HSBC Holdings plc

Pillar 3 Disclosures at 31 December 2024



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Unless the context requires otherwise, 'HSBC Holdings' means HSBC Holdings plc and 'HSBC', the 'Group', 'we', 'us' and 'our' refer to HSBC Holdings together with its subsidiaries. Within this document the Hong Kong Special Administrative Region of the People's Republic of China is referred to as 'Hong Kong'. When used in the terms 'shareholders' equity' and 'total shareholders' equity', 'shareholders' means holders of HSBC Holdings ordinary shares and those preference shares and capital securities issued by HSBC Holdings classified as equity. The abbreviations '\$m', '\$bn' and '\$tn' represent millions, billions (thousands of millions) and trillions (millions of millions) of US dollars respectively.

This document should be read in conjunction with the Annual Report and Accounts 2024, which has been published on our website at www.hsbc.com/investors.

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Introduction

Pillar 3 Disclosures and Governance

Regulatory framework for disclosure

Our Pillar 3 Disclosures at 31 December 2024 comprise both quantitative and qualitative information required under Pillar 3. These disclosures are made in accordance with the Prudential Regulation Authority ('PRA') Rulebook Disclosure (Capital Requirements Regulation). They are supplemented by specific additional requirements of the PRA and discretionary disclosures on our part.

We are supervised on a consolidated basis in the United Kingdom ('UK') by the PRA, which receives information on the capital and liquidity adequacy of, and sets capital and liquidity requirements for the Group as a whole. Individual banking subsidiaries are directly regulated by their local banking supervisors, who set and monitor their local capital and liquidity adequacy requirements. In most jurisdictions, non-banking financial subsidiaries are also subject to the supervision and capital and liquidity requirements of local regulatory authorities

The Basel Committee on Banking Supervision ('Basel') III framework is structured around three 'pillars', with Pillar 1 minimum capital requirements and Pillar 2 supervisory review process complemented by the Pillar 3 market discipline. The aim of Pillar 3 is to produce disclosures that allow market participants to assess the scope of application by banks of the Basel framework and the rules in their jurisdiction, their capital resources, risk exposures and risk management processes, and hence their capital adequacy.

At the consolidated Group level, capital is calculated for prudential regulatory purposes using the Basel III framework as implemented in the UK. Any references to European Union ('EU') regulations and directives (including technical standards) should, as applicable, be read as references to the UK's version of such regulation and/or directive, as onshored into UK law under the European Union (Withdrawal) Act 2018, and may be subsequently amended under UK law. We refer to the regulatory requirements of the Capital Requirements Regulation and Directive, the CRR II regulation and the PRA Rulebook as 'CRR II'.

The regulators of the Group's banking entities outside the UK are at varying stages of implementation of Basel's framework, so local regulation may have been on the basis of Basel I, II, III or Basel 3.1. Further details on our implementations from 1 January 2025 can be found on page 7 within the Regulatory developments section.

While the frameworks may vary for some of our banking subsidiaries they do not impact the Group's disclosures. However, the changes to local regulatory frameworks may impact distributions from our subsidiaries.

Information relating to the rationale for withholding certain disclosures is provided in Appendix I.

We publish our Pillar 3 disclosures quarterly on our website www.hsbc.com/investors.

Regulatory reporting processes and controls

We are advancing a comprehensive initiative aimed at strengthening our global regulatory reporting processes and making them more sustainable. This multifaceted programme includes enhancing data, consistency and controls. This remains a key priority for both HSBC management and regulatory authorities.

While this programme continues, there may be further impacts on some of our regulatory ratios, such as the common equity tier 1 ('CET1') ratio, liquidity coverage ratio ('LCR') and net stable funding ratio ('NSFR'), as we implement recommended changes and continue to enhance our controls across the process.

Comparatives and references

To give insight into movements during 2024, we provide comparative figures, commentary on variances and flow tables for capital requirements. In all tables where the term 'capital requirements' is used, this represents the minimum total capital charge set at 8% of risk-weighted assets ('RWAs') by Article 92(1) of CRR II. Narratives are included to explain quantitative disclosures where necessary.

Where disclosures have been enhanced, or are new, we do not generally restate or provide comparatives. Wherever specific rows and columns in the tables prescribed are not applicable or are immaterial to our activities, we omit them and follow the same approach for comparatives.

In alignment with the PRA Rulebook table requirements, we have shaded cells where no information is required to be disclosed.

Pillar 3 requirements may be met by inclusion in other disclosure media. Where we adopt this approach, references are provided to the relevant pages of the Annual Report and Accounts 2024 of HSBC Holdings plc or to other documents.

The table below references where comparatives have been restated.

Page ref	Table Reference	Activity
6 and 27	Table 1: Key metrics (KM1/ IFRS9-FL) Table 16: Net stable funding ratio (LIQ2)	Updated net stable funding ratio ('NSFR') based on enhanced calculation.
30	Table 14 - IRRBB1	Introduction of banking net interest income ('BNII') sensitivity to align with the Annual Reports and Accounts.

The table below references where disclosures have been enhanced.

Page ref	Table Reference	Activity
6, 26 and 27	Table 1 – KM1/ IFRS9-FL Table 15 – UK LIQ1 Table 16 – UK LIQ2	Enhanced liquidity consolidation process during 2024 by revising provisions that addressed historical limitations.
17	Table 6 – UK CC1	Updated the classification between components of shareholders' equity.
22	Table 10 – MR2-B	Enhanced to present the RWA movements on a FX spot basis.
30	Table 14 – IRRBB1	Introduction of BNII sensitivity and application of simplified pass-on assumptions to align with the Annual Reports and Accounts.
38	Table 24 – TLAC2 (HSBC Bank plc)	Enhanced disclosures for subordinated notes and loans owned by the resolution entity.
43	Table 30 – CR1-A	Enhanced disclosures to align to CR1.
46	Table 35 – CQ4	Disclosure of our materiality applied to the data presented in this table.
60	Table 51 – CR6	Enhanced to include value adjustment and provision disclosure split by PD bands.
89	Table 55 – CCR5	Enhanced disclosures to align to EBA Q&A guidelines.
90	Table 57 – CCR8	Enhanced disclosure for pre-funded and unfunded default fund contributions.

Governance

The HSBC Holdings Board of Directors ('Board') continued to oversee the governance, operation and oversight of the Group and its principal and material subsidiaries.

The HSBC Pillar 3 disclosures at 31 December 2024 comply with the PRA Rulebook. They are approved by the Board of Directors and are governed by the Group's disclosure policy and internal controls framework as approved by the Group Audit Committee ('GAC').

This Pillar 3 disclosure report was approved by the HSBC Board on 19 February 2025 and signed on its behalf by

Pam Kaur

Group Chief Financial Officer

■ For further details of our Corporate Governance, see page 236 of the Annual Report and Accounts 2024.

Highlights

CET1 Capital and ratio

Our CET1 capital was \$124.9bn and our ratio was 14.9%, up marginally as compared with the prior year as capital generation and a reduction in RWAs through strategic transactions, were offset by dividends, share buy-backs and organic balance sheet growth.

We intend to continue to manage the CET1 capital ratio within our medium-term target range of 14% to 14.5%, with a dividend payout

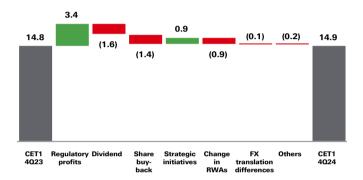
ratio target basis of 50% for 2025, excluding material notable items and related impacts.

The Board has approved a fourth interim dividend of \$0.36 per share, resulting in a total of \$0.87 per share in respect of 2024, inclusive of a special dividend of \$0.21 per share. We also intend to initiate a share buy-back of up to \$2bn, which we expect to complete by our first quarter 2025 results announcement.

Capital and ratio



Ratio movement



RWAs

Our RWAs are \$838.3bn, a decrease of \$15.8bn compared with 31 December 2023, mainly due to strategic disposals of \$47.8bn and foreign currency translation differences of \$22.2bn, which were partly offset by asset size movements of \$49.4bn and credit migrations of \$6.3bn.

RWAs by risk type

	31 Dec 2024	31 Dec 2023
Risk-weighted assets	\$bn	\$bn
Credit risk	657.9	683.9
Counterparty credit risk	37.7	35.5
Market risk	36.2	37.5
Operational risk	106.5	97.2
Total RWAs	838.3	854.1

Leverage

Our leverage ratio was 5.6%, unchanged during the year. This was due to the leverage exposures decrease, primarily from strategic disposals and adverse foreign currency translation differences, which exceeded the increase in the underlying balance sheet. This was offset by a fall in the tier 1 capital.

Leverage

	31 Dec 2024	31 Dec 2023
Leverage ratio (%)	5.6	5.6

Liquidity

The **Group LCR** was 138% or \$179bn above the regulatory requirement and the average high-quality liquid assets ('HQLA') were \$649bn. The **Group NSFR** was 143%. At 31 December 2024, all material operating entities were above regulatory minimum levels.

We enhanced our liquidity consolidation process in 2Q24 by revising provisions that addressed historical limitations. As our Group LCR and NSFR are reported on an average basis, the benefit of these changes incrementally increased our LCR and NSFR by circa 3% and 11% during the year, respectively. Compared to year ended 31 December 2023, the increase in LCR was mainly driven by these enhancements. The associated NSFR increase driven by these changes was partly offset by higher required stable funding primarily due to a rise in financial investments and derivatives activities.

Liquidity

	31 Dec 2024	31 Dec 2023
LCR (%)	138	136
NSFR (%)*	143	138

We enhanced our calculation process during 1Q24 and our NSFR comparative has been restated.

Key metrics

The table below sets out the key regulatory metrics covering the Group's available capital (including buffer requirements and ratios), RWAs, Leverage ratio, LCR and NSFR. Unless stated otherwise, figures have been prepared on an IFRS 9 transitional basis, which ends from 1 January 2025. Capital figures and ratios are reported on a CRR II transitional basis for capital instruments and the leverage ratio is calculated using the CRR II end point basis for capital. The calculation for LCR is the average of the preceding 12 months for each quarter and NSFR is the average of the preceding four quarters.

Table 1: Key metrics (KM1/IFRS9-FL)

				At		
		31 Dec 2024	30 Sep 2024	30 Jun 2024	31 Mar 2024	31 Dec 2023
	Available capital (\$bn)					
1	Common equity tier 1 ('CET1') capital	124.9	131.4	125.3	126.3	126.5
	CET1 capital as if IFRS 9 transitional arrangements had not been applied	124.9	131.4	125.3	126.3	126.4
2	Tier 1 capital	144.1	150.6	144.3	144.1	144.2
	Tier 1 capital as if IFRS 9 transitional arrangements had not been applied	144.1	150.6	144.3	144.1	144.1
3	Total capital	172.4	179.8	172.1	172.5	171.2
	Total capital as if IFRS 9 transitional arrangements had not been applied	172.4	179.8	172.1	172.5	171.1
	Risk-weighted assets (\$bn)					
4	Total RWAs	838.3	863.9	835.1	832.6	854.1
	Total RWAs as if IFRS 9 transitional arrangements had not been applied	838.2	863.9	835.1	832.6	854.0
	Capital ratios (%)					
5	CET1	14.9	15.2	15.0	15.2	14.8
	CET1 as if IFRS 9 transitional arrangements had not been applied	14.9	15.2	15.0	15.2	14.8
6	Tier 1	17.2	17.4	17.3	17.3	16.9
	Tier 1 as if IFRS 9 transitional arrangements had not been applied	17.2	17.4	17.3	17.3	16.9
7	Total capital	20.6	20.8	20.6	20.7	20.0
	Total capital as if IFRS 9 transitional arrangements had not been applied	20.6	20.8	20.6	20.7	20.0
	Additional own funds requirements based on Supervisory Review					
	and Evaluation Process ('SREP') as a percentage of RWAs (%)					
UK-7a	Additional CET1 SREP requirements	1.5	1.5	1.5	1.5	1.5
UK-7b	Additional tier 1 ('AT1') SREP requirements	0.5	0.5	0.5	0.5	0.5
UK-7c	Additional tier 2 ('T2') SREP requirements	0.6	0.6	0.6	0.6	0.6
UK-7d	Total SREP own funds requirements	10.6	10.6	10.6	10.6	10.6
	Combined buffer requirement as a percentage of RWAs (%)					
8	Capital conservation buffer requirement	2.5	2.5	2.5	2.5	2.5
9	Institution-specific countercyclical capital buffer	0.7	0.8	0.7	0.7	0.7
10	Global systemically important institution buffer	2.0	2.0	2.0	2.0	2.0
11	Combined buffer requirement	5.2	5.3	5.2	5.2	5.2
UK-11a	Overall capital requirements	15.8	15.9	15.8	15.8	15.8
12	CET1 available after meeting the total SREP own funds requirements	8.9	9.2	9.0	9.2	8.8
	Leverage ratio					
13	Total exposure measure excluding claims on central banks (\$bn)	2,571.1	2,657.8	2,514.5	2,528.0	2,574.8
14	Leverage ratio excluding claims on central banks (%)	5.6	5.7	5.7	5.7	5.6
	Additional leverage ratio disclosure requirements					
14a	Fully loaded expected credit losses ('ECL') accounting model leverage					F 0
	ratio excluding claims on central banks (%)	5.6	5.7	5.7	5.7	5.6
14b	Leverage ratio including claims on central banks (%)	4.9	5.0	5.0	5.0	4.8
14c	Average leverage ratio excluding claims on central banks (%)	5.5	5.7	5.7	5.6	5.7
14d	Average leverage ratio including claims on central banks (%)	4.9	5.0	5.0	4.9	4.9
14e	Countercyclical leverage ratio buffer (%)	0.2	0.3	0.3	0.3	0.2
EU-14d	Leverage ratio buffer requirement (%)	0.9	1.0	1.0	1.0	0.9
EU-14e	Overall leverage ratio requirements (%)	4.2	4.3	4.3	4.3	4.2
	Liquidity coverage ratio ('LCR') (\$bn) ¹			2121	245.0	
15	Total high-quality liquid assets	649.2	649.2	646.1	645.8	647.5
UK-16a	Cash outflows – total weighted value	656.3	657.9	660.1	666.6	672.3
UK-16b	Cash inflows – total weighted value	185.6	184.9	187.8	192.8	195.2
16	Total net cash outflow	470.7	473.0	472.3	473.8	477.1
_17	LCR (%)	138	137	137	136	136
10	Net stable funding ratio ('NSFR') (\$bn) ^{1,2}	4 500 4	4 500 7	4 5 4 4 4	4 574 0	1.004.0
18	Total available stable funding	1,523.4	1,538.7	1,544.1	1,571.9	1,601.9
19	Total required stable funding	1,064.5	1,092.7	1,115.1	1,151.1	1,162.3
_20	NSFR (%)	143	141	138	137	138

¹ We enhanced our liquidity consolidation process in 2024 by revising provisions that addressed historical limitations. As our Group LCR and NSFR are reported on an average basis, the benefit of these changes incrementally increased our LCR and NSFR by circa 3% and 11% during the year, respectively. Compared to year ended 31 December 2023, the increase in LCR was mainly driven by these enhancements. The associated NSFR increase driven by these changes was partly offset by higher required stable funding primarily due to a rise in financial investments and derivatives activities.

We enhanced our calculation processes during 1Q24 and our NSFR comparatives have been restated.

The Group is subject to the basic minimum capital requirements set out in Article 92 (1) of CRR II, namely that it maintains:

- Common equity tier 1 capital at 4.5% of RWAs;
- Tier 1 capital (CET1 capital plus AT1 capital) at 6% of RWAs; and
- Total capital (Tier 1 capital plus Tier 2 capital) at 8% of RWAs.

Rows UK-7a to UK-7c in the table above show how the Group's additional capital requirement (set by the PRA at 2.6% of RWAs) is allocated to each of these tiers of capital. Row UK-7d adds the total of these additional requirements to the CRR II minimum requirements to give a total capital supervisory review and evaluation process requirement of 10.6%.

Rows 8 to 11 set out buffer requirements to which the Group is also subject (and which must be satisfied by CET1). The Group's overall capital requirement in Row UK-11a, 15.8%, is the sum of these buffer requirements and the minimum capital requirements calculated above (in Row UK-7d).

IFRS 9 transitional arrangements

We have adopted the regulatory transitional arrangements of the CRR II for IFRS 9, including paragraph four of article 473a. These allow banks to add back to their capital base a proportion of the impact that IFRS 9 has upon their loan loss allowances. Our capital and ratios are presented under these arrangements throughout the tables in this disclosure, including the end point figures. This transitional period ended 1 January 2025.

Regulatory developments

Basel 3.1

Near-final rules in relation to the market risk, credit valuation adjustments, counterparty risk and operational risk elements of the Basel 3.1 package were published by the PRA in December 2023. In September 2024, the PRA published its near final rules on the credit risk, output floor and reporting and disclosure elements of the Basel 3.1 standards. The key changes include:

- an adjustment to the calculation of the output floor to reflect the different treatment of accounting provisions under the standardised approach and the Internal Ratings Based ('IRB') approach;
- changes to the credit conversion factors applicable to off balance sheet exposures:
- the introduction of new firm-specific adjustments in Pillar 2A for small and medium sized enterprises ('SMEs') and infrastructure lending and simplifying the definition of SMEs; and
- changes to the real estate requirements, such as in relation to valuation and the removal of commercial real estate floor.

In October 2024, the PRA published a consultation on incorporating the remaining elements of the UK's Capital Requirements Regulation into its rulebook, which included further changes arising from Basel 3.1, such as in relation to the securitisation framework.

In September 2024, the PRA's proposed implementation date for the package was 1 January 2026, with a transitional period of four years; however, in January 2025, this was delayed until 1 January 2027 to allow time for greater clarity in the implementation plans of the US. The transitional period has also been reduced to three years, so that the date of full implementation remains 1 January 2030.

We continue to assess the impact of Basel 3.1 standards on our capital, including the recent release of more beneficial PRA near-final rules, developments in the US and associated implementation challenges (including data provision). We expect that the impact on our CET 1 ratio at 1 January 2027 will be a modest benefit.

Across the other major jurisdictions that are key to HSBC, the progress of implementation varies:

- EU: The majority of the Basel 3.1 provisions went live on 1 January 2025; however, the market risk rules have been delayed until 1 January 2026.
- US: Final rules have yet to be published. The implementation date remains uncertain.
- Hong Kong: The final Basel 3.1 package went live on 1 January 2025

Counterparty risk management

In December 2024, the Basel Committee on Banking Supervision ('Basel') published final guidelines for counterparty risk ('CCR') management. The guidelines set out key practices for CCR management, which include the need to:

- conduct comprehensive due diligence;
- develop a comprehensive credit risk mitigation strategy;
- measure, control and limit CCR using a wide variety of complementary metrics; and
- build a strong CCR governance framework.

Large exposures

In October 2024, the PRA published proposals to implement the remaining elements of Basel's large exposures standards. These include changes relating to the use of credit risk mitigation techniques and limits on trading book exposures.

Environmental, social and governance ('ESG') risk

Globally, regulators and standard setters continue to publish multiple proposals and discussion papers on ESG topics. In recent years, this included multiple consultations on sustainability-related disclosure across jurisdictions including the UK, the EU, the US, Hong Kong and globally through the International Sustainability Standards Board ('ISSB') and Basel.

The work by Basel on climate-related financial risks across all three pillars of regulation, supervision and disclosure is ongoing. The initial work concluded that climate risk drivers, including physical and transition risks can be captured in traditional financial risk categories such as credit, market, operational and liquidity risks. As part of its wider efforts to improve ESG risk coverage, Basel is expected to finalise its work on the proposed Pillar 3 disclosures framework for climate-related financial risks in the first half of 2025 and has proposed an effective date of 1 January 2026.

Key changes

In 2024, the below changes have impacted our capital and liquidity adequacy.

Sale of our retail banking operations in France

In January 2024, we completed the sale of our retail banking operations in France and we recognised a \$2.0bn loss with no material incremental impact on CET1. Our leverage exposures decreased by \$15.4bn. In accordance with the terms of the sale, we retained a €7.1bn (\$7.4bn) portfolio of home and other loans. During the fourth quarter of 2024 we began to actively market this retained portfolio for sale. On 1 January 2025 we reclassified this portfolio as hold-to-collect-and sell and expect to recognise an estimated \$1bn fair value pre-tax loss in 'other comprehensive income' in equity on the remeasurement of the financial instruments in 1Q25. This had an immaterial impact on liquidity metrics.

Sale of our banking business in Canada

On 28 March 2024, HSBC completed the sale of HSBC Bank Canada to the Royal Bank of Canada. The associated gain on sale of \$4.8bn, including the recycling of related reserves, added approximately 0.8 percentage points to our CET1 ratio in Q1 2024. The Board approved a special dividend of \$0.21 per share, paid in June 2024 alongside the first interim dividend. Leverage exposures were reduced by \$85.4bn and Group RWAs reduced by \$35.8bn, including the impact from the foreign exchange hedges for the Canada sale proceeds and the operational risk RWAs post the PRA waiver permission granted in October 2024. This had an immaterial impact on liquidity metrics.

Sale of our banking business in Argentina

On 6 December 2024, HSBC completed the sale of HSBC Argentina to Grupo Financiero Galicia with a loss of \$1bn on disposal and recycling of FX reserves of \$5.2bn. As at 31 December 2024, this had an immaterial capital impact and leverage exposures decreased by \$6bn.This had an immaterial impact on liquidity metrics.

Other disposals

We have completed other disposals within the Group in 2024 which had immaterial impacts on capital and liquidity adequacy.

Hong Kong residential mortgages and countercyclical buffer

On 18 October 2024, the Hong Kong Monetary Authority ('HKMA') announced two changes with immediate effect. These were related to the removal of the 15% risk-weight floor for Hong Kong residential mortgages loans under the internal ratings-based approach. As directed by the PRA this floor was included for group reporting, this change resulted in a \$7.5bn decrease to our RWAs. Additionally HKMA announced a reduction to the countercyclical capital buffer ('CCyB') buffer from 1% to 0.5%.

For further details of assets held for sale, liabilities of disposal groups held for sale and business acquisitions, see page 3 and Note 23 on page 411 of the Annual Report and Accounts 2024.

Our new organisational structure

Effective from 1 January 2025, we have implemented a new organisational business structure that aims to unleash our full potential by building on our strong progress in recent years and driving our success into the future.

Hong Kong

Being the market leader in our home market of Hong Kong is one of our clear strengths and remains a strategic priority.

IJK

Our UK ring-fenced bank has a leading market position in our home market of the UK and will continue to be a critical pillar of our strategy.

Corporate and Institutional Banking

Our new Corporate and Institutional Banking business is a market leader in cross-border transaction banking and capital markets, and integrates our Commercial Banking business (outside the UK and Hong Kong) with our Global Banking and Markets business.

International Wealth and Premier Banking

This business brings together Premier focused banking (outside Hong Kong and the UK), our Global Private Bank, and our wealth manufacturing businesses of Asset Management and Insurance.

Group Operating Committee

To align with the new structure, a new Group Operating Committee comprised of 12 members will serve as the leading decision-making committee of the Group, replacing the Group Executive Committee of 18 members. The Group's functions will also be realigned to mirror the new business structure.

- Both our Hong Kong and UK businesses will serve our personal customers and commercial clients residing in these home markets.
- For further details on our senior management team, see page 242 of the Annual Report and Accounts 2024.

Linkage to the Annual Report and Accounts 2024

This section demonstrates the links between the Group's audited financial balance sheet and its regulatory counterpart.

Structure of the regulatory group

The regulatory consolidation is consistent with the accounting consolidation, with the following exceptions:

- the subsidiaries engaged in insurance activities are equity accounted in the regulatory consolidation and then deducted from CET1 capital, subject to thresholds;
- the special purpose entities ('SPEs') are excluded where significant risk has been transferred to third parties. Exposures to

- these SPEs are risk weighted as securitisation positions for regulatory purposes;
- the participating interests in banking associates are proportionally consolidated for regulatory purposes by including our share of assets, liabilities, profits and losses, and RWAs in accordance with the PRA's regulatory requirements; and
- non-participating significant investments are deducted from capital, subject to thresholds.
- For further details of the differences between the accounting and regulatory scope of consolidation and their definition of exposure, see pages 9 to 12.

The table below presents the reconciliation between the Group's financial balance sheet and the regulatory scope of consolidation. The regulatory balance sheet value cannot be directly reconciled to other tables within the regulatory scope of consolidation as it is not a measure of RWAs, but rather, it is derived from an accounting measure. It discloses an analysis of the regulatory reporting balance sheet by risk type.

Table 2: Reconciliation of regulatory own funds to balance sheet in the audited financial statements (UK CC2)

	Ref [†]	Accounting balance sheet	Deconsolidation of insurance/ other entities \$m		Equity accounting of Insurance subsidiaries \$m	Regulatory balance sheet
Assets		·	·			
Cash and balances at central banks		267,674	(11)	338	_	268,001
Hong Kong Government certificates of indebtedness		42,293	_	_	_	42,293
Trading assets		314,842	(418)	_	_	314,424
Financial assets designated and otherwise mandatorily measured at fair value through profit or loss		115,769	(103,195)	924	_	13,498
 of which: debt securities eligible as tier 2 issued by Group Financial Sector Entities ('FSEs') that are outside the regulatory scope of consolidation 		_	136	_	_	136
Derivatives	q	268.637	26	184		268,847
Loans and advances to banks	k	102,039	(883)	1,781		102,937
Loans and advances to customers	k	930,658	27	20,869		951,554
of which: lending eligible as Tier 2 to Group FSEs outside the regulatory scope of consolidation	q		335			331,334
- expected credit losses on IRB portfolios	h	(6,980)	_	_	_	(6,980)
Reverse repurchase agreements – non-trading		252,549	1,230	_	_	253,779
Financial investments		493,166	(7,104)	7,972	_	494,034
 of which: lending eligible as Tier 2 to Group FSEs outside the regulatory scope of consolidation 	q	_	524	_	_	524
Assets held for sale		27,234	(24,222)	_	_	3,012
 of which: goodwill and intangible assets 	е	5	_	_	_	5
 of which: expected credit losses on IRB portfolios 	h	(3)	_	_	_	(3)
Capital invested in insurance and other entities			3,709		3,513	7,222
- of which: positive goodwill on acquisition	е	_	234	_	_	234
Prepayments, accrued income and other assets		152,740	(6,634)	872	_	146,978
 of which: retirement benefit assets 	j	7,548	_		_	7,548
Current tax assets		1,313	(19)		_	1,294
Interests in associates and joint ventures		28,909	(474)	(6,041)		22,394
 of which: positive goodwill on acquisition 	е	462	(10)		_	452
Goodwill and intangible assets	е	12,384	(468)	914		12,830
Deferred tax assets	f	6,841	(1,115)	55		5,781
Total assets at 31 Dec 2024		3,017,048	(139,551)	27,868	3,513	2,908,878

Table 2: Reconciliation of regulatory own funds to balance sheet in the audited financial statements (UK CC2) (continued)

					Equity	
		•	Deconsolidation		accounting	Regulatory
		balance	of insurance/	of banking	of Insurance	balance
		sheet	other entities	associates	subsidiaries	sheet
	Ref †	\$m	\$m	\$m	\$m	\$m
Liabilities and equity						
Hong Kong currency notes in circulation		42,293	_	_	_	42,293
Deposits by banks		73,997	5	3,113	_	77,115
Customer accounts		1,654,955	4,246	21,503	_	1,680,704
Repurchase agreements – non-trading		180,880	(426)	840	_	181,294
Trading liabilities		65,982	_	_	_	65,982
Financial liabilities designated at fair value		138,727	(5,436)	_	_	133,291
- of which:						
included in tier 2	n,p,i	9,241	_	_	_	9,241
Derivatives		264,448	100	182	_	264,730
- of which: debit valuation adjustment	k	(24)	_	_	_	(24)
Debt securities in issue		105,785	(1,351)	_	_	104,434
Liabilities of disposals group held for sale		29,011	(23,419)	_	_	5,592
- of which: credit-related contingent liabilities and contractual						
commitments on IRB portfolios	h					_
Accruals, deferred income and other liabilities		130,340	(2,106)	1,607		129,841
Liabilities and equity						
Current tax liabilities		1,729	(282)	152		1,599
Insurance contract liabilities		107,629	(107,629)	_	_	_
Provisions		1,724	(20)	87		1,791
 of which: credit-related contingent liabilities and contractual commitments on IRB portfolios 	h	529	_	_	_	529
Deferred tax liabilities		1,317	9	_	_	1,326
Subordinated liabilities		25,958	_	419	_	26,377
- of which: included in tier 2	n,o,p	25,003	_	_	_	25,003
Total liabilities at 31 Dec 2024		2,824,775	(136,309)	27,903	_	2,716,369
Equity						
Called up share capital	а	8,973	_	_	_	8,973
Share premium account	а	14,810	_	_	_	14,810
Other equity instruments	I	19,070	_	_	_	19,070
Other reserves	b,c,g	(10,282)	2,284	(18)	6,053	(1,963)
Retained earnings	b,c,i	152,402	(5,332)	18	(2,540)	144,548
Total shareholders' equity		184,973	(3,048)	_	3,513	185,438
Non-controlling interests	d,m,p	7,300	(194)	(35)	_	7,071
Total equity at 31 Dec 2024		192,273	(3,242)	(35)	3,513	192,509
Total liabilities and equity at 31 Dec 2024		3,017,048	(139,551)	27,868	3,513	2,908,878

[†] The references (a)–(q) identify balance sheet components that are used in the calculation of regulatory capital in Table 6: Composition of Regulatory own funds (UK CC1). This table shows such items at their accounting values, which may be subject to analysis or adjustment in the calculation of regulatory capital shown in Table 6.

The table below lists the principal entities to which different accounting methods are applied under the regulatory scope of consolidation and refer to the structure of the regulatory group above.

