

2023
HSBC Bank Canada
Regulatory Capital & Risk Management

Pillar 3 Supplementary Disclosures
As at December 31, 2023



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Notes to users

Regulatory Capital and Risk Management Pillar 3 Disclosures

The Office of the Superintendent of Financial Institutions (“OSFI”) supervises HSBC Bank Canada (the “Bank”) on a consolidated basis. OSFI has approved the Bank’s application to apply the Advanced Internal Ratings Based (“AIRB”) approach to credit risk on our portfolio and the Standardized Approach for measuring Operational Risk. Please refer to the Annual Report and Accounts 2023 for further information on the Bank’s risk and capital management framework. Further information regarding HSBC Group Risk Management Processes can be found in HSBC Holdings plc Capital and Risk Management Pillar 3 Disclosures available on HSBC Group’s investor relations web site.

The Pillar 3 Supplemental Disclosures are additional summary descriptions and quantitative financial information which supplement those already made in the Annual Report and Accounts 2023 for the disclosure requirements under OSFI’s Pillar 3 Disclosure Requirements Advisory issued September 29, 2006 consistent with the “International Convergence of Capital Measurement and Capital Standards” (‘Basel II’) issued by the Basel Committee on Banking Supervision (BCBS) in June 2006 and the “Composition of capital disclosure requirements” (‘Basel III’) issued by the BCBS in June 2012 under OSFI’s advisory letter requirements issued in July 2013 and revised in May 2018.

The Basel rules are structured around three “pillars”:

- Pillar 1 - defines the Minimum capital requirements,
- Pillar 2 - requires banks to have robust Internal Capital Adequacy Assessment Processes (ICAAP) which will be part of regulators’ Supervisory review
- Pillar 3 - defines the Market discipline/ disclosures required by Banks which should be consistent and comparable across Banks.

Pillar 3 complements the other two pillars of Basel framework i.e. minimum capital requirements and the supervisory review process. Its aim is to encourage market discipline by developing a set of disclosure requirements which will allow market participants to assess certain specified information on the scope of application of Basel 2/2.5 (‘the Basel rules’), capital, particular risk exposures, risk assessment processes, and hence the capital adequacy of the institution.

The supervisory objectives of BCBS are to promote safety and soundness in the financial system and maintain an appropriate level of capital in the system, enhance competitive equality, constitute a more comprehensive approach to addressing risks, and focus on internationally active banks.

On June 26, 2012, the BCBS issued the Basel III rules on the information banks must publicly disclose when detailing the composition of their capital, which set out a framework to ensure that the components of banks capital bases are publicly disclosed in standardised formats across and within jurisdictions for banks subject to Basel III.

Basel III builds on Basel II. It also increases the level of risk-weighted assets for significant investments and deferred tax amounts due to temporary timing differences under defined thresholds, exposures to large or unregulated financial institutions meeting specific criteria, exposures to centralized counterparties and exposures that give rise to wrong way risk. In addition Basel III places a greater emphasis on common equity by introducing a new category of capital, Common Equity Tier 1 (CET1), which consists primarily of common shareholders equity net of regulatory adjustments. These regulatory adjustments include goodwill, intangible assets, deferred tax assets, pension assets and investments in financial institutions over certain thresholds. Overall, the Basel III rules increase the level of regulatory deductions relative to Basel II.

This report is unaudited and all amounts are in rounded millions of Canadian dollars, unless otherwise indicated. Balances reported in this Pillar 3 document reflect the OSFI Capital Adequacy Requirements (CAR) guidelines.

From Q2 2023, disclosure is based on OSFI’s Pillar 3 disclosure requirements (April 2023), including Capital disclosure requirement and Leverage ratio disclosure requirement.

In the second quarter of 2023, the bank implemented the Basel III reforms according to the final Capital Adequacy Requirements (‘CAR’) Guideline and Leverage Requirements (‘LR’) Guideline issued by OSFI, apart from the chapters related to market risk and credit valuation adjustment (‘CVA’) which will take effect in the first quarter of 2024. The resultant rise in risk-weighted assets (‘RWA’) accompanied by an increase in capital floor adjustment is a reflection of the following notable changes in the revised CAR Guideline:

- For internal ratings based (‘IRB’) portfolios, removal of a 6% scaling factor from IRB RWA.
- Implementation of a revised wholesale exposure at default (‘EAD’) model leading to lower IRB RWA on average.
- For the capital floor based on RWA calculated using the standardized approach (‘SA’), an inclusion for the first time, a revised operational risk RWA based on a framework driven by income and historical losses.
- The revised SA is more risk sensitive, in particular, wholesale exposures secured by real estate collateral and loans granted for land acquisition, development and construction (‘ADC’) can be assigned a risk weight as high as 150%.
- Reduction of the capital floor factor from 70% to 65%, requiring for a phase-in to 72.5% by 2026 with an annual increment of 2.5%.

The revisions to the existing Pillar 3 disclosure effective in the second quarter of 2023 has incorporated the above changes.

Road map to Pillar 3 disclosure requirement

Section	Identifier	Table and templates	Frequency	2023 Annual Report
Capital disclosure	CC1	Composition of Regulatory Capital	Quarterly	
Overview of risk management	OVA	Bank risk management approach	Annually	24-29
	OV1	Overview of risk weighted asset	Quarterly ³	
	KM1	Key Metrics	Quarterly	
Comparison of modelled & standardised RWA	CMS1	Comparison of modelled and standardised RWA at risk level	Quarterly ¹	
	CMS2	Comparison of modelled and standardised at asset class level	Quarterly ¹	
Credit risk	CRA	General information about credit risk	Annually	29-32
	CR1	Credit quality of assets	Quarterly	
	CRC	CRC – Qualitative disclosure requirements related to credit risk mitigation techniques	Annually	42-43
	CR3	Credit risk mitigation techniques – overview	Quarterly	
	CR4	Standardized approach – credit risk exposure and Credit Risk Mitigation (CRM) effects	Quarterly	
	CR5	Standardized approach – exposures by asset classes and risk weights	Quarterly	
	CRE	Qualitative disclosures related to IRB models	na ¹	
	CR6	IRB Credit risk exposures by portfolio and PD range	Quarterly	
	CR7	IRB – Effect on RWA of credit derivatives used as CRM techniques	na ²	
	CR8	RWA flow statements of credit risk exposures under IRB	Quarterly	
	CR9	IRB – Backtesting of probability of default (PD) per portfolio	Annual ¹	
Counterparty credit risk	CR10	Specialized lending on slotting approach and Equities under simple risk-weight method	Quarterly ³	
	CCRA	Qualitative disclosure related to counterparty credit risk	Annually	44
	CCR1	Analysis of counterparty credit risk (CCR) exposure by approach	Quarterly	
	CCR2	Credit valuation adjustment (CVA) capital charge (CCR2)	Quarterly ³	
	CCR3	Standardized approach of CCR exposures by regulatory portfolio and risk weights	na ²	
	CCR4	IRB – CCR exposures by portfolio and PD scale	Quarterly	
	CCR5	Composition of collateral for CCR exposure	Quarterly	
	CCR6	Credit derivatives exposures	na ¹	
CCR8	Exposures to central counterparties (CCPs)	Quarterly ³		
Securitization	SECA	Qualitative disclosure requirements related to securitization exposures	na ²	
Market risk	MRA	Qualitative disclosure requirements related to market risk	Annually	51-52
	MRB	Qualitative disclosures for banks using the Internal Models Approach (IMA)	Annually	51-52
	MR1	Market risk under standardised approach	Quarterly	
	MR2	RWA flow statements of market risk exposures under an IMA	Quarterly	
	MR3	IMA values for trading portfolios	Quarterly	
Operational Risk	MR4	Comparison of VaR estimates with gains/losses	Quarterly	
	ORA	General qualitative information on a bank's operational risk framework	Annually	
	OR1	Historical losses	Annually	
	OR2	Business indicator and subcomponents	Annually	
Interest Rate Risk in the Banking	OR3	Minimum required operational risk capital	Annually	
	IRRBB	IRRBB Disclosure	Annually	49-50
Leverage ratio	LR1	Summary comparison of accounting assets vs leverage ratio exposure measure	Quarterly	
Leverage ratio	LR2	Leverage ratio common disclosure template	Quarterly	

1. Table effective from reporting period as at 31st Dec 2023.

2. Table does not have any reportable values as at 31st Dec 2023.

3. Table continued from previous OSFI Pillar 3 guidelines.

Table 1 : Key metrics (KM1)

		At				
		31 Dec 2023	30 Sep 2023	30 Jun 2023	31 Mar 2023	31 Dec 2022
Available capital (\$m)						—
1	Common Equity Tier 1 capital (CET1)	6,181	5,958	5,718	5,467	5,198
1a	Common Equity Tier 1 capital (CET1) with transitional arrangements for ECL provisioning not applied	—	—	—	—	5,179
2	Tier 1 capital	7,281	7,058	6,818	6,567	6,298
2a	Tier 1 capital with transitional arrangements for ECL provisioning not applied	—	—	—	—	6,279
3	Total capital	8,089	8,066	7,821	7,627	7,337
3a	Total capital with transitional arrangements for ECL provisioning not applied	—	—	—	—	7,337
Risk Weighted Asset (\$m)						
4	Total risk-weighted assets (RWA)	43,416	43,216	44,519	44,086	44,656
4a	Total risk-weighted assets (pre-floor)	36,885	36,951	36,661	42,163	42,292
Risk-based capital ratios as a percentage of RWA (%)						
5	Common Equity Tier 1 ratio	14.2	13.8	12.8	12.4	11.6
5a	Common Equity Tier 1 with transitional arrangements for ECL provisioning not applied	—	—	—	—	11.6
5b	Common Equity Tier 1 ratio (pre-floor)	16.8	16.1	15.6	13.0	12.3
6	Tier 1 ratio	16.8	16.3	15.3	14.9	14.1
6a	Tier 1 with transitional arrangements for ECL provisioning not applied	—	—	—	—	14.1
6b	Tier 1 ratio (pre-floor)	19.7	19.1	18.6	15.6	14.9
7	Total capital ratio	18.6	18.7	17.6	17.3	16.4
7a	Total capital with transitional arrangements for ECL provisioning not applied	—	—	—	—	16.4
7b	Total capital ratio (pre-floor)	21.9	21.8	21.3	18.1	17.3
Additional CET1 buffer requirements as a percentage of RWA (%)						
8	Capital conservation buffer requirement (2.5% from 2019)	—	—	—	—	—
9	Countercyclical buffer requirement	—	—	—	—	—
10	Bank G-SIB and/or D-SIB additional requirements	na	na	na	na	na
11	Total of bank CET1 specific buffer requirements (%) (row 8 + row 9 + row 10)	—	—	—	—	—
12	CET1 available after meeting the bank's minimum capital requirements	14.2	13.8	12.8	12.4	11.6
Basel III Leverage ratio (%)						
13	Total Basel III leverage ratio exposure measure	132,170	130,167	131,227	129,224	132,762
14	Basel III leverage ratio (row 2 / row 13)	5.5	5.4	5.2	5.1	4.7
14a	Basel III leverage ratio (row 2a / row 13) with transitional arrangements for ECL provisioning not applied	—	—	—	—	4.7

