, and CVA risk sensitivities and loss metrics are managed within established risk limits.

b) Whether the bank is eligible and has chosen to set its capital requirement for CVA at 100% of the bank's capital requirement for counterparty credit risk as applicable under [CAR 2024, Chapter 8, paragraph 9].

RBC has adopted the BA-CVA methodology therefore has not elected a simplified approach to set CVA Capital requirements equal to Counterparty Credit Risk Capital.



CVA2: The full basic approach for CVA (BA-CVA)

This table provides the components used for the computation of capital requirements under the full BA-CVA for CVA risk which was effective for us in Q1 2024.

As at October 31, 2024

(Millions of Canadian dollars)		a
		Capital requirements & RWA under BA-CVA
1	K Reduced	2,598
2	K Hedged	2,124
3	Total CVA capital ¹	1,458
4	Total CVA RWA (row 3 x 12.5)	18,220

¹ Total CVA capital is determined based on the prescribed formula in the CAR guideline.

As at July 31, 2024

(Millions of Canadian dollars)		a
		Capital requirements & RWA under BA-CVA
1	K Reduced	2,368
2	K Hedged	1,865
3	Total CVA capital ¹	1,294
4	Total CVA RWA (row 3 x 12.5)	16,176

¹ Total CVA capital is determined based on the prescribed formula in the CAR guideline.

SECURITIZATION
SECA: Qualitative disclosure requirements related to securitization exposures

The table below presents an overview of Pillar 3 disclosure requirements that have been met within our 2024 Annual Report and incorporated by reference into this Pillar 3 report. Our 2024 Annual Report is available free of charge on our website at <http://www.rbc.com/investorrelations>.

Pillar 3 disclosures requirement		2024 Annual Report section	Sub-section
a)	Objectives in relation to securitization activities	Off-balance sheet arrangements	Off-balance sheet arrangements
		Consolidated Financial Statements	Note 7 - Derecognition of financial assets
		Consolidated Financial Statements	Note 8 - Structured entities
b)	List of SPEs where RBC is sponsor / provides implicit support	Consolidated Financial Statements	Note 8 - Structured entities
c)	Accounting policies for securitization	Consolidated Financial Statements	Note 2 - Summary of significant accounting policies, estimates and judgments - - <i>Basis of consolidation</i> - <i>Derecognition of financial assets</i>
		Critical accounting policies and estimates	Consolidation of structured entities
d)	The names of external credit assessment institution (ECAIs) used for securitizations and the types of securitization exposure for which each agency is used	Capital management (also refer to CRD in this document)	Regulatory capital approach for securitization exposures
e)	Use of Basel IAA for capital purposes	Credit risk	n/a
		Capital management	Regulatory capital approach for securitization exposures
f)	Use of other internal assessment for capital purposes	Credit risk	Credit risk assessment



SEC1: IRB – Securitization exposures in the banking book

The following table presents the breakdown of our balance sheet banking book carrying values by our role and type.

As at October 31, 2024

	a	b	c	d	e	f	g	h	i	j	k	l												
													Bank acts as originator ¹				Bank acts as sponsor ²				Bank acts as investor ³			
													Traditional	Of which simple, transparent and comparable (STC)	Synthetic	Sub-total	Traditional	Of which STC	Synthetic	Sub-total	Traditional	Of which STC	Synthetic	Sub-total
(Millions of Canadian dollars)																								
1	Retail (total)	52	-	-	52	40,087	35,170	-	40,087	494	66	-	494											
	- of which																							
2	residential mortgage	-	-	-	-	3,799	2,850	-	3,799	66	66	-	66											
3	credit card	52	-	-	52	5,009	4,050	-	5,009	-	-	-	-											
4	other retail exposures					31,279	28,270	-	31,279	428	-	-	428											
4a	of which student loans					2,345	2,345	-	2,345	427	-	-	427											
4b	of which auto loans and leases					19,925	18,996	-	19,925	1	-	-	1											
4c	of which consumer loans					9,009	6,927	-	9,009	-	-	-	-											
4d	of which other retail					-	-	-	-	-	-	-	-											
5	re-securitization					-	-	-	-	-	-	-	-											
6	Wholesale (total)			1,198	1,198	22,830	15,003		22,830	11,518	-		11,518											
	- of which																							
7	loans to corporates			1,198	1,198	4,480	-	-	4,480	8,794	-	-	8,794											
8	commercial mortgage					14	-	-	14	1,838	-	-	1,838											
9	lease and receivables					-	-	-	-	-	-	-	-											
10	other wholesale					18,336	15,003	-	18,336	886	-	-	886											
10a	of which dealer floor plan receivable					1,832	1,685	-	1,832	-	-	-	-											
10b	of which equipment receivable					3,432	3,290	-	3,432	-	-	-	-											
10c	of which trade receivable					574	574	-	574	-	-	-	-											
10d	of which other wholesale					12,498	9,454	-	12,498	886	-	-	886											
11	re-securitization																							

¹ Bank acts as originator reflects securitization activities in which we securitize our own assets (e.g. Golden credit card securitization).

² Bank acts as sponsor reflects securitization activities in which RBC works with its client to originate securitization transactions. RBC provides the liquidity and credit enhancement facilities to the SPE.

³ Bank acts as investor reflects purchases of securitization assets from the market.



SEC1: IRB – Securitization exposures in the banking book (continued)

As at July 31, 2024

		a	b	c	d	e	f	g	h	i	j	k	l
		Bank acts as originator ¹				Bank acts as sponsor ²				Bank acts as investor ³			
		Traditional	Of which simple, transparent and comparable (STC)	Synthetic	Sub-total	Traditional	Of which STC	Synthetic	Sub-total	Traditional	Of which STC	Synthetic	Sub-total
(Millions of Canadian dollars)													
1	Retail (total) – of which	51	-	-	51	40,389	35,399	-	40,389	549	-	-	549
2	residential mortgage	-	-	-	-	3,666	2,710	-	3,666	1	-	-	1
3	credit card	51	-	-	51	5,248	4,211	-	5,248	-	-	-	-
4	other retail exposures					31,475	28,478		31,475	548	-		548
4a	of which student loans					2,489	2,489		2,489	541			541
4b	of which auto loans and leases					20,136	19,157		20,136	7			7
4c	of which consumer loans					8,850	6,830		8,850	-			-
4d	of which other retail					-	-		-	-			-
5	re-securitization					-	-		-	-			-
6	Wholesale (total) – of which			1,195	1,195	22,137	15,314		22,137	11,755	69		11,755
7	loans to corporates			1,195	1,195	3,527	-		3,527	8,964	-		8,964
8	commercial mortgage					-	-		-	2,125	-		2,125
9	lease and receivables					-	-		-	-	-		-
10	other wholesale					18,610	15,314		18,610	666	69		666
10a	of which dealer floor plan receivable					1,809	1,663		1,809	-	-		-
10b	of which equipment receivable					3,901	3,762		3,901	-	-		-
10c	of which trade receivable					572	572		572	-	-		-
10d	of which other wholesale					12,328	9,317		12,328	666	69		666
11	re-securitization												

¹ Bank acts as originator reflects securitization activities in which we securitize our own assets (e.g. Golden credit card securitization).

² Bank acts as sponsor reflects securitization activities in which RBC works with its client to originate securitization transactions. RBC provides the liquidity and credit enhancement facilities to the SPE.

³ Bank acts as investor reflects purchases of securitization assets from the market.



SEC2: IRB – Securitization exposures in the trading book

The following table presents the breakdown of our balance sheet trading book carrying values by our role and type.