Table 3: Principal entities with a different regulatory and accounting scope of consolidation (LI3)

				At 31 Dec	2024	
			Me	thod of regulator	y consolidation	on
	Principal activities	Method of accounting consolidation	Proportional consolidation	Neither consolidated nor deducted	Equity method	Deducted from capital subject to thresholds
Principal associates						
Saudi Awwal Bank	Banking services	Equity	•			
Principal insurance entities						
HSBC Life (International) Ltd	Life insurance manufacturing	Fully consolidated			•	•
HSBC Assurances Vie (France)	Life insurance manufacturing	Fully consolidated			•	•
Hang Seng Insurance Company Ltd	Life insurance manufacturing	Fully consolidated			•	•
HSBC Insurance (Singapore) Pte Ltd	Life insurance manufacturing	Fully consolidated			•	•
HSBC Life (UK) Ltd	Life insurance manufacturing	Fully consolidated			•	•
HSBC Life Assurance (Malta) Ltd	Life insurance manufacturing	Fully consolidated			•	•
HSBC Life Insurance Company Ltd	Life insurance manufacturing	Fully consolidated			•	•
HSBC Seguros S.A. (Mexico)	Life insurance manufacturing	Fully consolidated			•	•
HSBC Life (Singapore) Pte. Ltd.	Life insurance manufacturing	Fully consolidated			•	•
HSBC Insurance (Bermuda) Ltd	Reinsurance	Fully consolidated			•	•
Principal SPEs						
Metrix Portfolio Distribution plc	Securitisation	Fully consolidated		♦		
Neon Portfolio Distribution DAC	Securitisation	Fully consolidated		♦		
Regency Assets DAC	Securitisation	Fully consolidated		♦		

Measurement of regulatory exposures

This section sets out the main reasons why the measurement of regulatory exposures is not directly comparable with the financial information presented in the Annual Report and Accounts 2024.

The Pillar 3 Disclosures at 31 December 2024 are prepared in accordance with regulatory capital and liquidity adequacy concepts and rules, while the Annual Report and Accounts 2024 is prepared in

accordance with IFRSs. The regulatory exposure value includes an estimation of risk, and is expressed as the amount expected to be outstanding were the counterparty to default.

Moreover, regulatory exposure classes are based on different criteria from accounting asset types and are therefore not comparable on a line by line basis.

The table below provides a breakdown of assets and liabilities under the accounting and regulatory scope of consolidation, by risk types that form the basis for regulatory capital requirements and the link to regulatory exposure value.

Table 4: Differences between accounting and regulatory scopes of consolidation and mapping of financial statement categories with regulatory risk categories (LI1)

regulatory risk categories (LI1)							
				Са	rrying value of i	tems	
							Not subject
	Carrying			Subject to			to own funds
	values as	Carrying		the			requirements
	reported in	values under	Subject to	counter-	Subject to	Subject to	•
	published	scope of		party credit	the	the market	deduction
	financial	regulatory consolidation ¹	risk		securitisation	risk framework ⁴	from own
	statements						funds
	\$bn	\$bn	\$bn	\$bn	\$bn	\$bn	\$bn
Assets							
Cash and balances at central banks	267.7	268.0	268.0	_	_		
Hong Kong Government certificates of	40.0	40.0	40.0				
indebtedness	42.3	42.3	42.3				
Trading assets	314.8	314.4	3.5	25.2	0.1	312.4	
Financial assets designated and otherwise	445.0	40.5	7.0		0.4		
mandatorily measured at fair value	115.8	13.5	7.6	5.6	0.1		0.2
Derivatives	268.6	268.8		268.4	0.4	268.8	
Loans and advances to banks	102.0	102.9	102.5	0.4			
Loans and advances to customers	930.7	951.6	919.0	0.2	31.9		0.5
Reverse repurchase agreements – non-trading	252.5	253.8		253.8			
Financial investments	493.2	494.0	491.8		1.8		0.4
Assets held for sale	27.2	3.0	3.0				_ _
Capital invested in insurance and other entities		7.2	3.4				3.8
Prepayments, accrued income and other assets	152.8	147.1	53.0	65.2		13.7	21.8
Current tax assets	1.3	1.3	1.3				
Interests in associates and joint ventures ⁵	28.9	22.4	10.6				11.8
Goodwill and intangible assets	12.4	12.8					12.3
Deferred tax assets	6.8	5.8	5.2			_ _	0.6
Total assets at 31 Dec 2024	3,017.0	2,908.9	1,911.2	618.8	34.3	594.9	51.4
Liabilities							
Hong Kong currency notes in circulation	42.3	42.3					42.3
Deposits by banks	74.0	77.1					77.1
Customer accounts	1,655.0	1,680.7					1,680.7
Repurchase agreements – non-trading	180.9	181.3		181.3			1,000.7
Trading liabilities	66.0	66.0	_	18.4	_	66.0	
Financial liabilities designated at FV	138.7	133.3		- 10.4		63.8	69.5
Derivatives	264.4	264.7	_	264.7	_	264.7	
Debt securities in issue	105.8	104.4	_		_		104.4
Liabilities for disposal groups held for sale	29.0	5.6			_	_	5.6
Accruals, deferred income, and other liabilities	130.4	129.9		58.0			71.9
Current tax liabilities	1.7	1.6		- 50.0			1.6
Liabilities under insurance contract	107.6	- 1.0					-
Provisions	1.7	1.8	0.7				1.1
Deferred tax liabilities	1.3	1.3	0.9		_		2.8
Subordinated liabilities	26.0	26.4					26.4
Total liabilities at 31 Dec 2024	2,824.8	2,716.4	1.6	522.4		394.5	2,083.4
TOTAL HADMINGS OF DIE CONT.	2,024.0	2,110.4	1.0	J22.4	_	334.3	2,003.4

¹ The amounts shown do not equal the sum of the amounts shown in the remaining columns of this table for line items 'Derivatives', 'Trading assets', 'Assets held for sale' and 'Prepayments, accrued income and other assets' as some of the assets in this column are subject to regulatory capital charges for credit risk, counterparty credit risk and market risk.

The amounts shown include both non-trading book and trading book.

³ The amounts shown are non-trading book positions. Trading book securitisation positions are included in the market risk column.

⁴ The amounts shown do not consider exposures subject to foreign exchange risk RWA calculations.

⁵ Our investment in BoCom is recognised as a significant investment in a financial sector entity. At 31 December 2024, \$11.4bn was deducted from CET1 and \$26.4bn RWAs were reported for this investment, with a related exposure of \$10.6bn.

The table below shows the main differences between the accounting balances and the regulatory exposure amounts by risk type and the on and off-balance sheet treatment of the exposures. Row 1 and 2 excludes amounts subject to deduction from capital or not subject to regulatory capital requirements. Row 12 'exposure amounts considered for regulatory purposes' is disclosed only for credit risk and securitisation frameworks as a more meaningful measure for those risk types, no exposures are reported against the market risk framework.

Table 5: Main sources of differences between regulatory exposure amounts and carrying values in financial statements (LI2)

		of which items subject to:				
			Credit risk	Securitisation	CCR	Market risk
		Total	framework	framework	framework	framework
		\$bn	\$bn	\$bn	\$bn	\$bn
1	Assets carrying value amount under the scope of regulatory consolidation (as					
	per template LI1)	2,857.5	1,911.2	34.3	618.8	594.9
2	Liabilities carrying value amount under the regulatory scope of consolidation					
	(as per template LI1)	633.0	1.6	_	522.4	394.5
3	Total net amount under the regulatory scope of consolidation	2,224.5	1,909.6	34.3	96.4	200.4
4	Off-balance-sheet amounts	945.9	906.6	22.3	17.0	
6	Differences due to different netting rules, other than those already included in row 2	37.0	16.5	_	20.5	
7	Differences due to consideration of provisions	7.6	7.6	_	_	
8	Differences due to the use of credit risk mitigation techniques (CRMs)	(70.2)	(19.6)	(1.7)	(48.9)	
9	Differences due to credit conversion factors	(630.6)	(630.6)	_	_	
10	Differences due to Securitisation with risk transfer	(10.8)	_	(10.8)	_	
11	Other differences	73.9	0.3	(0.2)	73.8	
12	Exposure amounts considered for regulatory purposes at 31 Dec 2024	2,577.3	2,190.4	43.9	158.8	_

Explanations of differences between carrying values in financial statements and regulatory exposure amounts

Differences in netting rules

The increase from carrying value due to differences in netting rules is the reversal of amounts deducted from gross loans and advances to customers in the published financial statements in accordance with the offsetting criteria of IAS 32 'Financial instruments: presentation'. This also includes the differences between accounting carrying values versus regulatory exposures considered for counterparty credit risk reporting purposes.

Differences due to consideration of provisions

The carrying value of assets is net of credit risk adjustments. The regulatory exposure value under IRB approaches is before deducting credit risk adjustments.

Differences due to the use of credit risk mitigation techniques

Exposure value under the standardised approach ('SA') is calculated after deducting credit risk mitigation whereas accounting value is before such deductions.

Differences due to credit conversion factors

Exposure value of off-balance sheet items are calculated after the application of the relevant conversion factors as defined in the CRR II.

Differences due to securitisation with risk transfer

Securitisation exposure is based on risk transfer of exposure at default ('EAD') of underlying loans instead of accounting value.

Other differences

Other differences primarily relate to exposures at default ('EAD') modelling impacts, potential future exposures ('PFE') and adjustments relating to FSR for counterparty credit risk, IFRS 9 transitional arrangements applicable to standardised credit risk exposure and dilution risk.

Explanation of differences between accounting fair value and regulatory prudent valuation

Fair value is defined as the best estimate of the price that would be received to sell an asset or be paid to transfer a liability in an orderly transaction between market participants at the measurement date.

Some fair value adjustments already reflect valuation uncertainty to some degree. These are market data uncertainty and model uncertainty. However, it is recognised that a variety of valuation techniques using stressed assumptions and combined with the range of plausible market parameters at a given point in time may still generate unexpected uncertainty beyond fair value.

A series of additional valuation adjustments ('AVAs') are therefore required to reach a specified degree of confidence (the 'prudent value') set by regulators that differs both in terms of scope and measurement from HSBC's own quantification for disclosure purposes.

AVAs should consider at the minimum: market price uncertainty, bidoffer (close-out) uncertainty, model risk, concentration, administrative costs, unearned credit spreads and investing and funding costs.

AVAs are not limited to level 3 exposures, for which a 95% uncertainty range is already computed and disclosed, but must also be calculated for any exposure for which the exit price cannot be determined with a high degree of certainty. Table 68 presents further information on the prudent valuation adjustment.

For further details of level 3 exposures, see Note 12 on page 386 of the Financial Statements of the Annual Report and Accounts 2024.

Risk management

Our risk management framework

We aim to use a comprehensive risk management approach across the organisation and across all risk types, underpinned by our culture and values. This is outlined in our risk management framework ('RMF'), including the key principles and practices that we employ in managing material risks, both financial and non-financial.

The framework fosters continuous monitoring and promotes risk awareness and a positive risk culture. It encourages a sound operational and strategic decision-making and escalation process. It also supports a consistent approach to identifying, assessing, managing and reporting the risks we accept and incur in our activities, with clear accountabilities.

- For further details of our risk management framework, see page 128 of the Annual Report and Accounts 2024.
- For details of the management and mitigation of principal risks facing the Group, see page 131 of the Annual Report and Accounts 2024.
- For details on our management of treasury risk, see page 16, and for commentary on hedging strategies, see pages 93 and 99.

Material risks

Pillar 3 requires that all material risks be disclosed to provide a comprehensive view of a bank's risk profile. In addition to the disclosure in this document, other information on material risks can be found on page 136 of the Annual Report and Accounts 2024. Please see the following sections for further details on:

- Credit risk (refer to page 138 of the Annual Report and Accounts 2024)
- Treasury risk (refer to page 200 of the Annual Report and Accounts 2024)
- Market risk (refer to page 216 of the Annual Report and Accounts 2024)
- Climate risk (refer to page 219 of the Annual Report and Accounts 2024)
- Resilience risk (refer to page 229 of the Annual Report and Accounts 2024)
- Regulatory compliance risk (refer to page 229 of the Annual Report and Accounts 2024)
- Financial crime risk (refer to page 230 of the Annual Report and Accounts 2024)
- Model risk (refer to page 230 of the Annual Report and Accounts 2024)
- Financial risk (refer to page 234 of the Annual Report and Accounts 2024)
- Insurance manufacturing operations risk (refer to page 231 of the Annual Report and Accounts 2024)
- For further details on our risk management see page 126 of the Annual Report and Accounts 2024.

Culture

HSBC understands the importance of a strong culture. Our culture refers to our shared attitudes, beliefs, values and standards that shape behaviours including those related to risk awareness, risk taking and risk management. It is instrumental in aligning the behaviours of individuals with our attitude to assuming and managing risk, which helps to ensure that our risk profile remains in line with our risk appetite. The fostering of a strong culture is a key responsibility of our senior executives.

Our culture is also reinforced by our approach to remuneration. Individual awards, including those for senior executives, are based on compliance with our values and the achievement of financial and non-financial objectives that are aligned to our risk appetite and global strategy.

For further details of risk and remuneration, see page 304 of the Annual Report and Accounts 2024.

Remuneration

Our remuneration policy, including the remuneration committee membership and activities, remuneration strategy and remuneration details of HSBC's identified staff and material risk takers, is available in the Directors' Remuneration Report on page 279 of the Annual Report and Accounts 2024.

Risk governance

The Board has ultimate responsibility for the effective management of risk and approves our risk appetite. It is advised on risk-related matters by the Group Risk Committee ('GRC').

For further details of the activities of the GRC, see pages 271 to 278 of the Annual Report and Accounts 2024.

Executive accountability for the ongoing monitoring, assessment and management of the enterprise-wide risk environment, and the effectiveness of the risk management framework resides with the Group Chief Risk and Compliance Officer ('GCRCO'). The GCRCO is supported by the Group Risk Management Meeting ('GRMM') of the Group Executive Committee ('GEC').

For further details of risk governance, see page 128 of the Annual Report and Accounts 2024.

Day-to-day responsibility for risk management is delegated to senior managers with individual accountability for decision making. These senior managers are supported by global functions. All our people have a role to play in risk management.

These roles are defined using the three lines of defence model, which takes into account our business and functional structures.

We use a defined executive risk governance structure to ensure appropriate oversight and accountability for risk, which facilitates the reporting and escalation to the Risk Management Meetings ('RMM').

For further details of the Group's three lines of defence model and executive risk governance structures, see page 129 of the Annual Report and Accounts 2024.

Risk appetite

Risk appetite is a key component of our management of risk. It defines our desired forward-looking risk profile, and informs the strategic and financial planning process. At HSBC, risk appetite is managed through a global risk appetite framework and articulated in a risk appetite statement ('RAS'), which is reviewed and approved by the Board on the advice of the GRC, to make sure it remains fit for purpose.

Our risk appetite provides an objective baseline to guide strategic decision making, helping to ensure that planned business activities provide an appropriate balance of return for the risk assumed, while remaining within acceptable risk levels. It is also integrated within other risk management tools, such as stress testing, to help ensure consistency in risk management.

For further details of our risk management tools and risk appetite, see page 127 of the Annual Report and Accounts 2024.

Global Risk and Compliance

We have a dedicated Global Risk and Compliance function, headed by the GCRCO, which is responsible for the Group's risk management framework. This includes establishing global policy, monitoring risk profiles, and identifying and managing forward-looking risk. Global Risk and Compliance is made up of sub-functions covering all risks to our business. It is independent from the global businesses to provide challenge, appropriate oversight and balance in risk versus return decisions. The global Risk and Compliance function operates in line with the three lines of defence model and plays an important role in reinforcing our culture and values. It focuses on creating an environment that encourages our people to speak up and do the right thing.

For further details of Global Risk and Compliance, see page 129 of the Annual Report and Accounts 2024.

Stress testing

HSBC operates a wide-ranging stress testing programme that supports our risk management and capital and liquidity planning and assesses our capital and liquidity strength through a examination of our resilience to external shocks. As well as undertaking regulatory-driven stress tests, we conduct our own internal stress tests to understand the nature and level of material risks, quantify the impact of such risks and develop plausible mitigating actions. The outcome of a stress test provides management with key insights into the impact of severely adverse events on the Group and provides an indication to regulators of the Group's resilience to shocks and financial stability.

The Group stress testing programme is overseen by the GRC, and results are reported, where appropriate, to the GRMM and GRC.

For further details of stress testing and the Group's regulatory stress test results, see page 129 of the Annual Report and Accounts 2024.

Risk management and internal control systems

The Directors are responsible for maintaining and reviewing the effectiveness of the risk management and internal control systems, and for determining the aggregate level of risk and the risk types they are willing to accept in achieving the Group's business objectives. On behalf of the Board, the GRC has responsibility for the oversight of risk management and internal controls other than for financial reporting, and the GAC has responsibility for oversight of risk management and internal controls over financial reporting.

The Directors, through the GRC and the GAC, receive regular updates and confirmation that management has taken, or is taking, the necessary actions to remediate any failings or weaknesses identified through the operation of our framework of controls.

For further details of HSBC's key risk management and internal control procedures, see page 271 of the Annual Report and Accounts 2024, where the Report of the Directors on the effectiveness of internal controls can also be found.

Risk measurement and reporting systems

Our risk measurement and reporting systems are designed to help ensure that risks are comprehensively captured with all the attributes necessary to support well-founded decisions, that those attributes are accurately assessed, and that information is delivered in a timely manner for those risks to be successfully managed and mitigated.

Risk measurement and reporting systems are also subject to a governance framework designed to help ensure that their build and implementation are fit for purpose and functioning appropriately. Risk information system development is a key responsibility of the Global Risk and Compliance function, while the development and operation of risk rating and management systems and processes are ultimately subject to the oversight of the Board.

We are advancing a comprehensive initiative aimed at strengthening our global regulatory reporting processes and making them more sustainable. This multifaceted programme includes enhancing data, consistency and controls.

We remain committed to investing in the reliability and resilience of our technology systems and critical services, which support all parts of our business. We assess our third parties to ensure they deliver the standard of services we require to provide resilient services to our customers. We do so to help protect our customers, affiliates and counterparties, and to help ensure that we minimise any disruption to services. In our approach to defending against these threats, we invest in business and technical controls to help us prevent, detect, manage and recover from issues in a timely manner within our risk appetite.

Risk measurement and reporting structures deployed at Group level are applied throughout global businesses and major operating subsidiaries through a common operating model for integrated risk management and control. This model sets out the respective responsibilities of Group, global business, region and country level risk and compliance functions in respect of risk governance and oversight, approval authorities and lending guidelines, global and local scorecards, management information and reporting, and relations with third parties such as regulators, rating agencies and auditors.

Global Risk analytics and model governance

The Global Risk function manages a number of analytics disciplines supporting the development and management of models, including those for risk rating, behavioural scoring, economic capital, climate and stress testing, covering different risk types and business segments.

The analytics functions support technical responses to industry developments and regulatory policy in the field of risk analytics. They develop HSBC's global risk models, and oversee local model development and use across the Group as we work towards our implementation targets for internal ratings based approaches ('IRB'). The Global Model Risk Committee ('GMRC') is the primary committee responsible for the oversight of model risk globally. It serves an important role in providing strategic direction on the management of models and their associated risks to HSBC's businesses globally. It is also an essential element of the governance structure for model risk management. GMRC is supported by the Global Model Oversight Forum ('GMOF'), which is responsible for model risk management within the functional areas, including wholesale credit risk, market risk, wealth and personal banking risk, and Finance. All new or materially changed IRB capital models require pre-approval from the PRA.

The GMRC meets regularly and reports to the GRMM. The GMRC is chaired by the GCRCO and its membership includes the chief executive officers ('CEOs') of the global businesses, and senior executives from risk and finance. Through its oversight of the GMOF, it identifies emerging risks for all aspects of the risk rating system, ensuring that model risk is managed within our RAS, and formally advises the GRMM on any material model-related issues. The governance structure is implemented consistently at regional levels, with regional model oversight forums reporting to the regional model risk committees, which in turn report to the GMRC.

Models are also subject to an independent validation process and governance oversight by the model risk management and independent model review team within Global Risk. The team helps to challenge the modelling approaches used across the Group. It also helps to ensure that the performance of those models is transparent and that any limitations are visible to key stakeholders. The model risk management function is separate from the risk analytics functions that are responsible for the development of models.

Model risk remains a key area of focus given the regulatory scrutiny in this area, with local regulatory exams taking place in many jurisdictions and the PRA's supervisory statement 1/23 (SS1/23) coming into effect, This provided detailed principles-based guidance on how model risk should be managed, and further developments in policy are also expected from other regulators.

Pillar 3 Disclosures at 31 December 2024

Global risk policy and procedures govern the development, validation, independent review, approval, implementation, performance monitoring of credit risk rating models and any model changes. The development and use of data and models to meet local requirements are the responsibility of global businesses or functions, as well as regional and/or local entities under the governance of their own management, subject to overall Group policy and oversight.

Regulatory and other expectations continue to evolve with regards to our capability and practice of model risk management.

In the 'Risk review, Our Responsibilities' section of the Annual Report and Accounts 2024 on page 129 we outline how roles are defined using the three lines of defence model, which takes into account our business and functional structures. The internal audit function work as part of the third line of defence and is independent to the global risk function

Model risk management works closely with businesses to help ensure that models in development meet risk management, pricing and capital management needs. Global internal audit provides assurance over the risk management framework for models.

Additional assurance work is performed by the model risk governance teams, which act as second lines of defence. The teams test whether controls implemented by model users comply with model risk policy and if model risk standards are adequate.

Within this Pillar 3 document, relevant risk types disclose their model information and governance in further detail to meet CRR II requirements.

For further details of model risk management, see page 230 of the Annual Report and Accounts 2024.

Treasury Risk Management

Within the risk framework, treasury risk is the risk of having insufficient capital, liquidity or funding resources to meet financial obligations and satisfy regulatory requirements. This includes the risk of an adverse impact on earnings or capital due to structural and transactional foreign exchange exposures, as well as changes in market interest rates, together with pension risk and insurance risk.

The Global Head of Traded and Treasury Risk Management and Risk Analytics is the accountable risk steward for all treasury risks. The Group Treasurer is the risk owner for all treasury risks, with the exception of pension risk and insurance risk. The Group Treasurer coowns pension risk with the Group Head of Performance and Reward. Insurance risk is owned by the Chief Executive Officer for Global Insurance. Insurance risk is owned by the Chief Executive Officer for Global Insurance.

The Global Treasury function actively manages capital risk, liquidity risk, interest rate risk in the banking book and non-trading book foreign exchange risk on an ongoing basis, supported by the Holdings Asset and Liability Management Committee ('ALCO') and local ALCOs, overseen by Treasury Risk Management and the RMM. Pension risk is overseen by a network of local and regional pension financial risk management meetings.

The Group uses stress testing to inform management of the capital and liquidity needed to withstand internal and external shocks, including a global economic downturn or a systems failure.

Outside the stress testing framework, other risks may be identified that have the potential to affect our RWAs, capital and/or liquidity position. Downside and upside scenarios are assessed against our management objectives, and mitigating actions are assigned as necessary.

For further details of our approach to treasury risk management including capital risk, liquidity risk, interest rate in the banking book, non-trading foreign exchange exposure and pension risk, see page 200 of the Annual Report and Accounts 2024.

Capital risk

Our approach to capital management is driven by our strategic and organisational requirements, taking into account the regulatory, economic and commercial environment. We aim to maintain a strong capital base to support the risks inherent in our business and invest in accordance with our strategy, meeting both consolidated and local regulatory capital requirements at all times.

As at 31 December 2024, capital securities included in the capital base of HSBC have been issued on a fully compliant or grandfathered basis in accordance with the Capital Requirements Regulation. Capital securities are regularly reviewed for compliance with guidelines. A list of the main features of our capital instruments and eligible liabilities, in accordance with Articles 437 and 437a of CRR II is also published on our website at www.hsbc.com with reference to our balance sheet on 31 December 2024. The full terms and conditions of our securities are also available at www.hsbc.com.

HSBC has no current or foreseen practical or legal impediment envisaged with regard to planned dividends or payments from material subsidiaries to the parent. However, the ability of subsidiaries to pay dividends or advance monies to HSBC Holdings depends on, among other things, their respective local regulatory capital and banking requirements, exchange controls, statutory reserves, and financial and operating performance. None of our subsidiaries that are excluded from the regulatory consolidation had capital resources below their minimum regulatory requirement as at 31 December 2024

Liquidity risk

We aim to ensure that management has oversight of our liquidity and funding risks at Group and entity level by maintaining comprehensive policies, metrics and controls. We maintain a strong liquidity base to support the risks inherent in our business and invest in accordance with our strategy, meeting both consolidated and local regulatory requirements at all times. We manage liquidity and funding risk at an operating entity level to help ensure that obligations can be met in the jurisdiction under which they fall, and generally without reliance on other parts of the Group.

Interest rate risk in the banking book

Interest rate risk in the banking book ('IRRBB') is the risk of an adverse impact to earnings or capital due to changes in market interest rates or changes in expected interest rate repricing of client products that impact banking book positions. It is generated by our non-traded assets and liabilities, specifically loans, deposits and financial instruments that are not held for trading intent or in order to hedge positions held with trading intent.

Our global IRRBB risk management framework is designed to ensure that all material sources of IRRBB are identified, measured, managed, and monitored, with policies and frameworks in place.

Our IRRBB risks are measured and managed using a combination of economic value and earnings based measures to ensure that the balance between stabilising earnings and generating value sensitivity is managed appropriately. These metrics measure IRRBB risks across the banking book, to support the overall monitoring against risk appetite including:

- Banking net interest income sensitivity; and
- Economic value of equity sensitivity.
- For further details of IRRBB, see page 28.

Non-trading book foreign exchange exposures

Structural foreign exchange exposures arise from capital invested or net assets in a foreign operation. A foreign operation is an entity that is a subsidiary, associate, joint venture or branch of a reporting entity the activities of which are based or conducted in a country or currency other than those of the reporting entity. An entity's functional reporting currency is normally that of the primary economic environment in which the entity operates.

Our structural foreign exchange exposures are managed with the primary objective of ensuring, where practical, that our consolidated capital ratios and the capital ratios of individual banking subsidiaries are largely protected from the effect of changes in exchange rates. We hedge structural foreign exchange positions where it is capital efficient to do so, and subject to approved limits. This is achieved through a combination of net investment hedges and economic hedges. Hedging positions are monitored and rebalanced periodically to manage RWA or downside risks associated with HSBC's foreign currency investments.

Transactional foreign exchange risk arises primarily from day-to-day transactions in the banking book generating profit and loss or fair value through other comprehensive income reserves in a currency other than the reporting currency of the operating entity.

Transactional foreign exchange exposure generated through profit and loss is periodically transferred to Markets and Securities Services ('MSS') and managed within limits, with the exception of limited residual foreign exchange exposure arising from timing differences or for other reasons. Transactional foreign exchange exposure generated through other comprehensive income reserves is managed by Global Treasury within the approved appetite.

Own funds

The table below provides a detailed breakdown of the key components of our CET1, tier 1 ('T1') and tier 2 ('T2') capital, and the regulatory adjustments impacting our capital base on a transitional basis. Additional value adjustments are calculated on assets measured at fair value. The minimum deductions for holdings of own CET1, AT1 and T2 capital instruments are set by the PRA. The threshold deduction for significant investments relates to balances recorded on numerous lines on the balance sheet and includes: investments in insurance subsidiaries and non-consolidated associates; other CET1 equity held in financial institutions; connected funding of a capital nature; and other balance sheet lines.

Table 6: Composition of Regulatory own funds (UK CC1)

			A	t
			31 Dec 2024	31 Dec 2023
		Ref †	\$m	\$m
	Common equity tier 1 ('CET1') capital: instruments and reserves			
1	Capital instruments and the related share premium accounts		22,378	22,964
	- ordinary shares	а	22,378	22,964
2	Retained earnings ¹	b	138,959	135,614
3	Accumulated other comprehensive income (and other reserves) ¹	С	(8,410)	(7,195)
5	Minority interests (amount allowed in consolidated CET1)	d	3,960	3,917
UK-5a	Independently reviewed interim net profits net of any foreseeable charge or dividend	b	7,184	10,568
6	Common equity tier 1 capital before regulatory adjustments		164,071	165,868
	Common equity tier 1 capital: regulatory adjustments			
7	Additional value adjustments (negative amount)		(1,141)	(1,238)
8	Intangible assets (net of related deferred tax liability) (negative amount)	е	(12,890)	(13,378)
10	Deferred tax assets that rely on future profitability excluding those arising from temporary differences (net of			
	related tax liability where the conditions in Article 38 (3) CRR II are met) (negative amount)	f	(3,513)	(4,308)
11	Fair value reserves related to gains or losses on cash flow hedges of financial instruments that are not valued			
	at fair value	g	1,057	992
12	Negative amounts resulting from the calculation of expected loss amounts	h	(3,125)	(2,304)
14	Gains or losses on liabilities valued at fair value resulting from changes in own credit standing	i	1,243	932
15	Defined-benefit pension fund assets (negative amount)	j	(5,651)	(5,773)
16	Direct and indirect holdings of own CET1 instruments (negative amount)		(40)	(40)
19	Direct, indirect and synthetic holdings by the institution of the CET1 instruments of financial sector entities		(,	(12)
.0	where the institution has a significant investment in those entities (amount above 10% threshold and net of			
	eligible short positions)		(15,076)	(14,309)
27a	Other regulatory adjustments to CET1 capital (including IFRS 9 transitional adjustments when relevant)	k	(24)	59
28	Total regulatory adjustments to common equity tier1		(39,160)	(39,367)
29	Common equity tier 1 ('CET1') capital		124,911	126,501
	Additional tier 1 ('AT1') capital: instruments		,-	
30	Capital instruments and the related share premium accounts		19,070	17,719
31	- classified as equity under IFRSs	1	19,070	17,719
34	Qualifying tier 1 capital included in consolidated AT1 capital (including minority interests not included in CET1)		10,010	.,,,,
0.	issued by subsidiaries and held by third parties	m	216	13
36	Additional tier 1 capital before regulatory adjustments		19,286	17,732
	Additional tier 1 capital: regulatory adjustments		10/200	.,,,,,,
37	Direct and indirect holdings of own AT1 instruments (negative amount)		(70)	(70)
43	Total regulatory adjustments to additional tier 1 capital		(70)	(70)
44	Additional tier 1 capital		19,216	17,662
45	Tier 1 capital (T1 = CET1 + AT1)		144,127	144,163
	Tier 2 capital: instruments and provisions		177,127	144,100
46	Capital instruments and the related share premium accounts	n	24,292	22,848
UK-47b	Amount of qualifying items referred to in Article 494b (2) CRR II subject to phase out from T2	0	3,858	4,112
48			3,030	4,112
40	Qualifying own funds instruments included in consolidated T2 capital (including minority interests and AT1 instruments not included in CET1 or AT1) issued by subsidiaries and held by third parties	р	1,184	1,188
51	Tier 2 capital before regulatory adjustments	Р	29,334	28,148
- 51	· · · · · · · · · · · · · · · · · · ·		23,334	20,140
52	Tier 2 capital: regulatory adjustments Direct, indirect and synthetic holdings by an institution of own T2 instruments and subordinated loans			
	(negative amount)		(80)	(80)
55	Direct and indirect holdings by the institution of the T2 instruments and subordinated loans of financial sector entities where the institution has a significant investment in those entities (net of eligible short positions)	q	(995)	(1,027)
57	Total regulatory adjustments to tier 2 capital		(1,075)	(1,107)
58	Tier 2 capital		28,259	27,041
59	Total capital (TC = T1 + T2)		172,386	171,204
60	Total Risk exposure amount		838,254	854,114
	·			

Table 6: Composition of Regulatory own funds (UK CC1) (continued)

			At
		31 Dec 2024	31 Dec 2023
	R	ef t \$m	\$m
	Capital ratios and buffers (%)		
61	Common equity tier 1 (as a percentage of total risk exposure amount)	14.9	14.8
62	Tier 1 (as a percentage of total risk exposure amount)	17.2	16.9
63	Total capital (as a percentage of total risk exposure amount)	20.6	20.0
64	Institution CET1 overall capital requirement (per Article 92 (1) CRR II, plus additional requirement in accordance with point (a) of Article 104(1) CRR II, and combined buffer requirement in accordance with Article 128(6) CRR II as a percentage of risk exposure amount)	11.1	11.2
65	- capital conservation buffer requirement	2.5	
66	- countercyclical buffer requirement	0.7	
67a	- Global systemically important institution ('G-SII') buffer	2.0	2.0
68	Common equity tier 1 available to meet buffers	8.9	8.8
	Amounts below the threshold for deduction (before risk weighting)		
72	Direct and indirect holdings of own funds and eligible liabilities of financial sector entities where the institution does not have a significant investment in those entities (amount below 10% threshold and net of eligible short positions)	3,497	3,965
73	Direct and indirect holdings by the institution of the CET1 instruments of financial sector entities where the institution has a significant investment in those entities (amount below 17.65% thresholds and net of eligible short positions)	13,997	14,069
75	Deferred tax assets arising from temporary differences (amount below 17.65% threshold, net of related tax liability where the conditions in Article 38 (3) CRR II are met)	4,364	4,694
	Applicable caps on the inclusion of provisions in tier 2		
77	Cap on inclusion of credit risk adjustments in T2 under standardised approach	2,251	2,128
79	Cap for inclusion of credit risk adjustments in T2 under internal ratings-based approach	3,015	3,226

[†] The references (a)–(q) identify balance sheet components in 'Table 2: Reconciliation of regulatory own funds to balance sheet in the audited financial statements (UK CC2)', which are used in the calculation of regulatory capital. This table shows how they contribute to the regulatory capital calculation. Their contribution may differ from their accounting value in Table 2 as a result of adjustment or analysis to apply regulatory definitions of capital.