Composition of capital

Table 2 : Composition of Regulatory Capital (CC1)

		At	
		31 Dec 2023	30 Sep 2023
Common Equity Tier 1 capital: instruments and reserves (\$m)			
1	Directly issued qualifying common share capital (and equivalent for non-joint stock companies) plus related stock surplus	1,125	1,125
2	Retained earnings	5,234	5,076
3	Accumulated other comprehensive income (and other reserves)	(424)	(803)
4	Directly issued capital subject to phase out from CET1 (only applicable to non-joint stock companies)	—	—
5	Common share capital issued by subsidiaries and held by third parties (amount allowed in group CET1)	—	—
6	Common Equity Tier 1 capital before regulatory adjustments	5,935	5,398
Common Equity Tier 1 capital: regulatory adjustments (\$m)			
28	Total regulatory adjustments to Common Equity Tier 1	246	560
29	Common Equity Tier 1 capital (CET1)	6,181	5,958
Additional Tier 1 capital: instruments			
30	Directly issued qualifying Additional Tier 1 instruments plus related stock surplus	1,100	1,100
31	– of which: classified as equity under applicable accounting standards	1,100	1,100
32	– of which: classified as liabilities under applicable accounting standards	—	—
33	Directly issued capital instruments subject to phase out from Additional Tier 1	—	—
34	Additional Tier 1 instruments (and CET1 instruments not included in row 5) issued by subsidiaries and held by third parties (amount allowed in group AT1)	—	—
35	<i>of which: instruments issued by subsidiaries subject to phase out</i>	—	—
36	Additional Tier 1 capital before regulatory adjustments	1,100	1,100
Additional Tier 1 capital: regulatory adjustments (\$m)			
43	Total regulatory adjustments to Additional Tier 1 capital	—	—
44	Additional Tier 1 capital (AT1)	1,100	1,100
45	Tier 1 capital (T1 = CET1 + AT1)	7,281	7,058
Tier 2 capital: instruments and allowances (\$m)			
46	Directly issued qualifying Tier 2 instruments plus related stock surplus	1,000	1,000
47	Directly issued capital instruments subject to phase out from Tier 2	—	—
48	(amount allowed in group Tier 2)	—	—
49	– of which: instruments issued by subsidiaries subject to phase out	—	—
50	Impairment allowances	8	8
51	Tier 2 capital before regulatory adjustments ¹	808	1,008
Tier 2 capital: regulatory adjustments (\$m)			
57	Total regulatory adjustments to Tier 2 capital	—	—
58	Tier 2 capital (T2)	808	1,008
59	Total capital (TC = T1 + T2)	8,089	8,066
60	Total risk-weighted assets (RWA)	43,416	43,216
61	Common Equity Tier 1 (as percentage of risk-weighted assets)	14.2	13.8
62	Tier 1 (as percentage of risk-weighted assets)	16.8	16.3
63	Total capital (as percentage of risk-weighted assets)	18.6	18.7
OSFI all-in target (%)			
69	Common Equity Tier 1 capital all-in target ratio	7.0	7.0
70	Tier 1 capital all-in target ratio	8.5	8.5
71	Total capital all-in target ratio	10.5	10.5

1. Amortizing subordinated debt as per CAR guideline.

Table 3 : Overview of Risk Weighted Assets (OV1)

	At		
	31 Dec 2023	30 Sep 2023	31 Dec 2023
	RWA ⁷ \$m	RWA ¹ \$m	Capital requirements ² \$m
1 Credit risk (excluding counterparty credit risk)	31,935	32,145	2,555
2 – of which Standardized approach (SA) ³	1,581	1,484	126
3 – of which internal rating based (F-IRB) approach	7,339	7,453	587
4 – of which supervisory slotting approach	256	347	20
5 – of which internal rating based (A-IRB) approach	22,759	22,861	1,821
6 Counterparty credit risk	603	511	48
7 – of which Standardized approach for counterparty credit risk (SA-CCR)	594	499	48
8 – of which internal model method (IMM)	–	–	–
9 – of which other CCR	9	12	1
10 Credit valuation adjustment (CVA) ⁴	253	262	20
Equity positions in banking book ⁵	–	–	–
11 Equity investments in funds – look-through approach	25	24	2
12 Equity investments in funds – mandate-based approach	–	–	–
13 Settlement risk	–	–	–
14 Securitisation exposures in banking book	–	–	–
15 – of which IRB ratings based approach (RBA)	–	–	–
16 – of which securitisation external ratings-based approach (SEC-ERBA), including internal assessment approach (IAA)	–	–	–
17 – of which securitisation standardised approach (SEC-SA)	–	–	–
18 Market risk	1,080	1,058	86
19 – of which Standardized approach (SA)	61	82	5
20 – of which internal model method (IMM)	1,019	976	82
21 Capital charge for switch between trading book and banking book	–	–	–
22 Operational risk	2,989	2,951	239
23 Amounts below the thresholds for deduction (subject to 250% risk weight)	–	–	–
24 Output floor applied	65	65	–
25 Floor adjustment (before application of transitional cap)	6,531	6,265	–
26 Floor adjustment (after application of transitional cap) ⁶	6,531	6,265	522
27 Total (1 + 6 + 10 + 11 + 12 + 13 + 14 + 18 + 21 + 22 + 23 + 26)	43,416	43,216	3,473

1. RWA includes 6% adjustment to IRB risk-weighted assets for scaling factor which is removed under BASEL III reforms starting Jun 2023
2. 'Capital requirement' represents the minimum total capital charge set at 8% of RWAs by the OSFI Capital Adequacy Requirements (CAR) guidelines
3. Amount includes Other assets not included in standardized or IRB approaches
4. Starting Q1 2019, OSFI has allowed a 0.7 scalar to be applied to the exposure amount determined under SA-CCR for the purpose of calculating CVA
5. Amount includes banking book equity exposure which are not material and risk weighted @100% in accordance with OSFI CAR guidelines
6. The Bank is subject to a regulatory capital floor prescribed by OSFI
7. Basel 3 Reforms impact can be referred to Notes to users

Comparison of modelled & standardised RWA

Table 4 : Comparison of modelled and standardised RWA at risk level (CMS1)

	a	b	c	d
	RWA			
	RWA for modelled approaches that SMSBs have supervisory approval to use	RWA for portfolios where standardised approaches are used	Total Actual RWA (a+b) ¹	RWA calculated using full standardised approach ²
	\$m	\$m	\$m	\$m
1 Credit risk (excluding counterparty credit risk)	30,354	1,581	31,935	64,627
2 Counterparty credit risk	594	9	603	1,116
3 Credit valuation adjustment	–	253	253	253
4 Securitisation exposures in the banking book	–	–	–	–
5 Market risk	1,019	61	1,080	502
6 Operational risk	–	2,989	2,989	2,989
7 Residual RWA	25	–	–	–
8 Total at 31 Dec 2023	31,992	4,893	36,885	69,487

1. RWA which SMSBs report as current requirements.
2. Used in the base of the output floor.

Table 5 : Comparison of modelled and standardised RWA for credit risk at asset level (CMS2)

	a	b	c	d
	RWA			
	RWA for modelled approaches that SMSBs have supervisory approval to use \$m	RWA for portfolios where standardised approaches are used \$m	Total Actual RWA (a+b) ¹ \$m	RWA calculated using full standardised approach ² \$m
1 Sovereign	245	–	245	181
Of which: categorised as MDB/PSE in SA	150	–	150	153
2 Banks and other financial institutions	174	111	285	461
3 Covered Bonds	145	–	145	308
4 Equity	25	25	50	49
5 Purchased receivables	–	–	–	–
6 Corporates	25,352	159	25,511	51,293
Of which: F-IRB is applied	7,020	–	7,020	–
Of which: A-IRB is applied	18,332	–	18,332	–
7 Retail	4,182	14	4,196	10,708
Of which: qualifying revolving retail	581	–	581	562
Of which: other retail	685	14	700	885
Of which: retail residential mortgages	2,459	–	2,459	9,261
8 Specialised lending	256	–	256	354
Of which: income-producing real estate and high volatility commercial real estate	–	–	–	–
9 Others	–	1,272	1,272	1,272
10 Total at 31 Dec 2023	30,379	1,581	31,960	64,627

1. RWA which SMSBs report as current requirements..

2. Used in the base of the output floor.

Credit Risk

Credit risk is the risk of financial loss if a customer or counterparty fails to meet an obligation under contract. Credit risk arises principally from direct lending, trade finance and the leasing business, but also from other products such as guarantees and credit derivatives.

Table 6 : Credit quality of assets (CR1)

	a	b	c	d		e	f	g
	Gross carrying values of		Allowances/ impairments	Of which ECL accounting provisions for credit losses on SA exposures		Allocated in regulatory category of General	Of which ECL accounting provisions for credit losses on IRB exposures	Net values (a+b-c)
	Defaulted exposures \$m	Non - defaulted exposures \$m		Allocated in regulatory category of Specific \$m	Allocated in regulatory category of General \$m			
1 Loans	341	84,157	314	–	3	311	84,184	
2 Debt securities	–	22,204	–	–	–	–	22,204	
3 Off-balance sheet exposures	176	54,145	32	–	–	32	54,289	
4 Total at 31 Dec 2023	517	160,506	346	–	3	343	160,677	
1 Loans	357	82,004	342	–	3	339	82,019	
2 Debt securities	–	22,709	–	–	–	–	22,709	
3 Off-balance sheet exposures	137	53,437	39	–	–	39	53,535	
4 Total at 30 Sep 2023	494	158,150	381	–	3	378	158,263	

Table 7 : Credit risk mitigation techniques – overview (CR3)

	a	b	c	d	e
	Exposures unsecured: carrying amount	Exposures to be secured: carrying amount ²	Exposures secured by collateral	Exposures secured by financial guarantees ³	Exposures secured by credit derivatives
	\$m	\$m	\$m	\$m	\$m
1 Loans	17,836	66,662	63,770	2,891	–
2 Debt securities	11,212	10,992	10,992	–	–
3 Total at 31 Dec 2023	29,048	77,654	74,762	2,891	–
4 Of which defaulted	115	225	225	–	–
1 Loans	16,354	66,007	63,065	2,942	–
2 Debt securities	11,546	11,163	11,163	–	–
3 Total at 30 Sep 2023	27,900	77,170	74,228	2,942	–
4 Of which defaulted	173	185	185	–	–

1. Amount equals to the carrying value gross of allowances.

2. Amount represents the gross carrying value of the exposure secured (fully or partially by either collateral or guarantees).

3. With the implementation of Basel III reforms, parental support is either through PD substitution under guarantees or LGD adjustment under collateral.