As at October 31, 2024

	(Millions of Canadian dollars)	a	b	c	d	e	f	g	h	i	j	k	l
		Bank acts as originator ¹				Bank acts as sponsor ²				Bank acts as investor ³			
		Traditional	Of which STC	Synthetic	Sub-total	Traditional	Of which STC	Synthetic	Sub-total	Traditional	Of which STC	Synthetic	Sub-total
1	Retail (total)	-	-	-	-	-	-	-	-	788	-	-	788
	- of which												
2	residential mortgages	-	-	-	-	-	-	-	-	3	-	-	3
3	credit cards	-	-	-	-	-	-	-	-	188	-	-	188
4	other retail exposures	-	-	-	-	-	-	-	-	597	-	-	597
4a	of which student loans	-	-	-	-	-	-	-	-	13	-	-	13
4b	of which auto loans and leases	-	-	-	-	-	-	-	-	341	-	-	341
4c	of which consumer loans	-	-	-	-	-	-	-	-	159	-	-	159
4d	of which other retail	-	-	-	-	-	-	-	-	84	-	-	84
5	re-securitization	-	-	-	-	-	-	-	-	-	-	-	-
6	Wholesale (total)	-	-	-	-	-	-	-	-	2,314	-	-	2,314
	- of which												
7	loans to corporates	-	-	-	-	-	-	-	-	326	-	-	326
8	commercial mortgages	-	-	-	-	-	-	-	-	13	-	-	13
9	leases and receivables	-	-	-	-	-	-	-	-	-	-	-	-
10	other wholesale exposures	-	-	-	-	-	-	-	-	1,975	-	-	1,975
10a	of which dealer floor plan receivables	-	-	-	-	-	-	-	-	-	-	-	-
10b	of which equipment receivables	-	-	-	-	-	-	-	-	-	-	-	-
10c	of which trade receivables	-	-	-	-	-	-	-	-	-	-	-	-
10d	of which other wholesale	-	-	-	-	-	-	-	-	1,975	-	-	1,975
11	re-securitization	-	-	-	-	-	-	-	-	-	-	-	-

¹ Bank acts as originator reflects securitization activities in which we securitize our own assets.

² Bank acts as sponsor reflects securitization activities in which RBC works with its client to originate securitization transactions. RBC provides the liquidity and credit enhancement facilities to the SPE.

³ Bank acts as investor reflects purchases of securitization assets from the market.



SEC2: IRB – Securitization exposures in the trading book (continued)

As at July 31, 2024

	(Millions of Canadian dollars)	a	b	c	d	e	f	g	h	i	j	k	l
		Bank acts as originator ¹				Bank acts as sponsor ²				Bank acts as investor ³			
		Traditional	Of which STC	Synthetic	Sub-total	Traditional	Of which STC	Synthetic	Sub-total	Traditional	Of which STC	Synthetic	Sub-total
1	Retail (total)	-	-	-	-	-	-	-	-	594	-	-	594
	- of which												
2	residential mortgages	-	-	-	-	-	-	-	-	3	-	-	3
3	credit cards	-	-	-	-	-	-	-	-	117	-	-	117
4	other retail exposures	-	-	-	-	-	-	-	-	474	-	-	474
4a	of which student loans	-	-	-	-	-	-	-	-	6	-	-	6
4b	of which auto loans and leases	-	-	-	-	-	-	-	-	223	-	-	223
4c	of which consumer loans	-	-	-	-	-	-	-	-	167	-	-	167
4d	of which other retail	-	-	-	-	-	-	-	-	78	-	-	78
5	re-securitization	-	-	-	-	-	-	-	-	-	-	-	-
6	Wholesale (total)	-	-	-	-	-	-	-	-	1,020	-	-	1,020
	- of which												
7	loans to corporates	-	-	-	-	-	-	-	-	262	-	-	262
8	commercial mortgages	-	-	-	-	-	-	-	-	14	-	-	14
9	leases and receivables	-	-	-	-	-	-	-	-	-	-	-	-
10	other wholesale exposures	-	-	-	-	-	-	-	-	744	-	-	744
10a	of which dealer floor plan receivables	-	-	-	-	-	-	-	-	-	-	-	-
10b	of which equipment receivables	-	-	-	-	-	-	-	-	-	-	-	-
10c	of which trade receivables	-	-	-	-	-	-	-	-	-	-	-	-
10d	of which other wholesale	-	-	-	-	-	-	-	-	744	-	-	744
11	re-securitization	-	-	-	-	-	-	-	-	-	-	-	-

¹ Bank acts as originator reflects securitization activities in which we securitize our own assets.

² Bank acts as sponsor reflects securitization activities in which RBC works with its client to originate securitization transactions. RBC provides the liquidity and credit enhancement facilities to the SPE.

³ Bank acts as investor reflects purchases of securitization assets from the market.



SEC3: Securitization exposures in the banking book and associated regulatory capital requirements – bank acting as originator or as sponsor

The following table presents a breakdown of securitization exposures in the banking book by risk weight and by regulatory approach when we act as originator or sponsor, and the associated capital requirements.

As at October 31, 2024

	a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	p	q
	Exposure values (by RW bands)					Exposure values (by regulatory approach)				RWA (by regulatory approach)				Capital charge after cap (by regulatory approach)			
	≤20% RW	>20% to 50% RW	>50% to 100% RW	>100% to <1250% RW	1250% RW	SEC – IRBA ¹	SEC – ERBA and SEC-IAA	SEC – SA	1250%	SEC – IRBA ¹	SEC – ERBA and SEC-IAA	SEC – SA	1250%	SEC – IRBA ¹	SEC – ERBA and SEC-IAA	SEC – SA	1250%
(Millions of Canadian dollars)																	
1 Total exposures	59,585	3,520	426	440	196	1,250	46,256	16,661	-	353	8,856	2,784	-	29	718	226	-
2 Traditional securitization	58,387	3,520	426	440	196	52	46,256	16,661	-	173	8,856	2,784	-	14	718	226	-
3 Of which: securitization	58,387	3,520	426	440	196	52	46,256	16,661	-	173	8,856	2,784	-	14	718	226	-
4 Of which: retail underlying	38,277	1,381	222	258	-	52	33,543	6,543	-	173	4,367	1,090	-	14	355	88	-
5 Of which: STC	34,881	157	110	73	-	52	31,434	3,735	-	173	3,691	416	-	14	299	34	-
6 Of which: wholesale	20,110	2,139	204	182	196	-	12,713	10,118	-	-	4,489	1,694	-	-	364	137	-
7 Of which: STC	13,791	728	169	118	196	-	10,941	4,061	-	-	4,121	476	-	-	334	39	-
8 Of which: re-securitization	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9 Synthetic securitization	1,198	-	-	-	-	1,198	-	-	-	180	-	-	-	15	-	-	-
10 Of which: securitization	1,198	-	-	-	-	1,198	-	-	-	180	-	-	-	15	-	-	-
11 Of which: retail underlying	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12 Of which: wholesale	1,198	-	-	-	-	1,198	-	-	-	180	-	-	-	15	-	-	-
13 Of which: re-securitization	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

¹SEC-IRBA exposures reflect exposures where we have underlying IRB approval currently.



As at July 31, 2024

	a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	p	q																	
																		Exposure values (by RW bands)					Exposure values (by regulatory approach)				RWA (by regulatory approach)				Capital charge after cap (by regulatory approach)			
																		≤20% RW	>20% to 50% RW	>50% to 100% RW	>100% to <1250% RW	1250% RW	SEC – IRBA ¹	SEC – ERBA and SEC-IAA	SEC – SA	1250%	SEC – IRBA ¹	SEC – ERBA and SEC-IAA	SEC – SA	1250%	SEC – IRBA ¹	SEC – ERBA and SEC-IAA	SEC – SA	1250%
(Millions of Canadian dollars)																																		
1 Total exposures	58,469	3,959	672	450	222	1,246	48,076	14,450	-	359	9,915	2,299	-	29	793	183	-																	
2 Traditional securitization	57,274	3,959	672	450	222	51	48,076	14,450	-	180	9,915	2,299	-	14	793	183	-																	
3 Of which: securitization	57,274	3,959	672	450	222	51	48,076	14,450	-	180	9,915	2,299	-	14	793	183	-																	
4 Of which: retail underlying	38,584	1,348	217	292	-	51	34,753	5,636	-	180	4,670	710	-	14	374	57	-																	
5 Of which: STC	35,131	143	104	72	-	51	31,592	3,808	-	180	3,687	417	-	14	295	33	-																	
6 Of which: wholesale	18,690	2,611	455	158	222	-	13,323	8,814	-	-	5,244	1,589	-	-	420	127	-																	
7 Of which: STC	14,014	770	175	131	222	-	11,622	3,690	-	-	4,558	442	-	-	365	34	-																	
8 Of which: re-securitization	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-																	
9 Synthetic securitization	1,195	-	-	-	-	1,195	-	-	-	179	-	-	-	14	-	-	-																	
10 Of which: securitization	1,195	-	-	-	-	1,195	-	-	-	179	-	-	-	14	-	-	-																	
11 Of which: retail underlying	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-																	
12 Of which: wholesale	1,195	-	-	-	-	1,195	-	-	-	179	-	-	-	14	-	-	-																	
13 Of which: re-securitization	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-																	

¹SEC-IRBA exposures reflect exposures where we have underlying IRB approval currently.