The CET1 capital ratio increased marginally from 14.8% at 31 December 2023 to 14.9% at 31 December 2024, reflecting a decrease in RWAs of \$15.8bn, partly offset by a decrease in CET1 capital of \$1.6bn. The key drivers of the overall rise in our CET1 ratio during the year were:

- a 0.9 percentage point increase, excluding foreign exchange fluctuations, was primarily driven by a reduction in RWAs through strategic transactions, and the gain on disposal of our Canadian banking business adjusted for the \$0.21 per share special dividend:
- a 0.9 percentage point reduction excluding foreign exchange fluctuations, owing to higher RWAs mainly driven by organic balance sheet growth and credit migrations excluding strategic transactions:
- a 0.4 percentage point increase from capital generation, mainly through regulatory profits and other reserves less dividends and share buy-backs; and
- a 0.3 percentage point decrease from the adverse impact of regulatory deductions and foreign exchange fluctuations on our RWAs and capital.

Our Pillar 2A requirement at 31 December 2024, as per the PRA's Individual Capital Requirement based on a point-in-time assessment, was equivalent to 2.6% of RWAs, of which 1.5% was required to be met by CET1. Throughout 2024, we complied with the PRA's regulatory capital adequacy requirements.

may differ from their accounting value in Table 2 as a result of adjustment or analysis to apply regulatory definitions of capital.

We have updated the classification between components of shareholders' equity to present 'Retained Earnings' in Row 2 and 'Accumulated other comprehensive income (and other reserves) in Row 3. The comparatives have been aligned.

Capital buffers

Our geographical breakdown and institution-specific countercyclical capital buffer ('CCyB') disclosure is provided on page 107 of this document. The global systemically important bank ('G-SIB') indicators disclosure is published annually on our website, www.hsbc.com/investors.

Pillar 1 minimum capital requirements and RWA flow

Pillar 1 covers the minimum capital resource requirements for credit risk, counterparty credit risk ('CCR'), equity, securitisation, market risk and operational risk. These requirements are expressed in terms of RWAs

Risk category	Scope of permissible approaches	Our approach
Credit risk	The Basel committee's framework applies three approaches of increasing sophistication to the calculation of Pillar 1 credit risk capital requirements. The most basic level, the standardised approach, requires banks to use external credit ratings to determine the risk weightings applied to rated counterparties. Other counterparties are grouped into broad categories, and standardised risk weightings are applied to these categories. The next level, the Foundation IRB ('FIRB') approach, allows banks to calculate their credit risk capital requirements on the basis of their internal assessment of a counterparty's probability of default ('PD'), but subjects their quantified estimates of EAD and loss given default ('LGD') to standard supervisory parameters. Finally, the advanced IRB ('AIRB') approach allows banks to use their own internal assessment in both determining PD and quantifying EAD and LGD.	For consolidated Group reporting, we have adopted the AIRB approach for the majority of our business. Some portfolios remain on the standardised or FIRB approaches: pending the issuance of local regulations or model approval; following supervisory prescription of a non-advanced approach; or under exemptions from IRB treatment.
Counterparty credit risk	CCR covers the risk of counterparty default and potential mark-to-market losses in derivatives and securities financing transactions ('SFTs'). The potential for mark-to-market losses is known as CVA risk. The exposure value, for a given netting set, is determined either by the credit risk mitigation ('CRM') approach, Standardised Approach for Counterparty Credit Risk ('SA-CCR'), or by IMM. For SFTs either the simple or comprehensive approach is applied to recognition of collateral with SFTs or the Value at Risk ('VaR') approach. For CVA, permissible approaches are the Standardised Approach ('SA-CVA') and Advanced Approach ('AA-CVA').	We primarily use the SA-CCR and internal model method ('IMM') approaches for CCR. For CVA, we apply an approach consistent with our permissions. Details of the IMM permission we have received from the PRA can be found in the Financial Services Register on the PRA's website.
Equity	Capital requirements for non-trading book holdings of equity can be assessed under the standardised or IRB approaches. Underlying equity positions within collective investment	We calculate capital requirements for: - non-trading book equity holdings using the standardised approach; and - underlying equity positions within collective investments undertakings using
	undertakings ('CIU') must be treated using the IRB equity simple risk-weight approach.	the IRB equity simple risk-weight approach.
Securitisation	The framework prescribes the following approaches:	Under the framework:
	internal ratings-based approach ('SEC-IRBA');	 our originated positions are reported under SEC-IRBA;
	standardised approach ('SEC-SA');external ratings-based approach ('SEC-ERBA'); and	 our positions in the sponsored Solitaire programme and our investment in third-party positions are reported under SEC-SA and SEC-ERBA; and,
	 internal assessment approach ('IAA'). 	 our sponsored positions in Regency are reported under IAA. Our IAA approach is audited annually by internal model review and is subject to review by the PRA.
		For definitions of Solitaire and Regency securities, see page 93.
Market risk	Market risk capital requirements can be determined under either the standardised rules or the internal models approach ('IMA'). The latter involves the use of internal value at risk (VaR') models to measure market risks and determine the appropriate capital requirement. In addition to the VaR models, other internal models permitted under IMA include stressed VaR ('SVaR'), incremental risk charge ('IRC') and comprehensive risk measure.	The market risk capital requirement is measured using internal market risk models, where approved by the PRA, or under the standardised rules. Our internal market risk models comprise VaR, SVaR and IRC. Non-proprietary details of the scope of our IMA permissions are available in the Financial Services Register on the PRA's website.
Operational risk	The Basel Committee allows firms to calculate their operational risk capital requirement under the basic indicator approach, the standardised approach or the advanced measurement approach.	We currently use the standardised approach in determining our operational risk capital requirement. We have in place an operational risk model that is used for economic capital calculation purposes.

The table below shows total RWAs including free deliveries, and the corresponding total own funds requirement split by risk type. Equities under the simple risk-weighted approach include off-balance sheet CIU equity exposures, calculated as per the PRA Rulebook Article 132(c) and 'Other counterparty credit risk' includes securities financing transactions RWAs.

Table 7: Overview of risk-weighted exposure amounts (OV1)

		At		
		31 Dec 2024	30 Sep 2024	31 Dec 2024
		RWAs	RWAs	Total own funds
				requirements
		\$m	\$m	\$m
	Credit risk (excluding counterparty credit risk)	648,230	680,610	51,859
2	- standardised approach	177,202	183,862	14,176
3	- foundation IRB approach	84,195	84,794	6,736
4	- slotting approach	22,269	24,027	1,782
UK 4a	 equities under the simple risk weighted approach 	4,700	5,703	376
5	- advanced IRB approach	359,864	382,224	28,789
6	Counterparty credit risk	37,642	37,495	3,012
7	- standardised approach	9,225	9,259	738
8	- internal model method	13,771	13,021	1,102
UK-8a	- exposures to a central counterparty	1,808	1,999	145
UK-8b	- credit valuation adjustment	2,235	1,925	179
9	- other counterparty credit risk	10,603	11,292	848
15	Settlement risk	40	62	3
16	Securitisation exposures in the non-trading book (after the cap)	9,665	9,412	774
17	- internal ratings-based approach ('SEC-IRBA')	2,832	2,894	227
18	- external ratings-based approach ('SEC-ERBA') (including internal assessment approach ('IAA'))	2,063	2,296	165
19	- standardised approach ('SEC-SA')	4,488	4,047	359
UK-19a	- 1250%/deduction	282	175	23
20	Position, foreign exchange and commodities risks (market risk)	36,205	37,432	2,897
21	- standardised approach	9,334	10,093	747
22	- internal models approach	26,871	27,339	2,150
23	Operational risk	106,472	98,913	8,518
UK-23b	- standardised approach	106,472	98,913	8,518
29	Total	838,254	863,923	67,062
24	- of which: Amounts below the thresholds for deduction (subject to 250% risk weight) ¹	45,784	47,156	3,663

¹ These balances are included in rows 2 and 5 of the table and include thresholds for the recognition of significant investments and deferred tax assets.

The quarter-on-quarter RWA movements in the table above are explained by risk type in the following comments.

Credit risk, including amounts below the thresholds for deduction

Credit risk RWAs reduced by \$32.4bn. Excluding a decrease of \$ \$20.0bn from foreign currency translation differences, RWAs fell by \$12.4bn, reflecting the following movements:

- a \$10.2bn decrease due to methodology and policy changes, mainly driven by a \$7.5bn fall due to regulatory changes related to the risk-weighting of residential mortgages in Hong Kong. Credit risk parameter refinements further contributed to the fall in RWAs; and
- a \$7.7bn decrease from strategic disposals, mainly from the sale of our business in Argentina \$7.3bn.

These decreases were partly offset by:

- a \$2.3bn increase largely from unfavourable credit risk migrations in Asia and HSBC UK Bank plc, partly offset by our portfolio mix in the US, and a \$1.3bn rise from the post-model adjustments for the Hong Kong unsecured portfolio; and
- a \$2.0bn increase from asset size movements, mainly from increased corporate lending in HSBC UK Bank plc and SAB, partly offset by a fall in corporate exposures in the US and higher sovereign exposures in Asia.

Counterparty credit risk, including settlement risk

Counterparty credit risk RWAs increased by \$0.1bn, primarily due to mark-to-market movements in Asia, partly offset by a \$0.2bn reduction from the sale of our business in Argentina.

Market risk

Market risk RWAs fell by \$1.2bn primarily due to a decrease in the incremental risk charge from reduced positions in Asia and HSBC Bank plc, and lower interest rate risk driven by a reduction in exposures in Mexico. A further decrease of \$0.4bn relates to the sale of our business in Argentina.

Securitisation

An increase of \$0.3bn RWAs was mainly due to new positions across regions, partly offset by foreign currency translation differences.

Operational risk

Operational risk RWAs increased by \$7.6bn, predominantly due to book size movements of \$14.6bn driven by an increase in average income. This was partly offset by the exclusion of \$3.1bn in operational risk RWAs for HSBC Bank Canada post the PRA waiver permission granted in October 2024, and a fall from foreign currency translation differences of \$3.9bn.

The table below shows the drivers of the quarterly movements of credit risk RWAs, excluding counterparty credit risk and including free deliveries under the IRB approach. The table also excludes securitisation positions, equity exposures and non-credit obligation assets.

Table 8: RWA flow statements of credit risk exposures under the IRB approach (CR8)

		Quarter ended				
		31 Dec 2024 30 Sep 2024 30 Jun 2024		30 Jun 2024	31 Mar 2024	
		\$m	\$m	\$m	\$m	
1	RWAs at the opening period	478,334	460,941	466,154	489,736	
2	Asset size	810	4,437	4,030	4,772	
3	Asset quality	2,915	3,709	(6,052)	7,623	
4	Model updates	1,305	(549)	(1,773)		
5	Methodology and policy	(9,283)	(834)	(472)	(750)	
6	Acquisitions and disposals	(4,753)	_	62	(28,933)	
7	Foreign exchange movements ¹	(15,079)	10,630	(1,008)	(6,294)	
9	RWAs at the closing period	454,249	478,334	460,941	466,154	

¹ Foreign exchange movements in this disclosure are computed by retranslating the RWAs into US dollars based on the underlying transactional currencies, and other movements in the table are presented on a constant currency basis.

Excluding foreign currency translation differences, RWAs under the IRB approach decreased by \$9.0bn during the fourth quarter of 2024 primarily from:

- a \$9.3bn decrease in methodology and policy was mainly a \$7.5bn fall due to regulatory changes related to the risk-weighting of residential mortgages in Hong Kong;
- a \$4.8bn decrease mainly from the sale of our business in Argentina;
- a \$2.9bn increase in asset quality movements was primarily due to credit risk migrations in Asia;
- a \$1.3bn rise from the post-model adjustments for the Hong Kong unsecured portfolio; and
- a \$0.8bn increase in asset size movements primarily due to higher sovereign exposures, partly offset by a decrease in corporate lending.

The table below shows the drivers of the quarterly movements of counterparty credit risk RWAs under the internal model method approach.

Table 9: RWA flow statements of CCR exposures under IMM (CCR7)

			Quarter ended					
		31 Dec 2024	30 Sep 2024	30 Jun 2024	31 Mar 2024			
		\$m	\$m	\$m	\$m			
1	RWAs at the opening period	13,021	12,682	11,312	11,208			
2	Asset size	725	748	27	163			
3	Credit quality of counterparties	(36)	(409)	1,343	(59)			
4	Model updates (IMM only)	61	_	_	_			
9	RWAs at the closing period	13 771	13 021	12 682	11 312			

RWAs under the internal model method increased by \$0.8bn in the fourth quarter of 2024, largely driven by an increased derivatives portfolio, mainly in HSBC Bank plc and Asia.

The table below shows the drivers of the quarterly movements of market risk RWAs under the internal model approach, split by VaR, SVaR, IRC and other models.

Table 10: RWA flow statements of market risk exposures under IMA (MR2-B)

		VaR	SVaR	Incremental risk charge ('IRC')	Other	Total RWAs	Total capital requirements
		\$m	\$m	\$m	\$m	\$m	\$m
1	RWAs at 1 Oct 2024	6,485	12,272	6,941	1,641	27,339	2,187
2	Movement in risk levels	(400)	687	(635)	(124)	(472)	(37)
3	Model updates/changes	(1)	1	-	14	14	1
5	Acquisitions and disposals	(1)	(8)	(1)	_	(10)	(1)
8	RWAs at 31 Dec 2024	6,083	12,952	6,305	1,531	26,871	2,150
1	RWAs at 1 Jul 2024	8,173	11,186	6,418	1,750	27,527	2,202
2	Movement in risk levels	(1,675)	1,435	496	(109)	147	12
3	Model updates/changes	(13)	(349)	27	_	(335)	(27)
5	Acquisitions and disposals	_	_	_	_	_	
8	RWAs at 30 Sep 2024	6,485	12,272	6,941	1,641	27,339	2,187
1	RWAs at 1 Apr 2024	8,395	11,596	4,926	1,741	26,658	2,132
2	Movement in risk levels	(222)	(410)	1,492	9	869	70
3	Model updates/changes	_	_	_	_	_	_
5	Acquisitions and disposals	_	_	_	_	_	_
8	RWAs at 30 Jun 2024	8,173	11,186	6,418	1,750	27,527	2,202
1	RWAs at 1 Jan 2024	7,164	8,297	5,163	1,694	22,318	1,785
2	Movement in risk levels	1,231	3,299	(237)	47	4,340	347
3	Model updates/changes	_	_	_	_	_	_
5	Acquisitions and disposals	_	_	_	_	_	
8	RWAs at 31 Mar 2024	8,395	11,596	4,926	1,741	26,658	2,132

RWAs under the internal model approach decreased by \$0.5bn during 4Q24, due to a lower incremental risk charge from reduced positions and VaR driven by the averaging effect, partly offset by an increase in SVaR driven by sensitivity to interest rate shocks captured in the stressed period.

The table below shows the drivers of the quarterly movements of market risk RWAs under the internal model approach, split by VaR, SVaR, IRC and other models. Rows 1a/1b and 8a/8b represent differences between RWAs reported for the period and RWAs includes components that are calculated on a spot basis at the end of the reporting period, except RWAs in 'Other' which includes components that are calculated on an average basis.

Table 10a:RWA flow statements of market risk exposures under IMA (MR2-B)

		VaR	SVaR	IRC	Other	Total RWAs	Total own funds requirements
		\$m	\$m	\$m	\$m	\$m	\$m
1	RWAs at 1 Oct 2024	6,485	12,272	6,941	1,641	27,339	2,187
1a	Regulatory adjustment	(4,915)	(8,996)	(923)	_	(14,834)	(1,187)
1b	RWAs at the previous quarter end (end of day)	1,570	3,276	6,018	1,641	12,505	1,000
2	Movement in risk levels	56	999	(754)	(124)	177	15
3	Model updates/changes	(1)	1		14	14	1
8a	RWAs at the end of the reporting period (end of day)	1,624	4,268	5,263	1,531	12,686	1,015
8b	Regulatory adjustment	4,459	8,684	1,042	_	14,185	1,135
8	RWAs at 31 Dec 2024	6,083	12,952	6,305	1,531	26,871	2,150
1	RWAs at 1 Jul 2024	8,173	11,186	6,418	1,750	27,527	2,202
1a	Regulatory adjustment	(6,052)	(7,653)	_	_	(13,705)	(1,096)
1b	RWAs at the previous quarter end (end of day)	2,121	3,533	6,418	1,750	13,822	1,106
2	Movement in risk levels	(538)	92	(427)	(109)	(982)	(83)
3	Model updates/changes	(13)	(349)	27	_	(335)	(27)
8a	RWAs at the end of the reporting period (end of day)	1,570	3,276	6,018	1,641	12,505	996
8b	Regulatory adjustment	4,915	8,996	923	_	14,834	1,191
8	RWAs at 30 Sep 2024	6,485	12,272	6,941	1,641	27,339	2,187

Leverage

The risk of excessive leverage is managed as part of HSBC's global risk appetite framework and monitored using the leverage ratio metric within the RAS.

■ For further details of our risk management tools and the management of our risk appetite through our global risk appetite framework, see page 127 of the Annual Report and Accounts 2024.

The table below provides a detailed breakdown of the components of our leverage exposure, including the split of the on- and off-balance sheet exposures, leverage ratios, minimum requirements and buffers on an IFRS 9 transitional basis. The components of the leverage ratio on an average basis are included below in accordance with the UK's leverage ratio framework.

Table 11: Leverage ratio common disclosure (UK LR2-LRCom)

		A ⁻	-	
		31 Dec 2024	31 Dec 2023	
		\$bn	\$bn	
	On-balance sheet exposures (excluding derivatives and securities financing transactions ('SFTs'))	·		
1	On-balance sheet items (excluding derivatives, SFTs, but including collateral)	2,342.9	2,383.2	
2	Gross-up for derivatives collateral provided, where deducted from the balance sheet assets pursuant to the applicable			
	accounting framework	5.6	7.1	
3	(Deductions of receivables assets for cash variation margin provided in derivatives transactions)	(54.3)	(51.8)	
6	(Asset amounts deducted in determining tier 1 capital (leverage))	(40.4)	(40.1)	
7	Total on-balance sheet exposures (excluding derivatives and SFTs)	2,253.8	2,298.5	
	Derivative exposures			
8	Replacement cost associated with SA-CCR derivatives transactions (i.e. net of eligible cash variation margin)	60.3	44.4	
9	Add-on amounts for potential future exposure associated with SA-CCR derivatives transactions	114.9	119.1	
10	(Exempted CCP leg of client-cleared trade exposures) (SA-CCR)	(33.9)	(42.1)	
11	Adjusted effective notional amount of written credit derivatives	56.6	61.5	
12	(Adjusted effective notional offsets and add-on deductions for written credit derivatives)	(54.7)	(58.1)	
13	Total derivative exposures	143.2	124.8	
	SFT exposures			
14	Gross SFT assets (with no recognition of netting), after adjusting for sales accounting transactions	486.8	495.3	
15	(Netted amounts of cash payables and cash receivables of gross SFT assets)	(190.7)	(182.2)	
16	Counterparty credit risk exposure for SFT assets	13.5	12.1	
18	Total securities financing transaction exposures	309.6	325.2	
	Other off-balance sheet exposures			
19	Off-balance sheet exposures at gross notional amount	938.4	952.1	
20	(Adjustments for conversion to credit equivalent amounts)	(707.2)	(716.7)	
22	Total off-balance sheet exposures	231.2	235.4	
	Capital and total exposures measure			
23	Tier 1 capital (leverage)	144.1	144.2	
24	Total exposure measure including claims on central banks	2,937.8	2,983.9	
UK-24a	·	(366.7)	(409.1)	
UK-24b	17	2,571.1	2,574.8	
OK Z 15	Leverage ratios		2,07 1.0	
25	Leverage ratio excluding claims on central banks (%)	5.6	5.6	
	Fully loaded ECL accounting model leverage ratio excluding claims on central banks (%)	5.6	5.6	
UK-25b		0.0	0.0	
011 200	at fair value through other comprehensive income had not been applied (%)	5.6	5.6	
UK-25c	Leverage ratio including claims on central banks (%)	4.9	4.8	
26	Regulatory minimum leverage ratio requirement (%)	3.3	3.3	
	Additional leverage ratio disclosure requirements – leverage ratio buffers			
27	Leverage ratio buffer (%)	0.9	0.9	
	- of which: G-SII or O-SII additional leverage ratio buffer (%)	0.7	0.7	
	- of which: countercyclical leverage ratio buffer (%)	0.2	0.2	
	Additional leverage ratio disclosure requirements – disclosure of mean values		•	
28	Mean of daily values of gross SFT assets, after adjustment for sale accounting transactions and netted of amounts of			
20	associated cash payables and cash receivable	297.2	292.2	
29	Quarter-end value of gross SFT assets, after adjustment for sale accounting transactions and netted of amounts of			
-	associated cash payables and cash receivables	296.1	313.1	
UK-31	Average total exposure measure including claims on central banks	2,972.8	2,903.0	
UK-32	Average total exposure measure excluding claims on central banks	2,608.4	2,498.6	
UK-33	Average leverage ratio including claims on central banks (%)	4.9	4.9	
UK-34	Average leverage ratio excluding claims on central banks (%)	5.5	5.7	
			3.7	

Our leverage ratio was 5.6% at 31 December 2024, unchanged from 31 December 2023. Leverage exposures decreased primarily due to strategic disposals and adverse foreign currency translation differences, which exceeded the increase in the underlying balance sheet. This was offset by a fall in the tier 1 capital.

At 31 December 2024, our UK minimum leverage ratio requirement of 3.25% was supplemented by a leverage ratio buffer of 0.9%, which consists of an additional leverage ratio buffer of 0.7% and a countercyclical leverage ratio buffer of 0.2%.

These buffers translated into capital values of \$18.0bn and \$5.1bn respectively.

The average leverage ratio was 5.5% at 31 December 2024, down from 5.7% at 31 December 2023. The increase in the average leverage exposures led to a 0.1 percentage point fall in the leverage ratio, primarily due to growth in the average balance sheet. This was compounded by a 0.1 percentage point decrease due to a fall in average tier 1 capital.

The table below provides a reconciliation of the total assets in our published balance sheet under IFRS and the total leverage exposure.

Table 12: Summary reconciliation of accounting assets and leverage ratio exposures (UK LR1- LRSum)

		A ⁻	t
		31 Dec 2024	31 Dec 2023
		\$bn	\$bn
1	Total assets as per published financial statements	3,017.0	3,038.7
2	Adjustment for entities which are consolidated for accounting purposes but are outside the scope of prudential consolidation	(108.2)	(104.1)
3	(Adjustment for securitised exposures that meet the operational requirements for the recognition of risk transference)	(0.9)	(1.2)
4	(Adjustment for exemption of exposures to central banks)	(366.7)	(409.1)
6	Adjustment for regular-way purchases and sales of financial assets subject to trade date accounting	(12.5)	(22.8)
7	Adjustment for eligible cash pooling transactions	(6.8)	(7.1)
8	Adjustment for derivative financial instruments	(174.4)	(150.4)
9	Adjustment for securities financing transactions ('SFTs')	30.6	37.5
10	Adjustment for off-balance sheet items (i.e. conversion to credit equivalent amounts of off-balance sheet exposures)	231.2	235.4
11	(Adjustment for prudent valuation adjustments and specific and general provisions which have reduced tier 1 capital (leverage))	(40.4)	(40.1)
12	Other adjustments	2.2	(2.0)
13	Total leverage ratio exposure	2,571.1	2,574.8

The table below provides a breakdown of on-balance sheet exposures excluding derivatives, SFTs and exempted exposures by asset class.

Table 13: Leverage ratio - split of on-balance sheet exposures (excluding derivatives, SFTs and exempted exposures) (UK LR3-LRSpl)

	А	t
	31 Dec 2024	31 Dec 2023
	\$bn	\$bn
UK-1 Total on-balance sheet exposures (excluding derivatives, SFTs and exempted exposures), of which:	1,921.9	1,922.3
UK-2 Trading book exposures	285.6	250.0
UK-3 Banking book exposures, of which:	1,636.3	1,672.3
UK-4 - Covered bonds	2.0	1.9
UK-5 – Exposures treated as sovereigns	429.2	381.8
 UK-6 – Exposures to regional governments, multilateral development banks, international organisations and public sector entities not treated as sovereigns 	2.6	3.4
UK-7 – Institutions	69.1	73.6
UK-8 - Secured by mortgages of immovable properties	362.9	408.8
UK-9 – Retail exposures	71.3	69.4
UK-10 - Corporates	492.8	532.1
UK-11 - Exposures in default	16.1	12.6
UK-12 - Other exposures (e.g. equity, securitisations and other non-credit obligation assets)	190.3	188.7

Liquidity

Management of liquidity and funding risk

We manage liquidity and funding risk at an operating entity level, in accordance with globally consistent policies, procedures and reporting standards

Liquidity coverage ratio

The LCR aims to ensure that a bank has sufficient unencumbered HQLA to meet its liquidity needs in a 30 calendar day liquidity stress scenario. For the disclosure of the LCR, we follow Article 451a of CRR II.

The average Group LCR for the 12 months to 31 December 2024 was 138% or \$179bn above the regulatory requirement. At 31 December 2024, all of the Group's material operating entities exceeded their minimum required regulatory levels. The Group consolidation methodology includes a deduction to reflect the impact of limitations in the transferability of entity liquidity around the Group. The result was an adjustment of \$141bn to LCR HQLA and \$6bn to LCR inflows on an average basis.

During 2024, we enhanced our liquidity consolidation process by revising provisions that addressed historical limitations. As Group LCR is reported as a 12-month average, the benefit of these changes have been recognised incrementally over the year starting from 30 June 2024.

The average Group LCR HQLA of \$649bn (31 December 2023: \$648bn) was held in a range of asset classes and currencies.

The Group and its entities actively manage liquidity and funding drivers within the balance sheet, including derivatives and collateral management.

Net stable funding ratio

We use the NSFR or other appropriate metrics as a basis for ensuring operating entities raise sufficient stable funding to support their business activities. The NSFR is defined as the ratio between the

amount of stable funding available and the amount of stable funding required. The average Group NSFR over the previous four quarters was 143% at 31 December 2024 and 138% at 31 December 2023.

As highlighted in the LCR section, we enhanced our liquidity consolidation process by revising provisions that addressed historical limitations in 2024. As Group NSFR is reported on an average basis, the benefit of these changes have been recognised incrementally over the year starting from 30 June 2024.

Currency mismatch in the LCR

The Group's internal liquidity and funding risk management framework requires all operating entities to monitor the LCR for material currencies. Limits are set to ensure that outflows can be met, given assumptions on stressed capacity in the foreign exchange swap markets. This continuous monitoring helps with the overall management of currency exposures, in line with our internal framework

Sources of funding

Our primary sources of funding are customer current accounts and savings deposits payable on demand or at short notice. We issue secured and unsecured wholesale securities to supplement customer deposits, meet regulatory obligations and to change the currency mix, maturity profile or location of our liabilities.

- For further details of our approach to managing Liquidity Risk, see Treasury Risk management section on page 16.
- More details on the concentration of funding and liquidity sources may be found on page 209 of the Annual Report and Accounts 2024.

The table below sets out the granular split of cash outflows and cash inflows, as well as the available HQLA on both an unweighted and weighted basis, which are used to derive the LCR. The LCR, HQLA and net outflows are based on the average over the preceding 12 months.