Table 8 : Standardized approach – credit conversion factor ('CCF') and credit risk mitigation ('CRM') effects (CR4)

	Exposures before CCF and CRM		Exposures post-CCF and CRM		RWA and RWA density	
	On-balance sheet amount	Off-balance sheet amount	On-balance sheet amount	Off-balance sheet amount	RWAs	RWA density
	\$m	\$m	\$m	\$m	\$m	%
Asset classes						
1 Sovereigns and their central banks	41	–	41	–	–	–
2 Public sector entities (PSEs) ³	–	–	243	–	–	–
3 Multilateral development banks	–	–	–	–	–	–
4 Banks ³	184	–	556	–	111	20
Of which: securities firms and other financial institutions treated as banks	–	–	372	–	74	20
5 Covered bonds	–	–	–	–	–	–
6 Corporates	714	571	99	57	159	102
Of which: securities firms and other financial institutions treated as corporates	–	–	–	–	–	–
Of which: specialised lending	–	–	–	–	–	–
7 Subordinated debt, equity and other capital	10	–	10	–	25	250
8 Retail	19	–	19	–	14	75
12 Defaulted exposures	–	–	–	–	–	–
13 Other assets	1,799	–	1,799	–	1,272	71
14 Total at 31 Dec 2023	2,767	571	2,767	57	1,581	56
1 Sovereigns and their central banks	70	–	70	–	32	45
2 Public sector entities (PSEs) ³	–	–	241	–	–	–
3 Multilateral development banks	–	–	–	–	–	–
4 Banks ³	557	–	958	–	192	20
Of which: securities firms and other financial institutions treated as banks	–	–	401	–	80	20
5 Covered bonds	–	–	–	–	–	–
6 Corporates	689	506	47	51	102	104
as corporates	–	–	–	–	–	–
Of which: specialised lending	–	–	–	–	–	–
7 Subordinated debt, equity and other capital	11	–	11	–	28	250
8 Retail	20	–	20	–	15	75
12 Defaulted exposures	–	–	–	–	–	–
13 Other assets	2,305	–	2,305	–	1,115	48
14 Total at 30 Sep 2023	3,652	506	3,652	51	1,484	40

1. CCF - Credit Conversion Factor, CRM - Credit Risk Mitigation.

2. Comprises exposures subject to credit risk framework but are not included in standardized or IRB approaches including settlement risk and other balance sheet assets that are risk-weighted at 100%.

3. Exposures post-CCF and CRM including risk transfer-in amounts.

Table 9: Standardized approach – exposures by asset class and risk weight (CR5)

Risk weight ('RW') %								Total credit exposure amount (post-CCF and post-CRM)
	0	20	50	75	100	150	250	
	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m
Asset classes								
1	Sovereigns and their central banks	41	–	–	–	–	–	41
2	Public sector entities (PSEs)	243	–	–	–	–	–	243
3	Multilateral development banks	–	–	–	–	–	–	–
4	Banks	–	556	–	–	–	–	556
–	Of which: securities firms and other financial institutions treated as banks	–	372	–	–	–	–	372
5	Covered bonds	–	–	–	–	–	–	–
6	Corporates	–	–	–	–	149	7	156
–	Of which: securities firms and other financial institutions treated as corporates	–	–	–	–	–	–	–
–	Of which: specialised lending	–	–	–	–	–	–	–
7	Subordinated debt, equity and other capital	–	–	–	–	–	10	10
8	Retail	–	–	–	19	–	–	19
12	Defaulted exposures	–	–	–	–	–	–	–
13	Other assets	616	57	–	–	1,037	–	89
14	Total at 31 Dec 2023	900	613	–	19	1,186	7	99
1	Sovereigns and their central banks	38	–	–	–	32	–	70
2	Public sector entities (PSEs)	241	–	–	–	–	–	241
3	Multilateral development banks	–	–	–	–	–	–	–
4	Banks	–	958	–	–	–	–	958
–	Of which: securities firms and other financial institutions treated as corporates	–	401	–	–	–	–	401
5	Covered bonds	–	–	–	–	–	–	–
6	Corporates	–	–	–	–	91	7	98
–	financial institutions treated as corporates	–	–	–	–	–	–	–
–	Of which: specialised lending	–	–	–	–	–	–	–
7	Subordinated debt, equity and other capital	–	–	–	–	–	11	11
8	Retail	–	–	–	20	–	–	20
12	Defaulted exposures	–	–	–	–	–	–	–
13	Other assets	1,242	–	44	–	960	–	59
14	Total at 30 Sep 2023	1,521	958	44	20	1,083	7	70

Table 10: Standardized approach – exposures by asset class and risk weight (CR5) Contd.

Risk weight ('RW') %	a	b	c	d
	On-balance sheet exposure	Off-balance sheet exposure (pre-CCF)	Weighted average CCF	Exposures post-CCF and CRM ¹
	\$m	\$m		\$m
1 Less than 40	897	–	100	1,513
2 40–70	–	–	–	–
3 75	19	–	100	19
4 85	–	–	–	–
5 90–100	1,645	557	72	1,186
6 105–130	–	–	–	–
7 150	106	14	7	7
8 250	99	–	100	99
9 400	–	–	–	–
10 1250	–	–	–	–
11 Total at 31 Dec 2023	2,766	571	85	2,824
1 Less than 40	1882	–	100	2,524
2 40–70	–	–	–	–
3 75	20	–	100	20
4 85	–	–	–	–
5 90–100	1,583	483	52	1,082
6 105–130	–	–	–	–
7 150	97	23	6	7
8 250	70	–	100	70
9 400	–	–	–	–
10 1250	–	–	–	–
11 Total at 30 Sep 2023	3,652	506	89	3,703

1. Exposures post-CCF and CRM includes risk transfer-in amounts.

Table 11: A-IRB – Credit risk exposures by portfolio and PD range (CR6)

PD scale	Original on-balance sheet gross exposure	Off-balance sheet exposure pre-CCF	Average CCF	EAD post-CRM and post-CCF	Average PD	Number of obligors	Average LGD	Average maturity	RWA	RWA density	Expected loss	Provisions
	\$m	\$m	%	\$m	%		%	years	\$m	%	\$m	\$m
Sovereign												
0.00 to <0.15	27,856	1,811	96	28,574	0.01	84	7.9	1.42	242	0.8	–	1
0.15 to <0.25	–	3	34	1	0.22	2	52.7	1.02	–	37.9	–	–
0.25 to <0.50	–	1	40	–	0.37	4	29.2	1.00	–	28.5	–	–
0.50 to <0.75	–	–	–	–	–	–	–	–	–	–	–	–
0.75 to <2.50	14	2	92	15	1.20	5	11.0	2.17	3	22.8	–	–
2.50 to <10.00	–	–	–	–	–	–	–	–	–	–	–	–
10.00 to <100.00	–	–	–	–	–	–	–	–	–	–	–	–
100.00 (Default)	–	–	–	–	–	–	–	–	–	–	–	–
Sub-total	27,870	1,817	96	28,590	0.01	95	7.9	1.42	245	0.9	–	1
Corporates												
0.00 to <0.15	1,472	1,320	67	1,875	0.11	304	35.1	1.90	417	22.2	1	4
0.15 to <0.25	2,891	3,522	61	3,922	0.22	975	33.5	1.65	1,108	28.3	3	2
0.25 to <0.50	5,295	3,887	71	6,512	0.37	889	32.1	1.61	2,281	35.0	7	5
0.50 to <0.75	5,172	3,660	71	6,283	0.63	868	33.0	1.53	3,004	47.8	13	7
0.75 to <2.50	10,475	7,438	72	12,841	1.38	2,314	33.0	1.44	7,682	59.8	44	20
2.50 to <10.00	2,582	1,173	79	2,965	4.82	634	32.3	1.45	2,740	92.4	42	24
10.00 to <100.00	420	158	80	461	19.02	124	32.0	1.40	549	119.2	24	16
100.00 (Default)	231	113	75	257	100.00	72	44.3	1.11	551	214.2	90	90
Sub-total	28,538	21,271	71	35,116	2.11	6,180	33.0	1.53	18,332	52.2	224	168
Wholesale AIRB - Total at 31 Dec 2023	56,408	23,088	80	63,706	1.17	6,275	21.7	1.48	18,577	29.2	224	169

Table 12: F-IRB – Credit risk exposures by portfolio and PD range (CR6)

PD scale	Original on-balance sheet gross exposure	Off-balance sheet exposure pre-CCF	Average CCF	EAD post-CRM and post-CCF	Average PD	Number of obligors	Average LGD	Average maturity	RWA	RWA density	Expected loss	Provisions
	\$m	\$m	%	\$m	%		%	years	\$m	%	\$m	\$m
Banks												
0.00 to <0.15	1,712	760	87	2,160	0.06	149	30.1	1.80	308	14.2	–	–
0.15 to <0.25	9	25	63	21	0.22	10	45.0	0.17	7	32.1	–	–
0.25 to <0.50	6	15	37	8	0.37	4	45.0	0.87	4	45.1	–	–
0.50 to <0.75	–	–	–	–	–	–	–	–	–	–	–	–
0.75 to <2.50	–	–	–	–	–	–	–	–	–	–	–	–
2.50 to <10.00	–	–	–	–	–	–	–	–	–	–	–	–
10.00 to <100.00	–	–	–	–	–	–	–	–	–	–	–	–
100.00 (Default)	–	–	–	–	–	–	–	–	–	–	–	–
Sub-total	1,727	800	87	2,189	0.07	163	30.3	1.78	319	14.5	–	–
Corporates												
0.00 to <0.15	3,403	9,931	52	6,950	0.09	433	37.7	1.58	1,252	18.0	2	2
0.15 to <0.25	1,636	1,664	65	2,146	0.22	156	32.2	1.92	651	30.3	1	1
0.25 to <0.50	1,580	1,058	73	1,932	0.37	186	34.3	2.09	825	42.7	2	2
0.50 to <0.75	861	1,458	65	1,505	0.63	154	37.3	1.50	725	48.1	3	5
0.75 to <2.50	3,357	5,925	60	5,525	1.52	522	35.0	1.97	3,172	57.4	18	23
2.50 to <10.00	15	37	82	42	100.00	70	38.6	0.96	49	115.6	8	4
10.00 to <100.00	213	201	72	297	4.63	14	32.0	1.93	277	93.1	4	3
100.00 (Default)	15	78	49	46	11.11	7	33.6	2.19	69	152.4	2	2
Sub-total	11,080	20,352	59	18,443	0.94	1,542	35.8	1.79	7,020	38.1	40	42
Wholesale FIRB - Total at 31 Dec 2023	12,807	21,152	61	20,632	0.85	1,705	35.2	1.79	7,339	35.6	40	42

Table 13: A-IRB – Credit risk exposures by portfolio and PD range (CR6) (continued)