SEC4: Securitization exposures in the banking book and associated capital requirements – bank acting as investor

The following table presents a breakdown of securitization exposures in the banking book by risk weight and by regulatory approach when we act as investor, and the associated capital requirements.

As at October 31, 2024

	a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	p	q
	Exposure values (by RW bands)					Exposure values (by regulatory approach)				RWA (by regulatory approach)				Capital charge after cap (by regulatory approach)			
	≤20% RW	>20% to 50% RW	>50% to 100% RW	>100% to <1250% RW	1250% RW	SEC – IRBA ¹	SEC – ERBA and SEC-IAA	SEC – SA	1250%	SEC – IRBA ¹	SEC – ERBA and SEC-IAA	SEC – SA	1250%	SEC – IRBA ¹	SEC – ERBA and SEC-IAA	SEC – SA	1250%
(Millions of Canadian dollars)																	
1 Total exposures	11,231	545	159	37	40	-	11,972	-	40	-	2,689	-	499	-	217	-	40
2 Traditional securitization	11,231	545	159	37	40	-	11,972	-	40	-	2,689	-	499	-	217	-	40
3 Of which: securitization	11,231	545	159	37	40	-	11,972	-	40	-	2,689	-	499	-	217	-	40
4 Of which: retail underlying	289	202	3	-	-	-	494	-	-	-	115	-	-	-	9	-	-
5 Of which: STC	66	-	-	-	-	-	66	-	-	-	7	-	-	-	1	-	-
6 Of which: wholesale	10,942	343	156	37	40	-	11,478	-	40	-	2,574	-	499	-	208	-	40
7 Of which: STC	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8 Of which: re-securitization																	
9 Synthetic securitization																	
10 Of which: securitization																	
11 Of which: retail underlying																	
12 Of which: wholesale																	
13 Of which: re-securitization																	

¹ SEC-IRBA exposures reflect exposures where we have underlying IRB approval currently.



As at July 31, 2024

	a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	p	q																	
																		Exposure values (by RW bands)					Exposure values (by regulatory approach)				RWA (by regulatory approach)				Capital charge after cap (by regulatory approach)			
																		≤20% RW	>20% to 50% RW	>50% to 100% RW	>100% to <1250% RW	1250% RW	SEC – IRBA ¹	SEC – ERBA and SEC-IAA	SEC – SA	1250%	SEC – IRBA ¹	SEC – ERBA and SEC-IAA	SEC – SA	1250%	SEC – IRBA ¹	SEC – ERBA and SEC-IAA	SEC – SA	1250%
(Millions of Canadian dollars)																																		
1 Total exposures	11,620	568	12	37	67	-	12,237	-	67	-	2,652	-	832	-	213	-	67																	
2 Traditional securitization	11,620	568	12	37	67	-	12,237	-	67	-	2,652	-	832	-	213	-	67																	
3 Of which: securitization	11,620	568	12	37	67	-	12,237	-	67	-	2,652	-	832	-	213	-	67																	
4 Of which: retail underlying	335	210	4	-	-	-	548	-	-	-	133	-	-	-	11	-	-																	
5 Of which: STC	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-																	
6 Of which: wholesale	11,285	358	8	37	67	-	11,689	-	67	-	2,519	-	832	-	202	-	67																	
7 Of which: STC	69	-	-	-	-	-	69	-	-	-	7	-	-	-	1	-	-																	
8 Of which: re-securitization																																		
9 Synthetic securitization																																		
10 Of which: securitization																																		
11 Of which: retail underlying																																		
12 Of which: wholesale																																		
13 Of which: re-securitization																																		

¹ SEC-IRBA exposures reflect exposures where we have underlying IRB approval currently.

MARKET RISK

MRA: Qualitative disclosure requirements related to market risk

Market risk management strategies and processes

Market risk arises from our trading and non-trading portfolios. The primary objective of trading is to generate an optimal return on our capital while ensuring that risks remain within our risk appetite. Trading activities involve market making, facilitating client transactions and hedging risks generated from these activities.

RBC has an established control framework for determining the instruments to include in, and to exclude from, the trading book for purposes of regulatory capital, consistent with OSFI's CAR Guidelines. Policies specify the financial instruments mandated to be designated as trading, those that are presumed to be trading and those that are excluded from a trading designation. Additionally, and consistent with the CAR Guidelines, OSFI is notified of any deviation of instrument classification from the policy or regulatory guidance, including the rationale and materiality of the deviation. As at October 31st 2024, instruments presumed to be in the trading book under OSFI's CAR Guidelines that are held within our banking book portfolios had a net market value of approximately CAD 3.1 billion, primarily comprised of equity and debt securities within our Wealth Management and Capital Markets businesses for client facilitation purposes.

Our policies also specify the definition and requirements of a trading desk, including but not limited to, mandate, risk limits, eligible products, and reporting requirements for P&L, intraday limits and inventory aging (including stale positions).

Market risk also arises from our non-trading portfolio as a result of managing interest rate risk from client-originating banking products (such as loans and deposits) and related hedge transactions, portfolios used for asset-liability management and liquidity management, exposures designated as FVOCI, and exposures from our insurance operations.

To ensure that market risk remains within our risk appetite, we hedge our market risk exposures where appropriate. We use cash and derivative financial instruments, as permitted by regulatory and jurisdictional requirements, to manage the market risk related to our trading and non-trading activities.

Certain market risks (interest rate, credit, or equity) originating in the banking book may be hedged through derivative transactions with the trading portfolio through an Internal Risk Transfer (IRT). Interest rate IRTs are transacted through dedicated IRT desks which have been approved by OSFI. Credit and equity IRTs are transacted directly between non-trading and trading portfolios. We have defined policies that outline the requirements and governance of IRTs so that the transactions are compliant with OSFI's CAR guidelines at initiation and on an on-going basis.

The table below presents an overview of Pillar 3 disclosure requirements that have been met within our 2024 Annual Report and incorporated by reference into this Pillar 3 report. Our 2024 Annual Report is available free of charge on our website at <http://www.rbc.com/investorrelations>.

Pillar 3 disclosures requirement	2024 Annual Report section	Sub-Section
a) Strategies and processes implemented to identify, measure, monitor and control the bank's market risks	Market Risk	Market risk controls – FVTPL positions, including trading portfolios
		Stress tests
		Market risk measures – FVTPL positions
		Market risk measures for assets and liabilities of RBC Insurance
		Market risk controls – Interest Rate Risk in the Banking Book (IRRBB) positions
		IRRBB measurement
		Market risk measures – IRRBB Sensitivities
		Market risk measures for other material non-trading portfolios
Policies for hedging risk and strategies/processes for monitoring the continuing effectiveness of hedges	Consolidated Financial Statements	Note 2 - Summary of significant accounting policies, estimates and judgements – <i>Hedge accounting</i> Note 9 - Derivative financial instruments and hedging activities

MRA: Qualitative disclosure requirements related to market risk (continued)

Market risk management structure and organization

The Enterprise Market Risk Management Framework is the governance and control framework for the management of market risk within the bank. The market risk management structure is designed to ensure strong corporate governance over all market risk in the context of each business considering operating environment, industry best practices, and regulatory requirements. Drivers of market risk are considered in the bank’s policies, practices and standards which are continuously updated given dynamic market and regulatory conditions.