Table 14: Quantitative information of LCR (LIQ1)

			r ended c 2024	Quarter ended 30 Sep 2024		Quarter ended 30 Jun 2024		2024 31 Mar 20	
		Total unweigh- ted value	Total weighted value	Total unweigh- ted value	Total weighted value	Total unweigh- ted value	Total weighted value	Total unweigh- ted value	Total weighted value
		\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m
UK-1b	Number of data points used in the calculation of averages	12	12	12	12	12	12	12	12
	High quality liquid assets								
1	Total high quality liquid assets ('HQLA')		649,210		649,199		646,052		645,789
	Cash outflows								
2	Retail deposits and small business funding	838,008	91,064	840,445	91,106	844,777	90,817	857,463	91,303
	- of which:								
3	stable deposits	348,397	17,420	344,131	17,207	348,761	17,438	356,599	17,830
4	less stable deposits	489,611	73,644	496,314	73,899	496,016	73,379	500,864	73,473
5	Unsecured wholesale funding	793,848	360,467	792,760	358,466	788,146	355,493	796,520	358,589
6	 operational deposits (all counterparties) and deposits in networks of cooperative banks 	250,089	61,088	250,731	61,277	249,673	61,012	251,419	61,449
7	 non-operational deposits (all counterparties) 	532,596	288,216	530,853	286,013	527,745	283,753	534,794	286,833
8	 unsecured debt 	11,163	11,163	11,176	11,176	10,728	10,728	10,307	10,307
9	Secured wholesale funding		31,688		29,826		29,527		29,355
10	Additional requirements	345,860	96,645	339,232	97,190	333,111	99,137	326,390	100,330
11	 outflows related to derivative exposures and other collateral requirements 	50,057	41,153	49,718	41,616	50,552	43,503	51,512	45,129
13	- credit and liquidity facilities	295,803	55,492	289,514	55,574	282,559	55,634	274,878	55,201
14	Other contractual funding obligations ¹	92,734	54,431	96,920	59,610	99,966	63,366	101,135	65,088
15	Other contingent funding obligations	643,283	21,983	648,174	21,746	654,775	21,788	663,448	21,888
16	Total cash outflows		656,278		657,944		660,128		666,553
	Cash inflows								
17	Secured lending transactions (including reverse repos)	376,767	48,548	361,134	47,043	347,607	46,365	343,819	47,931
18	Inflows from fully performing exposures	104,474	79,173	107,274	81,171	108,691	82,418	109,992	83,145
19	Other cash inflows	113,504	57,907	114,418	56,717	116,281	59,012	119,703	61,690
20	Total cash inflows	594,745	185,628	582,826	184,931	572,579	187,795	573,514	192,766
UK-20c	Inflows Subject to 75% Cap	594,745	185,628	582,826	184,931	572,579	187,795	573,514	192,766
	Liquidity coverage ratio (Adjusted value)								
UK-21	Liquidity Buffer		649,210		649,199		646,052		645,789
22	Total net cash outflows		470,650		473,013		472,333		473,787
23	Liquidity coverage ratio (%)		138		137		137		136

¹ We enhanced our liquidity consolidation process in 2024 by revising provisions that addressed historical limitations. As our Group LCR is reported on an average basis, the benefit of these changes incrementally increased our LCR by circa 3% during the year by reducing net outflows. This reduction was partly offset by an organic increase in outflows mostly in Asia, resulting in a net 2% increase of our LCR compared to year ended 31 December 2023.

The table below shows the components of the NSFR for unweighted values by residual maturity and the resultant weighted amounts. The NSFR is the average of the preceding four quarters.

Table 15: Net stable funding ratio² (LIQ2)

		Unw	eighted value by	residual maturity	У	
		No maturity	< 6 months	6 months to < 1yr	≥ 1yr	Weighted value
		\$m	\$m	to < Tyr \$m	≥ Tyr \$m	
A:11	able stable funding ('ASF') Items	φiii	φiii	ŞIII	ŞIII	\$m
1	Capital items and instruments:	183,355	40	234	29,219	212,569
2	- Own funds	183,355	40	234	29,219	212,569
4	Retail deposits:	103,333	845,389	351	990	779,605
5	- Stable deposits		351,341	71	1	333,806
6	Less stable deposits		494,048	280	989	445,799
7	Wholesale funding:		1,139,335	42,884	143,605	525,447
8	Operational deposits		236,022	42,004	143,003	118,013
9	Other wholesale funding		903,313	42,880	143,605	407,434
10	Interdependent liabilities		3,681	42,000	140,000	407,434
11	Other liabilities:	2,775	241,996	317	5,789	5,786
12	NSFR derivative liabilities	2,775	241,330	317	3,703	3,700
13	All other liabilities and capital instruments not included in the	2,770				
	above categories		241,996	317	5,789	5,786
14	Total available stable funding ('ASF')					1,523,407
Requi	ired stable funding ('RSF') Items					
15	Total high-quality liquid assets ('HQLA')					67,798
16	Deposits held at other financial institutions for operational					
	purposes		591	_	_	296
17	Performing loans and securities:		531,192	99,530	806,162	824,970
18	 Performing securities financing transactions with financial customers collateralised by Level 1 HQLA subject to 0% 					
	haircut		168,066	7,406	3,338	13,947
19	 Performing securities financing transactions with financial customer collateralised by other assets and loans and 		88,863	6,147	7,223	19,402
	advances to financial institutions		88,803	0,147	7,223	15,402
20	 Performing loans to non-financial corporate clients, loans to retail and small business customers, and loans to sovereigns, and PSEs 		143,943	54,110	267,634	329,340
21	- of which: With a risk weight of less than or equal to 35%					·
21	under the Basel II standardised approach for credit risk ³		2,291	1,690	22,680	23,862
22	 Performing residential mortgages³ 		8,992	7,629	348,177	243,710
23	- of which: With a risk weight of less than or equal to 35%		-,	-,,	0.10,111	,.
	under the Basel II standardised approach for credit risk ³		6,217	6,173	306,117	205,843
24	Other loans and securities that are not in default and do not					
	qualify as HQLA, including exchange-traded equities and					
	trade finance on-balance sheet products ¹		121,328	24,238	179,790	218,571
25	Interdependent assets		_	_	4,347	_
26	Other assets:		193,348	41	89,880	132,550
27	 Physical traded commodities 				14,306	12,160
28	 Assets posted as initial margin for derivative contracts and contributions to default funds of CCPs 		35,032	-	-	29,777
30	 NSFR derivative liabilities before deduction of variation 					
	margin posted		92,569	-	-	4,830
31	 All other assets not included in the above categories 		65,747	41	75,574	85,783
32	Off-balance sheet items		182,151	90,206	656,639	38,877
33	Total RSF					1,064,491
34	Net stable funding ratio (%)					143

Table 15: Net stable funding ratio² (LIQ2) (continued)

		31 Dec 2023				
	-	Un	weighted value by	residual maturity		
	-		. 3	6 months		Weighted
		No maturity	< 6 months	to < 1yr	≥ 1yr	value
		\$m	\$m	\$m	\$m	\$m
Availa	ble stable funding ('ASF') items	****	••••	****	•	• • • • • • • • • • • • • • • • • • • •
1	Capital items and instruments:	183,605	44	159	25,838	209,442
2	- Own funds	183,605	44	159	25,838	209,442
4	Retail deposits:		866,634	2,838	939	801,557
5	- Stable deposits		363,232	707	181	345.888
6	- Less stable deposits		503,402	2,131	758	455,669
7	Wholesale funding:		1,128,068	39,491	166,065	546,468
8	- Operational deposits		241,680	50	66	120,931
9	- Other wholesale funding		886,388	39,441	165,999	425,537
10	Interdependent liabilities		2,499	_		
11	Other liabilities:	2,512	258,120	341	44,298	44,468
12	- NSFR derivative liabilities	2,512				
13	- All other liabilities and capital instruments not included in the					
	above categories		258,120	341	44,298	44,468
14	Total available stable funding ('ASF')			·		1,601,935
Requi	red stable funding ('RSF') Items					
15	Total high-quality liquid assets ('HQLA')					52,025
16	Deposits held at other financial institutions for operational					
	purposes		419	_	_	209
17	Performing loans and securities:		577,617	102,617	895,827	909,816
18	 Performing securities financing transactions with financial customers collateralised by Level 1 HQLA subject to 0% haircut 		204,888	8,349	2,097	11,585
19	Performing securities financing transactions with financial customers collateralised by other assets and loans and advances to financial institutions		97,576	5,064	5,256	17,059
20	Performing loans to non-financial corporate clients, loans to retail and small business customers, and loans to sovereigns, and PSEs ³		146,922	56,183	292,913	353,004
21	- of which: With a risk weight of less than or equal to 35%					
	under the Basel II standardised approach for credit risk ³		1,763	1,737	27,078	27,066
22	 Performing residential mortgages³ 		10,921	9,643	373,004	268,456
23	 of which: With a risk weight of less than or equal to 35% under the Basel II standardised approach for credit risk³ 		7,672	7,736	313,687	214,749
24	 Other loans and securities that are not in default and do not qualify as HQLA, including exchange-traded equities and trade finance on-balance sheet products¹ 		117,310	23,378	222,557	259,712
25	Interdependent assets		4,348	_	3,110	_
26	Other assets:		194,499	137	129,514	162,990
27	- Physical traded commodities				12,741	10,830
28	Assets posted as initial margin for derivative contracts and contributions to default funds of CCPs		22,615	_	_	19,217
30	NSFR derivative liabilities before deduction of variation margin posted		107,198	_	_	5,564
31	All other assets not included in the above categories		64,686	137	116,773	127,379
32	Off-balance sheet items		184,909	73,254	655,060	37,305
33	Total RSF					1,162,345

We enhanced our liquidity consolidation process in 2Q24 by revising provisions that addressed historical limitations. As our Group NSFR is reported on an average basis, the benefit of these changes incrementally increased our NSFR by circa 11% during the year by reducing required stable funding. This reduction was partly offset by a rise in financial investments and derivatives activities, resulting in a net 5% increase of NSFR compared to year ended 31 December 2023.
 We enhanced our calculation processes during 1Q24 and our NSFR comparatives have been restated.

Interest rate risk in the banking book

Net stable funding ratio (%)

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Interest rate risk in the banking book ('IRRBB') is the risk of an adverse impact to earnings or capital due to changes in market interest rates. It is generated by our non-traded assets and liabilities, specifically loans, deposits and financial instruments that are not held for trading intent.

Risk management and governance

Our Global IRRBB risk management framework is designed to ensure that all material sources of IRRBB are identified, measured, managed, and monitored, with robust policies and frameworks in place. Our IRRBB risks are measured and managed using a combination of economic value and earnings-based measures to ensure that the balance between stabilising earnings and generating value sensitivity is managed appropriately. These metrics measure IRRBB risks across the banking book, to support the overall monitoring against risk appetite, including:

- Banking Net Interest Income ('BNII') Sensitivity; and
- Economic Value of Equity ('EVE') Sensitivity.

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³ Reporting of residential mortgage average weighted balances have been enhanced from 31 December 2024 and comparatives have been restated for the year ended 31 December 2023.

Banking net interest income sensitivity and Economic value of equity sensitivity

BNII sensitivity captures the risk to earnings generated from the banking book from changes in market implied interest rates over a 12-month period using static rolling balance sheet assumptions. The static rolling balance sheet assumption is in place to ensure that IRRBB management actions are focused on risks which can be managed within Treasury. A particular exception to this is related to the price sensitivity of certain interest bearing non-maturity deposits ('NMDs'), where we apply dynamic assumptions to ensure we capture any potential margin widening or compression over the corresponding shock horizon and rate scenario.

HSBC has a significant quantity of trading book assets that are funded by banking book liabilities, and the NII sensitivity measure does not include the sensitivity of the internal transfer income from this funding. The BNII sensitivity measure, which was first introduced in the Annual Report and Accounts 2023, includes an adjustment on top of the NII sensitivity to reflect this. To ensure alignment with other disclosures, we are now reporting the BNII sensitivity measure in Pillar 3 disclosure as this is our primary measure for monitoring and management of interest rate risk in the banking book. The currency split of BNII sensitivities includes the impact of vanilla foreign exchange swaps to optimize cash management across the Group. The BNII sensitivities are shown in ΔNII column in the UK IRRBB1 table

EVE measures the present value of the banking book assets and liabilities excluding equity, based on a run-off balance sheet. EVE sensitivity measures the impact to EVE from a movement in interest rates, including the assumed term profile of NMDs having adjusted for stability and price sensitivity. It is measured and reported as part of HSBC's internal risk metrics, regulatory rules (including the Supervisory Outlier Test) and external Pillar 3 disclosures. The Group and operating entities monitor EVE sensitivities as a percentage of their capital resources.

The measurement frequency of BNII sensitivity and EVE sensitivity is quarterly, and for material entities we assess this monthly.

Active management of IRRBB

Interest rate risk that can be economically hedged is transferred to Markets Treasury, with some exceptions. Any interest rate risk that Markets Treasury cannot economically hedge is not transferred and will remain within the global business from where the risks originate. Hedging is generally executed through interest rate derivatives or fixed-rate bonds.

Markets Treasury safeguards the entities by ensuring that risk remains within our risk appetite and seeks to generate sustainable returns through management of those risks within the risk appetite set by the Treasury Risk function (second line of defence). Markets Treasury manages a variety of risks including duration, spread, cross currency basis, inflation and convexity, utilising products including liquid fixed income securities, interest rate swaps, cross currency swaps, and money markets loans and deposits. The Treasury Risk function measures and monitors (against limits) the Markets Treasury exposures, using metrics including present value of one basis point, credit spread of one basis point and VaR on a daily basis.

The majority of Markets Treasury activity is capitalised on a banking book basis. The only Markets Treasury trading book activity is the use of FX swaps to manage cash. Markets Treasury operates in all of the banking entities within the Group and is managed at an entity level. All returns generated by Markets Treasury are transferred to the global businesses.

Interest rate shock and stress scenarios applied

The BNII sensitivities are indicative and based on the shocks prescribed by the PRA instructions (Rule 9.7 of the PRA Rulebook: CRR II Firms: Internal Capital Adequacy Assessment) and in

accordance with Article 448(1) of the Disclosure (CRR) part of PRA Rulebook).

The BNII sensitivity calculations are done under the following shocks:

- parallel up:
- parallel down;
- These shocks consider an immediate impact of +/-200 basis points for US dollars, euros, Hong Kong dollars and +/-250 basis points for pounds sterling to the current market-implied path of interest rates across all four currencies (effects over one year); and
- other currency shocks are as per the regulatory guidelines (effects over one year).

The EVE sensitivities are based on the six PRA standard outlier Test shocks:

- parallel up;
- parallel down;
- steepener;
- flattener:
- short rates shock up; and
- short rates shock down.

Key modelling assumptions

For BNII sensitivities, we assume a constant balance sheet, and we include commercial margins. All forecasted market rates are based on implied forward rates from the reporting date. Customer pricing includes flooring where there are contractual obligations, and customer optionality including prepayment and early redemption risk is included where present.

We have made a prospective revision, from 30 June 2024 onwards, to the pass-on assumptions for major entities on certain interest-bearing deposits to a simplified 50%, to align with other disclosures. We have not restated our comparatives, however our results would have reflected a reduction in the sensitivities irrespective of this change.

For EVE sensitivities, commercial margins and other spread components have been excluded from the interest cash flows calculation, and all balance sheet items are discounted at risk free rates back to the reporting date. As prescribed by the regulator, the interest rate floors start at -1.0% for overnight yield curve tenors and increase five basis points per year to 0.0% at 20-year tenors. All of the negative values are netted with 50% of the positive values by currency, as per the regulatory guidelines.

NMDs are deposits that have no explicit maturity and no explicit repricing date, thus behavioural assumptions are applied.

The Pillar 3 disclosure has different assumptions to Group IRRBB's internal model assumptions. These different assumptions include, but are not limited to, treatment of NMDs, shocks and flooring.

Quantitative information on IRRBB

The most adverse BNII sensitivity scenario over the next 12 months is the parallel down shock, resulting in a decrease in projected BNII of \$6,624m as at 31 December 2024, as compared with \$7,228m as at 31 December 2023.

At 31 December 2024, the maximum decline in EVE was in the parallel up shock at \$8,369m. This translates to 5.81% of tier 1 capital.

The changes in sensitivities have been driven by factors including balance sheet evolution, an increase in stabilisation activities in line with our strategy and modelling improvements.

The average repricing maturity for NMDs, as of 31 December 2024, was 16 months, which increased from 12 months as of 31 December 2023. The longest repricing maturity for NMDs, as of 31 December 2024, was 120 months.

For further details of our IRRBB and BNII, see page 212 of the Annual Report and Accounts 2024

The table below discloses our changes in interest rate risk in the banking book for economic value of equity and banking net interest income, calculated under the supervisory shock scenarios defined in the PRA Rulebook.

Table 16: Quantitative information on IRRBB (UK IRRBB1)

		Δ EVE		ΔNII^1		Tier 1	capital
		31 Dec 2024	31 Dec 2023	31 Dec 2024	31 Dec 2023	31 Dec 2024	31 Dec 2023
		\$m	\$m	\$m	\$m	\$m	\$m
10	Parallel shock up	(8,369)	(7,303)	4,696	5,334		
20	Parallel shock down	4,095	3,572	(6,624)	(7,228)		
30	Steepener shock	(460)	(1,664)				
40	Flattener shock	(1,648)	(519)				
50	Short rates shock up	(4,371)	(2,700)				
60	Short rates shock down	2,211	1,075				
70	Maximum	(8,369)	(7,303)	(6,624)	(7,228)		
80	Tier 1 capital					144,127	144,163

¹ ANII values have been updated, for both reporting periods, to show Banking NII sensitivities to align with other disclosures.

Asset encumbrance

The below asset encumbrance tables are prepared on the regulatory scope of consolidation basis consistent with the regulatory scope of consolidation used to prepare other liquidity reporting. Each of the reported values in the below tables is based on the average of the previous four quarters.

Assets pledged that are subject to any restrictions in withdrawal, such as assets that require prior approval before withdrawal or replacement by other assets, are considered encumbered.

The carrying amount of unencumbered assets includes amounts that are not readily available for encumbrance in the normal course of business, such as debt and equity securities designated through profit and loss, prepayments, accrued income and Hong Kong Government certificates of indebtedness.

HSBC Group has \$274bn of encumbered assets, which represents 9.4% of the total assets. The carrying amount of encumbered other assets is \$98bn, which is predominantly cash collateral posted for derivative margin requirements of \$59bn and loans and advances of \$24bn.

HSBC Group has \$2.6tn of unencumbered assets, which represents 90.6% of the total assets. This balance predominantly includes loans and advances of \$1.3tn and derivatives financial assets of \$239bn.

The carrying amount of selected financial liabilities is \$320bn, which primarily relates to repurchase agreements of \$217bn and cash collateral posted for derivatives margin requirements of \$76bn.

HSBC has \$278bn of collateral encumbered, which represents 54.4% of the total collateral received.

The table below provides a split of on-balance sheet assets between encumbered and unencumbered.

Table 17: Encumbered and unencumbered assets (UK AE1)

		Carrying amount of encumbered assets		Fair value of encumbered assets		Carrying amount of unencumbered assets		Fair value of unencumbered ass	
			of which: notionally		of which: notionally				
			eligible EHQLA		eligible EHQLA		of which: EHQLA		of which: EHQLA
		Total	and HQLA	Total	and HQLA	Total	and HQLA	Total	and HQLA
		010	030	040	050	060	080	090	100
		\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m
010	Assets of the reporting institution	274,280	131,638			2,640,718	716,355		
030	Equity instruments	54,489	33,178	54,489	33,178	105,664	25,895	105,664	25,895
040	Debt securities	121,663	98,431	121,259	98,431	489,074	412,201	486,102	409,694
	- of which:								
050	covered bonds	151	140	151	140	9,841	9,082	9,841	9,082
060	securitisations	280	_	280	_	8,304	4,311	8,292	4,311
070	issued by general governments	112,087	94,686	111,701	94,686	373,564	326,413	371,020	324,190
080	issued by financial corporations	5,641	2,730	5,641	2,730	64,923	49,887	64,413	49,887
090	issued by non-financial corporations	3,524	944	3,524	944	13,208	3,638	13,181	3,631
120	Other assets	98,128	29			2,045,980	278,259		

The table below provides details for collateral received and own debt security issued.

Table 18: Collateral received and own debt securities issued (UK AE2)

		Fair value of encumbered collateral received or own debt securities issued		Unencumbered Fair value of collateral received of collateral received own debt securities issued available for encumbrance	
		Total	of which: notionally eligible EHQLA and HQLA	Total	of which: EHQLA and HQLA
		010	030	040	060
		\$m	\$m	\$m	\$m
130	Collateral received by the reporting institution	277,656	197,490	232,740	147,516
150	Equity instruments	30,799	15,179	26,387	8,018
160	Debt securities	246,857	182,311	206,353	139,498
170	- of which:				
	covered bonds	1,879	1,597	3,583	3,206
180	securitisations	449	=	3,289	703
190	issued by general governments	208,189	168,138	149,775	118,095
200	issued by financial corporations	26,996	8,009	30,370	7,696
210	issued by non-financial corporations	8,684	3,178	20,391	8,723
241	Own covered bonds and asset-backed securities issued and not yet pledged			2,953	_
250	Total assets, collateral received and own debt securities issued	551,936	329,128		

The table below provides sources of encumbrance, values are the average of quarterly data points in the year.

Table 19: Sources of encumbrance (UK AE3)

	Matching liabilities, contingent liabilities or securities lent	Assets, collateral received and own debt securities issued other than covered bonds and securitisations encumbered
	010	030
	\$m	\$m
ted financial liabilities	320,102	416,082

Importance of encumbrance

We are a deposit-led bank and hence the majority of our funding is from customer current accounts and customer savings deposits payable on demand or at short notice. Given this structural unsecured funding position, we have little requirement to fund ourselves in secured markets, and therefore our overall low level of encumbrance reflects this position. However, we do provide collateralised financing services to clients as part of our GBM business model, providing cash financing or specific securities.

The other sources that contribute to encumbrance are securities pledged in derivative transactions, mostly for hedging purposes, issuance of asset-backed securities, and covered bond programmes. HSBC Holdings ALCO reviews the asset encumbrance of the institution as a whole quarterly, and any events changing the asset encumbrance level are examined.

Pillar 2 and ICAAP

Pillar 2

We conduct an ICAAP to determine a forward-looking assessment of our capital requirements given our business strategy, risk profile, risk appetite and capital plan. The process incorporates the Group's risk management processes and governance framework. Economic capital models, coupled with stress testing and other risk assessment techniques, are used to assess our internal capital adequacy requirements and inform our view of our internal capital planning buffer. The ICAAP is formally approved by the Board, which has the ultimate responsibility for the effective management of risk and approval of HSBC's risk appetite.

The ICAAP is reviewed by the PRA as part of the joint risk assessment and decision process during the Supervisory Review and Evaluation Process. This process occurs periodically to enable the

regulator to define the individual capital requirement ('ICR') or total minimum capital requirements for HSBC, including Pillar 2A.

Pillar 2A considers any supplementary requirements for those risks assessed under Pillar 1, and any requirements for risk categories not captured under Pillar 1. The risk categories covered under Pillar 2A depend on the specific circumstances of a firm and the nature and scale of its business.

Pillar 2B, also known as the PRA buffer, consists of guidance from the PRA on the capital buffer a firm would require in order to remain above its ICR in adverse circumstances that may be largely outside the firm's normal and direct control; for example, during a period of severe but plausible downturn stress, when asset values and the firm's capital surplus may become strained. The assessment is informed by stress tests and any other information that the PRA considers relevant in order to protect the safety and soundness of firms

Where the PRA assesses that a firm's risk management and governance are significantly weak, it may also increase the PRA buffer to cover the risks posed by those weaknesses until they are addressed.

The PRA buffer is not intended to duplicate the Capital Requirements Regulation and Directive (CRD IV) buffers, and is intended to be drawn upon in times of stress. Its use is not of itself a breach of capital requirements that would trigger automatic restrictions on distributions. In specific circumstances, the PRA should agree a plan with a firm for its restoration over an agreed timescale. The PRA buffer is not disclosed.

Internal capital adequacy assessment

The Board manages the Group ICAAP and, together with the RMM and the GRC, it examines the Group's risk profile from a regulatory and economic capital viewpoint. They aim to ensure that capital resources:

- remain sufficient to support our risk profile and outstanding commitments;
- meet current and future regulatory requirements;
- allow the Group to remain adequately capitalised in the event of a severe economic downturn stress scenario; and
- remain consistent with our strategic and operational goals, and our shareholder and investor expectations.

The minimum regulatory capital that we are required to hold is determined by the rules and guidance established by the PRA for the consolidated Group and by local regulators for individual Group companies. These capital requirements are a primary factor in influencing and shaping the business planning process, in which targets are established for our global businesses in accordance with the Group's strategic direction and risk appetite.

Economic capital is the internally calculated capital requirement that we deem necessary to support the risks to which we are exposed. The economic capital assessment is a more risk-sensitive measure than the regulatory minimum, and takes account of the diversification of risk accruing from our operations. Both the regulatory and the economic capital assessments rely upon the use of models that are integrated into our risk management processes. Our economic capital models are calibrated to quantify the level of capital that is sufficient to absorb potential losses over a one-year time horizon to a 99.95% level of confidence for our banking and trading activities, to a 99.5% level of confidence for our insurance activities and pension risks, and to a 99.9% level of confidence for our operational risks.

Preserving our strong capital position remains a priority, and the level of integration of our risk and capital management helps to optimise our response to business demand for regulatory and economic capital. Risks that are explicitly assessed through economic capital are credit risk (including CCR), market risk, operational risk, IRRBB, insurance risk, pension risk and structural foreign exchange risk.

Minimum requirement for own funds and eligible liabilities

Overview and requirements

A minimum requirement for total loss-absorbing capacity ('TLAC') in line with the final standards adopted by the Financial Stability Board, came into effect in the UK in January 2019. This includes a minimum requirement for own funds and eligible liabilities ('MREL').

MREL includes own funds and liabilities that can be written down or converted into capital resources in order to absorb losses or recapitalise a bank in the event of its failure. The framework is complemented with disclosure requirements and these disclosures are based on the formats provided in the Basel Committee Standards for Pillar 3 disclosures requirements.

HSBC's preferred resolution strategy is a multiple point of entry ('MPE') bail-in, as determined by the Bank of England ('BoE') in coordination with HSBC's other regulators and members of HSBC's Global Crisis Management Group. This strategy provides flexibility for a resolution in two ways:

- through a bail-in at the HSBC Holdings level, which facilitates recapitalisation of operating bank subsidiaries in the Group (as required) through the write-down or conversion to equity of TLAC/ MREL issued on an intra-Group basis, while restructuring actions are undertaken, with the Group remaining together; and/or
- at a resolution group level pursuant to the application of statutory resolution powers by host resolution authorities locally.

HSBC is expected to maintain a sufficient amount of resources that can credibly and feasibly be used to absorb losses in resolution and recapitalise to a level that ensures compliance with the conditions for regulatory authorisation and sustains market confidence. Further details on HSBC's resolvability can be found in our Resolvability Assessment Framework available on the hsbc.com website.

HSBC considers that the first option is the optimal strategy to deliver the most effective resolution outcome for its stakeholders, as it should help reduce the risk of disrupting the continuity of critical functions, including cross-border; wholesale services to clients between resolution groups and across the HSBC network; avoid the destruction of value associated with a disorderly and/or sudden breakup of our global business lines; and minimise the risk to public funds.

HSBC issues loss-absorbing instruments to external investors from HSBC Holdings in order to ensure loss-absorbing capacity is available to support the objectives of a resolution, were such an event to occur. In the event of a resolution of the Group, it is anticipated that the BoE will apply statutory powers to write down or convert to equity the TLAC/MREL issued externally by HSBC Holdings. This would enable operating bank subsidiaries of the Group to be recapitalised, as needed, to support the resolution objectives and maintain the provision of critical functions globally. Recapitalisation of operating bank subsidiaries could be achieved through the write-down, or conversion to equity, of internally issued TLAC/MREL as required. This approach to recapitalising the Group's operating bank subsidiaries would aim to allow the Group to stay together to help ensure an effective stabilisation of the Group as a whole and the continuity of critical functions, while also facilitating an orderly restructuring process, to address the cause of failure.

It is anticipated that any resolution of HSBC as a group would be coordinated by the BoE and the PRA as HSBC's home resolution authority and prudential regulator, respectively. HSBC expects that the BoE would coordinate closely with the Group's host resolution authorities outside the UK in the run-up to resolution and would seek to apply our resolution strategy pre-emptively to recapitalise operating bank subsidiaries as needed.

Given the Group's corporate structure, HSBC is overseen by various regulators and resolution authorities. Host resolution authorities outside the UK could also use their statutory resolution powers in respect of the resolution groups for which they are responsible. This may occur, for example, in the event that host resolution authorities consider that holding the Group together may no longer achieve their resolution objectives. The application of these local statutory resolution powers may or may not result in such resolution groups ceasing to be part of the Group, depending on the resolution strategy adopted by the relevant host resolution authority. HSBC's operating bank subsidiaries that are not part of the three resolution groups would be subject to relevant statutory proceedings independently of the rest of the Group, if the conditions to initiating such proceedings were met

In line with its existing structure and business model, HSBC has three resolution groups, the European resolution group ('ERG'), the Asian resolution group ('ARG') and the US resolution group ('URG'). There are some smaller entities that fall outside of these resolution groups. The table below lists the resolution groups, the related resolution entities and their material subsidiaries subject to TLAC requirements.

Resolution structure

Resolution group	Resolution entity	Material entity or subgroup with MREL requirements
		HSBC Bank plc
European resolution group	HSBC Holdings plc	HSBC UK Bank plc
		HSBC Continental Europe
Asian resolution group	HSBC Asia Holdings Limited	The Hongkong and Shanghai Banking Corporation Limited
Asian resolution group	HSBC Asia Holdings Limited	Hang Seng Bank Limited
US resolution group	HSBC North America Holdings Inc	N/A

The current binding requirement for the Group is the sum-of-the-parts requirement which is made up of the sum of each resolution group's local regulatory requirements and other group entities' local regulatory requirements.

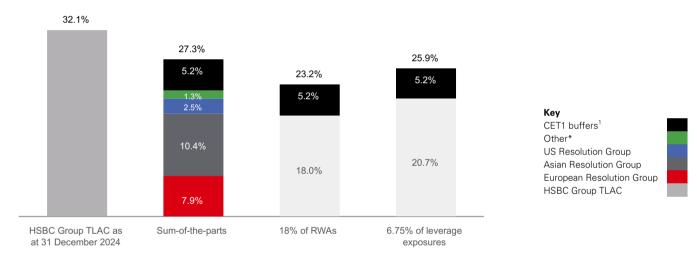
Including capital buffers this requirement is equivalent to 27.3% of RWAs as at 31 December 2024 for which we have a buffer of \$41bn. The chart below highlights the Group's binding requirements.