PD scale	Original on-balance sheet gross exposure \$m	Off-balance sheet exposure pre-CCF \$m	Average CCF %	EAD post-CRM and post-CCF \$m	Average PD %	Number of obligors	Average LGD %	Average maturity years	RWA \$m	RWA density %	Expected loss \$m	Provisions \$m
Retail Residential Mortgages												
0.00 to <0.15	20,520	–	100	20,520	0.05	45,071	19.3	–	564	2.7	2	24
0.15 to <0.25	8,296	–	100	8,296	0.16	15,006	20.5	–	590	7.1	3	30
0.25 to <0.50	1,446	–	100	1,446	0.28	2,976	18.3	–	142	9.8	1	3
0.50 to <0.75	1,620	–	100	1,620	0.58	2,986	20.5	–	293	18.1	2	11
0.75 to <2.50	325	–	100	325	2.08	596	21.0	–	139	42.6	1	–
2.50 to <10.00	705	–	100	705	3.09	1,342	19.4	–	354	50.2	4	5
10.00 to <100.00	173	–	100	173	18.61	307	19.0	–	179	103.4	6	3
100.00 (Default)	72	–	100	72	100.00	101	35.9	–	198	275.0	10	18
Sub-total	33,157	–	100	33,157	0.51	68,385	19.7	–	2,459	7.4	29	94
HELOC												
0.00 to <0.15	820	4,270	73	3,725	0.05	22,757	12.3	–	68	1.8	–	1
0.15 to <0.25	1	–	100	1	0.18	1	15.3	–	–	5.7	–	–
0.25 to <0.50	292	153	97	434	0.29	2,405	12.8	–	30	6.9	–	1
0.50 to <0.75	–	–	100	–	0.65	1	26.0	–	–	24.3	–	–
0.75 to <2.50	120	12	114	150	1.01	873	13.0	–	25	16.5	–	2
2.50 to <10.00	99	50	101	150	6.27	682	13.1	–	73	48.8	1	1
10.00 to <100.00	10	14	87	21	30.53	118	11.6	–	15	67.7	1	–
100.00 (Default)	7	18	31	8	100.00	125	39.5	–	24	314.3	1	–
Sub-total	1,349	4,517	77	4,489	0.63	26,962	12.5	–	235	5.2	3	5
Retail Qualifying revolving exposures												
0.00 to <0.15	185	3,072	98	3,184	0.07	187,201	85.9	–	119	3.7	2	2
0.15 to <0.25	87	678	96	732	0.21	68,534	87.1	–	71	9.7	1	1
0.25 to <0.50	–	–	–	–	–	–	–	–	–	–	–	–
0.50 to <0.75	79	195	98	269	0.58	31,338	88.5	–	60	22.3	1	2
0.75 to <2.50	90	72	100	162	1.34	19,242	90.0	–	70	43.0	2	3
2.50 to <10.00	116	44	100	160	4.22	19,035	90.0	–	154	96.4	6	8
10.00 to <100.00	36	11	96	45	21.92	5,695	88.6	–	92	207.1	9	5
100.00 (Default)	6	7	51	6	100.00	1,308	79.8	–	15	238.2	4	3
Sub-total	599	4,079	97	4,558	0.66	332,353	86.6	–	581	12.8	25	24
Retail SME												
0.00 to <0.15	2	22	95	23	0.09	805	92.1	–	5	21.3	–	–
0.15 to <0.25	3	92	88	83	0.22	1,831	75.0	–	27	32.7	–	–
0.25 to <0.50	3	8	102	11	0.38	177	38.0	–	3	23.7	–	–
0.50 to <0.75	1	2	100	3	0.58	374	100.0	–	2	77.8	–	–
0.75 to <2.50	180	17	99	195	1.92	1,599	57.6	–	143	73.2	2	1
2.50 to <10.00	2	2	91	3	5.99	191	74.8	–	3	111.2	–	–
10.00 to <100.00	19	7	110	29	14.61	887	62.2	–	33	115.7	3	1
100.00 (Default)	5	–	96	5	100.00	276	65.1	–	6	137.8	–	3
Sub-total	215	150	97	352	3.68	6,140	64.3	–	222	63.3	5	5
Retail Other												
0.00 to <0.15	45	501	88	478	0.05	7,747	67.4	–	74	15.5	–	–
0.15 to <0.25	94	127	93	206	0.16	2,457	56.1	–	66	32.1	–	1
0.25 to <0.50	697	1	100	699	0.30	4,030	35.9	–	233	33.3	1	2
0.50 to <0.75	48	19	96	64	0.59	771	50.2	–	34	53.0	–	–
0.75 to <2.50	228	31	99	255	1.79	7,796	41.1	–	171	67.1	2	1
2.50 to <10.00	39	5	99	43	4.53	359	44.6	–	48	111.2	1	1
10.00 to <100.00	18	4	158	36	30.51	6,284	49.2	–	53	149.6	6	–
100.00 (Default)	5	1	85	5	100.00	3,646	45.8	–	6	112.9	1	1
Sub-total	1,174	689	96	1,786	1.42	33,090	48.4	–	685	38.4	11	6
Total Retail at 31 Dec 2023	36,495	9,435	97	44,342	0.60	466,930	27.3	–	4,182	9.4	73	131

Table 14: AIRB – Credit risk exposures by portfolio and PD range (CR6)

PD scale	Original on-balance sheet gross exposure \$m	Off-balance sheet exposure pre-CCF \$m	Average CCF %	EAD post-CRM and post-CCF \$m	Average PD %	Number of obligors	Average LGD %	Average maturity years	RWAs \$m	RWA density %	Expected loss \$m	Provisions \$m
Sovereign												
0.00 to <0.15	26,143	1,467	97	26,718	0.01	85	7.2	1.59	176	0.7	—	1
0.15 to <0.25	—	3	33	1	0.22	1	52.0	1.00	—	—	—	—
0.25 to <0.50	—	1	0	—	0.37	3	26.3	1.00	0	—	—	—
0.50 to <0.75	—	—	0	—	—	—	—	—	—	—	—	—
0.75 to <2.50	115	2	99	116	2.12	7	10.1	3.02	7	6.0	—	—
2.50 to <10.00	—	—	0	—	—	—	—	—	—	—	—	—
10.00 to <100.00	—	—	0	—	—	—	—	—	—	—	—	—
100.00 (Default)	—	—	0	—	—	—	—	—	—	—	—	—
Sub-total	26,258	1,473	97	26,835	0.02	96	7.2	1.60	183	0.7	—	1
Corporates												
0.00 to <0.15	1,560	1,727	63	2,068	0.12	326	33.0	1.82	460	22.2	1	1
0.15 to <0.25	2,752	3,289	62	3,721	0.23	1,043	30.5	1.79	1,089	29.3	3	3
0.25 to <0.50	5,903	4,177	70	7,056	0.39	983	30.1	1.50	2,469	35.0	8	5
0.50 to <0.75	4,843	3,793	69	5,986	0.67	863	31.4	1.57	2,776	46.4	11	8
0.75 to <2.50	11,515	6,820	75	13,803	1.63	2,527	35.8	1.67	8,426	61.0	49	27
2.50 to <10.00	2,225	999	80	2,589	4.99	530	32.6	1.55	2,340	90.5	33	20
10.00 to <100.00	396	171	78	445	15.93	122	25.0	1.46	561	126.1	19	11
100.00 (Default)	251	65	85	268	100.00	70	33.1	1.06	374	139.6	123	123
Sub-total	29,445	21,041	71	35,936	2.15	6,464	32.8	1.62	18,495	51.5	247	198
Wholesale AIRB - Total at 30 Sep 2023	55,703	22,514	80	62,771	1.24	6,560	21.9	1.61	18,678	29.8	247	199

Table 15: F-IRB – Credit risk exposures by portfolio and PD range (CR6)

PD scale	Original on-balance sheet gross exposure \$m	Off-balance sheet exposure pre-CCF \$m	Average CCF %	EAD post-CRM and post-CCF \$m	Average PD %	Number of obligors	Average LGD %	Average maturity years	RWA \$m	RWA density %	Expected loss \$m	Provisions \$m
Banks												
0.00 to <0.15	1,783	714	88	2,195	0.06	162	29.7	1.95	313	14.3	—	—
0.15 to <0.25	4	6	70	7	0.22	11	45.0	0.12	2	28.6	—	—
0.25 to <0.50	7	14	38	8	0.37	2	45.0	0.93	4	50.0	—	—
0.50 to <0.75	—	—	—	—	—	—	—	—	—	—	—	—
0.75 to <2.50	—	—	—	—	—	—	—	—	—	—	—	—
2.50 to <10.00	—	—	—	—	—	—	—	—	—	—	—	—
10.00 to <100.00	—	—	—	—	—	—	—	—	—	—	—	—
100.00 (Default)	—	—	—	—	—	—	—	—	—	—	—	—
Sub-total	1,794	734	87	2,210	0.06	175	29.8	1.94	319	14.4	—	—
Corporates												
0.00 to <0.15	2,951	9,764	50	6,312	0.10	407	38.2	1.87	1,242	19.6	2	2
0.15 to <0.25	982	1,642	58	1,515	0.23	214	35.6	2.29	533	35.2	1	2
0.25 to <0.50	1,300	1,251	65	1,669	0.44	237	34.9	2.27	692	41.5	2	1
0.50 to <0.75	1,095	1,833	64	1,885	0.70	104	39.3	2.13	1,038	55.1	4	8
0.75 to <2.50	3,343	5,397	61	5,358	1.50	483	36.3	1.97	2,978	55.6	16	20
2.50 to <10.00	280	293	69	396	4.32	68	30.5	2.41	421	106.3	5	4
10.00 to <100.00	67	111	65	115	12.47	15	39.9	2.38	206	179.1	5	8
100.00 (Default)	6	48	69	37	100.00	9	38.4	0.96	24	64.9	10	8
Sub-total	10,024	20,339	57	17,287	1.04	1,537	37.0	2.02	7,134	41.2	45	53
Wholesale FIRB - Total at 30 Sep 2023	11,818	21,073	59	19,497	0.93	1,712	36.2	2.01	7,453	38.2	45	53

Table 16: A-IRB – Credit risk exposures by portfolio and PD range (CR6) (Continued)