The table below presents an overview of Pillar 3 disclosure requirements that have been met within our 2024 Annual Report and incorporated by reference into this Pillar 3 report. Our 2024 Annual Report is available free of charge on our website at <http://www.rbc.com/investorrelations>.

Pillar 3 disclosures requirement	2024 Annual Report section	Sub-Section
b) Description of the market risk governance structure established to implement the strategies and processes of the bank	Enterprise Risk Management	Risk governance
		Risk appetite
		Risk measurement
		Risk control
		Risk measurement - <i>Stress testing</i>
	Operational risk	Culture and conduct risk

Scope and nature of risk reporting and/or measurement systems

The table below presents an overview of Pillar 3 disclosure requirements that have been met within our 2024 Annual Report and incorporated by reference into this Pillar 3 report. Our 2024 Annual Report is available free of charge on our website at <http://www.rbc.com/investorrelations>.

Pillar 3 disclosures requirement	2024 Annual Report section	Sub-Section
c) Scope and nature of risk reporting and/or measurement systems	Enterprise Risk Management	Risk measurement
		Risk control
		Risk measurement – <i>Stress testing</i>
	Market Risk	Market risk controls – FVTPL positions, including trading portfolios
		Stress tests
		Market risk measures – FVTPL positions
		Market risk measures for assets and liabilities of RBC Insurance
		Market risk controls – Interest Rate Risk in the Banking Book (IRRBB) positions
		IRRBB measurement
		Market risk measures – IRRBB Sensitivities
		Market risk measures for other material non-trading portfolios

MR1: Market risk under standardized approach

The following table presents the components of the capital and RWA requirement under our adoption of the Basel III reforms standardized approach for market risk (FRTB) effective for us November 1, 2023. On adoption templates MR 3 and MR 4 have been retired by OSFI while MR 2 is no longer applicable for us.

	(Millions of Canadian dollars)	As at October 31, 2024	
		Capital requirement	RWA
1	General interest rate risk	156	1,956
2	Equity risk	292	3,656
3	Commodity risk	143	1,787
4	Foreign exchange risk	223	2,787
5	Credit spread risk – non-securitisations	632	7,895
6	Credit spread risk – securitisations (non-correlation trading portfolio)	38	479
7	Credit spread risk – securitisation (correlation trading portfolio)	-	-
8	Default risk – non-securitisations	759	9,493
9	Default risk – securitisations (non-correlation trading portfolio)	113	1,405
10	Default risk – securitisations (correlation trading portfolio)	-	-
11	Residual risk add-on	358	4,472
12	Total	2,714	33,930

	(Millions of Canadian dollars)	As at July 31, 2024	
		Capital requirement	RWA
1	General interest rate risk	231	2,884
2	Equity risk	248	3,096
3	Commodity risk	196	2,455
4	Foreign exchange risk	253	3,160
5	Credit spread risk – non-securitisations	474	5,920
6	Credit spread risk – securitisations (non-correlation trading portfolio)	26	328
7	Credit spread risk – securitisation (correlation trading portfolio)	-	-
8	Default risk – non-securitisations	751	9,391
9	Default risk – securitisations (non-correlation trading portfolio)	100	1,244
10	Default risk – securitisations (correlation trading portfolio)	-	-
11	Residual risk add-on	355	4,442
12	Total	2,634	32,920

PRUDENT VALUATION ADJUSTMENTS
PV1: Prudent valuation adjustments (PVAs)

The following table presents an overview of the prudent valuation adjustments (PVAs) included in our regulatory capital as disclosed in table CC1 – Composition of Capital.

As at October 31, 2024

	(Millions of Canadian dollars)	a	b	c	d	e	f	g	h
		Equity	Interest rates	Foreign exchange	Credit	Commodities	Total	Of which: in the trading book	Of which: in the banking book
1	Closeout uncertainty, of which:	88	69	-	35	-	192	103	89
2	<i>Mid-market value</i>	70	22	-	28	-	120	49	71
3	<i>Closeout cost</i>	18	47	-	7	-	72	54	18
4	<i>Concentration</i>	-	-	-	-	-	-	-	-
5	Early termination	-	-	-	-	-	-	-	-
6	Model risk	-	-	-	-	-	-	-	-
7	Operational risk	-	-	-	-	-	-	-	-
8	Investing and funding costs						-	-	-
9	Unearned credit spreads						-	-	-
10	Future administrative costs	-	-	-	-	-	-	-	-
11	Other	-	-	-	-	-	-	-	-
12	Total adjustment	88	69	-	35	-	192	103	89

As at October 31, 2023

	(Millions of Canadian dollars)	a	b	c	d	e	f	g	h
		Equity	Interest rates	Foreign exchange	Credit	Commodities	Total	Of which: in the trading book	Of which: in the banking book
1	Closeout uncertainty, of which:	91	45	-	48	-	184	85	99
2	<i>Mid-market value</i>	73	13	-	38	-	124	45	79
3	<i>Closeout cost</i>	18	32	-	10	-	60	40	20
4	<i>Concentration</i>	-	-	-	-	-	-	-	-
5	Early termination	-	-	-	-	-	-	-	-
6	Model risk	-	-	-	-	-	-	-	-
7	Operational risk	-	-	-	-	-	-	-	-
8	Investing and funding costs						-	-	-
9	Unearned credit spreads						-	-	-
10	Future administrative costs	-	-	-	-	-	-	-	-
11	Other	-	-	-	-	-	-	-	-
12	Total adjustment	91	45	-	48	-	184	85	99

OPERATIONAL RISK
ORA: General qualitative information on a bank's operational risk framework

The table below presents an overview of Pillar 3 disclosure requirements that have been met within our 2024 Annual Report and incorporated by reference into this Pillar 3 report. Our 2024 Annual Report is available free of charge on our website at <http://www.rbc.com/investorrelations>.

	Pillar 3 disclosures requirement	2024 Annual Report section	Sub-section
a)	Policies, frameworks and guidelines for the management of operational risk	Operational risk	Overview
			Operational risk framework
b)	The structure and organisation of their operational risk management and control function	Operational risk	Overview
			Operational risk framework
c)	Operational risk measurement system	Operational risk	Operational risk framework
			Operational risk capital
d)	The scope and main context of the reporting framework on operational risk to executive management and to the board of directors	Operational risk	Operational risk framework
			Culture and conduct risk
e)	The risk mitigation and risk transfer used in the management of operational risk including mitigation by policy, divesting from high-risk businesses, and by the establishment of controls	Operational risk	Operational risk framework



OR1: Historical losses

The following table presents 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) which informs the operational risk capital calculation.

As at October 31, 2024

		a	b	c	d	e	f	g	h	i	j	k
(Millions of Canadian dollars, except as otherwise noted)		2024	2023	2022	2021	2020	2019	2018	2017	2016	2015	Ten-year average
Using \$30,000 CAD threshold												
1	Total amount of operational losses net of recoveries (no exclusions)	542	225	198	139	176	169	209	297	225	357	254
2	Total number of operational risk losses	1,200	1,011	693	660	747	730	642	514	534	492	722
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	542	225	198	139	176	169	209	297	225	357	254
Details of operational risk capital calculation												
6	Are losses used to calculate the ILM (yes/no)?	Yes										



As at October 31, 2023

		a	b	c	d	e	f	g	h	i	j	k
(Millions of Canadian dollars, except as otherwise noted)		2023	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)	277	190	129	174	165	208	295	219	350	282	229
2	Total number of operational risk losses	927	671	631	720	706	630	496	512	476	427	620
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	277	190	129	174	165	208	295	219	350	282	229
Details of operational risk capital calculation												
6	Are losses used to calculate the ILM (yes/no)?	Yes										

OR2: Business Indicator and subcomponents

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

As at October 31, 2024

(Millions of Canadian dollars)		a	b	c
BI and its subcomponents¹		2024	2023	2022
1	Interest, lease and dividend component	26,572		
1a	Interest and lease income	104,286	88,852	40,842
1b	Interest and lease expense	78,500	64,673	19,305
1c	Interest earning assets	1,782,985	1,756,557	1,685,881
1d	Dividend income	2,897	2,663	2,656
2	Services component	28,720		
2a	Fee and commission income	30,828	27,952	26,355
2b	Fee and commission expense	4,381	4,230	3,890
2c	Other operating income	-	-	-
2d	Other operating expense	423	451	151
3	Financial component	2,106		
3a	Net P&L on the trading book	2,376	2,493	1,019
3b	Net P&L on the banking book	172	197	62
	Merger & Acquisition BI	210	-	-
4	BI	57,609		
5	Business indicator component (BIC)	8,975		
Disclosure on the BI		a		
6a	BI gross of excluded divested activities	57,609		
6b	Reduction in BI due to excluded divested activities	-		

¹ Figures are as reflected in regulatory filings of our Income Statement and Balance Sheet to OSFI based on CAR Operational Risk requirements.