The external MREL requirement applicable in 2024 was the highest of the following:

- the sum of all loss absorbing capital ('LAC') requirements and other capital requirements relating to other Group entities or subgroups:
- 18% of the Group's consolidated RWAs; or,
- 6.75% of the Group's consolidated leverage exposure.

MREL/TLAC position versus requirements of Group RWAs

Current binding requirement Non-binding requirements



- 1 Group CET1 buffers are shown in addition to the MREL requirements. The buffers shown in addition to the RWA, leverage and sum-of-the-parts TLAC/MREL requirement are calculated in accordance with the PRA Supervisory statement 16/16 updated in December 2020.
- * Capital or TLAC requirements relating to other Group entities.

HSBC Holdings is the provider of own funds, MREL-eligible debt and other types of funding to its subsidiaries. These investments are funded by HSBC Holdings' own equity capital and MREL-eligible debt.

In line with the BoE MREL statement of policy, non CET1 own funds instruments issued to external holders are no longer eligible as external or internal MREL if issued by a non-resolution entity.

Therefore, non-CET1 own funds issued by HSBC Bank plc, HSBC Bank USA NA and HSBC Continental Europe SA do not qualify as external or internal MREL. Their eligibility as own funds is not impacted.

■ For further details of our approach to capital management, see 'Treasury risk management' on page 200 of the Annual Report and Accounts 2024.

Key metrics of the resolution groups

The following tables summarise key metrics for the total loss absorbing capacity of each of the Group's three resolution groups. Fully loaded values and ratios are calculated without applying any regulatory transitional arrangements for expected credit losses ('ECL') that may be available to the resolution group.

The Group and the ERG report in accordance with CRR II, and the leverage exposure is calculated in line with the PRA's UK leverage rules and excludes central bank claims. Reporting for the ARG follows the Hong Kong Monetary Authority regulatory rules and there are no IFRS 9 transitional arrangements. For the URG, leverage exposures and ratios are based on 'total assets for the leverage ratio' as reported in the regulatory capital calculations. The US accounting standard corresponding to IFRS 9 is in force with transitional adjustments.

Table 20.i: Key metrics of the European resolution group (KM2)

		At				
		31 Dec 2024	30 Sep 2024	30 Jun 2024	31 Mar 2024	31 Dec 2023
		\$bn	\$bn	\$bn	\$bn	\$bn
1	Total loss absorbing capacity ('TLAC') available	107.1	108.6	105.7	97.6	103.0
1a	Fully loaded ECL accounting model TLAC available	107.0	108.6	105.7	97.6	103.0
2	Total RWAs at the level of the resolution group	290.9	293.9	280.9	278.4	275.0
3	TLAC as a percentage of RWA (row1/row2) (%)	36.8	37.0	37.6	35.1	37.5
За	Fully loaded ECL accounting model TLAC as a percentage of fully loaded ECL accounting model RWA (%)	36.8	37.0	37.6	35.1	37.4
4	Leverage exposure measure at the level of the resolution group ¹	966.8	1,037.0	992.9	998.0	969.0
5	TLAC as a percentage of leverage exposure measure (row1/row4) (%) ¹	11.1	10.5	10.6	9.8	10.6
5a	Fully loaded ECL accounting model TLAC as a percentage of fully loaded ECL accounting model leverage exposure measure $(\%)^1$	11.1	10.5	10.6	9.8	10.6
6a	Does the subordination exemption in the antepenultimate paragraph of section 11 of the FSB TLAC term sheet apply?	No	No	No	No	No
6b	Does the subordination exemption in the penultimate paragraph of section 11 of the FSB TLAC term sheet apply?	No	No	No	No	No
6c	If the capped subordination exemption applies, the amount of funding issued that ranks pari passu with excluded liabilities and that is recognised as external TLAC, divided by funding issued that ranks pari passu with excluded liabilities and that would be recognised as external TLAC if no cap was applied (%)	N/A	N/A	N/A	N/A	N/A

¹ From 30 September 2024, we aligned our treatment of the leverage exposure measure to the calculation of total TLAC resources for the ERG, which excludes investments up to TLAC resources in group entities outside ERG. This approach helps to ensure that all items are treated consistently in both the numerator and denominators of these rows.

Table 20.ii: Key metrics of the Asian resolution group

		At				
		31 Dec 2024	30 Sep 2024	30 Jun 2024	31 Mar 2024	31 Dec 2023
		\$bn	\$bn	\$bn	\$bn	\$bn
1	Total loss absorbing capacity ('TLAC') available	111.3	118.7	110.9	110.8	110.7
1a	Fully loaded ECL accounting model TLAC available	111.3	118.7	110.9	110.8	110.7
2	Total RWAs at the level of the resolution group	407.8	424.2	420.0	418.7	411.2
3	TLAC as a percentage of RWA (row1/row2) (%)	27.3	28.0	26.4	26.5	26.9
3a	Fully loaded ECL accounting model TLAC as a percentage of fully loaded ECL accounting model RWA (%)	27.3	28.0	26.4	26.5	26.9
4	Leverage exposure measure at the level of the resolution group	1,292.1	1,332.1	1,257.1	1,257.1	1,237.8
5	TLAC as a percentage of leverage exposure measure (row1/row4) (%)	8.6	8.9	8.8	8.8	8.9
5a	Fully loaded ECL accounting model TLAC as a percentage of fully loaded ECL accounting model Leverage exposure measure (%)	8.6	8.9	8.8	8.8	8.9
6a	Does the subordination exemption in the antepenultimate paragraph of Section 11 of the FSB TLAC Term Sheet apply?	No	No	No	No	No
6b	Does the subordination exemption in the penultimate paragraph of Section 11 of the FSB TLAC Term Sheet apply?	No	No	No	No	No
6c	If the capped subordination exemption applies, the amount of funding issued that ranks pari passu with excluded liabilities and that is recognised as external TLAC, divided by funding issued that ranks pari passu with excluded liabilities and that would be recognised as external TLAC if no cap was applied (%)	N/A	N/A	N/A	N/A	N/A

Table 20.iii: Key metrics of the US resolution group

		At				
		31 Dec 2024	30 Sep 2024	30 Jun 2024	31 Mar 2024	31 Dec 2023
		\$bn	\$bn	\$bn	\$bn	\$bn
1	Total loss absorbing capacity ('TLAC') available	23.8	23.6	23.3	23.2	23.1
1a	Fully loaded ECL accounting model TLAC available	23.8	23.6	23.3	23.2	23.1
2	Total RWAs at the level of the resolution group	106.4	109.4	109.9	107.3	105.1
3	TLAC as a percentage of RWA (row1/row2) (%)	22.3	21.6	21.2	21.6	22.0
За	Fully loaded ECL accounting model TLAC as a percentage of fully loaded ECL accounting model RWA (%)	22.3	21.6	21.2	21.6	22.0
4	Leverage exposure measure at the level of the resolution group	233.4	230.4	231.8	229.4	222.4
5	TLAC as a percentage of leverage exposure measure (row1/row4) (%)	10.2	10.2	10.1	10.1	10.4
5a	Fully loaded ECL accounting model TLAC as a percentage of fully loaded ECL accounting model leverage exposure measure (%)	10.2	10.2	10.1	10.1	10.4
6a	Does the subordination exemption in the antepenultimate paragraph of section 11 of the FSB TLAC term sheet apply?	No	No	No	No	No
6b	Does the subordination exemption in the penultimate paragraph of section 11 of the FSB TLAC term sheet apply?	No	No	No	No	No
6c	If the capped subordination exemption applies, the amount of funding issued that ranks pari passu with excluded liabilities and that is recognised as external TLAC, divided by funding issued that ranks pari passu with excluded liabilities and that would be recognised as external TLAC if no cap was applied (%)	N/A	N/A	N/A	N/A	N/A

Given the MPE resolution strategy, and the fact that the BoE framework includes requirements set on the basis of the HSBC Group consolidated position, the following table presents data for both the consolidated Group and the resolution groups.

The European resolution group must meet minimum eligible liabilities requirements and it has no capital or leverage requirements. Total TLAC resources are reduced to avoid duplication of own funds and TLAC eligible liabilities across resolution groups and non-resolution group entities. Since 3Q24 we have made the reduction on a corresponding basis, whereas prior to this, the investment in TLAC eligible liabilities issued by the Asian and US resolution groups was

against own funds. To allow for this change we exclude these investments from the RWA calculation. The leverage exposure measure now excludes all items excluded from total TLAC resources rather than solely those from Total Tier 1, as the European Resolution Group is not subject to capital or leverage requirements. This approach helps to ensure that all items are treated consistently in both the numerator and denominators of both the TLAC/RWA and TLAC/leverage ratios.

The difference between Group CET1 and the aggregate of resolution groups' CET1 is driven by entities that fall outside of the resolution groups and by differences in regulatory frameworks.

Table 21: TLAC composition (TLAC1)

			At 31 Dec	2024			At 31 Dec	2023	
			Reso	lution grou	ıp		Resc	lution group	
		Group	European	Asian	US	Group	European	Asian	US
	Regulatory capital elements of TLAC and adjustments (\$bn)								
1	Common equity tier 1 capital ('CET1') ¹	124.9	19.2	66.5	12.9	126.5	3.9	65.1	12.4
2	Additional tier 1 capital ('AT1') before TLAC adjustments	19.2	19.0	8.4	1.6	17.7	17.6	6.9	1.6
4	Other adjustments ¹	_	(9.5)	_	_		(17.6)	_	
5	AT1 instruments eligible under the TLAC framework	19.2	9.5	8.4	1.6	17.7	_	6.9	1.6
6	Tier 2 capital ('T2') before TLAC adjustments	28.3	28.1	8.0	2.2	27.0	27.0	8.9	2.2
7	Amortised portion of T2 instruments where remaining maturity > 1 year	1.4	1.4	_	_	3.2	3.2	_	_
8	T2 capital ineligible as TLAC as issued out of subsidiaries to third parties	(0.9)	(0.5)	_	_	(1.1)	(0.7)	_	_
9	Other adjustments ¹	_	(9.4)	_	(2.2)	(0.1)	(27.1)	_	(2.2)
10	T2 instruments eligible under the TLAC framework	28.8	19.6	8.0	_	29.0	2.4	8.9	
11	TLAC arising from regulatory capital	172.9	48.3	82.9	14.5	173.2	6.3	80.9	14.1
	Non-regulatory capital elements of TLAC								
12	External TLAC instruments issued directly by the bank and subordinated to excluded liabilities	96.5	96.5	28.4	9.3	96.7	96.7	29.8	9.0
17	TLAC arising from non-regulatory capital instruments before adjustments	96.5	96.5	28.4	9.3	96.7	96.7	29.8	9.0
	Non-regulatory capital elements of TLAC: adjustments								
18	TLAC before deductions	269.4	144.8	111.3	23.8	269.9	103.0	110.7	23.1
19	Deductions of exposures between MPE resolution groups that correspond to items eligible for TLAC ¹	_	(37.7)	_	_	_	_	_	_
22	TLAC after deductions	269.4	107.1	111.3	23.8	269.9	103.0	110.7	23.1
	Risk-weighted assets and leverage exposure measure for TLAC purposes								
23	Total risk-weighted assets	838.3	290.9	407.8	106.4	854.1	275.0	411.2	105.1
24	Leverage exposure measure ²	2,571.1	966.8	1,292.1	233.4	2,574.8	969.0	1,237.8	222.4
	TLAC ratios and buffers								
25	TLAC (as a percentage of risk-weighted assets)	32.1	36.8	27.3	22.3	31.6	37.5	26.9	22.0
26	TLAC (as a percentage of leverage exposure) ²	10.5	11.1	8.6	10.2	10.5	10.6	8.9	10.4
27	CET1 (as a percentage of risk-weighted assets) available after meeting the resolution group's minimum capital and TLAC requirements	8.9	N/A	N/A	4.3	8.9	N/A	N/A	4.0
28	Institution-specific buffer requirement expressed as a percentage of risk-weighted assets	5.2	N/A	N/A	2.5	5.2	N/A	N/A	2.5
29	 of which: capital conservation buffer requirement 	2.5	N/A	N/A	2.5	2.5	N/A	N/A	2.5
30	bank specific countercyclical buffer requirement	0.7	N/A	N/A	N/A	0.7	N/A	N/A	N/A
31	higher loss absorbency (G-SIB) requirement	2.0	N/A	N/A	N/A	2.0	N/A	N/A	N/A

¹ From 30 September 2024, the investments in eligible liabilities issued by the Asian and US resolution groups are deducted on a corresponding basis, previously they were against own funds.

² From 30 September 2024, we aligned our treatment of the leverage exposure measure to the calculation of total TLAC resources for the ERG, which excludes investments up to TLAC resources in group entities outside ERG. This approach ensures that all items are treated consistently in both the numerator and the denominator of these rows.

Creditor ranking at legal entity level

The following tables present information regarding the ranking of creditors in the liability structure of HSBC legal entities at 31 December 2024.

The main features of capital instruments disclosure for the Group, Asia and US resolution groups are published on our website, https://www.hsbc.com/investors/fixed-income-investors/regulatory-capital-securities.

European resolution group

The ERG comprises HSBC Holdings plc, the designated resolution entity, together with its material operating entities – namely HSBC Bank plc and its subsidiaries including HSBC Continental Europe, and HSBC UK Bank plc and its subsidiaries.

The tables below present the ranking of creditors of HSBC Holdings plc and their material sub-group entities. Nominal values are disclosed.

Table 22: HSBC Holdings plc creditor ranking (TLAC3)

			Creditor r	anking (\$m)		
		1	2	3	4	
		(most			(most	Sum of
		junior)			senior)	1 to 4
			Preference			
			shares, AT1			
			instruments		Senior notes	
			and certain		and other	
		Ordinary		Subordinated	pari passu	
1	Description of creditor ranking	shares1	notes	notes ⁴	liabilities	
2	Total capital and liabilities net of credit risk mitigation	8,973	18,902	33,192	103,154	164,221
3	 of row 2 that are excluded liabilities² 	_	_	_	251	251
4	Total capital and liabilities less excluded liabilities (row 2 minus row 3) ³	8,973	18,902	33,192	102,903	163,970
5	 of row 4 that are potentially eligible as TLAC³ 	8,973	18,902	33,192	100,019	161,086
6	- of row 5:					
	with 1 year ≤ residual maturity < 2 years	_	_	892	17,826	18,718
7	with 2 years ≤ residual maturity < 5 years	_	_	2,668	39,870	42,538
8	with 5 years ≤ residual maturity < 10 years	_	_	14,704	33,155	47,859
9	with residual maturity ≥ 10 years, but excluding perpetual securities	_	_	12,358	9,168	21,526
10	that are perpetual securities	8,973	18,902	_	_	27,875

- 1 Excludes the value of share premium and reserves attributable to ordinary shareholders.
- 2 Excluded liabilities are defined in CRR II Article 72a (2). The current balance mainly relates to liabilities with a maturity of less than seven days and accruals for service company recharges.
- 3 The difference between rows 4 and 5 relates to pari passu liabilities of \$2.9bn.
- 4 The difference between row 5 and the sum of rows 6-10, \$2.6bn, is instruments maturing in less than one year, considered eligible for TLAC up to the value included in own funds.

Table 23: HSBC UK Bank plc creditor ranking (TLAC2)

			Creditor	ranking (\$m)		
		1	2	3	4	
		(most			(most	Sum of
		junior)			senior)	1 to 4
1	Is the resolution entity the creditor/investor? ¹	Yes	Yes	Yes	Yes	
					Senior	
		Ordinary	AT1	Subordinated	subordinated	
2	Description of creditor ranking	shares ²	instruments	loans	loans	
3	Total capital and liabilities net of credit risk mitigation	_	2,754	4,013	16,074	22,841
5	Total capital and liabilities less excluded liabilities (row 3 minus row 4)	_	2,754	4,013	16,074	22,841
6	- of row 5 that are eligible as TLAC	_	2,754	4,013	16,074	22,841
7	- of row 6:					
	with 1 year ≤ residual maturity < 2 years	_	_	_	1,773	1,773
8	with 2 years ≤ residual maturity < 5 years	_	_	_	8,165	8,165
9	with 5 years ≤ residual maturity < 10 years	_	_	4,013	6,136	10,149
11	that are perpetual securities	_	2,754	_	_	2,754

¹ The entity's capital and TLAC are owned by HSBC Holdings plc.

² The nominal value of ordinary shares is £50,002. This excludes the value of reserves attributable to ordinary shareholders.

Table 24: HSBC Bank plc creditor ranking (TLAC2)

			Cre	ditor ranking	ı (\$m)		
		1	2	3	4	4	
		(most			(most	(most	Sum of
		junior)			senior)	senior)	1 to 4
1	Is the resolution entity the creditor/investor? ¹	Yes	Yes	No	Yes	No	
2	Description of creditor ranking	Ordinary shares ²	Third Dollar preference shares and AT1 instruments	Deeply Subordina ted Notes	Subordinated notes and subordinated loans	Subordinated notes and subordinated loans	
3	Total capital and liabilities net of credit risk mitigation	1,000	5,117	878	20,987	840	28,822
5	Total capital and liabilities less excluded liabilities (row 3 minus row 4) ³	1,000	5,117	878	20,987	840	28,822
6	- of row 5 that are eligible as TLAC	1,000	5,117	_	20,987	_	27,104
	- of row 6:						
7	- of row 6:						
	with 1 year ≤ residual maturity < 2 years	_	-	_	_	_	_
8	with 2 years ≤ residual maturity < 5 years	_	_	_	5,437	_	5,437
9	with 5 years ≤ residual maturity < 10 years	_	_	_	14,149	_	14,149
10	with residual maturity ≥ 10 years, but excluding perpetual						
	securities	_	_	_	1,401	_	1,401
11	that are perpetual securities	1,000	5,117	_	_	_	6,117

¹ The entity's ordinary shares are owned by HSBC Holdings plc.

Asian resolution group

The ARG comprises HSBC Asia Holdings Limited, The Hongkong and Shanghai Banking Corporation Limited, Hang Seng Bank Limited and their subsidiaries. HSBC Asia Holdings Ltd is the designated resolution entity.

The following tables present information regarding the ranking of creditors of HSBC Asia Holdings Limited, The Hongkong and Shanghai Banking Corporation Limited, and Hang Seng Bank Limited.

Table 25: HSBC Asia Holdings Ltd creditor ranking¹ (TLAC3)

			Creditor ra	anking (\$m)		
		1	2	3	4	
		(most junior)			(most senior)	Sum of 1 to 4
1	Description of creditor ranking	Ordinary shares ²	AT1 instruments	Tier 2 instruments	LAC loans	
2	Total capital and liabilities net of credit risk mitigation	57,587	8,300	3,777	29,210	98,874
4	Total capital and liabilities less excluded liabilities (row 2 minus row 3)	57,587	8,300	3,777	29,210	98,874
5	 of row 4 that are potentially eligible as TLAC 	57,587	8,300	3,777	29,210	98,874
6	 of row 5 with 1 year ≤ residual maturity < 2 years 	_	_	_	4,118	4,118
7	 of row 5 with 2 years ≤ residual maturity < 5 years 	_	_	_	14,588	14,588
8	 of row 5 with 5 years ≤ residual maturity < 10 years 	_	_	3,777	5,339	9,116
9	 of row 5 with residual maturity ≥ 10 years, but excluding perpetual securities 	_	_	_	5,165	5,165
10	- of row 5 that are perpetual securities	57,587	8,300	_	_	65,887

¹ The entity's capital and LAC are held by HSBC Holdings plc.

Table 26: The Hongkong and Shanghai Banking Corporation Limited creditor ranking (TLAC2)

			Creditor ra	nking (\$m)		
		1	2	3	4	Sum of
		(most junior)			(most senior)	1 to 4
1	Is the resolution entity the creditor/investor?	Yes	Yes	Yes	Yes	
		Ordinary	AT1	Tier 2		
2	Description of creditor ranking	shares1	instruments	instruments	LAC loans	
3	Total capital and liabilities net of credit risk mitigation	23,201	8,300	3,777	29,210	64,488
5	Total capital and liabilities less excluded liabilities (row 3 minus row 4)	23,201	8,300	3,777	29,210	64,488
6	- of row 5 that are eligible as TLAC	23,201	8,300	3,777	29,210	64,488
7	 of row 6 with 1 year ≤ residual maturity < 2 years 	_	_	_	4,118	4,118
8	 of row 6 with 2 years ≤ residual maturity < 5 years 	_	_	_	14,588	14,588
9	 of row 6 with 5 years ≤ residual maturity < 10 years 	_	_	3,777	5,339	9,116
10	 of row 6 with residual maturity ≥ 10 years, but excluding perpetual securities 	_	_	_	5,165	5,165
11	- of row 6 that are perpetual securities	23,201	8,300		_	31,501

 $^{1\}quad \hbox{Excludes the value of share premium and reserves attributable to ordinary shareholders}.$

² Excludes the value of share premium and reserves attributable to ordinary shareholders.

³ The difference between row 5 and 6 relates to externally issued non-CET1 own funds. In line with the Bank of England Statement of Policy on MREL (December 2021), non-CET1 own fund instruments issued externally by HSBC Bank plc and its subsidiaries do not count towards MREL for HSBC Bank plc.

² Excludes the value of share premium and reserves attributable to ordinary shareholders.

Table 27: Hang Seng Bank Ltd creditor ranking (TLAC2)

		Cre	ditor ranking	(\$m)	
		1	2	3	Sum of
		(most junior)		(most senior)	1 to 3
1	Is the resolution entity the creditor/investor?	No	No	No	
		Ordinary	AT1		
2	Description of creditor ranking	shares1	instruments	LAC loans	
3	Total capital and liabilities net of credit risk mitigation	1,244	1,500	3,539	6,283
5	Total capital and liabilities less excluded liabilities (row 3 minus row 4)	1,244	1,500	3,539	6,283
6	- of row 5 that are eligible as TLAC	1,244	1,500	3,539	6,283
7	 of row 6 with 1 year ≤ residual maturity < 2 years 	_	_	803	803
8	 of row 6 with 2 years ≤ residual maturity < 5 years 	_	_	2,336	2,336
9	 of row 6 with 5 years ≤ residual maturity < 10 years 	_	_	400	400
11	- of row 6 that are perpetual securities	1,244	1,500	_	2,744

¹ Excludes the value of reserves attributable to ordinary shareholders.

US resolution group

The URG comprises HSBC North America Holdings Inc. and its subsidiaries. HSBC North America Holdings Inc. is the designated resolution

The following table presents information regarding the ranking of creditors of HSBC North America Holdings Inc.

Table 28: HSBC North America Holdings Inc. creditor ranking¹ (TLAC3)

	3					
			Creditor r	anking (\$m)		
		1	2	3	4	Sum of
		(most junior)			(most senior)	1 to 4
					Senior	
					unsecured	
					loans and	
		_			other pari	
		Common		Subordinated	passu	
1	Description of creditor ranking	stock ²	stock	loans	liabilities	
2	Total capital and liabilities net of credit risk mitigation	_	1,640	_	12,594	14,234
3	 of row 2 that are excluded liabilities³ 	_	_	_	208	208
4	Total capital and liabilities less excluded liabilities (row 2 minus row 3) ⁴	_	1,640	_	12,386	14,026
5	 of row 4 that are potentially eligible as TLAC 	_	1,640	_	9,250	10,890
6	- of row 5:					
	with 1 year ≤ residual maturity < 2 years	_	_	_	_	-
7	with 2 years ≤ residual maturity < 5 years	_	_	_	7,000	7,000
8	with 5 years ≤ residual maturity < 10 years	_	_	_	2,250	2,250
9	with residual maturity ≥ 10 years, but excluding perpetual securities	_	_	_	_	_
10	that are perpetual securities	_	1,640	_	_	1,640

The entity's capital and TLAC are held by HSBC Overseas Holdings (UK) Limited.

The nominal value of common stock is \$2. This excludes the value of share premium and reserves attributable to ordinary shareholders. Excluded liabilities consists of 'unrelated liabilities' as defined in the Final US TLAC rules. This mainly represents accrued employee benefit obligations.

Row 4 includes liabilities related to intercompany borrowings with URG subsidiaries that are not eligible as TLAC.

Credit risk

Overview and responsibilities

Credit risk represents our largest regulatory capital requirement.

The principal objectives of our credit risk management function are:

- to maintain across HSBC a strong culture of responsible lending and a robust credit risk policy and control framework;
- to both partner and challenge our businesses in defining, implementing and continually re-evaluating our credit risk appetite under actual and stress scenario conditions; and
- to ensure there is independent, expert scrutiny of credit risks, their costs and their mitigation.

The credit risk functions within Wholesale Credit Risk Management, and Wealth and Personal Banking ('WPB') are the constituent parts of Global Risk that support the GCRCO in overseeing credit risks. Their major duties comprise undertaking independent reviews of large and high-risk credit proposals, overseeing large exposure policy and reporting on our wholesale and retail credit risk management disciplines. They also own our credit policy and credit systems programmes, oversee portfolio management and report on risk matters to senior executive management and regulators.

These credit risk functions work closely with other parts of Global Risk, for example, with Operational Risk on the internal control framework and with Risk Strategy on the risk appetite process. In addition, they work jointly with Risk Strategy and Global Finance on stress testing.

▶ For further details of the credit responsibilities of Global Risk, see page 129 of the Annual Report and Accounts 2024.

The credit risk functions form a network of credit risk management offices around the Group reporting within regional risk functions. They fulfil an essential role as independent risk control units distinct from business line management providing objective scrutiny of risk rating assessments, credit proposals for approval and other risk matters.

Our credit risk procedures operate through a hierarchy of personal credit limit approval authorities. Operating company chief executives, acting under authorities delegated by their boards and Group standards, are accountable for credit risk and other risks in their business. In turn, chief executives delegate authority to operating company chief risk officers and management teams on an individual basis. Each operating company is responsible for the quality and performance of its credit portfolios in accordance with Group standards. Above these thresholds of delegated personal credit limited approval authorities, approval must be sought from the regional and, as appropriate, the global credit risk function.

Credit risk management

Credit risk

Our exposure to credit risk arises from a wide range of customer types and products, and the risk rating systems in place to measure and monitor these risks are correspondingly diverse. Senior management receives reports on our credit risk exposures, including expected credit losses, total exposures and RWAs, as well as updates on specific portfolios that are considered to have heightened credit risk.

Credit risk exposures are generally measured and managed in portfolios of either customer types or product categories. Risk rating systems are designed to assess the PD and LGD associated with distinct customers who are typically managed as individual relationships or, in the case of retail business exposures, on a product portfolio basis.

Risk rating systems for retail exposures are generally quantitative in nature, applying techniques such as behavioural analysis across product portfolios comprising large numbers of homogeneous transactions.

Rating systems for individually managed relationships typically use customer financial statements and market data analysis, but also qualitative elements and a final judgemental overlay to reflect any relevant risk drivers not captured in the rating system.

For further details of the application of the IRB approach, see page 59.

A fundamental principle of our policy and approach is that analytical risk rating systems and scorecards are valuable management tools that are fully embedded within the credit risk management framework, ensuring compliance with the regulatory use test requirements.

The credit process for wholesale lending requires a review of the PDs at least annually and for retail lending revolving facilities, an annual review is undertaken. Review may be more frequent as required by circumstances, such as the emergence of adverse risk factors.

We seek to continually improve the quality of our risk management. Group IT systems that process credit risk data continue to be enhanced to deliver both comprehensive management information in support of business strategy and solutions to evolving regulatory reporting requirements.

Like other facets of risk management, analytical risk rating systems are not static. They are subject to review and modification in light of the changing economic environment, changing regulatory requirements and any deficiencies identified through internal and external regulatory review. Structured processes and metrics are in place to capture relevant data and feed this into continuous model improvement.

Post Model Adjustments ('PMAs') are held to ensure that capital requirements are not understated due to non-compliance of risk rating systems or other IRB model limitations. PMAs will be held until new models are approved by the PRA or model limitations have been remediated. PMAs are reviewed at least quarterly and updated where required.

For further details of model performance, see page 86.

Dilution risk

Dilution risk is the risk that an amount receivable is reduced through cash or non-cash credit to the obligor, and arises mainly from factoring and invoice discounting transactions.

Where there is recourse to the seller, we treat these transactions as loans secured by the collateral of the debts purchased and do not report dilution risk for them. For our non-recourse portfolio we obtain an indemnity from the seller that indemnifies us against this risk.

Factoring transactions involve lending at a discount to the face-value of the receivables, which provides protection against dilution risk.

Credit quality of assets

Our credit risk is diversified across a number of asset classes and geographies with a credit quality profile mainly concentrated in the higher quality bands.

The IFRS 9 stages have the following characteristics:

 Stage 1: These financial assets are unimpaired and without a significant increase in credit risk. A 12-month allowance for ECL is recognised.

- Stage 2: A significant increase in credit risk has been experienced on these financial assets since initial recognition. A lifetime ECL is recognised.
- Stage 3: There is objective evidence of impairment and the financial assets are therefore considered to be in default or otherwise credit impaired. A lifetime ECL is recognised.
- Purchased or originated credit-impaired ('POCI'): Financial assets purchased or originated at a deep discount are seen to reflect incurred credit losses and a lifetime ECL is recognised. These exposures are included in stage 3 in the table below.
- For further details of credit-impaired (stage 3) exposures, see pages 170 and 185 of the Annual Report and Accounts 2024.

The table below breaks down the gross carrying amount of the performing and non-performing exposures and related impairments, and details of the collateral and financial guarantees received within each of the FINREP categories and definitions. Gross carrying amount includes reverse repos and settlement accounts, and the on-balance sheet exposures exclude assets held for sale. The staging analysis is non-additive as totals contain instruments not eligible for staging, such as those held at fair value through profit and loss.