PD scale	Original on-balance sheet gross exposure \$m	Off-balance sheet exposure pre-CCF \$m	Average CCF %	EAD post-CRM and post-CCF \$m	Average PD %	Number of obligors	Average LGD %	Average maturity years	RWAs \$m	RWA density %	Expected loss \$m	Provisions \$m
Retail Residential Mortgages												
0.00 to <0.15	20,268	—	100	20,268	0.05	44,416	19.4	—	561	2.8	2	25
0.15 to <0.25	8,417	—	100	8,417	0.16	15,052	20.7	—	596	7.1	3	24
0.25 to <0.50	1,461	—	100	1,461	0.28	3,025	18.7	—	146	10.0	1	3
0.50 to <0.75	1,662	—	100	1,662	0.58	3,000	20.5	—	301	18.1	2	9
0.75 to <2.50	296	—	100	296	2.05	572	22.3	—	133	44.9	1	—
2.50 to <10.00	696	—	100	696	3.08	1,321	19.4	—	348	50.0	4	4
10.00 to <100.00	154	—	100	154	17.73	272	19.3	—	158	102.7	5	4
100.00 (Default)	72	—	100	72	100.00	95	35.2	—	185	257.2	11	17
Sub-total	33,026	—	100	33,026	0.50	67,753	19.8	—	2,428	7.4	29	86
HELOC												
0.00 to <0.15	797	4,225	73	3,672	0.05	22,585	12.7	—	68	1.9	—	1
0.15 to <0.25	1	—	100	1	0.18	3	15.3	—	0	0.0	—	—
0.25 to <0.50	302	155	98	446	0.29	2,407	13.2	—	32	7.2	—	1
0.50 to <0.75	1	—	100	1	0.65	3	16.3	—	0	14.3	—	—
0.75 to <2.50	138	13	115	173	1.02	946	13.5	—	30	17.4	—	2
2.50 to <10.00	83	51	98	132	6.36	654	13.0	—	65	48.9	1	1
10.00 to <100.00	14	12	94	24	31.13	106	14.9	—	21	86.5	1	—
100.00 (Default)	7	17	32	8	100.00	109	36.5	—	21	269.7	1	—
Sub-total	1,343	4,473	77	4,457	0.64	26,813	12.8	—	237	5.3	3	5
Retail Qualifying revolving												
0.00 to <0.15	186	3,084	98	3,198	0.07	189,295	86.0	—	120	3.8	2	2
0.15 to <0.25	92	698	96	757	0.21	71,792	87.2	—	74	9.8	1	1
0.25 to <0.50	—	—	—	—	—	—	—	—	—	—	—	—
0.50 to <0.75	81	194	98	269	0.58	32,082	88.6	—	60	22.3	1	2
0.75 to <2.50	90	73	100	162	1.34	19,164	89.9	—	70	43.0	2	3
2.50 to <10.00	113	44	99	156	4.19	18,576	89.8	—	149	95.6	6	8
10.00 to <100.00	35	11	95	43	21.97	5,517	88.3	—	91	209.0	8	5
100.00 (Default)	4	5	49	5	100.00	1,107	81.1	—	11	237.5	3	3
Sub-total	601	4,109	97	4,590	0.62	337,533	86.6	—	575	12.5	23	24
Retail SME												
0.00 to <0.15	2	22	95	23	0.09	803	92.2	—	5	21.4	—	—
0.15 to <0.25	3	93	88	84	0.22	1,889	75.0	—	28	32.8	—	—
0.25 to <0.50	4	9	102	13	0.38	177	37.1	—	3	22.9	—	—
0.50 to <0.75	2	2	100	3	0.58	398	99.5	—	3	76.5	—	—
0.75 to <2.50	181	18	99	197	1.92	1,591	57.5	—	142	73.1	2	2
2.50 to <10.00	2	2	93	4	6.28	207	65.2	—	4	97.4	—	—
10.00 to <100.00	18	7	114	28	16.66	852	66.9	—	35	125.1	3	1
100.00 (Default)	3	—	97	3	100.00	319	67.6	—	3	103.2	—	2
Sub-total	215	153	97	355	3.39	6,236	64.5	—	223	62.9	—	—
Retail Other												
0.00 to <0.15	47	512	88	491	0.05	7,916	67.7	—	78	15.9	—	—
0.15 to <0.25	99	136	93	219	0.16	2,484	55.8	—	72	33.0	—	—
0.25 to <0.50	698	2	100	700	0.30	4,288	36.5	—	237	33.8	1	2
0.50 to <0.75	51	14	98	64	0.59	738	50.4	—	37	57.9	—	1
0.75 to <2.50	241	19	99	257	1.77	6,946	41.3	—	171	66.5	2	1
2.50 to <10.00	48	7	99	54	4.33	387	42.6	—	59	107.9	1	1
10.00 to <100.00	17	3	179	36	28.73	6,172	51.3	—	61	171.5	6	—
100.00 (Default)	14	1	93	14	100.00	4,428	81.0	—	5	39.1	6	1
Sub-total	1,215	694	96	1,835	1.85	33,359	49.1	—	720	39.3	16	—
Total Retail at 30 Sep 2023	36,400	9,429	96	44,263	0.60	471,694	27.6	—	4,183	9.5	77	126

Table 17 : RWA flow statements of credit risk exposures under the IRB approach (CR8)

	a
	RWA amounts
1 RWA at the beginning of the period - 1st Oct 2023	30,314
2 Asset size ¹	154
3 Asset quality	(370)
4 Model updates	—
5 Methodology and policy ²	—
6 Acquisitions and disposals	—
7 Foreign exchange movements	—
8 Other ³	—
9 RWA at the end of the period - 31 Dec 2023	30,098

1. Foreign exchange movements are embedded in the asset size
2. Primarily impact of Basel III reforms on IRB Risk weighted Assets
3. Firm-size adjustment for corporate SMEs is resumed

Table 18: A-IRB – Backtesting of probability of default (PD) per portfolio (CR9)

	Number of obligors						Average historical annual default rate
	Weighted Average PD	Arithmetic average PD by obligors	End of previous year	End of the year	Defaulted obligors in the year	of which: new defaulted obligors in the year	
	%	%					%
Sovereign							
0.00 to <0.15	0.01	0.01	88	84	—	—	—
0.15 to <0.25	—	0.22	—	2	—	—	—
0.25 to <0.50	0.37	0.37	3	4	—	—	—
0.50 to <0.75	—	—	—	—	—	—	—
0.75 to <2.50	—	1.20	—	5	—	—	—
2.50 to <10.00	—	—	—	—	—	—	—
10.00 to <100.00	—	—	—	—	—	—	—
100.00 (Default)	—	—	—	—	—	—	—
Sub-total	0.01	0.01	91	95	—	—	—
Corporates							
0.00 to <0.15	0.11	0.16	442	304	—	—	—
0.15 to <0.25	0.22	0.30	1,143	975	3	—	0.21
0.25 to <0.50	0.37	0.51	1,131	889	2	—	0.17
0.50 to <0.75	0.63	0.87	971	868	—	—	0.10
0.75 to <2.50	1.20	1.65	2,359	2,314	12	—	0.30
2.50 to <10.00	4.92	6.77	530	634	13	1	1.59
10.00 to <100.00	16.29	22.40	120	124	5	—	6.60
100.00 (Default)	100.00	100.00	76	72	—	—	—
Sub-total	1.77	2.47	6,772	6,180	35	1	0.53
2023	1.03	2.46	6,863	6,275	35	1	0.53

Table 19: F-IRB – Backtesting of probability of default (PD) per portfolio (CR9)

	Number of obligors		End of previous year	End of the year	Defaulted obligors in the year	of which: new defaulted obligors in the year	Average historical annual default rate
	Weighted Average PD	Arithmetic average PD by obligors					
	%	%					%
Banks							
0.00 to <0.15	0.05	0.05	149	149	–	–	–
0.15 to <0.25	0.22	0.22	5	10	–	–	–
0.25 to <0.50	0.37	0.37	2	4	–	–	–
0.50 to <0.75	0.63	0.63	5	–	–	–	–
0.75 to <2.50	2.25	2.25	1	–	–	–	–
2.50 to <10.00	–	–	–	–	–	–	–
10.00 to <100.00	–	–	–	–	–	–	–
100.00 (Default)	–	–	–	–	–	–	–
Sub-total	0.06	0.06	162	163	–	–	–
Corporates							
0.00 to <0.15	0.08	0.11	341	433	–	–	–
0.15 to <0.25	0.22	0.30	195	156	–	–	–
0.25 to <0.50	0.37	0.51	193	186	–	–	–
0.50 to <0.75	0.63	0.87	100	154	–	–	–
0.75 to <2.50	1.35	1.85	331	522	–	–	0.08
2.50 to <10.00	4.26	5.86	58	70	–	–	0.66
10.00 to <100.00	12.31	16.93	13	14	–	–	7.58
100.00 (Default)	100.00	100.00	6	7	–	–	–
Sub-total	0.84	1.01	1,237	1,542	–	–	–
2023	0.74	1.01	1,399	1,705	–	–	0.32

Table 20: A-IRB – Backtesting of probability of default (PD) per portfolio (CR9) (continued)

	Number of obligors		End of previous year	End of the year	Defaulted obligors in the year	of which: new defaulted obligors in the year	Average historical annual default rate
	Weighted Average PD	Arithmetic average PD by obligors					
	%	%					%
Retail Residential Mortgages							
0.00 to <0.15	0.05	0.05	44,228	45,071	14	–	0.02
0.15 to <0.25	0.16	0.16	11,176	15,006	13	–	0.08
0.25 to <0.50	0.28	0.28	6,233	2,976	10	1	0.13
0.50 to <0.75	0.58	0.58	2,067	2,986	16	–	0.34
0.75 to <2.50	2.09	2.08	2,569	596	14	–	1.31
2.50 to <10.00	3.06	3.08	1,029	1,342	33	–	1.63
10.00 to <100.00	16.97	17.25	243	307	37	–	11.37
100.00 (Default)	100.00	100.00	65	101	–	–	–
Sub-total	0.38	0.36	67,610	68,385	137	1	2.13
HELOC							
0.00 to <0.15	0.05	0.05	24,354	22,757	10	–	0.02
0.15 to <0.25	0.18	0.18	–	1	–	–	–
0.25 to <0.50	0.29	0.29	2,652	2,405	3	–	0.13
0.50 to <0.75	0.65	0.65	–	1	–	–	–
0.75 to <2.50	1.01	1.00	973	873	7	–	0.55
2.50 to <10.00	6.24	6.25	730	682	21	–	2.35
10.00 to <100.00	31.31	31.56	97	118	18	–	10.97
100.00 (Default)	100.00	100.00	119	125	–	–	–
Sub-total	0.85	0.78	28,925	26,962	59	–	2.81
Retail Qualifying revolving exposures							
0.00 to <0.15	0.06	0.06	181,925	187,201	123	48	0.04
0.15 to <0.25	0.24	0.21	67,504	68,534	204	113	0.14
0.25 to <0.50	–	–	–	–	–	–	–
0.50 to <0.75	0.58	0.58	32,443	31,338	173	42	0.39
0.75 to <2.50	1.34	1.35	20,136	19,242	316	64	1.01
2.50 to <10.00	4.07	4.39	18,489	19,035	710	46	2.93
10.00 to <100.00	20.49	24.48	4,962	5,695	987	43	17.23
100.00 (Default)	100.00	100.00	1,238	1,308	–	–	–
Sub-total	0.64	1.22	326,697	332,353	2,513	356	3.62
Retail SME							
0.00 to <0.15	0.09	0.09	917	805	1	–	0.11
0.15 to <0.25	0.24	0.23	2,305	1,831	4	1	0.10
0.25 to <0.50	0.42	0.42	192	177	–	–	0.06
0.50 to <0.75	0.58	0.58	538	374	–	–	0.09
0.75 to <2.50	1.94	1.82	2,063	1,599	17	3	0.51
2.50 to <10.00	5.80	4.35	196	191	8	–	2.48
10.00 to <100.00	16.22	50.99	1,715	887	1,054	353	25.70
100.00 (Default)	100.00	100.00	378	276	–	–	–
Sub-total	3.67	15.76	8,304	6,140	1,084	357	4.15
Retail Other							
0.00 to <0.15	0.05	0.05	8,035	7,747	–	–	0.01
0.15 to <0.25	0.15	0.15	2,665	2,457	1	–	0.07
0.25 to <0.50	0.32	0.32	4,109	4,030	9	2	0.13
0.50 to <0.75	0.59	0.59	851	771	3	–	0.25
0.75 to <2.50	1.44	1.66	889	7,796	15	–	1.19
2.50 to <10.00	4.93	5.25	351	359	15	–	2.83
10.00 to <100.00	25.93	43.72	8,992	6,284	10,022	5,762	34.15
100.00 (Default)	100.00	100.00	2,700	3,646	–	–	–
Sub-total	2.07	23.40	28,592	33,090	10,065	5,764	5.52
Total Retail at 31 Dec 2023	0.48	2.63	476,178	466,930	13,858	6,478	3.7