As at October 31, 2023

(Millions of Canadian dollars)		a	b	c
BI and its subcomponents¹		2023	2022	2021
1	Interest, lease and dividend component	22,616		
1a	Interest and lease income	84,329	38,115	25,918
1b	Interest and lease expense	61,862	18,054	8,143
1c	Interest earning assets	1,654,793	1,567,186	1,424,667
1d	Dividend income	2,663	2,656	2,228
2	Services component	27,449		
2a	Fee and commission income	29,749	26,300	25,466
2b	Fee and commission expense	6,790	4,620	2,834
2c	Other operating income	(219)	110	130
2d	Other operating expense	441	139	254
3	Financial component	1,627		
3a	Net P&L on the trading book	2,392	926	1,183
3b	Net P&L on the banking book	193	43	145
	Merger & Acquisition BI	437		
4	BI	52,130		
5	Business indicator component (BIC)	7,988		
Disclosure on the BI		a		
6a	BI gross of excluded divested activities	52,130		
6b	Reduction in BI due to excluded divested activities	-		

¹ Figures are as reflected in regulatory filings of our Income Statement and Balance Sheet to OSFI based on CAR Operational Risk requirements.



OR3: Minimum required operational risk capital

The following table presents the operational risk regulatory capital requirements.

As at October 31, 2024

	(Millions of Canadian dollars)	a
1	Business indicator component (BIC)	8,975
2	Internal loss multiplier (ILM)	0.80
3	Minimum required operational risk capital (ORC)	7,163
4	Operational risk RWA	89,543

As at October 31, 2023

	(Millions of Canadian dollars)	a
1	Business indicator component (BIC)	7,988
2	Internal loss multiplier (ILM)	0.80
3	Minimum required operational risk capital (ORC)	6,391
4	Operational risk RWA	79,883



STANDARDISED RISK WEIGHTED COMPARISON

CMS1: Comparison of modelled and standardised RWA at risk level

The following table provides details of the comparison of modelled and standardised RWA at risk level.

As at October 31, 2024

		a	b	c	d
		RWA			
	(Millions of Canadian dollars)	RWA for modelled approaches that D-SIBs have supervisory approval to use	RWA for portfolios where standardised approaches are used	Total Actual RWA (a + b) (i.e., RWA which D-SIBs report as current requirements)	RWA calculated using full standardised approach (i.e., used in the base of the output floor)
1	Credit risk (excluding counterparty credit risk)	337,909	121,812	459,721	691,882
2	Counterparty credit risk	24,986	2,026	27,012	107,666
3	Credit valuation adjustment		18,220	18,220	18,220
4	Securitisation exposures in the banking book	8,825	6,356	15,181	18,647
5	Market risk	-	33,930	33,930	33,930
6	Operational risk		89,543	89,543	89,543
7	Residual RWA		28,675	28,675	28,675
8	Total	371,720	300,562	672,282	988,563



As at July 31, 2024

		a	b	c	d
		RWA			
		RWA for modelled approaches that D-SIBs have supervisory approval to use	RWA for portfolios where standardised approaches are used	Total Actual RWA (a + b) (i.e., RWA which D-SIBs report as current requirements)	RWA calculated using full standardised approach (i.e., used in the base of the output floor)
	(Millions of Canadian dollars)				
1	Credit risk (excluding counterparty credit risk)	333,044	123,493	456,537	682,676
2	Counterparty credit risk	23,231	1,818	25,049	107,723
3	Credit valuation adjustment		16,176	16,176	16,176
4	Securitisation exposures in the banking book	10,008	6,049	16,057	19,358
5	Market risk	-	32,920	32,920	32,920
6	Operational risk		87,775	87,775	87,775
7	Residual RWA		26,663	26,663	26,663
8	Total	366,283	294,894	661,177	973,291



CMS2: Comparison of modelled and standardised RWA for credit risk at asset class level

The following table provides details of the comparison of modelled and standardised RWA for credit risk at asset class level.

As at October 31, 2024

		a	b	c	d
		RWA			
	(Millions of Canadian dollars)	RWA for modelled approaches that D-SIBs have supervisory approval to use	RWA for portfolios where standardised approaches are used	Total Actual RWA (a + b) (i.e., RWA which D-SIBs report as current requirements)	RWA calculated using full standardised approach (i.e., used in the base of the output floor)
1	Sovereign	11,548	2,568	14,116	14,977
	Of which: categorised as MDB/PSE in SA	6,576	2,502	9,078	12,346
2	Banks and other financial institutions	5,489	10,280	15,769	19,067
3	Covered Bonds	3,184	278	3,462	5,406
4	Equity ¹	-	7,971	7,971	7,971
5	Purchased receivables	-	-	-	-
6	Corporates	197,010	67,873	264,883	397,195
	Of which: F-IRB is applied	90,817	-	90,817	165,404
	Of which: A-IRB is applied	106,193	-	106,193	156,856
7	Retail	102,966	11,641	114,607	202,800
	Of which: qualifying revolving retail	24,606	1,271	25,877	32,557
	Of which: other retail	30,828	5,974	36,802	40,626
	Of which: retail residential mortgages	47,532	4,396	51,928	129,617
8	Specialised lending	17,712	-	17,712	23,265
	Of which: income-producing real estate and high volatility commercial real estate	15,655	-	15,655	17,512
9	Others	-	21,201	21,201	21,201
10	Total	337,909	121,812	459,721	691,882

¹ OSFI's CAR guideline only allows the Standardized Approach for our Equity holdings.



As at July 31, 2024

		a	b	c	d
		RWA			
		RWA for modelled approaches that D-SIBs have supervisory approval to use	RWA for portfolios where standardised approaches are used	Total Actual RWA (a + b) (i.e., RWA which D-SIBs report as current requirements)	RWA calculated using full standardised approach (i.e., used in the base of the output floor)
	(Millions of Canadian dollars)				
1	Sovereign	11,521	2,481	14,002	14,831
	Of which: categorised as MDB/PSE in SA	6,442	2,401	8,843	11,826
2	Banks and other financial institutions	4,871	9,826	14,697	17,158
3	Covered Bonds	3,215	275	3,490	4,818
4	Equity ¹	-	7,808	7,808	7,808
5	Purchased receivables	-	-	-	-
6	Corporates	196,570	67,581	264,151	397,732
	Of which: F-IRB is applied	90,556	-	90,556	168,300
	Of which: A-IRB is applied	106,014	-	106,014	157,557
7	Retail	100,921	10,859	111,780	193,051
	Of which: qualifying revolving retail	24,551	1,232	25,783	32,091
	Of which: other retail	30,172	5,843	36,015	39,699
	Of which: retail residential mortgages	46,198	3,784	49,982	121,261
8	Specialised lending	15,946	-	15,946	22,615
	Of which: income-producing real estate and high volatility commercial real estate	13,923	-	13,923	16,958
9	Others	-	24,663	24,663	24,663
10	Total	333,044	123,493	456,537	682,676

¹ OSFI's CAR guideline only allows the Standardized Approach for our Equity holdings.



COUNTERCYCLICAL CAPITAL BUFFER

CCyB: Geographical distribution of credit exposures used in the countercyclical buffer

The following table provides the geographical distribution of our private sector credit exposures used in the calculation of the bank-specific countercyclical capital buffer requirement. Countercyclical capital buffer rates are as enacted by the respective jurisdiction.