Table 29: Performing and non-performing exposures and related provisions (CR1)

				arrying aı ninal amo				changes	npairmen s in fair va and provis	lue due t			Collate finar guara rece	icial ntees
			erformin xposures			forming sures		erformin xposure	•	Non-per expos	•	Accu-	On	On non-
			of which: stage 1	of which: stage 2		of which: stage 3		of which: stage 1	of which: stage 2		of which: stage 3	mulated partial write- off	perfor- ming expo- sures	perfor- ming expo- sures
		\$bn	\$bn	\$bn	\$bn	\$bn	\$bn	\$bn	\$bn	\$bn	\$bn	\$bn	\$bn	\$bn
005	Cash balances at central banks and other demand deposits	314.7	314.6	0.1	_	_	_	_	_	_	_	_	_	_
010	Loans and advances	1,278.0	1,174.0	96.4	23.3	23.3	(3.9)	(1.2)	(2.7)	(6.3)	(6.4)	(3.2)	886.8	13.4
020	Central banks	23.1	23.1	_	_		_	_	_		-	_	3.6	-
030	General governments	11.4	11.3	0.1	0.2	0.2	_	_	_	_	_	_	5.1	0.1
040	Credit institutions	125.9	125.3	0.1	_	_	_	_	_	_	_	_	87.3	_
050	Other financial corporations	258.3	250.8	2.3	0.7	0.7	(0.1)	(0.1)	_	(0.3)	(0.4)	_	187.9	0.3
060	Non-financial corporations	410.1	354.4	53.8	18.8	18.8	(2.0)	(0.5)	(1.5)	(5.2)	(5.2)	(3.0)	204.3	10.7
070	- of which: SMEs	21.7	18.1	3.7	1.2	1.2	(0.2)	(0.1)	(0.1)	(0.2)	(0.2)	(0.1)	16.2	0.9
		449.2	409.1		3.6		· · ·							2.3
080	Households Debt securities	494.6	491.3	40.1 0.8	3.0	3.6	(1.8)	(0.6)	(1.2)	(0.8)	(0.8)	(0.2)	398.6 35.4	
100	Central banks	22.9	22.9	U.8 —	_	_	(0.1)	(0.1)		_			33.4	
110	General	22.3	22.3											_
	governments	416.3	414.7	0.8	_	_	(0.1)	(0.1)	_	_	_	_	31.6	_
120	Credit institutions	38.4	38.2			_						_	3.5	_
130	Other financial corporations	12.3	12.0	_	_	_	_	_	_	_	_	_	0.1	_
140	Non-financial corporations	4.7	3.5	_	_	_	_	_	_	_	_	_	0.2	_
150	Off-balance-sheet					,								
	exposures	985.7	626.7	23.1	2.7	1.4	(0.4)	(0.1)	(0.1)	(0.4)	(0.2)		106.2	0.2
160	Central banks	0.7	0.7	_	_	_	_	_	_	_	_		_	_
170	General governments	3.8	3.4	_	_	_	_	_	_	_	_		_	_
180	Credit institutions	50.8	43.1	0.1	_	_	_	_	_	_	_		0.5	_
190	Other financial corporations	104.0	78.1	2.1	0.1	0.1	_	_	_	_	_		13.5	_
200	Non-financial					,								
	corporations	571.3	248.4	19.2	2.5	1.2	(0.4)	(0.1)	(0.1)	(0.4)	(0.2)		36.1	0.2
210	Households	255.1	253.0	1.7	0.1	0.1					_		56.1	_
220	Total at 31 Dec 2024	3,072.9	2,606.6	120.4	26.0	24.7	(4.4)	(1.4)	(2.8)	(6.7)	(6.6)	(3.2)	1,028.4	13.6

Table 29: Performing and non-performing exposures and related provisions (CR1) (continued)

				carrying ar				e changes	npairment s in fair val and provisi	ue due to		_	Collater finan guarar recei	ncial ntees
			Performing exposures	•	Non-per expos	_		erforming exposures	l	Non-perf expos	_		On	On non-
			of which: stage 1	of which: stage 2		of which: stage 3		of which: stage 1	of which: stage 2		of which: stage 3	Accu- mulated partial write-off	perfor- ming expo- sures	perfor- ming expo- sures
		\$bn	\$bn	\$bn	\$bn	\$bn	\$bn	\$bn	\$bn	\$bn	\$bn	\$bn	\$bn	\$bn
005	Cash balances at central banks and other demand deposits	332.1	330.9	1.2	_	_	_	_	_	_	_	_	_	
010	Loans and advances	1,314.2	1,183.8	125.0	20.1	20.1	(4.4)	(1.2)	(3.2)	(7.2)	(7.2)	(2.0)	900.6	9.6
020	Central banks	41.8	41.1	0.6	_	_					- (7.2)		12.1	
030	General governments	8.5	8.3	0.2	0.2	0.2	_	_	_	_	_	_	3.2	0.1
040	Credit institutions	138.4	138.2	0.1									93.0	
050	Other financial corporations	249.0	240.8	3.8	0.8	0.8	(0.1)	(0.1)	_	(0.3)	(0.3)	_	174.9	0.2
060	Non-financial corporations	427.9	354.5	72.6	15.5	15.5	(2.2)	(0.5)	(1.7)	(6.0)	(6.0)	(1.8)	221.1	7.2
070	- of which: SMEs	26.5	21.5	5.0	1.9	1.9	(0.3)	(0.1)	(0.2)	(0.3)	(0.3)		20.0	1.5
080	Households	448.6	400.9	47.7	3.6	3.6	(2.1)	(0.6)	(1.5)	(0.9)	(0.9)	(0.2)	396.3	2.1
090	Debt securities	433.3	430.6	1.2	_	_	(0.1)		(0.1)				32.7	
100	Central banks	26.2	26.1	0.1								_	_	_
110	General governments	358.8	357.0	1.0	_	_	(0.1)	_	(0.1)	_	_	_	29.4	
120	Credit institutions	31.0	30.9	0.1	_	_	_	_	_	_	_	_	2.9	_
130	Other financial corporations	13.9	13.6	_	_	_	_	_	_	_	_	_	0.2	_
140	Non-financial corporations	3.4	3.0	_	_	_	_	_	_	_	_	_	0.2	_
150	Off-balance-sheet exposures	1,017.6	656.0	31.6	3.0	1.7	(0.3)	(0.2)	(0.1)	(0.3)	(0.2)		142.8	0.3
160	Central banks	0.8	0.8	_		_	_	_	_	_	_		_	
170	General governments	4.4	3.4	_	_	_	_	_	_	_	_		_	
180	Credit institutions	57.5	50.7	0.2	_	_	_	_	_		_		0.8	
190	Other financial corporations	112.7	86.6	4.9	0.1	0.1	_	_	_	_	_		28.5	
200	Non-financial corporations	584.1	260.2	23.0	2.5	1.3	(0.3)	(0.2)	(0.1)	(0.3)	(0.2)		56.1	0.1
210	Households	258.1	254.3	3.5	0.4	0.3					_		57.4	0.2
220	Total at 31 Dec 2023	3,097.2	2,601.3	159.0	23.1	21.8	(4.8)	(1.4)	(3.4)	(7.5)	(7.4)	(2.0)	1,076.1	9.9

The table below presents the residual maturity breakdown of on- and off-balance sheet loans and debt securities. This table excludes on-balance sheet assets held for sale, cash balances with central banks and other demand deposits.

Table 30: Maturity of exposures (CR1-A)

				Net expos	ure value ¹		
		On demand	<= 1 year	> 1 year <= 5 years	> 5 years	No stated maturity	Total
		\$m	\$m	\$m	\$m	\$m	\$m
1	Loans and advances	72,757	527,107	265,383	403,805	22,039	1,291,091
2	Debt securities	177	196,961	205,187	91,831	342	494,498
3	Total at 31 Dec 2024	72,934	724,068	470,570	495,636	22,381	1,785,589
1	Loans and advances	258,301	921,250	471,716	520,406	1,369	2,173,042
2	Debt securities	_	197,739	149,603	88,304	_	435,646
3	Total at 31 Dec 2023	258,301	1,118,989	621,319	608,710	1,369	2,608,688

¹ We enhanced our disclosures to align with table 29, performing and non-performing exposures and related provisions (CR1) and now include securitisation positions and settlement accounts, and exclude off-balance sheet exposures of \$988bn primarily in the less than 1 year maturity bucket. Further reporting process improvements resulted in reclassifications of exposures between different maturity buckets. These changes are not included at 31 December 2023.

The table below shows changes in gross carrying amount of on-balance sheet non-performing loans and advances during the 12 months to December 2024.

Table 31: Changes in the stock of non-performing loans and advances (CR2)

		12 months	to 31 Dec
		2024	2023
		Gross carrying value	Gross carrying value
		\$m	\$m
10	Initial stock of non-performing loans and advances	19,851	21,611
20	Inflows to non-performing portfolios	14,071	9,630
30	Outflows from non-performing portfolios	(1,668)	(2,277)
40	Outflows due to write-offs	(4,447)	(3,923)
50	Outflow due to other situations ¹	(4,467)	(5,190)
60	Final stock of non-performing loans and advances	23,340	19,851

¹ Other situations include foreign exchange movements, repayments and assets held for sale in default.

Non-performing and forborne exposures

Tables 32 to 36 are presented in accordance with the European Banking Authority's ('EBA') 'Guidelines on disclosure of non-performing and forborne exposures'. The PRA has acknowledged that, whilst the EBA's guidelines relating to the management of non-performing exposures and forborne exposures are not applicable in the UK, the prudential aspects of these guidelines broadly represent good credit risk management standards.

The EBA defines non-performing exposures as exposures with material amounts that are more than 90 days past due or exposures where the debtor is assessed as unlikely to pay its credit obligations in full without the realisation of collateral, regardless of the existence of any past due amounts or number of days past due. For our retail portfolios a past due credit obligation is recognised where any amount of principal, interest or fees has not been paid at the date it was due (or the cycle date). Any debtors that are in default for regulatory purposes or impaired under the applicable accounting framework are always considered as non-performing exposures. The Annual Report and Accounts 2024 definition of stage 3 credit-impaired is aligned to the EBA's definition of non-performing exposures. Under the IFRS 9 accounting standard, ECLs are classified as regulatory specific credit risk adjustments.

Forborne exposures are defined by the EBA as exposures where the bank has made concessions to a debtor that is experiencing or about to experience financial difficulties in meeting its financial commitments. Our definition of forborne captures non-payment related concessions.

In the Annual Report and Accounts 2024, forborne exposures are reported within the table 'Forborne loans and advances to customers at amortised cost by stage allocation'.

Forbearance measures consist of concessions towards a debtor that is experiencing or about to experience difficulties in meeting its financial commitments ('financial difficulties').

Under the EBA's definition, exposures cease to be reported as forborne if they pass three tests:

- the forborne exposure must have been considered to be performing for a 'probation period' of at least two years;
- regular payments of more than an insignificant aggregate amount of principal or interest have been made during at least half of the probation period; and
- no exposure to the debtor is more than 30 days past due during or at the end of the probation period.

The table below breaks down performing and non-performing forborne exposures by FINREP counterparty sector and shows the gross carrying amount, accumulated impairments and collateral and financial guarantees received against these exposures. The on-balance sheet exposures exclude assets held for sale.

Table 32: Credit quality of forborne exposures (CQ1)

		Gross carry	ring amou	nt/nominal	amount	Accum impair accumulate changes in due to creci	ment, d negative fair value lit risk and	financial (received and guarantees on forborne osures
		Performing ⁻	Non-pe	erforming fo	orborne of which:	On performing forborne	On non- performing forborne		of which: forborne non- performing
		forborne	Total	defaulted	impaired	exposures	exposures	Total	exposures
		\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m
010	Loans and advances	4,869	9,051	9,051	9,051	(533)	(2,365)	6,636	4,404
050	Other financial corporations	78	191	191	191	(1)	(36)	214	150
060	Non-financial corporations	4,246	7,438	7,438	7,438	(462)	(2,023)	5,565	3,556
070	Households	545	1,422	1,422	1,422	(70)	(306)	857	698
090	Loan commitments given	186	307	307	307	_	(4)	67	33
100	Total at 31 Dec 2024	5,055	9,358	9,358	9,358	(533)	(2,369)	6,703	4,437
010	Lancardadores	0.000	0.050	0.050	0.050	(070)	(0.007)	0.040	0.000
010	Loans and advances	6,666	6,859	6,859	6,859	(373)	(2,267)	6,343	2,892
050	Other financial corporations		37	37	37	(2)	(11)	35	12
060	Non-financial corporations	5,778	5,536	5,536	5,536	(257)	(1,949)	5,355	2,098
070	Households	818	1,286	1,286	1,286	(114)	(307)	953	782
090	Loan commitments given	86	329	329	329		(1)	65	45
100	Total at 31 Dec 2023	6,752	7,188	7,188	7,188	(373)	(2,268)	6,408	2,937

The table below shows an analysis of gross performing and non-performing exposures by days past due. The gross non-performing loan ratio at 31 December 2024 was 1.79% calculated in line with the EBA's guidelines.

Table 33: Credit quality of performing and non-performing exposures by past due days (CQ3)

						Gross ca	rrying am	ount/non	ninal amo	ount			
		Perfor	ming exp	osures			,		-perform		ures		
			Not past due or	Past due > 30 days ≤ 90 days	Total \$bn	Unlikely to pay that are not past due or are past due ≤ 90 days \$bn	Past due > 90 days ≤ 180 days \$bn	Past due > 180 days ≤ 1 year \$bn	Past due > 1 year ≤	Past due > 2	Past due > 5 years ≤		of which: defaulted \$bn
005	Cash balances at central banks and other demand			φυπ	φυπ	ΨDII	φυιι	Ψυπ	φυπ	ΨDII	φυπ	φυπ	φιπ
	deposits	314.7	314.7										
010 020	Loans and advances	1,278.0	1,276.8	1.2	23.3	14.6	2.2	2.9	1.5	1.8	0.1	0.2	23.3
030	Central banks General governments	23.1 11.4	23.1 11.4		0.2					0.1		0.1	0.2
040	Credit institutions	125.9	125.9		U.Z					- 0.1		- 0.1	- 0.2
050	Other financial corporations	258.3	258.2	0.1	0.7	0.7	_	_	_	_	_	_	0.7
060	Non-financial corporations	410.1	409.9	0.2	18.8	11.7	1.6	2.5	1.4	1.4	0.1	0.1	18.8
070	- of which SMEs	21.7	21.6	0.1	1.2	0.6	0.1	0.5	_	_	_	_	1.2
080	Households	449.2	448.3	0.9	3.6	2.2	0.6	0.4	0.1	0.3	_	_	3.6
090	Debt securities	494.6	494.6	_	_	=	_	_	_	_	-	_	_
100	Central banks	22.9	22.9	_	_	_	_	_	_	_	_	_	_
110	General governments	416.3	416.3						_		_		
120	Credit institutions	38.4	38.4	_	_	_	_	_	_	_	_	_	
130	Other financial corporations	12.3	12.3										
140	Non-financial corporations	4.7	4.7										
150	Off-balance-sheet exposures	985.7			2.7								2.7
160	Central banks	0.7											
170	General governments	3.8			_								_
180	Credit institutions	50.8			_								_
190	Other financial corporations	104.0			0.1								0.1
200	Non-financial corporations	571.3			2.5								2.5
210	Households	255.1			0.1								0.1
220	Total at 31 Dec 2024	3,072.9	2,086.1	1.2	26.0	14.6	2.2	2.9	1.5	1.8	0.1	0.2	26.0
005	Cash balances at central banks and other demand deposits	332.1	332.1	_	_	_	_	_	_	_	_	_	
010	Loans and advances	1,314.2	1,312.2	2.0	20.1	13.3	1.8	1.9	1.2	1.3	0.2	0.3	20.1
020	Central banks General governments	41.8 8.5	41.8 8.5		0.2	0.2							
040	Credit institutions	138.4	138.4		- 0.2	U.Z							0.2
050	Other financial corporations	249.0	248.7	0.3	0.8	0.4			0.4				0.8
060	Non-financial corporations	427.9	427.3	0.6	15.5	10.7	1.2	1.5	0.6	1.0	0.2	0.2	15.5
070	- of which SMEs	26.5	26.4	0.1	1.9	0.7	0.2	0.9	0.1	_	_	_	1.9
080	Households	448.6	447.5	1.1	3.6	2.0	0.6	0.4	0.2	0.3	0.1	0.1	3.6
090	Debt securities	433.3	433.3	_		_	_	_	_		_	_	
100	Central banks	26.2	26.2			_	_	_	_		_		
110	General governments	358.8	358.8							_			
120	Credit institutions	31.0	31.0				_						
130	Other financial corporations	13.9	13.9										
150	Non-financial corporations Off-balance-sheet exposures	1,017.6	3.4		3.0		_		_	_	_		3.0
160	Central banks	0.8			_								_
170	General governments	4.4			_								_
180	Credit institutions	57.5			_								_
190	Other financial corporations	112.7			0.1								0.1
200	Non-financial corporations	584.1			2.5								2.5
210	Households	258.1			0.4								0.4
220	Total at 31 Dec 2023	3,097.2	2,077.5	2.0	23.1	13.3	1.8	1.9	1.2	1.3	0.2	0.3	23.1

The table below provides information on the instruments that were cancelled in exchange for collateral obtained by taking possession and on the value of the collateral. The value at initial recognition represents the gross carrying amount of the collateral obtained by taking possession at initial recognition on the balance sheet. The accumulated negative changes represent the accumulated impairment or negative change in the value of the collateral since initial recognition, including amortisation in the case of property, plant and equipment and investment properties.

Table 34: Collateral obtained by taking possession and execution processes (CQ7)

			At		
		At 31 D	ec 2024	At 31 De	c 2023
		Collateral o	•	Collateral ob taking pos	,
		Value at initial recognition	Accumulated negative changes	Value at initial recognition	Accumulated negative changes
		\$m	\$m	\$m	\$m
020	Other than property, plant and equipment	93.3	(18.3)	79.4	(11.9)
030	Residential immovable property	67.5	(6.2)	65.3	(9.2)
040	Commercial immovable property	25.1	(12.1)	13.9	(2.7)
050	Movable property (auto, shipping, etc.)	0.6	_	0.1	_
070	Other	0.1	_	0.1	_
080	Total	93.3	(18.3)	79.4	(11.9)

Concentration risk

Concentrations of credit risk arise when a number of counterparties or exposures have comparable economic characteristics, are engaged in similar activities or operate in the same geographical areas or industry sectors so that their collective ability to meet contractual obligations is uniformly affected by changes in economic, political or other conditions.

We have a number of global businesses with a broad range of products. We operate in a number of geographical markets with the

majority of our exposures in Asia and Europe. We use a number of controls and measures to minimise undue concentration of exposure in our portfolios across industries, countries and global businesses. These include portfolio and counterparty limits, approval and review controls, and stress testing. The following tables present information on the concentration of exposures by geography and industry.

The table below shows the credit quality of on- and off- balance sheet exposures by geography. The geographical breakdown is based on the country or territory of residence of the immediate counterparty. The table presents the countries that are contributing 10% or more of the total on-balance sheet and off-balance sheet exposures separately, with the remaining exposures aggregated within 'other countries'. The on-balance sheet exposures exclude cash and balances at central banks and assets held for sale.

Table 35: Quality of non-performing exposures by geography (CQ4)

		а	b	С	d	е	f
			Gross ca Nominal				Provisions on off-balance sheet commit- ments and
		Total	of which: non- performing	of which: defaulted	of which: subject to impairment	Accumulated impairment	financial guarantee given
		\$m	\$m	\$m	\$m	\$m	\$m
010	On-balance sheet exposures	1,795,926	23,347	23,347	1,785,814	(10,329)	
020	United Kingdom	375,331	4,694	4,694	373,007	(2,242)	
030	Hong Kong	341,109	9,693	9,693	339,321	(2,945)	
040	United States	318,818	904	904	317,371	(352)	
070	Other countries/territories	760,668	8,056	8,056	756,115	(4,790)	
080	Off-balance sheet exposures	988,355	2,682	2,682			(769)
090	Hong Kong	218,528	224	224			(30)
100	United Kingdom	127,378	614	614			(164)
110	United States	122,885	366	366			(56)
140	Other countries/territories	519,564	1,478	1,478			(519)
150	Total at 31 Dec 2024	2,784,281	26,029	26,029	1,785,814	(10,329)	(769)
010	On-balance sheet exposures	1,767,522	20,051	20,051	1,760,605	(11,712)	
020	United Kingdom	365,954	5,121	5,121	364,832	(2,326)	
030	Hong Kong	350,671	4,358	4,358	348,939	(2,382)	
040	United States	287,408	994	994	285,567	(376)	
070	Other countries/territories	763,489	9,578	9,578	761,267	(6,628)	
080	Off-balance sheet exposures	1,020,552	3,007	3,007			(611)
090	Hong Kong	219,193	192	192			(39)
100	United Kingdom	126,789	514	514			(164)
110	United States	131,931	463	463			(45)
140	Other countries/territories	542,639	1,838	1,838			(363)
150	Total at 31 Dec 2023	2,788,074	23,058	23,058	1,760,605	(11,712)	(611)

The table below shows the gross carrying amount of loans and advances to non-financial corporations, the related accumulated impairment and the accumulated changes in fair value to credit risk by industry types. The on-balance sheet exposures exclude assets held for sale.

Table 36: Credit quality of loans and advances to non-financial corporations by industry (CQ5)

		Total	of which: non-performing	of which: defaulted	of which: subject to impairment	Accumulated impairment
		\$m	\$m	\$m	\$m	\$m
010	Agriculture, forestry and fishing	7,101	282	282	7,101	(96)
020	Mining and quarrying	8,419	318	318	8,419	(46)
030	Manufacturing	89,832	1,602	1,602	88,921	(943)
040	Electricity, gas, steam and air conditioning supply	18,407	239	239	18,339	(133)
050	Water supply	2,963	43	43	2,963	(23)
060	Construction	30,184	3,279	3,279	29,993	(1,768)
070	Wholesale and retail trade	87,428	2,989	2,989	87,203	(1,595)
080	Transport and storage	24,003	418	418	23,956	(322)
090	Accommodation and food service activities	14,795	1,611	1,611	14,715	(298)
100	Information and communication	19,883	229	229	19,850	(160)
110	Financial and insurance activities	270	_	_	270	(1)
120	Real estate activities	61,175	5,700	5,700	61,129	(964)
130	Professional, scientific and technical activities	26,158	648	648	25,878	(266)
140	Administrative and support service activities	20,272	739	739	20,269	(320)
150	Public administration and defence, compulsory social					
	security	87	_	_	87	_
160	Education	2,637	81	81	2,637	(58)
170	Human health services and social work activities	4,031	184	184	4,031	(51)
180	Arts, entertainment and recreation	2,065	78	78	2,065	(35)
190	Other services	9,212	338	338	9,194	(116)
200	Total at 31 Dec 2024	428,922	18,778	18,778	427,020	(7,195)
010	A minute man farmatan and finite m	7.000	207	207	7.000	(101)
010	Agriculture, forestry and fishing	7,236	307	307	7,236	(131)
020	Mining and quarrying	7,718	326	326	7,718	(102)
030	Manufacturing	92,296	1,999	1,999	91,741	(1,197)
040	Electricity, gas, steam and air conditioning supply	16,083	287	287	15,882	(128)
050	Water supply	3,264	103	103	3,264	(62)
060	Construction	35,477	3,956	3,956	35,477	(2,690)
070	Wholesale and retail trade	87,552	2,564	2,564	87,462	(1,551)
080	Transport and storage	22,620	543	543	22,620	(231)
090	Accommodation and food service activities	15,894	970	970	15,886	(257)
100	Information and communication	19,478	299	299	19,478	(173)
110	Financial and insurance activities	291	9	9	291	(2)
120	Real estate activities	66,290	2,085	2,085	66,290	(735)
130	Professional, scientific and technical activities	26,523	740	740	26,513	(400)
140	Administrative and support service activities	22,396	597	597	22,396	(269)
150	Public administration and defence, compulsory social	4 2 4 2			4.0.0	
	security	1,042			1,042	(1)
160	Education	2,416	77	77	2,416	(40)
170	Human health services and social work activities	4,326	183	183	4,326	(56)
180	Arts, entertainment and recreation	1,993	99	99	1,993	(42)
190	Other services	10,465	328	328	10,442	(158)
200	Total at 31 Dec 2023	443,360	15,472	15,472	442,473	(8,225)

Risk mitigation

Our approach to granting credit facilities is on the basis of capacity to repay, rather than placing primary reliance on credit risk mitigants. Depending on a customer's standing and the type of product, facilities may be provided unsecured.

Mitigation of credit risk is a key aspect of effective risk management and takes many forms. Our general policy is to promote the use of credit risk mitigation, justified by commercial prudence and capital efficiency. Detailed policies cover the acceptability, structuring and terms relating to the availability of credit risk mitigation such as in the form of collateral security. These policies, together with the setting of suitable valuation parameters, are subject to regular review to ensure that they are supported by empirical evidence and continue to fulfil their intended purpose.

Collateral

The most common method of mitigating credit risk is to take a charge over collateral. In our retail residential and commercial real estate ('CRE') businesses, a mortgage over the property is usually taken to help secure claims. Physical collateral is also taken in various forms of specialised lending and leasing transactions where income from the physical assets that are financed is also the principal source of facility repayment. In the commercial and industrial sectors, charges are created over business assets such as premises, stock and debtors. Loans to private banking clients may be made against a pledge of eligible marketable securities, cash or real estate. Facilities to SMEs are commonly granted against guarantees given by their owners and/or directors

For credit risk mitigants in the form of immovable property, the key determinant of concentration at Group level is geography. Use of immovable property mitigants for risk management purposes is predominantly in Asia and Europe.

For further details of collateral held over CRE and residential property, see pages 180 and 194 of the Annual Report and Accounts 2024.

Financial collateral

In the institutional sector, trading facilities are supported by charges over financial instruments, such as cash, debt securities and equities. Financial collateral in the form of marketable securities is used in much of the Group's derivatives activities and in securities financing transactions, such as repos, reverse repos, securities lending and borrowing. Netting is used extensively and is a prominent feature of market standards documentation.

For further details of collateral held for trading exposures, see page 184 of the Annual Report and Accounts 2024.

In the banking book, we provide customers with working capital management products. In some cases, these products combine loans and advances to customers, whose accounts we have the right of offset, which complies with the regulatory requirements for onbalance sheet netting. Where this applies, the customer accounts are treated as cash collateral and are reflected in our LGD estimates.

Under on-balance sheet netting agreements, the customer accounts are treated as though they are covered by cash collateral and the effects of this collateral are incorporated in our LGD estimates. For risk management purposes, the net amounts of such exposures are subject to limits and the relevant customer agreements are subject to review to ensure the legal right of offset remains appropriate.

Other forms of credit risk mitigation

Our GBM business uses credit risk mitigation to manage the credit risk of its portfolios, with the goal of reducing concentrations in individual names, sectors or portfolios. The techniques in use include credit default swap ('CDS') purchases, structured credit notes and securitisation structures. Buying credit protection creates credit exposure against the protection provider, which is monitored as part of the overall credit exposure to them. Where applicable, the transaction is entered into directly with a central clearing house counterparty; otherwise our exposure to CDS protection providers is

diversified among mainly banking counterparties with strong credit ratings.

In our corporate lending, we also take guarantees from banks, corporates and export credit agencies. Corporates would normally provide guarantees as part of a parent and subsidiary or common parent relationship and would span a number of credit grades. The ECAs will normally be investment grade.

Policy and procedures

Policies and procedures cover the end-to-end credit lending process including the governance of the protection of our position from the outset of a customer relationship; for instance, in requiring standard terms and conditions or specifically agreed documentation permitting the offset of credit balances against debt obligations, and through controls over the integrity, current valuation and, if necessary, realisation of collateral security.

Valuing collateral

Valuation strategies are established to monitor collateral mitigants to ensure that they will continue to provide the anticipated secure secondary repayment source. The frequency of valuation increases with the volatility of the collateral. For market trading activities such as collateralised over-the-counter ('OTC') derivatives and SFTs, we typically carry out daily valuations. For residential mortgages, Group policy prescribes a revaluation of the portfolio at a minimum of every three years, or every 6 months for material portfolios. More frequent revaluations are required where market conditions are subject to significant change, and for non performing loans are subject to monitoring at a minimum annually. Residential property collateral values are determined through a combination of professional appraisals, desktop valuations, automated valuation models ('AVMs'), house price indices or statistical analysis.

For CRE, where the facility exceeds regulatory threshold requirements, Group policy requires an independent review of the valuation at least every three years, or more frequently as the need arises. Revaluations are sought where, for example, material concerns arise in relation to the performance of the collateral. CRE revaluation also occurs commonly in circumstances where an obligor's credit quality has declined sufficiently to cause concern that the principal payment source may not fully meet the obligation.

Recognition of risk mitigation under the IRB approach

Within an IRB approach, risk mitigants are considered in two broad categories:

- those which reduce the intrinsic PD of an obligor and therefore operate as determinants of PD; and
- those which affect the estimated recoverability of obligations and require adjustment of LGD or, in certain limited circumstances, EAD.

The first category typically includes full parental guarantees where one obligor within a group guarantees another. In these circumstances, the PD of the parent guarantor is used to adjust or substitute the PD of the guaranteed obligor. PD estimates may be subject to a 'sovereign ceiling', constraining the risk ratings assigned to obligors in countries of higher risk, and where only partial parental support exists. In certain jurisdictions, certain types of third-party guarantee are recognised by substituting the obligor's PD with that of the guarantor.

In the second category, LGD estimates are affected by a wider range of collateral, including cash, charges over real estate property, fixed assets, trade goods, receivables and floating charges such as mortgage debentures. Unfunded mitigants, such as third-party guarantees, are also considered in LGD estimates where there is evidence that they reduce loss expectation.

The main types of guarantor are banks, other financial institutions and corporates. The creditworthiness of providers of unfunded credit risk mitigation is taken into consideration as part of the guarantor's risk profile. Internal limits for such contingent exposure are approved in the same way as direct exposures.

EAD and LGD values are calculated using regulatory approved models, where available. For those portfolios on a Foundation IRB approach, regulatory values are used. For retail portfolios funded and unfunded credit protection is typically reflected in the LGD risk parameter based on a modelled impact using historical data.

A range of collateral recognition approaches are applied to IRB capital treatments:

- Unfunded protection, includes credit derivatives and guarantees under the AIRB approach, recognition may be through PD or LGD.
- Eligible financial collateral under the AIRB approach is recognised in LGD models. Under the FIRB approach, regulatory LGD values are adjusted. The adjustment to LGD is based on the degree to which the exposure value would be adjusted notionally if the financial collateral comprehensive method were applied.
- For all other types of collateral, including real estate, the LGD for exposures under the AIRB approach is calculated by models. For FIRB, regulatory LGDs are adjusted depending on the value and type of the asset taken as collateral relative to the exposure. The types of eligible mitigation recognised under the FIRB approach are more limited.