Table 21: Specialized lending on slotting approach and Equities under simple risk-weight method (CR10)

		Specialized Lending - Other than HVCRE ²									
Regulatory categories ¹	Regulatory maturity	On-balance sheet amount \$m	Off-balance sheet amount \$m	Risk weight %	Exposure amount					RWA \$m	Expected loss \$m
					PF ² \$m	OF \$m	CF \$m	IPRE \$m	Total \$m		
Strong	Less than 2.5 years	—	—	50	—	—	—	—	—	—	—
	Equal to or more than 2.5 years	284	75	70	201	25	—	133	359	251	2
Good	Less than 2.5 years	—	—	70	—	—	—	—	—	—	—
	Equal to or more than 2.5 years	—	—	90	—	—	—	—	—	—	—
Satisfactory		4	—	115	—	—	—	4	4	5	—
Weak		—	—	250	—	—	—	—	—	—	—
Default		—	—	0	—	—	—	—	—	—	—
	Total at 31 Dec 2023	288	75		201	25	—	137	363	256	2
Strong	Less than 2.5 years	—	—	50	—	—	—	—	—	—	—
	Equal to or more than 2.5 years	436	52	70	360	—	—	128	488	342	2
Good	Less than 2.5 years	—	—	70	—	—	—	—	—	—	—
	Equal to or more than 2.5 years	—	—	90	—	—	—	—	—	—	—
Satisfactory		4	—	115	—	—	—	4	4	5	—
Weak		—	—	250	—	—	—	—	—	—	—
Default		—	—	0	—	—	—	—	—	—	—
	Total at 30 Sep 2023	440	52		360	—	—	132	492	347	2

1. Regulatory categories are defined under paragraph 88 of OSFI CAR guidelines

2. HVCRE: High-volatility commercial real estate, PF: Project finance, OF: Object finance, CF: Commodities finance & IPRE: Income producing real estate

Counterparty Credit Risk (CCR)

Counterparty credit risk ('CCR') arises for derivatives and SFTs. It is calculated in both trading and non-trading books, and is the risk that a counterparty may default before settlement of the transaction. CCR is generated primarily in our wholesale global businesses.

Table 22: Analysis of counterparty credit risk exposure by approach (excluding CVA Charge & centrally cleared exposures)- CCR1

	a	b	c	d	e	f
	Replacement cost	Potential future exposure	Effective expected positive exposure (EEPE)	Alpha used for computing regulatory EAD (Multiplier)	EAD post CRM	post-CRM RWAs
	\$m	\$m	\$m		\$m	\$m
1 SA-CCR (for derivatives)	342	947	—	1.4	1,805	569
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)	—	—	—	—	77	25
5 VaR for SFTs	—	—	—	—	—	—
6 Total at 31 Dec 2023	342	947	—	1.4	1,882	594
1 SA-CCR (for derivatives)	395	1,021	—	1.4	1,982	483
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)	—	—	—	—	119	16
5 VaR for SFTs	—	—	—	—	—	—
6 Total at 30 Sep 2023	395	1,021	—	1.4	2,101	499

Table 23: Credit valuation adjustment (CVA) capital charge (CCR2)

	At 31 Dec 2023		At 30 Sep 2023	
	EAD post-CRM	RWA	EAD post-CRM	RWA
	\$m	\$m	\$m	\$m
1 Total portfolios subject to the Advanced CVA capital charge	—	—	—	—
2 – VaR component (including the 3 × multiplier)	—	—	—	—
3 – Stressed VaR component (including the 3 × multiplier)	—	—	—	—
4 All portfolios subject to the Standardized CVA capital charge	1,263	253	1,388	262
5 Total subject to the CVA capital charge	1,263	253	1,388	262

1. OSFI has allowed a 0.7 scalar to be applied to the exposure amount determined under SA-CCR for the purpose of calculating CVA.

Table 24: CCR exposures by portfolio and PD scale - AIRB (CCR4)

PD scale	EAD post-CRM \$m	Average PD %	Number of obligors	Average LGD %	Average maturity years	RWA \$m	RWA density %
Sovereign							
0.00 to <0.15	316	0.04	53	29.0	0.38	14	440.0
0.15 to <0.25	—	0.63	1	10.0	1.25	—	13.8
0.25 to <0.50	—	—	—	—	—	—	—
0.50 to <0.75	—	—	—	—	—	—	—
0.75 to <2.50	—	—	—	—	—	—	—
2.50 to <10.00	—	—	—	—	—	—	—
10.00 to <100.00	—	—	—	—	—	—	—
100.00 (Default)	—	—	—	—	—	—	—
Sub-total	316	0.04	54	29.0	0.38	14	4.4
Corporates							
0.00 to <0.15	70	0.07	26	52.0	1.18	12	17.0
0.15 to <0.25	86	0.22	71	52.0	1.52	36	42.0
0.25 to <0.50	23	0.37	46	52.0	1.98	15	63.2
0.50 to <0.75	50	0.63	55	52.0	1.31	35	69.8
0.75 to <2.50	68	1.52	125	52.0	2.51	82	120.7
2.50 to <10.00	19	5.13	31	52.0	1.48	31	159.5
10.00 to <100.00	1	20.69	5	52.0	1.13	3	233.1
100.00 (Default)	—	—	—	—	—	—	0.0
Sub-total	317	0.91	359	52.0	1.66	214	67.0
AIRB Total at 31 Dec 2023	633	0.48	413	40.0	1.02	228	35.8

Table 25: CCR exposures by portfolio and PD scale - FIRB (CCR4)

PD scale	EAD post-CRM \$m	Average PD %	Number of obligors	Average LGD %	Average maturity years	RWA \$m	RWA density %
Banks							
0.00 to <0.15	666	0.1	30	45.0	0.75	142	21.3
0.15 to <0.25	—	—	—	—	—	—	—
0.25 to <0.50	—	—	—	—	—	—	—
0.50 to <0.75	—	—	—	—	—	—	—
0.75 to <2.50	—	—	—	—	—	—	—
2.50 to <10.00	—	—	—	—	—	—	—
10.00 to <100.00	—	—	—	—	—	—	—
100.00 (Default)	—	—	—	—	—	—	—
Sub-total	666	0.10	30	45.0	0.75	142	21.3
Corporates							
0.00 to <0.15	190	0.07	184	42.0	0.94	28	14.9
0.15 to <0.25	218	0.22	17	40.0	1.61	73	33.6
0.25 to <0.50	71	0.37	10	40.0	2.00	41	58.8
0.50 to <0.75	25	0.63	36	42.0	1.09	15	58.6
0.75 to <2.50	78	1.47	102	43.0	1.10	67	85.7
2.50 to <10.00	1	4.20	2	40.0	1.25	1	112.5
10.00 to <100.00	—	13.00	1	40.0	1.00	—	200.4
100.00 (Default)	—	—	—	—	—	—	—
Sub-total	583	0.38	352	41.0	1.35	225	38.7
FIRB - Total at 31 Dec 2023	1,249	0.23	382	43.0	1.03	366	29.5

Table 26: CCR exposures by portfolio and PD scale - AIRB (CCR4)

PD scale	EAD post-CRM \$m	Average PD %	Number of obligors	Average LGD %	Average maturity years	RWA \$m	RWA density %
Sovereign							
0.00 to <0.15	423	0.02	55	10.0	0.54	5	1.1
0.15 to <0.25	—	0.63	1	10.0	1.50	—	14.4
0.25 to <0.50	—	—	—	—	—	—	—
0.50 to <0.75	—	—	—	—	—	—	—
0.75 to <2.50	—	—	—	—	—	—	—
2.50 to <10.00	—	—	—	—	—	—	—
10.00 to <100.00	—	—	—	—	—	—	—
100.00 (Default)	—	—	—	—	—	—	—
Sub-total	423	0.02	56	10.0	0.54	5	1.1
Corporates							
0.00 to <0.15	81	0.06	28	52.0	0.83	10	12.8
0.15 to <0.25	52	0.22	69	52.0	1.38	21	41.0
0.25 to <0.50	12	0.37	49	52.0	1.67	7	59.1
0.50 to <0.75	50	0.63	47	52.0	1.21	34	67.9
0.75 to <2.50	41	1.47	137	52.0	1.87	45	110.0
2.50 to <10.00	19	5.68	19	52.0	1.02	30	160.2
10.00 to <100.00	2	10.40	9	52.0	1.00	4	196.3
100.00 (Default)	—	—	—	—	—	—	—
Sub-total	257	0.93	358	52.0	1.24	151	59.0
Grand-total at 30 Sep 2023	680	0.36	414	26.0	0.80	156	23.0

Table 27: CCR exposures by portfolio and PD scale - FIRB (CCR4)

PD scale	EAD post-CRM \$m	Average PD %	Number of obligors	Average LGD %	Average maturity years	RWA \$m	RWA density %
Banks							
0.00 to <0.15	649	0.05	32	45	1.08	104	16.0
0.15 to <0.25	—	—	—	—	—	—	—
0.25 to <0.50	—	—	—	—	—	—	—
0.50 to <0.75	—	—	—	—	—	—	—
0.75 to <2.50	—	—	—	—	—	—	—
2.50 to <10.00	—	—	—	—	—	—	—
10.00 to <100.00	—	—	—	—	—	—	—
100.00 (Default)	—	—	—	—	—	—	—
Sub-total	649	0.05	32	45.0	1.08	104	16.0
Corporates							
0.00 to <0.15	394	0.07	188	43.0	0.80	55	14.0
0.15 to <0.25	221	0.22	45	40.0	1.57	76	34.3
0.25 to <0.50	51	0.37	19	40.0	1.33	24	46.5
0.50 to <0.75	28	0.63	31	44.0	1.01	16	57.3
0.75 to <2.50	76	1.35	122	42.0	1.06	67	87.9
2.50 to <10.00	1	4.71	3	40.0	1.00	1	114.4
10.00 to <100.00	—	—	—	—	—	—	—
100.00 (Default)	—	—	—	—	—	—	—
Sub-total	771	0.28	408	42.0	1.09	239	31.0
FIRB - Total at 30 Sep 2023	1,420	0.18	440	43.0	1.09	343	24.1

Table 28: Composition of collateral for CCR exposure (CCR5)