As at October 31, 2024

Geographical distribution of credit exposures	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 ¹	Countercyclical capital buffer amount ²
Exposure values		RWA			
<small>(Millions of Canadian dollars, except percentage and otherwise noted)</small>					
Geographical breakdown					
Australia (AU)	1.00	7,780	1,616		
Belgium	1.00	81	42		
Canada (CA)	-	1,530,571	261,421		
China (CN)	-	16,059	1,825		
France (FR)	1.00	4,667	1,839		
Germany (DE)	0.75	4,073	1,551		
Hong Kong SAR (HK)	1.00	1,734	456		
Japan (JP)	-	1,767	154		
South Korea (KR)	1.00	495	97		
Luxembourg (LU)	0.50	12,603	4,122		
Netherlands (NL)	2.00	2,755	1,158		
Spain (ES)	-	814	354		
Sweden (SE)	2.00	304	95		
Switzerland (CH)	-	2,412	508		
United Kingdom (GB)	2.00	26,531	11,617		
USA (US)	-	306,671	130,693		
Norway (NO)	2.50	166	164		
Other	-	35,242	15,627		
Total, where countercyclical capital buffer rate applies		61,189	22,757		
Total of geographical breakdowns		1,954,725	433,339	0.08%	538

¹ Bank-specific countercyclical capital buffer rate is the weighted average of the countercyclical capital buffer rates in which our private credit exposures are located.

² Countercyclical capital buffer amount is the amount of Common Equity Tier 1 capital held to meet the countercyclical capital buffer requirement determined by multiplying Total RWA (credit risk, market risk, and operational risk) by the bank-specific countercyclical capital buffer rate (column d).



As at July 31, 2024

Geographical distribution of credit exposures	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 ¹	Countercyclical capital buffer amount ²
		Exposure values	RWA		
(Millions of Canadian dollars, except percentage and otherwise noted)					
Geographical breakdown					
Australia (AU)	1.00	7,592	1,677		
Belgium	0.50	75	47		
Canada (CA)	-	993,266	254,988		
China (CN)	-	15,566	1,726		
France (FR)	1.00	5,039	2,345		
Germany (DE)	0.75	3,635	1,095		
Hong Kong SAR (HK)	1.00	1,628	382		
Japan (JP)	-	1,710	153		
South Korea (KR)	1.00	255	20		
Luxembourg (LU)	0.50	12,677	4,082		
Netherlands (NL)	2.00	3,382	1,528		
Spain (ES)	-	766	326		
Sweden (SE)	2.00	312	146		
Switzerland (CH)	-	2,565	574		
United Kingdom (GB)	2.00	26,914	9,825		
USA (US)	-	312,109	131,667		
Norway (NO)	2.50	153	118		
Other	-	36,445	15,979		
Total, where countercyclical capital buffer rate applies		61,662	21,265		
Total of geographical breakdowns		1,424,089	426,678	0.07%	463

¹ Bank-specific countercyclical capital buffer rate is the weighted average of the countercyclical capital buffer rates in which our private credit exposures are located.

LEVERAGE
LR1: Summary comparison of accounting assets vs leverage ratio exposure measure

The following table presents a reconciliation of our total assets per our published financial statements to our leverage ratio exposure measure.

LEVERAGE RATIO ¹		Q4/2024	Q3/2024	Q2/2024	Q1/2024	Q4/2023
Summary comparison of accounting assets vs. leverage ratio exposure measure (Millions of Canadian dollars)						
1	Total consolidated assets as per published financial statements	\$2,171,582	\$2,076,107	\$2,031,050	\$1,974,405	\$2,004,992
2	Adjustment for investments in banking, financial, insurance or commercial entities that are consolidated for accounting purposes but outside the scope of regulatory consolidation	(22,930)	(21,235)	(21,653)	(20,661)	(16,080)
3	Adjustment for securitized exposures that meet the operational requirements for the recognition of risk transfer ²	(9,558)	(10,008)	(9,006)	(5,816)	-
4	Adjustment for fiduciary assets recognized on the balance sheet pursuant to the operative accounting framework but excluded from the leverage ratio exposure measure	-	-	-	-	-
5	Adjustments for derivative financial instruments	(41,102)	(15,440)	(16,460)	(4,745)	(36,521)
6	Adjustment for securities financing transactions (SFT) (i.e. repo assets and similar secured lending)	24,047	24,645	24,192	22,805	22,007
7	Adjustments for off-balance sheet items (i.e., credit equivalent amounts of off-balance sheet exposures)	273,267	265,945	260,468	244,162	249,049
8	Other adjustments	(51,078)	(49,007)	(49,572)	(36,731)	(43,857)
9	Leverage Ratio Exposure	\$2,344,228	\$2,271,007	\$2,219,019	\$2,173,419	\$2,179,590

¹ Based on OSFI's LR guideline effective Q2 2023.

² OSFI's LR guideline allows for the exclusion of securitized exposures that meet the operational requirements for risk transference.



LR2: Leverage ratio common disclosure template

The following table presents a detailed breakdown of the components of our leverage ratio. Maintaining a prescribed minimum level of leverage helps neutralizes leverage risk in the event of unexpected economic crises. OSFI requires maintenance of a minimum leverage ratio of 3.5% at all times.

LEVERAGE RATIO COMMON DISCLOSURE TEMPLATE ¹		Q4/2024	Q3/2024	Q2/2024	Q1/2024	Q4/2023
(Millions of Canadian dollars, except percentages)						
On-balance sheet exposures						
1	On-balance sheet items (excluding derivatives, SFTs and grandfathered securitization exposures, but including collateral)	1,635,518	1,601,744	1,566,372	1,492,911	1,504,358
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 derivatives transactions)	(20,453)	(18,754)	(19,422)	(15,100)	(21,362)
4	(Asset amounts deducted in determining Basel III Tier 1 capital)	(30,625)	(30,253)	(30,149)	(21,632)	(22,495)
5	Total on-balance sheet exposure (excluding derivatives and SFTs) (sum of lines 1 and 4)	1,584,440	1,552,737	1,516,801	1,456,179	1,460,501
Derivatives exposures						
6	Replacement cost associated with all derivatives transactions (i.e., net of eligible cash variation margin)	30,141	25,355	30,246	23,959	31,236
7	Add-on amounts for potential future exposure (PFE) associated with all derivatives transactions	76,116	72,048	80,129	72,686	70,943
8	(Exempted central counterparty (CCP)-leg of client-cleared trade exposures)	-	-	-	-	-
9	Adjusted effective notional amount of written credit derivatives ²	60,960	54,994	51,437	29,496	8,002
10	(Adjusted effective notional offsets and add-on deductions for written credit derivatives) ²	(57,707)	(52,178)	(48,073)	(25,847)	(4,253)
11	Total derivative exposures (sum of lines 6 to 10)	109,510	100,219	113,739	100,294	105,928
Securities financing transaction exposures						
12	Gross SFT assets recognized for accounting purposes (with no recognition of netting), after adjusting for sale accounting transactions	498,041	454,791	443,348	456,615	438,781
13	(Netted amounts of cash payables and cash receivables of gross SFT assets)	(145,077)	(127,330)	(139,529)	(106,636)	(96,676)
14	Counterparty credit risk (CCR) exposure for SFTs	24,047	24,645	24,192	22,805	22,007
15	Agent transaction exposures	-	-	-	-	-
16	Total securities financing transaction exposures (sum of lines 12 to 15)	377,011	352,106	328,011	372,784	364,112
Other off-balance sheet exposures						
17	Off-balance sheet exposures at gross notional amount	895,781	852,193	836,821	768,667	793,703
18	(Adjustments for conversion to credit equivalent amounts)	(622,514)	(586,248)	(576,353)	(524,505)	(544,654)
19	Off-balance sheet items (sum of lines 17 and 18)	273,267	265,945	260,468	244,162	249,049
Capital and Total Exposures						
20	Tier 1 capital	97,952	95,724	92,444	96,140	93,904
21	Total Exposures (sum of lines 5,11,16 and 19)	2,344,228	2,271,007	2,219,019	2,173,419	2,179,590
Leverage ratio						
22	Basel III leverage ratio	4.2%	4.2%	4.2%	4.4%	4.3%

¹ Based on OSFI's LR guideline effective Q2 2023.