Table 37 sets out the exposure value and the effective value of credit risk mitigation expressed as the exposure value covered by the credit risk mitigant.

Recognition of risk mitigation under the standardised approach

Where credit risk mitigation is available in the form of an eligible guarantee, non-financial collateral or a credit derivative, the exposure is divided into covered and uncovered portions. The covered portion is determined after applying an appropriate 'haircut' for currency and maturity mismatches (and for omission of restructuring clauses in credit derivatives, where appropriate) to the amount of the protection provided and attracts the risk weight of the protection provider. The uncovered portion attracts the risk weight of the obligor.

The value of exposure fully or partially covered by eligible financial collateral is adjusted under the financial collateral comprehensive method using supervisory volatility adjustments (including those for currency mismatch) which are determined by the specific type of collateral (and its credit quality, in the case of eligible debt securities) and its liquidation period. The adjusted exposure value is subject to the risk rating of the obligor.

The table below provides a breakdown of loans and advances and debt securities by different credit risk mitigation techniques. The on-balance sheet exposures exclude assets held for sale.

Table 37: Credit risk mitigation techniques – overview (CR3)

					of which:	of which:
		Total Exposures:	Exposures	Exposures	or which: Exposures	Exposures secured by
		secured and	unsecured:	secured:	secured	financial
		unsecured		carrying amount	by collateral	guarantees
		\$m	\$m	\$m	\$m	\$m
1	Loans and advances	1,605,775	705,621	900,154	806,819	93,335
	Central banks	324,486	320,865	3,621	3,567	54
	General governments	11,535	6,384	5,151	4,785	366
	Credit Institutions	139,167	51,856	87,311	87,082	229
	Other financial corporations	258,618	70,437	188,181	179,161	9,020
	Non-financial corporations	421,727	206,757	214,970	138,361	76,609
	Households	450,242	49,322	400,920	393,863	7,057
2	Debt securities	494,498	459,101	35,397	_	35,397
	Central banks	22,876	22,876	_	=	_
	General governments	416,270	384,634	31,636	=	31,636
	Credit Institutions	38,338	34,851	3,487	_	3,487
	Other financial corporations	12,330	12,250	80	=	80
	Non-financial corporations	4,684	4,490	194	_	194
3	Total at 31 Dec 2024	2,100,273	1,164,722	935,551	806,819	128,732
4	 of which: non-performing exposures 	16,993	3,670	13,323	11,159	2,164
5	 of which: defaulted 	16,993	3,670	13,323		
1	Loans and advances	1,654,769	744,550	910,219	813,834	96,385
	Central banks	361,563	349,496	12,067	11,999	68
	General governments	8,704	5,412	3,292	2,871	421
	Credit Institutions	150,735	57,725	93,010	92,889	121
	Other financial corporations	249,406	74,230	175,176	166,280	8,896
	Non-financial corporations	435,134	206,915	228,219	149,503	78,716
	Households	449,227	50,772	398,455	390,292	8,163
2	Debt securities	433,135	400,465	32,670		32,670
	Central banks	26,173	26,173			
	General governments	358,764	329,352	29,412		29,412
	Credit Institutions	30,972	28,112	2,860		2,860
	Other financial corporations	13,890	13,656	234		234
	Non-financial corporations	3,336	3,172	164	_	164
3	Total at 31 Dec 2023	2,087,904	1,145,015	942,889	813,834	129,055
4	 of which: non-performing exposures 	12,811	3,228	9,583	7,142	2,441
5	 of which: defaulted 	12,811	3,228	9,583		

The table below shows the bridge between the Group's financial balance sheet line items and the regulatory scope of exposures presented in the above table 37, credit risk mitigation techniques - overview ('CR3'), with the carrying amount being reconciled to total exposures for loans and advances reported in the table 37. Cash and balances at central banks recognised as loans and advances excludes cash in hand of \$5,115m. Loans and advances to customers excludes asset-backed securities amounting to \$19m. Other financial assets includes acceptances, settlement balances and items in course of collection; financial assets measured at fair value through other comprehensive income ('FVOCI'); fair value through profit or loss ('FVTPL') and amortised cost; de-consolidation of insurance/other entities and consolidation of banking associates.

Table 37.i: Analysis of accounting lines comprising total exposures in CR3

	Loans and advances : Secured	and unsecured
	31 Dec 2024	31 Dec 2023
	\$m	\$m
Assets as reported in financial statements		
Cash and balances at central banks	262,559	279,631
Loans and advances to banks	102,039	112,902
Loans and advances to customers	930,639	938,516
Reverse repurchase agreement - non trading	252,549	252,217
Other financial assets	57,989	71,503
Carrying amount reported in the table CR3	1,605,775	1,654,769

The table below shows the split of credit risk exposures under the standardised approach, reflecting the EAD before and after the impact of CRM techniques and credit conversion factors ('CCF'). Securitisation positions are not included in this table.

Table 38: Standardised approach - credit conversion factor ('CCF') and credit risk mitigation ('CRM') effects (CR4)

		Exposures and (Exposures and (RWAs	
		On-balance	Off-balance	On-balance	Off-balance		
		sheet	sheet	sheet	sheet		RWA
		amount	amount	amount	amount	RWAs	density
		\$m	\$m	\$m	\$m	\$m	%
	Asset classes						
1	Central governments or central banks	298,838	1,928	321,444	3,321	4,873	2
2	Regional governments or local authorities	3,354	192	6,103	15	770	13
3	Public sector entities	8,868	249	107	_	73	69
4	Multilateral development banks	17,356	476	19,593	314	130	1
5	International organisations	5,833		5,833		_	
6	Institutions	1,390	2,285	1,892	2,169	1,801	44
7	Corporates	78,859	90,033	76,381	13,569	80,622	90
8	Retail	27,609	53,621	20,777	243	15,566	74
9	Secured by mortgages on immovable property	52,133	1,263	52,133	325	19,147	37
10	Exposures in default	2,775	745	2,695	208	3,672	126
11	Exposures associated with particularly high risk	919	52	866	14	1,320	150
14	Collective investment undertakings	2,279	12	2,279	6	2,123	93
15	Equity	16,460	66	16,460	66	37,503	227
16	Other items	13,319	278	13,319	278	9,602	71
_17	Total at 31 Dec 2024	529,992	151,200	539,882	20,528	177,202	32
1	Central governments or central banks	302,253	2,862	326,719	2,346	5,346	2
2	Regional governments or local authorities	2,554	356	5,944	39	799	13
3	Public sector entities	9.322	197	311	13	104	32
4	Multilateral development banks	12,122	474	14,071	244	122	1
5	International organisations	3,954		3,954		122	
6	Institutions	1,377	1.747	1,838	2.052	1.640	42
7	Corporates	75,298	80,459	68,980	11,414	77,697	97
8	Retail	21,936	50,309	21,171	440	15,924	74
9	Secured by mortgages on immovable property	33,469	1,015	33,469	303	12,951	38
10	Exposures in default	2,349	632	2,277	221	3,169	127
11	Exposures associated with particularly high risk	220	57	161	7	251	150
14	Collective investment undertakings	2,125	19	2,125	9	1,811	85
15	Equity	16,488	71	16,487	71	37,662	227
16	Other items	14,559	331	14,559	331	9,620	65
17	Total at 31 Dec 2023	498,026	138,529	512,066	17,490	167,096	32
			· · · · · · · · · · · · · · · · · · ·		· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·	

The table below provides a breakdown of IRB credit risk RWAs before and after credit derivatives CRM effects. The table excludes securitisation positions, equity, corporate slotting exposures and non-credit obligation assets.

Table 39: IRB – Effect on the RWA of credit derivatives used as CRM techniques (CR7)

			А	t	
		At 31 Dec	2024	At 31 Dec 2	2023
		Pre-credit	Actual	Pre-credit	Actual
		derivatives RWAs	RWAs	derivatives RWAs	RWAs
		\$m	\$m	\$m	\$m
1	Exposures under FIRB	84,566	84,195	77,994	77,544
2	Central governments and central banks	116	116	161	161
3	Institutions	65	65	20	20
4	Corporates	84,385	84,014	77,813	77,363
4.1	- of which: SMEs	3,973	3,973	4,562	4,562
4.3	- of which: Others	80,412	80,041	73,251	72,801
5	Exposures under AIRB	348,623	347,785	387,429	386,306
6	Central governments and central banks	53,789	53,760	55,600	55,571
7	Institutions	13,331	13,310	12,579	12,538
8	Corporates	211,584	210,796	232,490	231,437
8.1	- of which: SMEs	5,838	5,838	8,025	8,025
8.2	 of which: Specialised lending 	4,953	4,953	4,339	4,339
8.3	- of which: Others	200,793	200,005	220,126	219,073
9	Retail	69,919	69,919	86,760	86,760
9.1	 of which Retail – SMEs - Secured by immovable property collateral 	78	78	249	249
9.2	- of which Retail - Non-SMEs - Secured by immovable property collateral	40,255	40,255	55,672	55,672
9.3	 of which Retail – Qualifying revolving 	15,566	15,566	15,609	15,609
9.4	- of which Retail - SMEs - Other	2,450	2,450	2,906	2,906
9.5	- of which Retail - Non-SMEs- Other	11,570	11,570	12,324	12,324
10	Total	433,189	431,980	465,423	463,850

The table below discloses percentage of exposures secured by various CRM techniques, separately for each exposure class in AIRB and FIRB approaches.

Table 40: IRB approach – Disclosure of the extent of the use of CRM techniques (CR7-A)

Name					I	Funded cre	edit Protec	tion (FCP)			Unfun- ded credit Protect- ion	Credit mitigation in the cald of RV	methods culation
Part of expositures Part of expositures						cover Other e	ed by eligible		cover Other credit pr	ed by funded otection			
Sures Sure				expo- sures covered by finan- cial		expo- sures covered by Immo- vable pro- perty	expo- sures covered by	expo- sures covered by other physical		expo- sures covered by life	expo- sures covered	post- all CRM assigned to the obligor expo-	RWA with subs-
Central governments and central povernments and central banks			-		Total				Total		_		titution
Central governments and central banks	AIRR									•			
Central banks		Central governments and	φυII	/0	/0	/0	/0	/0	/0	/0	/0	ΨUII	ADII
3	·		463.9	5.08	_	_	_	_	_	_	0.08	53.4	53.8
3.1		Institutions	76.1	0.52	1.64	-	_	1.64	_	_	0.04	13.0	13.3
Corporates - SMEs 9.8 6.78 63.54 56.78 1.60 5.16 4.06 4.06 4.06 0.83 5.8 5.8			421.5	9.57	12.72	9.19	2.17	1.36	0.23	0.23	1.00	211.4	210.8
Specialised lending 11.7 1.22 2.12 0.87 0.38 0.87 - - 9.84 5.0 5.0		Corporates – SMEs	9.8	6.78	63.54	56.78	1.60	5.16	4.06	4.06	0.83	5.8	5.8
Retail	3.2	specialised lending	11.7	1.22	2.12	0.87	0.38	0.87			9.84	5.0	5.0
A.1													200.0
Retail - immovable property SMEs 0.2 0.27 99.29 96.29 3.01 - - - 0.08 0.1 0.1 4.2 Retail - immovable property non-SMEs 323.3 0.08 95.93 95.93 - - 0.01 0.01 3.84 40.2 40.2 4.3 Retail - qualifying revolving 66.9 - - - - - - - - -			425.9	4.02	73.13	72.87	0.01	0.25	0.54	0.54	2.91	69.9	69.9
Retail - immovable property non-SMEs 323.3 0.08 95.93 95.93 - - 0.01 0.01 3.84 40.2 40.2 40.3 Retail - qualifying revolving 66.9 - - - - - - - - -	4.1	Retail – immovable	0.2	0.27	99.29	96.29	3.01	_	_	_	0.08	0.1	0.1
Retail - other SMEs 5.8 0.43 0.43 - 0.41 0.02 0.01 2.4 2.4	4.2	Retail – immovable	323.3	0.08	95.93	95.93	-	-	0.01	0.01	3.84	40.2	40.2
4.4 Retail – other SMEs 5.8 0.43 0.43 — 0.41 0.02 — — 0.01 2.4 2.4 4.5 Retail – other non-SMEs 29.7 56.76 3.55 — — 3.55 7.68 7.68 0.03 11.6 11.6 5 Total at 31 Dec 2024 1,387.4 5.87 26.40 25.16 0.66 0.58 0.24 0.24 1.23 347.7 347.3 FIRB 1 Central governments and central banks — — — — — — — — — — — — — — — — — — 0.2 2 Institutions — — — — — — — — — — — — — — — — — 0.3 3 Corporates 168.0 21.64 17.03 11.60 3.21 2.22 — — — — 84.3 84.1 3.1 — of which:	4.3		66.0									15.6	15.6
Retail - other non-SMEs 29.7 56.76 3.55 - - 3.55 7.68 7.68 0.03 11.6 11.6 11.6 5 Total at 31 Dec 2024 1,387.4 5.87 26.40 25.16 0.66 0.58 0.24 0.24 1.23 347.7 347.3 12.5 1.5	4.4				0.43		0.41	0.02	-		0.01		
5 Total at 31 Dec 2024 1,387.4 5.87 26.40 25.16 0.66 0.58 0.24 0.24 1.23 347.7 347.8 FIRB 1 Central governments and central banks —		Retail – other non-											11.6
FIRB 1	5					25.16	0.66		0.24	0.24	1.23		347.8
central banks - <													
2 Institutions - - - - - - - 0.00 3 Corporates 168.0 21.64 17.03 11.60 3.21 2.22 - - - 84.3 84.1 3.1 - of which: Corporates - SMEs 6.9 0.56 62.02 47.58 9.42 5.03 - - - 4.0 4.1 3.3 Corporates - other 161.1 22.55 15.11 10.06 2.95 2.10 - - - 80.3 80.0 4 Total at 31 Dec 2024 168.0 21.64 17.03 11.60 3.21 2.22 - - - 84.3 84.3 IRB Specialised lending under the slotting approach 31.8 -	1	•											
3 Corporates 168.0 21.64 17.03 11.60 3.21 2.22 - - - 84.3 84.6 3.1 - of which: Corporates - SMEs 6.9 0.56 62.02 47.58 9.42 5.03 - - - 4.0 4.1 3.3 Corporates - other 161.1 22.55 15.11 10.06 2.95 2.10 - - - 80.3 80.0 4 Total at 31 Dec 2024 168.0 21.64 17.03 11.60 3.21 2.22 - - - 84.3 84.3 IRB Specialised lending under the slotting approach 31.8 -									_				0.1
3.1 - of which: Corporates - SMEs 6.9 0.56 62.02 47.58 9.42 5.03 - - - 4.0 4.0 3.3 Corporates - other 161.1 22.55 15.11 10.06 2.95 2.10 - - - 80.3 80.0 4 Total at 31 Dec 2024 168.0 21.64 17.03 11.60 3.21 2.22 - - - 84.3 84.3 IRB Specialised lending under the slotting approach 31.8 -													0.1
Corporates – SMEs 6.9 0.56 62.02 47.58 9.42 5.03 — — — 4.0 4.0 3.3 Corporates – other 161.1 22.55 15.11 10.06 2.95 2.10 — — — 80.3 80.4 4 Total at 31 Dec 2024 168.0 21.64 17.03 11.60 3.21 2.22 — — — — 84.3 84.3 IRB Specialised lending under the slotting approach 31.8 —			168.0	21.64	17.03	11.60	3.21	2.22				84.3	84.0
4 Total at 31 Dec 2024 168.0 21.64 17.03 11.60 3.21 2.22 - - - 84.3 84.3 IRB Specialised lending under the slotting approach 31.8 -<	3.1		6.9	0.56	62.02	47.58	9.42	5.03	_	_	_	4.0	4.0
IRB Specialised lending under the slotting approach 31.8 -	3.3	Corporates – other	161.1	22.55	15.11	10.06	2.95	2.10	_	_	_	80.3	80.0
Specialised lending under 31.8 -		Total at 31 Dec 2024	168.0	21.64	17.03	11.60	3.21	2.22	_	_	_	84.3	84.2
the slotting approach 31.8 22.3 22.3	IRB												
		,	31.8	_	_	_	_	_	_	_	_	22.3	22.3
			2.1		_		_		_			4.7	4.7

Table 40: IRB approach – Disclosure of the extent of the use of CRM techniques (CR7-A) (continued)

					Funded cr	edit protec	tion (FCP)			Unfunded credit protection	Credit mitigation in the cal of RV	methods culation
					Part of excovered Other excollater	ed by eligible		Part of ex covere Other f credit pro (%	ed by unded otection			
		Total	Part of expo- sures covered by finan-cial		Part of expo- sures covered by Immov- able pro- perty	Part of expo- sures covered by	Part of expo- sures covered by other physical		Part of expo- sures covered by life insu-	sures covered by	RWA post- all CRM assigned to the obligor expo-	RWA with subs-
		expo- sures	colla- teral	Total	colla- teral	receiva- bles	colla- teral	Total	rance policies	guaran- tees	sure class	titution effects
AIRB		\$bn	%	%	%	%	%	%	%	\$bn	\$bn	\$bn
1	Central governments and central banks	463.4	6.38	_	_	_	_	_	_	0.07	55.5	55.6
2	Institutions	80.5	2.26	0.79		_	0.79	_		0.10	12.1	12.5
3	Corporates	474.7	8.18	19.15	13.36	2.53	3.26	0.27	0.27	1.19	231.9	231.4
3.1	of which: Corporates – SMEs	15.6	9.78	61.70	52.11	2.43	7.16	3.20	3.20	1.67	8.0	8.0
3.2	Corporates – specialised lending	11.7	0.33	1.12	0.37	_	0.75	_	_	10.75	4.4	4.3
3.3	Corporates – other	447.4	8.33	18.13	12.34	2.60	3.19	0.18	0.18	0.92	219.5	219.1
4	Retail	501.0	4.05	71.69	71.44	0.01	0.24	0.76	0.76	6.20	86.8	86.8
4.1	 of which: Retail – immovable property SMEs 	0.8	1.62	94.67	94.13	0.52	0.01	_	_	0.09	0.2	0.2
4.2	Retail – immovable property non-SMEs	389.6	0.16	91.68	91.68	_				7.96	55.7	55.7
4.3	Retail – qualifying revolving	68.4	_	_	_	_	_			_	15.6	15.6
4.4	Retail – other SMEs	8.5	4.90	0.47		0.44	0.02			0.27	2.9	2.9
4.5	Retail – other non- SMEs	33.7	57.24	3.54		_	3.54	11.28	11.28	0.06	12.4	12.4
5	Total at 31 Dec 2023	1519.6	5.96	29.66	27.73	0.79	1.14	0.34	0.34	2.44	386.3	386.3
FIRB 1	Central governments and central banks											0.2
2	Institutions											
3	Corporates	162.6	20.39	17.55	12.09	3.21	2.25				77.6	77.3
3.1	- of which: Corporates - SMEs	8.6	0.66	64.07	50.09	8.96	5.01	_	_	_	4.6	4.6
3.2	Corporates – specialised lending		_						_			
3.3	Corporates – other	154.0	21.49	14.96	9.97	2.89	2.10	_		_	73.0	72.7
4	Total at 31 Dec 2023	162.6	20.39	17.55	12.09	3.21	2.25	_		_	77.6	77.5
IRB												
	Specialised lending under the slotting approach	35.0	_	_	_	_	_	_	_	_	25.9	25.9
	Equity exposures	2.40								_	5.7	5.7

The table below sets out the specialised lending exposures by different regulatory slotting categories split by remaining maturity. It also includes a separate disclosure of equity exposures under the simple risk-weighted approach. Off-balance sheet CIU equity exposures are calculated as per CRR II Article 132(c).

Table 41: Specialised lending and equity exposures under the simple risk-weight approach (CR10)

Specialised lending: Proj	ect finance (Slotting approach)	On-balance sheet amount	Off-balance sheet amount	Risk weight	Exposure amount	RWAs	Expected loss
Regulatory categories	Remaining maturity	\$m	\$m	%	\$m	\$m	\$m
Category 1	Less than 2.5 years	41	_	50	41	17	_
	Equal to or more than 2.5 years	171	26	70	189	103	1
Category 2	Less than 2.5 years	21	_	70	21	14	_
	Equal to or more than 2.5 years	63	_	90	63	56	_
Category 3	Less than 2.5 years	2	2	115	3	2	_
	Equal to or more than 2.5 years	18	14	115	21	18	1
Category 4	Less than 2.5 years	_	_	250	_	_	_
	Equal to or more than 2.5 years	_	_	250	_	_	_
Category 5	Less than 2.5 years	_	_	_	_	_	_
	Equal to or more than 2.5 years	_	_	_	_	_	_
	Less than 2.5 years	64	2		65	33	_
Total at 31 Dec 2024	Equal to or more than 2.5 years	252	40		273	177	2
Category 1	Less than 2.5 years	_	_	50			
	Equal to or more than 2.5 years	_	_	70	_	_	_
Category 2	Less than 2.5 years	_	_	70	_	_	_
	Equal to or more than 2.5 years	3	_	90	3	2	_
Category 3	Less than 2.5 years	_	_	115	_	_	_
	Equal to or more than 2.5 years	_	_	115	_	_	_
Category 4	Less than 2.5 years	_	_	250	_	_	_
	Equal to or more than 2.5 years	_	_	250	_	_	
Category 5	Less than 2.5 years	_	_	_	_	_	
	Equal to or more than 2.5 years	1	_	_	1	_	
	Less than 2.5 years	_			_	_	
Total at 31 Dec 2023	Equal to or more than 2.5 years	4	_		4	2	_

	ome-producing real estate and al real estate (Slotting approach)	On-balance sheet amount	Off-balance sheet amount	Risk weight	Exposure amount	RWAs	Expected loss
Regulatory categories	Remaining maturity	\$m	\$m	%	\$m	\$m	\$m
Category 1	Less than 2.5 years	9,424	1,627	50	10,249	5,075	_
	Equal to or more than 2.5 years	3,517	194	70	3,646	2,517	15
Category 2	Less than 2.5 years	5,952	1,004	70	6,301	4,331	25
	Equal to or more than 2.5 years	3,119	135	90	3,213	2,794	26
Category 3	Less than 2.5 years	2,353	127	115	2,406	2,696	67
	Equal to or more than 2.5 years	382	4	115	384	420	11
Category 4	Less than 2.5 years	1,236	246	250	1,351	3,302	108
	Equal to or more than 2.5 years	371	19	250	383	904	31
Category 5	Less than 2.5 years	3,096	116	_	3,133	_	1,567
	Equal to or more than 2.5 years	404	13	_	414	-	206
	Less than 2.5 years	22,061	3,120		23,440	15,404	1,767
Total at 31 Dec 2024	Equal to or more than 2.5 years	7,793	365		8,040	6,635	289
Category 1	Less than 2.5 years	11,478	2,014	50	12,482	6,111	
category 1	Equal to or more than 2.5 years	4,965	433	70	5,207	3,561	21
Category 2	Less than 2.5 years	8,088	956	70	8,518	5,779	34
Catogory 2	Egual to or more than 2.5 years	3,093	295	90	3,275	2,873	26
Category 3	Less than 2.5 years	1,789	89	115	1,831	2,049	51
221290.7 2	Equal to or more than 2.5 years	622	20	115	637	705	18
Category 4	Less than 2.5 years	1,548	437	250	1,694	4,188	136
,	Equal to or more than 2.5 years	247	21	250	255	593	20
Category 5	Less than 2.5 years	659	14	_	671	_	336
3 ,	Equal to or more than 2.5 years	408	_	_	408	_	204
-	Less than 2.5 years	23,562	3,510		25,196	18,127	557
Total at 31 Dec 2023	Equal to or more than 2.5 years	9,335	769		9,782	7,732	289

Table 41: Specialised lending and equity exposures under the simple risk-weight approach (CR10) (continued)

Specialised lending: Object finance (Slotting approach)		On-balance sheet amount	Off-balance sheet amount	Risk weight	Exposure amount	RWAs	Expected loss
Regulatory categories	Remaining maturity	\$m	\$m	%	\$m	\$m	\$m
Category 1	Less than 2.5 years	_	_	50	_	_	_
	Equal to or more than 2.5 years	28	_	70	28	20	_
Category 2	Less than 2.5 years	_	_	70	_	_	_
	Equal to or more than 2.5 years	_	_	90	_	_	_
Category 3	Less than 2.5 years	_	_	115	_	_	_
	Equal to or more than 2.5 years	_	_	115	_	_	_
Category 4	Less than 2.5 years	_	_	250	_	_	_
	Equal to or more than 2.5 years	_	_	250	_	_	_
Category 5	Less than 2.5 years	_	_	_	_	_	_
	Equal to or more than 2.5 years	1	_	_	1	_	_
	Less than 2.5 years	_	_		_	_	_
Total at 31 Dec 2024	Equal to or more than 2.5 years	29	_		29	20	_
Category 1	Less than 2.5 years	6	13	50	11	5	
	Equal to or more than 2.5 years	28		70	28	20	
Category 2	Less than 2.5 years	_	_	70	_	_	
	Equal to or more than 2.5 years	_	_	90	_	_	
Category 3	Less than 2.5 years	_	_	115	_	_	_
	Equal to or more than 2.5 years	_	_	115	_	_	_
Category 4	Less than 2.5 years	_	_	250	_	_	
	Equal to or more than 2.5 years	_	_	250	_	_	
Category 5	Less than 2.5 years	_	_	_	_	_	
	Equal to or more than 2.5 years	3	_	_	3	_	1
	Less than 2.5 years	6	13		11	5	
Total at 31 Dec 2023	Equal to or more than 2.5 years	31			31	20	1

Table 41.i: Equity exposures under simple risk-weighted approach (CR10)

	On-balance sheet amount	Off-balance sheet amount	RW	Exposure amount	RWAs	Expected losses
Regulatory categories	\$m	\$m	%	\$m	\$m	\$m
Private equity exposures	1,134	_	190	1,134	2,155	9
Exchange-traded equity exposures	271	_	290	271	786	2
Other equity exposures	264	_	370	264	977	6
Off-balance sheet CIU equity exposures	-	771		398	782	4
Total at 31 Dec 2024	1,669	771		2,067	4,700	21
Private equity exposures	1,576	_	190	1,576	2,994	13
Exchange-traded equity exposures	150	_	290	150	436	1
Other equity exposures	240	_	370	240	889	6
Off-balance sheet CIU equity exposures	_	830		481	1,343	6
Total at 31 Dec 2023	1,966	830		2,447	5,662	26

Credit risk approaches

The table below shows exposures and percentages covered by the IRB and SA portfolio. This table excludes counterparty credit risk exposures and securitisation exposures.

Table 42: Scope of the use of IRB and SA approaches (UK CR6-A)

		Exposure value as defined in Article 166 CRR Il for exposures subject to IRB approach	Total exposure value for exposures subject to the Standardised approach and to the IRB approach ¹	Percentage of total exposure value subject to the permanent partial use of the SA	Percentage of total exposure value subject to IRB Approach	Percentage of total exposure value subject to a roll-out plan ²
		\$m	\$m	%	%	%
1	Central governments or central banks	463,918	800,084	24.12	57.99	17.89
1.1	of which: Regional governments or local authorities		13,115	0.02	74.27	25.71
1.2	of which: Public sector entities		9,558	0.55	5.85	93.60
2	Institutions	76,098	77,371	0.98	96.12	2.90
3	Corporates	621,375	704,294	7.21	84.93	7.86
3.1	of which: Corporates - Specialised lending, excluding slotting approach		11,435	_	100.00	_
3.2	of which: Corporates - Specialised lending under slotting approach		30,802	_	100.00	_
4	Retail	425,899	467,054	10.56	81.88	7.56
4.1	of which: Retail – Secured by real estate SMEs		205	_	77.80	22.20
4.2	of which: Retail – Secured by real estate non-SMEs		369,662	6.08	86.29	7.63
4.3	of which: Retail – Qualifying revolving		28,520	0.10	99.87	0.04
4.4	of which: Retail – Other SMEs		7,036	13.24	77.60	9.16
4.5	of which: Retail – Other non-SMEs		61,631	41.96	47.60	10.44
5	Equity	2,067	18,714	14.00	11.05	74.96
6	Other non-credit obligation assets	60,128	73,725	17.19	81.56	1.26
7	Total at 31 Dec 2024	1,649,485	2,141,242	14.44	73.84	11.72
1	Central governments or central banks	463,373	795,685	23.36	58.23	18.41
1.1	of which: Regional governments or local authorities		11,790	0.03	77.94	22.03
1.2	of which: Public sector entities		22,814	0.06	58.86	41.08
2	Institutions	80,524	83,593	1.24	96.41	2.35
3	Corporates	672,299	741,215	7.18	86.71	6.11
3.1	of which: Corporates-Specialised lending, excluding slotting approach		11,518	_	100.00	
3.2	of which: Corporates - Specialised lending under slotting approach		33,776	_	100.00	_
4	Retail	501,033	514,154	9.25	88.41	2.34
4.1	of which: Retail – Secured by real estate SMEs		863	0.80	94.67	4.53
4.2	of which: Retail – Secured by real estate non-SMEs		416,120	6.05	92.37	1.58
4.3	of which: Retail – Qualifying revolving		29,221	_	100.00	
4.4	of which: Retail – Other SMEs		9,949	14.13	78.16	7.71
4.5	of which: Retail – Other non-SMEs		58,001	36.18	55.82	8.00
5	Equity	2,447	19,431	13.20	14.39	72.41
6	Other non-credit obligation assets	62,273	77,162	18.31	80.71	0.98
7	Total at 31 Dec 2023	1,781,949	2,231,240	13.64	76.47	9.89

¹ The key driver for differences in IRB exposure value is primarily the CCF applied to the off-balance sheet exposures.

² Percentage of total exposure value subject to a roll-out plan, includes other SA exposures that are not subject to permanent partial use.

Standardised approach

Qualitative disclosures on banks' use of external credit ratings under the standardised approach for credit risk

The standardised approach is applied where exposures do not qualify for use of an IRB approach and/or where an exemption from IRB has been granted. The standardised approach requires banks to use risk assessments prepared by external credit assessment institutions ('ECAIs') or external credit agency ('ECAs') to determine the risk weightings applied to rated counterparties.

ECAI risk assessments are used within the Group as part of the determination of risk weightings for the following classes of exposure:

- central governments and central banks;
- regional governments and local authorities;
- institutions;
- corporates;
- securitisation positions; and
- short-term claims on institutions and corporates.