	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			
	\$m	\$m	\$m	\$m	\$m	\$m	
1	Cash – domestic currency	–	24	–	287	–	–
2	Cash – other currencies	–	336	–	104	–	–
3	Domestic sovereign debt	–	92	30	93	–	55
4	Other sovereign debt	–	–	–	40	–	–
5	Government agency debt	–	–	–	–	–	–
6	Corporate bonds	–	–	–	–	–	–
7	Equity securities	–	–	–	–	–	–
8	Other collateral	–	–	–	–	–	–
9	Total at 31 Dec 2023	–	452	30	524	–	55
1	Cash – domestic currency	–	22	–	745	–	–
2	Cash – other currencies	–	453	–	27	–	–
3	Domestic sovereign debt	–	19	30	259	–	55
4	Other sovereign debt	–	14	–	–	–	–
5	Government agency debt	–	–	–	–	–	–
6	Corporate bonds	–	–	–	–	–	–
7	Equity securities	–	–	–	–	–	–
8	Other collateral	–	–	–	–	–	–
9	Total at 30 Sep 2023	–	508	30	1,031	–	55

Table 29: Exposures to central counterparties (CCPs) - CCR8

	At 31 Dec 2023		At 30 Sep 2023		
	EAD post-CRM	RWA	EAD post-CRM	RWA	
	\$m	\$m	\$m	\$m	
1	Exposures to QCCPs (total)	387	9	427	12
2	Exposures for trades at QCCPs (excluding initial margin and default fund contributions); of which	324	7	354	8
3	– OTC derivatives	321	7	351	8
4	– exchange-traded derivatives	1	–	–	–
5	– securities financing transactions	2	–	3	–
6	– netting sets where cross-products netting has been approved	–	–	–	–
7	Segregated initial margin	55	1	55	1
8	Non-segregated initial margin	–	–	–	–
9	Pre-funded default fund contributions	8	1	18	3
10	Unfunded default fund contributions	–	–	–	–
11	Exposures to non-QCCPs (total)	–	–	–	–
12	Exposures for trades at QCCPs (excluding initial margin and default fund contributions); of which	–	–	–	–
13	– OTC derivatives	–	–	–	–
14	– exchange-traded derivatives	–	–	–	–
15	– securities financing transactions	–	–	–	–
16	– netting sets where cross-products netting has been approved	–	–	–	–
17	Segregated initial margin	–	–	–	–
18	Non-segregated initial margin	–	–	–	–
19	Pre-funded default fund contributions	–	–	–	–
20	Unfunded default fund contributions	–	–	–	–

1. QCCP - Qualifying Central Counterparty

Market Risk

Market Risk is the risk that movements in market factors, such as foreign exchange rates, interest rates, credit spread, equity prices and commodity prices will reduce the value of our portfolios.

Table 30: Market risk under standardised approach (MR1)

		At		
		31 Dec 2023	30 Sep 2023	31 Dec 2023
		RWA	RWA	Capital requirements
		\$m	\$m	\$m
Outright products				
1	Interest rate risk (general and specific)	61	82	5
2	Equity risk (general and specific)	–	–	–
3	Foreign exchange risk	–	–	–
4	Commodity risk	–	–	–
Options				
6	Delta-plus method	–	–	–
7	Scenario approach	–	–	–
8	Securitisation	–	–	–
9	Total	61	82	5

Table 31 : RWA flow statement of market risk exposures under Internal Model Approach (MR2)

		VaR	Stressed VaR	Other	Total RWA
		\$m	\$m	\$m	\$m
1	RWA at the beginning of the period - 1 Oct 2023	488	488	–	976
2	Movement in risk levels ¹	(47)	90	–	43
3	Model updates/changes	–	–	–	–
4	Methodology and policy	–	–	–	–
8	RWA at the end of the period - 31 Dec 2023	441	578	–	1,019

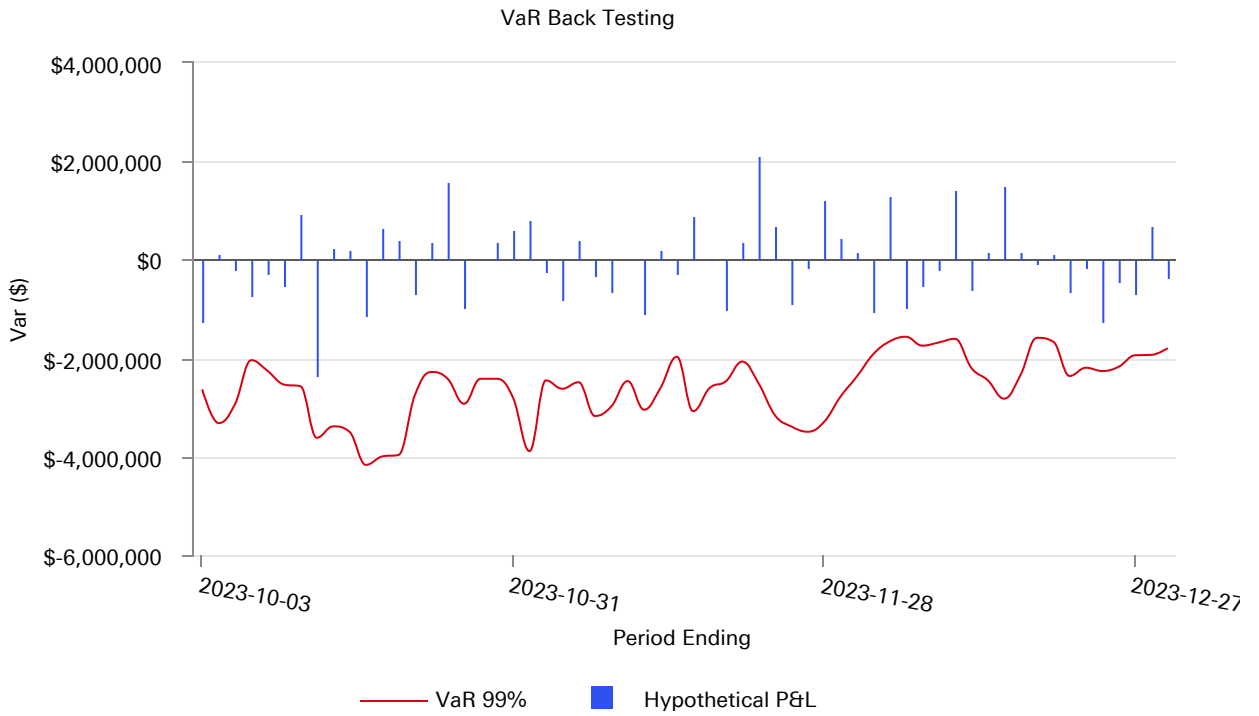
1. Movement due to position changes; foreign exchange movements are embedded in the movement in risk levels

Table 32: IMA values for trading portfolios¹ (MR3)

		At	
		31 Dec 2023	30 Sep 2023
		\$'000	\$'000
VaR			
1	Maximum value	20,399	21,057
2	Average value	11,748	13,016
3	Minimum value	5,139	6,139
4	Period end	7,168	13,105
Stressed VaR			
5	Maximum value	21,144	14,547
6	Average value	15,432	10,202
7	Minimum value	10,475	7,553
8	Period end	10,592	14,547
Incremental Risk Charge			
9	Maximum value	–	–
10	Average value	–	–
11	Minimum value	–	–
12	Period end	–	–
Comprehensive Risk capital charge			
13	Maximum value	–	–
14	Average value	–	–
15	Minimum value	–	–
16	Period end	–	–
17	Floor (standardized measurement method)	–	–

1. These are the maximum, average and minimum values in the fourth quarter of the year.

Table 33: Comparison of VaR estimates with gains/losses (MR4)



Operational Risk

ORA - General qualitative information on a bank's operational risk framework

Non-financial risk

Non-financial risk is the risk to achieving our strategy or objectives as a result of inadequate or failed internal processes, people and systems, or from external events. Sound non-financial risk management is central to achieving good outcomes for our customers. Non-financial risk is relevant to every aspect of our business and for HSBC Bank Canada, these are broadly managed through adopting HSBC Group's Risk Management Framework ('RMF'). We use a standardized set of risk types known as the HSBC risk taxonomy, where non-financial risks (NFR) fall into seven categories: Financial Reporting and Tax risks, Resilience risks, Financial Crime and Fraud risks, People risks, Regulatory Compliance risks, Legal risks, and Model risks. Operational risk is non-financial risk.

Policies, framework, and guidelines

Our HSBC approach to managing Non-Financial Risk is governed by a number of different documents which work collectively together to protect the bank and our customers.

- a. HSBCs Global principles – our global principles overlay all the bank's policies and procedures, informing and connecting our purpose, values, strategy and risk management.
- b. The HSBC Risk Management Framework (RMF) supports our Global Principles. It describes our approach to managing risk across the bank and applies to all the types of risk that we face in our business and operational activities. It is designed to ensure we manage risk in the same way across all parts of HSBC and have a strong risk culture in place where managing risk is simply part of how we work.

Our risk management approach follows five simple steps:

1. Define and Enable – Define risk appetite and controls. Enable risk culture and accountability.
2. Identify and Assess – Identify and record risks to our business. Assess the potential impact.
3. Manage – Manage and control our risks within appetite.
4. Aggregate and Report – Aggregate and analyze data. Report to enable decision making.
5. Govern – Govern the risks through analysis, challenge, and remediation.

Structure and organization

Responsibility for managing non-financial risk lies with our people. Non-financial risk is organized as a specific risk discipline within Global Risk and is headed by the Group Head of Operational and Resilience Risk (ORR), with corresponding Heads of ORR for every region. The Group Head of Operational and Resilience Risk is responsible for monitoring the effectiveness of the internal control environment, overseeing the management of risks and controls, ensuring the Group takes appropriate mitigating actions against emerging risks, and monitoring the level of operational losses. The Group Head of Operational and Resilience Risk is accountable to the Group Chief Risk Officer in respect of this element of the overall RMF.

Each regional Operational and Resilience Risk sub-function helps the business grow safely by driving governance and management of operational risk and resilience risk through the delivery and embedding of effective frameworks and policies, and continuous oversight and assurance of risks, controls, events and impacts. To enable risk management, we organize ourselves into Three Lines of Defence, according to the type of activity we perform. The first line of defence owns the risk and is accountable for identifying, assessing, managing key existing and emerging risks. The second line of defence sets the policy and control standards to manage risks, and provides advice and guidance to support these policies. It also challenges the first line to ensure it is managing risk effectively. The third line of defence is Global Internal Audit, which provides independent assurance to the Board and management that our risk management approach and processes are designed and operating effectively. The Three Lines of Defence is an activity-based model - which means it is our activities, not our job titles, which determine where we sit in the model. It defines clear accountabilities and responsibilities for risk and control management within each Line of defence, applies to all individuals and all risk types, and supports the delivery of conduct outcomes.

Operational Risk Measurement System

In order to drive risk awareness in a more forward-looking manner, we set out our risk appetite and then regularly monitor non-financial risk exposure against that risk appetite. This assists management in determining whether further action is required. Risk scenario analysis for material risk taxonomies provides an aggregated, forward-looking assessment of risks for stress testing and to help assess capital requirements. Operational Risk capital requirements are determined in accordance with OSFI issued guidelines. Upon implementation of the Basel III reforms in Q2 2023, we adopted a new Standardized Approach (SA) for the measurement of operational risk capital. This SA

methodology is a formula-based calculation where a Business Indicator Component (BIC) is multiplied by an Internal Loss Multiplier (ILM) to determine operational risk capital. The BIC is a financial statement-based proxy for operational risk that reflects a 3-year average of specified components of profit before tax multiplied by a set of supervisory provided coefficients. The ILM is a scaling factor that is based on our 10-year historical operational loss average relative to the BIC. Operational Risk losses are recorded in our operational risk management system, and robust processes exist to support high quality internal loss data.'