² Amounts have been revised from those previously presented.

Our Leverage ratio of 4.2% was down 10 bps from October 31, 2023, primarily due to the impact of the HSBC Canada acquisition and higher business-driven growth in leverage exposures. These factors were partially offset by net internal capital generation and share issuances under the DRIP and the net issuance of preferred shares and LRCNs.

Leverage exposures increased by \$165 billion from October 31, 2023, driven by the \$116 billion impact of the HSBC Canada acquisition, as well as business growth primarily in wholesale and retail lending.

TOTAL LOSS ABSORBING CAPACITY (TLAC) DISCLOSURE REQUIREMENTS

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

The following summary table provides information about our TLAC available, and TLAC requirements applied, at the resolution group level under a Single Point of Entry. TLAC requirements establish two minimum standards, which are required to be met effective November 1, 2021: the risk-based TLAC ratio, which builds on the risk-based capital ratios described in OSFI's CAR guideline, and the TLAC leverage ratio, which builds on the leverage ratio described in OSFI's LR guideline. The risk-based TLAC ratio is defined as TLAC divided by Total risk-weighted assets while the TLAC leverage ratio is defined as TLAC divided by the Leverage ratio exposure. The current OSFI requirement for D-SIBs is to maintain a minimum TLAC ratio of 25% (inclusive of the DSB of 3.5%) before considering the countercyclical capital buffer and a TLAC leverage ratio of 7.25%. Prior TLAC ratio minimum requirements were 24% in Q1 2023 and 24.5% for the remaining fiscal 2023 quarters. Our TLAC leverage ratio minimum requirement beginning Q2 2023 was 7.25% reflecting incorporation of a 50 bps leverage buffer. We began issuing TLAC eligible debt in Q4 2018 and our TLAC ratio is expected to increase through normal course refinancing of maturing debt.

		a	b	c	d	e	f
		October 31 2024	July 31 2024	April 30 2024	January 31 2024	October 31 2023	Change (a) - (e)
<i>(Millions of Canadian dollars, except as otherwise noted)</i>							
Resolution group							
1	Total loss-absorbing capacity (TLAC) available	196,659	187,656	179,902	185,556	184,916	11,743
2	Total RWA at the level of the resolution group	672,282	661,177	653,702	590,257	596,223	76,059
3	TLAC ratio: TLAC as a percentage of RWA (row 1/row 2) (%)	29.3%	28.4%	27.5%	31.4%	31.0%	(1.7)%
4	Leverage ratio exposure measure at the level of the resolution group	2,344,228	2,271,007	2,219,019	2,173,419	2,179,590	164,638
5	TLAC Leverage Ratio: TLAC as a percentage of leverage ratio exposure measure (row 1/row 4) (%)	8.4%	8.3%	8.1%	8.5%	8.5%	(0.1)%
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 recognized as external TLAC, divided by funding issued that ranks pari passu with Excluded Liabilities and that would be recognized as external TLAC if no cap was applied (%)	N/A	N/A	N/A	N/A	N/A	-

Our TLAC ratio of 29.3% was down 170 bps from October 31, 2023, reflecting the factors noted above under the KM1, partially offset by a favourable impact from a net increase in eligible external TLAC instruments.

Our TLAC leverage ratio of 8.4% was down 10 bps from October 31, 2023, reflecting the factors noted above under the LR2, partially offset by a favourable impact from a net increase in eligible external TLAC instruments.

TLAC1: TLAC composition (at resolution group level)

The following table presents details of the composition of our TLAC.

As at October 31, 2024

(Millions of Canadian dollars, except as otherwise noted)		Amount
	Regulatory capital elements of TLAC and adjustments	
1	Common Equity Tier 1 capital (CET1)	88,936
2	Additional Tier 1 capital (AT1) before TLAC adjustments	9,016
3	AT1 ineligible as TLAC as issued out of subsidiaries to third parties	-
4	Other adjustments	-
5	AT1 instruments eligible under the TLAC framework	9,016
6	Tier 2 capital (T2) before TLAC adjustments	12,535
7	Amortised portion of T2 instruments where remaining maturity > 1 year	1,670
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	14,205
11	TLAC arising from regulatory capital	112,157
	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	85,008
14	Of which: amount eligible as TLAC after application of the caps	85,008
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	85,008
	Non-regulatory capital elements of TLAC: adjustments	
18	TLAC before deductions	197,165
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	(506)
21	Other adjustments to TLAC	-
22	TLAC available after deductions	196,659
	Risk-weighted assets and leverage exposure measure for TLAC purposes	
23	Total risk-weighted assets adjusted as permitted under the TLAC regime	672,282
24	Leverage exposure measure	2,344,228
	TLAC ratios and buffers	
25	TLAC Ratio (as a percentage of risk-weighted assets adjusted as permitted under the TLAC regime, row 22 / row 23)	29.3%
26	TLAC Leverage Ratio (as a percentage of leverage exposure)	8.4%
27	CET1 (as a percentage of risk-weighted assets) available after meeting the resolution group's minimum capital and TLAC requirements	4.8%
28	Institution-specific buffer (capital conservation buffer plus countercyclical buffer plus higher loss absorbency, expressed as a percentage of risk-weighted assets)	3.6%
29	Of which: capital conservation buffer	2.5%
30	Of which: bank specific countercyclical buffer	0.1%
31	Of which: higher loss absorbency	1.0%

TLAC1: TLAC composition (at resolution group level) (continued)

As at July 31, 2024

(Millions of Canadian dollars, except as otherwise noted)		Amount
Regulatory capital elements of TLAC and adjustments		
1	Common Equity Tier 1 capital (CET1)	86,230
2	Additional Tier 1 capital (AT1) before TLAC adjustments	9,494
3	AT1 ineligible as TLAC as issued out of subsidiaries to third parties	-
4	Other adjustments	-
5	AT1 instruments eligible under the TLAC framework	9,494
6	Tier 2 capital (T2) before TLAC adjustments	12,355
7	Amortised portion of T2 instruments where remaining maturity > 1 year	1,656
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	14,011
11	TLAC arising from regulatory capital	109,735
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	78,268
14	Of which: amount eligible as TLAC after application of the caps	78,268
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	78,268
Non-regulatory capital elements of TLAC: adjustments		
18	TLAC before deductions	188,003
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	(347)
21	Other adjustments to TLAC	-
22	TLAC available after deductions	187,656
Risk-weighted assets and leverage exposure measure for TLAC purposes		
23	Total risk-weighted assets adjusted as permitted under the TLAC regime	661,177
24	Leverage exposure measure	2,271,007
TLAC ratios and buffers		
25	TLAC Ratio (as a percentage of risk-weighted assets adjusted as permitted under the TLAC regime, row 22 / row 23)	28.4%
26	TLAC Leverage Ratio (as a percentage of leverage exposure)	8.3%
27	CET1 (as a percentage of risk-weighted assets) available after meeting the resolution group's minimum capital and TLAC requirements	4.8%
28	Institution-specific buffer (capital conservation buffer plus countercyclical buffer plus higher loss absorbency, expressed as a percentage of risk-weighted assets)	3.6%
29	Of which: capital conservation buffer	2.5%
30	Of which: bank specific countercyclical buffer	0.1%
31	Of which: higher loss absorbency	1.0%

TLAC2: Material subgroup entity – creditor ranking at legal entity level (G-SIBs only)

TLAC 2 is a G-SIB disclosure requirement to provide the ranking of the liability structure of all our material subsidiaries in foreign jurisdictions as defined by the FSB TLAC term sheet. RBC US Group Holdings LLC (“RBC IHC”) is a material subsidiary entity for which TLAC 2 disclosure is required. RBC IHC complies with the Federal Reserve TLAC rules which require reporting of TLAC ratios for calendar quarters on or after June 2021. OSFI has advised RBC can align its RBC IHC TLAC 2 disclosure requirements to similarly disclose calendar quarter TLAC ratios. OSFI also requires us to disclose TLAC 2 for any other material subsidiary identified, however, at this time RBC IHC is our only material subsidiary.