Reporting framework

In each of our subsidiaries, the first line of defence are responsible for maintaining an appropriate level of internal control, commensurate with the scale and nature of operations. They are responsible for identifying and assessing risks, designing controls and monitoring the effectiveness of these controls. The RMF helps managers to fulfil these responsibilities by defining a standard risk assessment methodology and providing a tool for the systematic reporting of operational loss data.

We use a Group-wide risk management system called Helios to record the results of our non-financial risk management process. Non-financial risk and control assessments are recorded and maintained by the first line of defence. The first line of defence monitors and follows up the progress of documented action plans. Operational risk losses are entered into the system and reported to governance on a monthly basis. Loss capture thresholds are in line with industry standards.

The effectiveness of first line of defence risk and control owners, and second line of defence risk stewards in managing our Non-Financial Risk processes and practices is reported locally through Risk Management Meetings (RMMs) and the Audit and Risk Committee (ARC). At Group level, reporting is also consolidated from different Legal Entities' First and Second Line of Defense to the Non-Financial Risk Management Board (NFRMB) and the Group Operational Risk Capital, Stress Testing, and Appetite (ORCSTA) forum. The NFRMB is the formal governance body which provides recommendations and advice to the Group Chief Risk Officer in relation to the management of the HSBC Non-Financial Risk profile, including elements of the RMF which support non-financial risk management.

Risk mitigation and risk transfer

The risk and control assessment process is designed to provide the first line of defence with a view of non-financial risks, an assessment of the effectiveness of controls, and a tracking mechanism for action plans so that they can proactively manage non-financial risks within acceptable levels. Appropriate means of mitigation and controls are considered. These include making specific changes to strengthen the internal control environment, and investigating whether cost-effective insurance cover is available to mitigate the risk.

Table 34 : OR1: Historical losses

	31 Dec 2023	31 Dec 2022	31 Dec 2021	31 Dec 2020	31 Dec 2019	31 Dec 2018	31 Dec 2017	31 Dec 2016	31 Dec 2015	31 Dec 2014	Ten-Year Average	
	a	b	c	d	e	f	g	h	i	j	k	
	T	T-1	T-2	T-3	T-4	T-5	T-6	T-7	T-8	T-9		
(Millions of Canadian dollars, except as otherwise noted)	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	
Using \$30,000 CAD threshold												
1	Total amount of operational losses net of recoveries (no exclusions)	5	3	9	10	4	2	1	3	2	9	5
2	Total number of operational risk losses	64	56	30	43	26	27	29	32	55	56	—
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	5	3	9	10	4	2	1	3	2	9	5
Details of operational risk capital calculation												
6	Are losses used to calculate the ILM (yes/no)?	Yes										
7	If "no" in row 6, is the exclusion of internal loss data due to non-compliance with the minimum loss data standards (yes/no)?											

Table 35 : OR2: Business Indicator and subcomponents

	31 Dec 2023	31 Dec 2022	31 Dec 2021	
	a	b	c	
	T	T-1	T-2	
(Millions of Canadian dollars)	\$m	\$m	\$m	
1	Interest, lease and dividend component	1,544		
1a	Interest and lease income	5,357	3,356	1,843
1b	Interest and lease expense	3,605	1,701	619
1c	Interest earning assets	113,564	118,605	114,726
1d	Dividend income	—	—	—
2	Services component	925		
2a	Fee and commission income	886	891	902
2b	Fee and commission expense	133	113	108
2c	Other operating income	23	36	35
2d	Other operating expense	11	10	17
3	Financial component	121		
3a	Net P&L on the trading book	117	78	114
3b	Net P&L on the banking book	6	—	48
4	BI	2,590		
5	Business indicator component (BIC)	343		
Disclosure on the BI:				
6	BI gross of excluded divested activities	2,590		
6a	Reduction in BI due to excluded divested activities			

Table 36 : OR3: Minimum required operational risk capital

(Millions of Canadian dollars)	31 Dec 2023	
1	Business indicator component (BIC)	343
2	Internal loss multiplier (ILM)	0.70
3	Minimum required operational risk capital (ORC)	239
4	Operational risk RWA	2,989

Leverage

Table 37: Summary comparison of accounting assets vs. leverage ratio exposure measure (LR1)

		At	
		31 Dec 2023	30 Sep 2023
		\$m	\$m
1	Total consolidated assets as per published financial statements	119,710	119,533
2	Adjustment for investments in banking, financial, insurance or commercial entities that are consolidated for accounting purposes but outside the scope of regulatory consolidation	—	—
3	Adjustment for securitised exposures that meet the operational requirements for the recognition of risk transference	—	—
4	Adjustment for fiduciary assets recognised on the balance sheet pursuant to the operative accounting framework but excluded from the leverage ratio exposure measure	—	—
5	Adjustments for derivative financial instruments	(2,228)	(4,519)
6	Adjustment for securities financing transactions (i.e. repurchase agreements and similar secured lending)	21	44
7	Adjustment for off-balance sheet items (i.e. conversion to credit equivalent amounts of off-balance sheet exposures)	14,845	14,549
8	Other adjustments ¹	(178)	560
9	Leverage ratio exposure measure	132,170	130,167

1. Asset amounts deducted in determining Basel III Tier 1 capital are also included as a deduction.

Table 38: Leverage Ratio Common Disclosure Template (LR2)

		At	
		31 Dec 2023	30 Sep 2023
		\$m	\$m
On-balance sheet exposures			
1	On-balance sheet items (excluding derivatives, SFTs and grandfathered securitization exposures but including collateral) ¹	111,728	110,015
2	Gross up for derivatives collateral provided where deducted from the balance sheet assets pursuant to the operative accounting framework (IFRS)	—	—
3	(Deductions of receivables assets for cash variation margin provided in derivative transactions)	(392)	(772)
4	(Asset amounts deducted in determining Basel III Tier 1 capital)	246	560
5	Total on-balance sheet exposures (excluding derivatives and SFTs) (Sum of lines 1 to 4)	111,582	109,803
Derivative exposures			
6	Replacement cost associated with all derivative transactions (i.e. net of eligible cash variation margin)	276	836
7	Add-on amounts for PFE associated with all derivative transactions	1,851	1,498
8	(Exempted CCP-leg of client cleared trade exposures)	—	—
9	Adjusted effective notional amount of written credit derivatives	—	—
10	(Adjusted effective notional offsets and add-on deductions for written credit derivatives)	—	—
11	Total derivative exposures (sum of lines 6 to 10)	2,127	2,334
Securities financing transaction exposures			
12	Gross SFT assets recognized for accounting purposes (with no recognition of netting), after adjusting for sale accounting transactions	4,737	5,054
13	(Netted amounts of cash payables and cash receivables of gross SFT assets)	(1,142)	(1,617)
14	Counterparty credit risk (CCR) exposure for SFTs	21	44
15	Agent transaction exposures	—	—
16	Total securities financing transaction exposures (sum of lines 12 to 15)	3,616	3,481
Other off-balance sheet exposures			
17	Off-balance sheet exposure at gross notional amount	54,330	53,584
18	(Adjustments for conversion to credit equivalent amounts)	(39,485)	(39,035)
19	Off-balance sheet items (sum of lines 17 and 18)	14,845	14,549
Capital and Total Exposures			
20	Tier 1 capital	7,281	7,058
21	Total Exposures (sum of lines 5, 11, 16 and 19)	132,170	130,167
Leverage Ratios (%)			
22	Leverage ratio	5.5	5.4

1. Asset amounts deducted in determining Basel III Tier 1 capital are also included as a deduction.

Glossary

- **OSFI** - Office of the Superintendent of Financial Institutions
- **\$** - Canadian dollar
- **Gross carrying values:** The gross value is the accounting value before any any credit conversion factor (CCF), credit risk mitigation (CRM) techniques or allowance/impairments.
- **Probability of Default (PD)** - An estimate of the likelihood of a customer defaulting on any credit related obligation within a 1 year time horizon, expressed as a percentage.
- **Loss Given Default (LGD)** - An estimate of the economic loss, expressed as a percentage (0%-100%) of the exposure at default, that the Bank will incur in the event a borrower defaults
- **Exposure At Default (EAD)** - An estimate of the amount of exposure to a customer at the time of default.
- **Standardized Approach for credit risk** - Under this approach, banks use a standardized set of risk-weights as prescribed by OSFI to calculate credit risk capital requirements. The standardized risk-weights are based on external credit assessments, where available, and other risk-related factors, including exposure asset class, collateral, etc.
- **Advanced Internal Ratings Based (AIRB) approach for credit risk** - Under this approach, banks use their own internal historical experience of PD, LGD, EAD and other key risk assumptions to calculate credit risk capital requirements.
- **Foundation Internal Ratings Based (FIRB) approach for credit risk** - Under this approach, banks use their own estimates of PD and their own calculation of maturity (M) and rely on supervisory estimates for other risk components.
- **Home Equity Lines of Credit (HELOC)** - Revolving personal lines of credit secured by home equity.
- **SA-CCR** - The standardised approach (SA-CCR) for measuring exposure at default for counterparty credit risk.
- **Credit Value adjustment (CVA)** - Credit valuation adjustment ('CVA') risk is the risk of adverse moves in the CVAs taken for expected credit losses on derivative transactions.
- **VaR - Value at Risk** - Value at risk ('VaR') is a technique that estimates the potential losses on risk positions in the trading portfolio as a result of movements in market rates and prices over a specified time horizon and to a given level of confidence.
- **All-in regulatory capital** assumes that all Basel III regulatory adjustments are applied effective January 1, 2013 and that the capital value of instruments which no longer qualify as regulatory capital under Basel III rules will be phased out at a rate of 10% per year from January 1, 2013 and continuing to January 1, 2022.
- **Transitional regulatory capital** assumes that all Basel III regulatory capital adjustments are phased in from January 1, 2014 to January 1, 2018 and that the capital value of instruments which no longer qualify as regulatory capital under Basel III rules will be phased out at a rate of 10% per year from January 1, 2013 and continuing to January 1, 2022.
- **Asset size:** organic changes in book size and composition (including origination of new businesses and maturing loans) but excluding changes in book size due to acquisitions and disposal of entities.
- **Asset quality:** changes in the assessed quality of the bank's assets due to changes in borrower risk, such as rating grade migration or similar effects.
- **Model updates:** changes due to model implementation, changes in model scope, or any changes intended to address model weaknesses.
- **Methodology and policy:** changes due to methodological changes in calculations driven by regulatory policy changes, including both revisions to existing regulations and new regulations.
- **Acquisitions and disposals:** changes in book sizes due to acquisitions and disposal of entities.
- **ECL:** expected credit loss