As at October 31, 2024

(Millions of Canadian dollars, except as otherwise noted) Based on US GAAP		Creditor ranking					Sum
		1 (most junior)	2	3	4	5	
1	Is the resolution entity the creditor/investor? (yes or no)	yes	-	no	yes	-	-
2	Description of creditor ranking	Common shares	Preferred shares and Limited Recourse Capital Notes	Subordinated Debt	Bail-in Debt ¹	Other Liabilities excluding Bail-in Debt and Subordinated Debt ²	
3	Total capital and liabilities net of credit risk mitigation	26,318	-	-	12,978	5,007	44,303
4	Subset of row 3 that are excluded liabilities	-	-	-	-	5,007	5,007
5	Total capital and liabilities less excluded liabilities (row 3 minus row 4)	26,318	-	-	12,978	-	39,296
6	Subset of row 5 that are eligible as TLAC	26,318	-	-	12,978	-	39,296
7	Subset of row 6 with 1 year ≤ residual maturity < 2 years			-	-	-	-
8	Subset of row 6 with 2 years ≤ residual maturity < 5 years			-	5,279	-	5,279
9	Subset of row 6 with 5 years ≤ residual maturity < 10 years			-	7,699	-	7,699
10	Subset of row 6 with residual maturity ≥ 10 years, but excluded perpetual securities			-	-	-	-
11	Subset of row 6 that is perpetual securities	26,318	-	-	-	-	26,318

¹ Under the Bail-in regime, claims of some creditors whose claims otherwise rank equally with those of the holders holding bail-inable notes would be excluded from a bail-in conversion and thus the holders and beneficial owners of bail-inable notes will have to absorb losses ahead of these other creditors as a result of the bail-in conversion. Bail-in-Debt represents TLAC Eligible Long-Term Debt based on U.S. TLAC rules.

² Completion of this column is not required by OSFI at this time.



TLAC2: Material subgroup entity – creditor ranking at legal entity level (G-SIBs only) (continued)

As at July 31, 2024

(Millions of Canadian dollars, except as otherwise noted) Based on US GAAP		Creditor ranking					Sum
		1 (most junior)	2	3	4	5	
1	Is the resolution entity the creditor/investor? (yes or no)	yes	-	no	yes	-	-
2	Description of creditor ranking	Common shares	Preferred shares and Limited Recourse Capital Notes	Subordinated Debt	Bail-in Debt ¹	Other Liabilities excluding Bail-in Debt and Subordinated Debt ²	
3	Total capital and liabilities net of credit risk mitigation	26,633	-	-	13,133	4,109	43,875
4	Subset of row 3 that are excluded liabilities	-	-	-	-	4,109	4,109
5	Total capital and liabilities less excluded liabilities (row 3 minus row 4)	26,633	-	-	13,133	-	39,766
6	Subset of row 5 that are eligible as TLAC	26,633	-	-	13,133	-	39,766
7	Subset of row 6 with 1 year ≤ residual maturity < 2 years			-	-	-	-
8	Subset of row 6 with 2 years ≤ residual maturity < 5 years			-	5,343	-	5,343
9	Subset of row 6 with 5 years ≤ residual maturity < 10 years			-	7,791	-	7,791
10	Subset of row 6 with residual maturity ≥ 10 years, but excluded perpetual securities			-	-	-	-
11	Subset of row 6 that is perpetual securities	26,633	-	-	-	-	26,633

¹ Under the Bail-in regime, claims of some creditors whose claims otherwise rank equally with those of the holders holding bail-inable notes would be excluded from a bail-in conversion and thus the holders and beneficial owners of bail-inable notes will have to absorb losses ahead of these other creditors as a result of the bail-in conversion. Bail-in-Debt represents TLAC Eligible Long-Term Debt based on U.S. TLAC rules.

² Completion of this column is not required by OSFI at this time.

TLAC3: Resolution entity – creditor ranking at legal entity level

The following table provides information regarding the ranking of our unsecured liabilities structure at the resolution entity level.

As at October 31, 2024

		Creditor ranking					Sum
		1	2	3	4	5	
(Millions of Canadian dollars, except as otherwise noted)		(most junior)					
1	Description of creditor ranking	Common shares	Preferred shares and Limited Recourse Capital Notes	Subordinated Debt	Bail-in Debt ¹	Other Liabilities excluding Bail-in Debt and Subordinated Debt ²	
2	Total capital and liabilities net of credit risk mitigation	21,013	9,020	13,815	110,705	-	154,553
3	Subset of row 2 that are excluded liabilities	61	6	98	22,889	-	23,054
4	Total capital and liabilities less excluded liabilities (row 2 minus row 3)	20,952	9,014	13,717	87,816	-	131,499
5	Subset of row 4 that are <i>potentially</i> eligible as TLAC	20,952	9,014	13,717	87,816	-	131,499
6	Subset of row 5 with 1 year ≤ residual maturity < 2 years			2,088	14,339	-	16,427
7	Subset of row 5 with 2 years ≤ residual maturity < 5 years			-	42,848	-	42,848
8	Subset of row 5 with 5 years ≤ residual maturity < 10 years			11,152	22,597	-	33,749
9	Subset of row 5 with residual maturity ≥ 10 years, but excluding perpetual securities			477	8,032	-	8,509
10	Subset of row 5 that is perpetual securities	20,952	9,014	-	-	-	29,966

¹ Under the Bail-in regime, claims of some creditors whose claims otherwise rank equally with those of the holders holding bail-inable notes would be excluded from a bail-in conversion and thus the holders and beneficial owners of bail-inable notes will have to absorb losses ahead of these other creditors as a result of the bail-in conversion.

² Completion of this column is not required by OSFI at this time.

TLAC3: Resolution entity – creditor ranking at legal entity level (continued)

As at July 31, 2024

		Creditor ranking					Sum
		1 (most junior)	2	3	4	5	
(Millions of Canadian dollars, except as otherwise noted)							
1	Description of creditor ranking	Common shares	Preferred shares and Limited Recourse Capital Notes	Subordinated Debt	Bail-in Debt ¹	Other Liabilities excluding Bail-in Debt and Subordinated Debt ²	
2	Total capital and liabilities net of credit risk mitigation	20,977	9,520	13,795	104,900	-	149,192
3	Subset of row 2 that are excluded liabilities	191	28	90	23,467	-	23,776
4	Total capital and liabilities less excluded liabilities (row 2 minus row 3)	20,786	9,492	13,705	81,433	-	125,416
5	Subset of row 4 that are <i>potentially</i> eligible as TLAC	20,786	9,492	13,705	81,433	-	125,416
6	Subset of row 5 with 1 year ≤ residual maturity < 2 years			2,070	17,038	-	19,108
7	Subset of row 5 with 2 years ≤ residual maturity < 5 years			-	39,306	-	39,306
8	Subset of row 5 with 5 years ≤ residual maturity < 10 years			9,939	18,182	-	28,121
9	Subset of row 5 with residual maturity ≥ 10 years, but excluding perpetual securities			1,696	6,907	-	8,603
10	Subset of row 5 that is perpetual securities	20,786	9,492	-	-	-	30,278

¹ Under the Bail-in regime, claims of some creditors whose claims otherwise rank equally with those of the holders holding bail-inable notes would be excluded from a bail-in conversion and thus the holders and beneficial owners of bail-inable notes will have to absorb losses ahead of these other creditors as a result of the bail-in conversion.

² Completion of this column is not required by OSFI at this time.

INTEREST RATE RISK IN THE BANKING BOOK

The table below presents an overview of Pillar 3 disclosure requirements that have been met within our 2024 Annual Report and incorporated by reference into this Pillar 3 report. Our 2024 Annual Report is available free of charge on our website at <http://www.rbc.com/investorrelations>.

Pillar 3 disclosures requirement	2024 Annual Report section	Sub-section
Interest rate risk in the banking book	Market Risk	Market Risk