We have nominated three ECAIs for this purpose – Moody's Investor Service ('Moody's'), Standard and Poor's rating agency ('S&P') and Fitch Ratings ('Fitch'). In addition to this, we use Morningstar DBRS ('DBRS'), ARC ratings and Scope ratings specifically for securitisation positions. We have not nominated any ECAs.

Data files of external ratings from the nominated ECAIs are matched with customer records in our centralised credit database.

When calculating the risk-weighted value of an exposure using ECAl risk assessments, risk systems identify the customer in question and

look up the available ratings in the central database according to the rating selection rules. The systems then apply the prescribed credit quality step mapping to derive from the rating the relevant risk weight.

All other exposure classes are assigned risk weightings as prescribed in the PRA's Rulebook.

Credit quality step	Moody's assessment	S&P's assessment	Fitch's assessment	DBRS assessment
1	Aaa to Aa3	AAA to AA-	AAA to AA-	AAA to AAL
2	A1 to A3	A+ to A-	A+ to A-	AH to AL
3	Baa1 to Baa3	BBB+ to BBB-	BBB+ to BBB-	BBBH to BBBL
4	Ba1 to Ba3	BB+ to BB-	BB+ to BB-	BBH to BBL
5	B1 to B3	B+ to B-	B+ to B-	BH to BL
6	Caa1 and below	CCC+ and below	CCC+ and below	CCCH and below

Exposures to, or guaranteed by, central governments and central banks of the UK and equivalent countries are risk-weighted at 0% provided that they are denominated and funded in local currency or qualify for that weight by virtue of their external rating.

Table 44 provides further details of the risk weighting of our standardised non-counterparty credit exposures. For information about the risk weighting of our standardised counterparty credit risk exposures, refer to table 54.

Table 43: CQS reference table

			Institutions (includes banks)						
		-	Sovereign method	Credit assessn	ment method				
-	Corporates	Central government or central banks	Sovereign method	Maturity > 3 months	Maturity 3 months or less				
Credit Quality Step 1	20%	0%	20%	20%	20%				
Credit Quality Step 2	50%	20%	50%	50%	20%				
Credit Quality Step 3	100%	50%	100%	50%	20%				
Credit Quality Step 4	100%	100%	100%	100%	50%				
Credit Quality Step 5	150%	100%	100%	100%	50%				
Credit Quality Step 6	150%	150%	150%	150%	150%				

The table below discloses credit risk exposures under the standardised approach by risk weights, split into exposure class. Securitisation positions are not included in this table.

Table 44: Standardised approach – exposures by asset classes and risk weights (CR5)

	Risk weight ('RW%')	0% \$bn	2% \$bn	20% \$bn	35% \$bn	50% \$bn	75% \$bn	100% \$bn	150% \$bn	250% \$bn	1,250% \$bn	Total credit exposure amount (post-CCF and CRM) \$bn	of which: un- rated \$bn
	Asset classes												
1	Central governments or central banks	322.1	_	0.1	_	0.7	_	0.2	_	1.7	_	324.8	0.2
2	Regional governments or local authorities	5.3	_	_	_	0.2	_	0.5	_	0.1	_	6.1	0.4
3	Public sector entities	_	_	_	_	_	_	0.1	_	_	_	0.1	_
4	Multilateral development banks	19.5	_	0.2	_	0.2	_	_	_	_	_	19.9	_
5	International organisations	5.8	_	_	_	_	_	_	_	_	_	5.8	_
6	Institutions	_	1.1	0.1	_	2.2	_	0.7	_	_	_	4.1	1.8
7	Corporates	_	_	10.6	0.5	2.1	_	74.8	1.9	_	_	89.9	51.8
8	Retail	_	_	_	_	_	21.0	_	_	_	_	21.0	21.0
9	Secured by mortgages on immovable property	_	_	_	51.3	_	_	1.2	_	_	_	52.5	52.5
10	Exposures in default	_	_	_	_	_	_	1.4	1.5	_	_	2.9	2.9
11	Exposures associated with particularly high risk	_	_	-	-	-	-	-	0.9	_	_	0.9	0.9
14	Units or shares in collective investment undertakings	0.5	_	0.5	-	0.2	-	0.9	0.1	_	0.1	2.3	0.9
15	Equity exposures	_	_	_	_		_	2.5	_	14.0		16.5	6.0
16	Other items	0.2	_	4.8	_	_	_	8.6	_	_	_	13.6	13.6
17	Total at 31 Dec 2024	353.4	1.1	16.3	51.8	5.6	21.0	90.9	4.4	15.8	0.1	560.4	152.0
	Asset classes												
1	Central governments or central banks	325.7	_	0.2	_	1.0	_	0.2	0.1	1.8		329.0	0.2
2	Regional governments or local authorities	5.1	_	_	_	0.3	_	0.5	_	0.1		6.0	0.5
3	Public sector entities	0.1		0.2		_	_					0.3	
4	Multilateral development banks	13.7		0.6			_					14.3	
5	International organisations	4.0										4.0	
6	Institutions		1.4	0.1		1.7		0.7				3.9	2.0
7	Corporates			3.5	0.4	1.0		72.8	2.7			80.4	54.0
8	Retail			_	_		21.6					21.6	21.6
9	Secured by mortgages on immovable property				32.0			1.8				33.8	33.8
10	Exposures in default							1.2	1.3			2.5	2.5
11	Exposures associated with particularly high risk	_	_	_	_	_	_	_	0.2	_	_	0.2	0.2
14	Units or shares in collective investment												_
	undertakings	0.5		0.5	_	0.2		0.8			0.1	2.1	0.9
15	Equity exposures				_	_	_	2.5		14.1		16.6	16.6
16	Other items	0.2		6.4	_	_	_	8.3				14.9	14.9
17	Total at 31 Dec 2023	349.3	1.4	11.5	32.4	4.2	21.6	88.8	4.3	16.0	0.1	529.6	147.2

Application of the IRB approach

Our Group IRB credit risk rating framework incorporates obligor PD and facility LGD and EAD measures. These are used to calculate regulatory EL and capital requirements. They are also used with other inputs to inform rating assessments for the purposes of credit approval and many other purposes meeting the requirements of the use test, for example:

- credit approval and monitoring: IRB models are used in the assessment of customer and portfolio risk in lending decisions;
- risk appetite: IRB measures are an important element in identifying risk exposure at customer, sector and portfolio level;
- pricing: IRB parameters are used in pricing tools for new transactions and reviews; and
- economic capital and portfolio management: IRB parameters are used in the economic capital model that has been implemented across HSBC.

Roll-out of the IRB approach

With the PRA's permission, we have adopted the AIRB approach for the majority of our business. At the end of 2024, portfolios in much of Europe, Asia and North America were on AIRB approaches for wholesale and retail portfolios where applicable. The permanent partial use permission from the PRA allows some portfolios to adopt the standardised or foundation approaches pending the development of models for the PRA's approval in line with our IRB roll-out plans where the primary focus is on corporate and retail exposures. The remainder is permanently exempt and covers non-significant business units and immaterial exposure classes across all geographic regions.

Expected losses and credit risk adjustments

We analyse credit loss experience in order to assess the performance of our risk measurement and control processes, and to inform our understanding of the implications for risk and capital management of dynamic changes occurring in the risk profile of our exposures. When comparing regulatory EL with measures of ECL under IFRS 9, differences in the definition and scope of each are considered.

These can give rise to material differences in the way economic, business and methodological drivers are reflected quantitatively in the accounting and regulatory measures of loss.

In general, HSBC calculates ECL using three main components namely probability of default, loss given default, and exposure at default.

ECLs include impairment allowances (or provisions, against commitments and guarantees) calculated for a 12-month period ('12-month ECL'), for the remaining life of an exposure ('lifetime ECL'), and on financial assets that are considered to be in default or otherwise credit impaired. ECLs resulting from default events that are possible:

- within the next 12 months are recognised for financial instruments in stage 1; and
- beyond 12 months are recognised for financial instruments in stages 2 and 3.

An assessment of whether credit risk has increased significantly since initial recognition is performed at each reporting period by considering the change in the risk of default occurring over the remaining life of the financial instrument.

Unless identified at an earlier stage, all financial assets are deemed to have suffered a significant increase in credit risk when 30 days past

Change in ECL and other credit impairment charges represents the movement in the ECL during the year including write-offs, recoveries and foreign exchange. EL represents the one-year regulatory expected loss accumulated in the book at the balance sheet date.

Credit risk adjustments encompass the impairment allowances or provisions balances, and changes in ECL and other credit impairment charges.

HSBC leverages the IRB framework where possible, with recalibration to meet the differing IFRS 9 requirements as follows:

Model	Regulatory capital	IFRS 9
PD	 Represents long-run average PD throughout a full economic cycle (For mortgage portfolios a hybrid approach, which sits between the extremes of point in time and through the cycle, is used for calculating long run averages as required by the PRA.) 	Represents current portfolio quality and performance, adjusted for the impact of multiple forward-looking macro-economic scenarios Default backstop of 90+ days past due for all portfolios (includes UTP criteria in line with internal policy)
	 Default backstop of 90+ days past due for all portfolios (includes unlikely to pay ('UTP') criteria in line with internal policy) 	
	 May be subject to a sovereign cap 	
EAD	Cannot be lower than current balance	Amortisation captured for fixed term products
		 Future drawdown captured for revolving products
	 Downturn LGD (consistent with losses we would expect to suffer during a severe but plausible economic downturn) 	 LGD based on recent portfolio performance data and includes the expected impact of future economic conditions such as change in
LGD	 Regulatory floors may apply to mitigate risk of underestimating downturn LGD due to lack of historical data 	the value of collateral. No floors applied, discounted using original effective interest rate
	 Discounted using appropriate index (minimum 9%) 	- Only costs associated with selling collateral and certain third party
	 All collection costs included 	collection costs are included
Other		Discounted back from point of default to balance sheet date

The table below discloses the detailed key parameters used for the calculation of capital requirements of credit risk exposure under the IRB approach, broken down by exposure class and PD range. The risk parameters within this table do not reflect the application of PMAs. The table excludes securitisation positions and non-credit obligation assets. The number of obligors disclose the single obligor with multiple PD ratings counted separately for every PD band. We count these on the basis of our exposure to the original counterparty, reported in the first two columns of this table. The disclosures across all PD ranges are modelled LGD. Deferred tax RWAs reported on an IRB approach are not included in this table. Slotting exposures are disclosed in table 41, specialised lending and equity exposures under the simple risk-weight approach (CR10).

Table 45: IRB – Credit risk exposures by portfolio and PD range (CR6)

PD scale	On- balance sheet expo- sures \$bn	Off- balance sheet expo- sures pre-CCF \$bn	Expo- sure weigh- ted average CCF	Expo- sure post- CCF and post- CRM \$bn	Expo- sure weigh- ted average PD	Number of obligors	Expo- sure weigh- ted average LGD	Expo- sure weigh- ted average maturity (years)	Risk weighted exposure amount after supporting factors \$bn	Density of risk weigh- ted expo- sure amount	Expec- ted loss amount \$bn	Value adjust- ments and provi- sions ¹ \$bn
AIRB – Central	ψUII	JUII	/0	ψUII	/0		/0	years	φυπ	/0	ψDII	JUII
government and												
central banks												
0.00 to <0.15	447.6	2.0	31.0	448.6	0.02	295	43.3	2.1	36.7	8	_	_
- 0.00 to <0.10	436.6	1.5	33.5	439.0	0.01	172	43.3	2.1	33.0	8	_	_
- 0.10 to < 0.15	11.0	0.5	16.1	9.6	0.13	123	45.0	2.2	3.7	38	_	_
0.15 to <0.25	1.1	0.5	1.7	1.1	0.22	10	45.1	1.1	0.4	37	_	_
0.25 to <0.50	1.5	0.2	67.7	1.3	0.37	14	45.3	1.3	0.7	53	_	_
0.50 to <0.75	2.2	_	45.0	2.2	0.63	8	45.0	1.0	1.5	66	_	_
0.75 to <2.50	6.0	0.5	84.3	6.0	1.57	103	45.0	1.2	5.9	98	0.1	
- 0.75 to <1.75	3.1	0.1	49.6	3.1	0.92	92	45.0	1.3	2.6	84	0.1	
- 1.75 to <2.5	2.9	0.4	89.0	2.9	2.25	11	45.0	1.2	3.3	114		
2.50 to <10.00	1.4	0.3	38.9	1.2	3.65	12	42.2	1.3	1.4	123		
- 2.5 to <5	1.1	0.1	23.3	1.0	3.07	9	41.8	1.3	1.2	115		
- 5 to <10	0.3	0.2	73.5	0.2	7.85	3	45.0	1.5	0.2	184		
10.00 to <100.00	0.3			0.3	13.01	4	45.0	1.0	0.7	217	_	
- 10 to <20	0.3			0.3	13.00	3	45.0	1.0	0.7	217	_	
- 20 to <30					36.00		45.0	1.0	<u> </u>	261		
- 30.00 to <100.00 100.00 (Default)	0.2			0.1	100.00	2	6.4	4.2	0.1	58		
Sub-total at	0.2			0.1	100.00		0.4	4.2	0.1	30		
31 Dec 2024	460.3	3.5	30.3	460.8	0.08	448	43.3	2.1	47.4	10	0.1	_
0.00 to <0.15	444.4	1.9	37.9	444.0	0.02	345	42.8	1.9	31.7	7		
- 0.00 to <0.15	434.7	1.9	37.9	435.9	0.02	201	42.8	1.9	29.2	7		
- 0.00 to <0.10 - 0.10 to <0.15	9.7	0.5	31.9	8.1	0.01	144	45.0	1.9	29.2	31		
0.15 to <0.25	1.5	0.5	1.2	1.5	0.13	9	45.0	1.7	0.5	37		
0.25 to <0.50		0.1	0.8		0.22	5	36.0	0.5	— 0.5 —	30		
0.50 to <0.75	2.9		17.4	2.8	0.63	13	45.0	1.1	1.9	67		
0.75 to <2.50	3.8	0.3	72.7	4.0	1.06	92	44.2	1.2	3.3	83		
- 0.75 to <1.75	3.4	0.3	72.7	3.6	0.94	84	44.1	1.2	2.9	81		_
- 1.75 to <2.5	0.4	_	74.9	0.4	2.25	8	45.0	1.0	0.4	106		_
2.50 to <10.00	5.3	0.1	55.0	5.0	4.24	13	45.0	1.0	7.0	138	0.1	
- 2.5 to <5	5.0	_	6.1	4.9	4.20	10	45.0	1.0	6.9	137	0.1	_
- 5 to <10	0.3	0.1	56.0	0.1	7.83	3	44.6	2.2	0.1	189	_	_
10.00 to <100.00	1.6		_	1.6	32.41	6	45.0	1.1	4.1	258	0.3	0.1
- 10 to <20	0.3	_	_	0.3	19.00	3	45.0	1.0	0.8	245	_	_
- 20 to <30	_	_	_	_	_	_	_	_	_	_	0.1	_
- 30.00 to <100.00	1.3	_	_	1.3	36.00	3	45.0	1.1	3.3	261	0.2	0.1
100.00 (Default)	0.2	_	_	0.1	100.00	2	6.1	4.6	_	23	_	_
Sub-total at 31 Dec 2023	459.7	2.9	34.1	459.0	0.21	485	42.9	1.9	48.5	11	0.4	0.1

Table 45: IRB – Credit risk exposures by portfolio and PD range (CR6) (continued)

PD scale	On- balance sheet expo- sures \$bn	Off- balance sheet expo- sures pre-CCF \$bn	Expo- sure weigh- ted average CCF	Expo- sure post- CCF and post- CRM \$bn	Expo- sure weigh- ted average PD	Number of obligors	Exposure weighted average LGD	Expo- sure weigh- ted average maturity (years)	Risk weighted exposure amount after supporting factors \$bn	Density of risk weigh- ted expo- sure amount	Expec- ted loss amount \$bn	Value adjust- ments and provi- sions ¹ \$bn
AIRB – Institutions												· ·
0.00 to <0.15	66.1	14.7	26.6	71.2	0.05	2,790	38.7	1.4	11.3	16	_	_
- 0.00 to <0.10	58.4	10.9	25.8	62.1	0.04	1,720	38.3	1.4	8.3	13	_	_
- 0.10 to <0.15	7.7	3.8	28.6	9.1	0.13	1,070	41.8	1.6	3.0	33	_	_
0.15 to <0.25	1.5	1.5	25.0	2.0	0.22	145	32.0	1.4	0.5	24	_	_
0.25 to <0.50	0.4	0.5	21.9	0.4	0.37	76	37.9	1.8	0.2	50	_	_
0.50 to <0.75	1.3	0.4	32.5	1.3	0.63	102	44.4	0.9	0.9	74	_	_
0.75 to <2.50	2.1	2	25.3	0.4	1.29	153	45.3	1.6	0.4	98	_	_
- 0.75 to <1.75	0.6	0.8	25.4	0.4	1.26	116	45.5	1.5	0.4	94	_	_
- 1.75 to <2.5	1.5	1.2	25.2	_	2.25	37	41.7	4.7	_	212	_	_
2.50 to <10.00	_	0.1	15.3	_	4.21	13	43.6	1.9	_	149	_	_
- 2.5 to <5	_	0.1	9.8	_	3.20	9	43.2	1.0	_	116	_	_
- 5 to <10	_	_	21.0	_	7.85	4	45.0	5.0	_	271	_	_
10.00 to <100.00	_	_	48.2	_	10.00	3	45.0	1.5		198		_
- 10 to <20	_	_	48.2	_	10.00	3	45.0	1.5		198		_
100.00 (Default)	_	_	_	_	100.00	2	2.3	3.8		23	_	_
Sub-total at 31 Dec 2024	71.4	19.2	26.4	75.3	0.10	3,284	38.7	1.4	13.3	18	_	_
0.00 to <0.15	70.5	14.6	27.1	75.7	0.05	2,963	38.2	1.4	9.9	13		
- 0.00 to <0.10	61.8	11.1	27.8	65.8	0.04	1,811	38.5	1.4	7.5	12	_	_
- 0.10 to < 0.15	8.7	3.5	25.1	9.9	0.13	1,152	36.1	1.3	2.4	24	_	_
0.15 to < 0.25	1.5	2	23.2	2.1	0.22	207	39.6	1.2	0.8	37	_	_
0.25 to <0.50	0.6	0.5	6.7	0.6	0.37	112	42.5	0.9	0.3	52	_	
0.50 to <0.75	1.0	0.4	11.8	1.0	0.63	82	45.1	0.7	0.7	70	_	
0.75 to <2.50	2.1	1.1	21.1	0.3	1.41	132	41.4	1.0	0.3	93	_	
- 0.75 to <1.75	0.2	0.5	20.6	0.2	1.11	86	40.0	1.0	0.2	83	_	
- 1.75 to <2.5	1.9	0.6	23.8	0.1	2.25	46	45.3	0.9	0.1	119		
2.50 to <10.00	0.4	0.1	21.4	0.4	4.24	17	45.2	1.0	0.5	133		
- 2.5 to <5	0.4	0.1	18.9	0.4	4.19	13	45.4	1.0	0.5	132		
- 5 to <10			46.2		5.77	4	40.6	1.4		141		
10.00 to <100.00			17.8		10.06	5	45.3	4.9		258		
- 10 to <20			17.8		10.06	5	45.3	4.9		258	_	
100.00 (Default)					100.00	2	1.0	4.2			_	
Sub-total at 31 Dec 2023	76.1	18.7	25.8	80.1	0.11	3,520	38.4	1.4	12.5	16		

Table 45: IRB – Credit risk exposures by portfolio and PD range (CR6) (continued)

PD scale	On- balance sheet expo- sures \$bn	Off- balance sheet expo- sures pre-CCF \$bn	Expo- sure weigh- ted average CCF	Expo- sure post- CCF and post- CRM \$bn	Expo- sure weigh- ted average PD	Number of obligors	Expo- sure weigh- ted average LGD	Expo- sure weigh- ted average maturity (years)	Risk weighted exposure amount after supporting factors \$bn	Density of risk weigh- ted expo- sure amount	Expec- ted loss amount \$bn	Value adjust- ments and provi- sions ¹ \$bn
AIRB – Corporate – specialised lending	ΨΕΠ	ΨΟΠ	76	ΨΟΠ	70		76	yeurs	ФЫ	70	ΨΒΙΙ	Ψ
(excluding slotting)												
0.00 to <0.15	2.8	1.1	50.1	3.1	0.10	54	29.5	3.5	0.7	23		
- 0.00 to <0.10	1.1	0.6	76.9	1.5	0.07	23	30.7	3.9	0.3	22		
- 0.10 to <0.15	1.7	0.5	22.2	1.6	0.13	31	28.3	3.1	0.4	24		
0.15 to <0.25 0.25 to <0.50	1.2	0.7 0.5	49.5 40.9	1.4	0.22	46 32	26.5 32.9	3.3	0.4	27 50		
0.25 to < 0.50 0.50 to < 0.75	1.4	1.0	44.6	1.1	0.63	43	35.4	2.9	0.8	59		
0.50 to <0.75 0.75 to <2.50	1.4	2.1	48.8	2.4	1.07	54	33.2	3.4	1.7	72		
- 0.75 to <2.50	1.8	2.0	48.7	2.3	1.05	49	33.2	3.4	1.6	71		
- 1.75 to <2.5	0.1	0.1	70.6	0.1	2.25	5	35.7	4.7	0.1	112		
2.50 to <10.00	0.1	0.3	52.3	0.3	5.42	7	41.6	4.5	0.5	200		0.1
- 2.5 to <5	-	0.1	28.5	0.1	3.71	3	39.2	1.8	0.1	120	_	
- 5 to <10	0.2	0.2	66.6	0.2	5.75	4	42.1	5.0	0.4	215		0.1
10.00 to <100.00	0.1	_	69.2	0.1	16.86	3	28.9	1.7	0.1	139		
- 10 to <20	0.1	_	69.2	0.1	16.86	3	28.9	1.7	0.1	139		_
- 30.00 to <100.00	_	_							_		_	_
100.00 (Default)	0.1	_	91.5	0.1	100.00	4	24.5	3.6	0.1	85	0.1	_
Sub-total at	***											
31 Dec 2024	8.7	5.7	48.0	10.0	1.42	243	31.5	3.4	5.0	50	0.1	0.1
0.00 to <0.15	2.6	0.9	45.1	2.7	0.09	44	21.5	3.8	0.5	17		
- 0.00 to <0.10	1.5	0.5	71.6	1.8	0.03	15	19.5	4.2	0.3	14		
- 0.10 to <0.15	1.1	0.4	11.3	0.9	0.13	29	25.4	2.9	0.2	21		
0.15 to <0.25	1.5	0.9	46.7	1.9	0.22	60	29.1	3.0	0.5	28		
0.25 to <0.50	0.9	0.9	39.5	1.2	0.37	32	32.4	4.2	0.6	49		
0.50 to <0.75	1.6	0.7	44.2	1.7	0.63	42	27.5	2.9	0.8	47	_	_
0.75 to <2.50	1.8	2.0	53.5	2.0	1.07	43	30.4	3.5	1.4	68	_	_
- 0.75 to <1.75	1.7	1.7	55.8	1.9	1.00	38	30.1	3.6	1.3	67	_	
- 1.75 to <2.5	0.1	0.3	32.2	0.1	2.25	5	37.0	1.9	0.1	90	_	_
2.50 to <10.00	0.2	0.1	41.6	0.1	4.78	5	42.4	3.2	0.1	155	_	_
- 2.5 to <5	_	0.1	39.9	_	3.25	1	37.4	3.2	_	119	_	_
- 5 to <10	0.2	_	57.0	0.1	5.75	4	45.5	3.1	0.1	178	_	_
10.00 to <100.00	0.3	0.3	52.7	0.4	64.16	6	30.0	3.2	0.4	100	0.1	0.1
- 10 to <20	0.1	_	98.6	0.1	16.16	3	31.9	2.3	0.1	140	_	_
- 30.00 to <100.00	0.2	0.3	51.9	0.3	75.00	3	29.6	3.4	0.3	91	0.1	0.1
100.00 (Default)	0.1	_	86.9	0.1	100.00	7	24.1	3.5		24	_	
Sub-total at 31 Dec 2023	9.0	5.8	47.4	10.1	3.95	239	27.5	3.4	4.3	43	0.1	0.1

Table 45: IRB – Credit risk exposures by portfolio and PD range (CR6) (continued)

			_	Ехро-	_		_	Expo-	Risk	Density		
	_	Off-	Ехро-	sure	Expo-		Expo-	sure	weighted	of risk		Value
	On- balance	balance sheet	sure weigh-	post- CCF	sure weigh-		sure weigh-	weigh- ted	exposure amount	weigh- ted	Expec-	adjust- ments
	sheet	expo-	ted	and	ted	Number	ted	average	after	expo-	ted	and
	expo-	sures	average		average	of	average	maturity	supporting	sure	loss	provi-
	sures	pre-CCF	CCF	CRM	PD	obligors	LGD	(years)	• • • •	amount	amount	sions ¹
PD scale	\$bn	\$bn	%	\$bn	%		%	years	\$bn	%	\$bn	\$bn
AIRB – Corporate – SME												
0.00 to <0.15	0.1	0.4	26.4	0.3	0.09	240	50.1	1.4	0.1	20	_	_
- 0.00 to <0.10	_	0.1	31.4	0.2	0.06	40	59.0	1.6	0.1	22	_	_
- 0.10 to < 0.15	0.1	0.3	24.0	0.1	0.13	200	40.2	1.3	_	17	_	_
0.15 to <0.25	0.4	0.9	26.1	0.6	0.22	551	38.2	1.6	0.1	24		
0.25 to <0.50	0.4	1.1	23.9	0.8	0.37	698	40.6	1.6	0.3	35		
0.50 to <0.75	0.6	0.9	23.7	0.9	0.63	645	36.3	2.0	0.3	44		
0.75 to <2.50	4.7	3.6	24.8	5.5	1.56	2,721	34.3	1.9	3.2	57		
- 0.75 to <1.75	3.1	2.8	24.7	3.9	1.28	2,008	35.0	2.0	2.2	55		
- 1.75 to <2.5	1.6	0.8	25.5 26.7	1.6	2.25 4.01	713 786	32.7 40.8	1.9	1.0	62 89	<u> </u>	_
2.50 to <10.00 - 2.5 to <5	1.1	0.5	26.7	1.4	3.58	631	39.7	1.7	1.0	84		<u> </u>
- 5 to <10	0.2	0.2	27.9	0.2	6.44	155	47.0	1.5	0.2	118		
10.00 to <100.00	0.2	0.2	24.7	0.2	22.38	101	34.7	1.1	0.2	131		
- 10 to <20	0.1	0.1	25.2	0.1	14.53	87	41.7	1.0	0.1	145		_
- 20 to <30	_				23.33	1	35.6	1.3		130	_	_
- 30.00 to <100.00	0.1	_	3.8	0.1	36.02	13	22.5	1.3	0.1	107	_	_
100.00 (Default)	0.2	_	29.4	0.2	100.00	44	38.6	1.8	0.4	197	0.1	0.1
Sub-total at												
31 Dec 2024	7.9	7.9	25.0	9.9	3.83	5,786	36.7	1.8	5.8	59	0.1	0.1
0.00 to <0.15	0.8	1.7	12.8	1.2	0.07	358	21.0	2.3	0.1	9		
- 0.00 to <0.10	0.6	1.1	5.5	0.8	0.04	69	13.9	2.7	_	4	_	_
- 0.10 to <0.15	0.2	0.6	24.7	0.4	0.13	289	33.7	1.7	0.1	17	_	_
0.15 to <0.25	0.6	1.4	23.3	1.0	0.22	868	34.4	1.8	0.2	25	_	_
0.25 to <0.50	1.1	2.1	20.7	1.7	0.35	1,040	26.8	1.7	0.4	25		
0.50 to <0.75	1.1	1.1	26.4	1.5	0.63	922	33.1	2.0	0.6	43		
0.75 to <2.50	6.6	5.0	27.2	7.8	1.47	3,333	30.6	1.9	4.2	53	_	
- 0.75 to <1.75	5.1	4.0	27.2	6.1	1.24	2,513	31.0	1.9	3.1	51	_	
- 1.75 to <2.5	1.5	1.0	27.2	1.7	2.25	820	29.4	1.9	1.1	59		
2.50 to <10.00	1.9	1.3	29.3	2.0	4.04	969	36.2	1.6	1.8	89		
- 2.5 to <5	1.5	1.0	28.6	1.6	3.50	719	35.4	1.7	1.4	85	_	
- 5 to <10	0.4	0.3	31.9	0.4	6.21	250	39.4	1.6	0.4	106		
10.00 to <100.00	0.3	0.2	28.5	0.3	38.21	169	27.8	1.2	0.3	104		
- 10 to <20	0.2	0.2	32.4	0.2	14.19	155	39.0	1.3	0.3	144		
- 20 to <30 - 30.00 to <100.00	0.1		12.2	0.1	22.22		2.2 8.7	1.0		10 36		
100.00 (Default)	0.1		29.3	0.1	88.17 100.00	65	36.9	1.0	0.4	209	0.1	0.1
Sub-total at	0.2		28.3	0.2	100.00	00	30.9	1.0	0.4	209	0.1	0.1
31 Dec 2023	12.6	12.8	23.6	15.7	3.15	7,724	30.7	1.9	8.0	51	0.1	0.1

Table 45: IRB – Credit risk exposures by portfolio and PD range (CR6) (continued)

	On- balance sheet expo- sures	Off- balance sheet expo- sures pre-CCF	Expo- sure weigh- ted average CCF	Exposure post-cCF and post-CRM	Expo- sure weigh- ted average PD	Number of obligors	Expo- sure weigh- ted average LGD	Expo- sure weigh- ted average maturity (years)	Risk weighted exposure amount after supporting factors	Density of risk weigh- ted expo- sure amount	Expec- ted loss amount	Value adjust- ments and provi- sions ¹
PD scale	\$bn	\$bn	%	\$bn	%		%	years	\$bn	%	\$bn	\$bn
AIRB - Corporate -								•				
Other												
0.00 to <0.15	101.7	165.6	31.3	176.1	0.07	8,592	42.5	1.8	38.5	22	0.1	0.1
- 0.00 to <0.10	72.5	111.3	32.5	123.7	0.05	4,954	40.8	1.8	21.2	17	_	0.1
- 0.10 to <0.15	29.2	54.3	28.8	52.4	0.13	3,638	46.2	1.7	17.3	33	0.1	_
0.15 to <0.25	24.9	53.3	29.1	46.3	0.22	4,131	41.7	1.7	18.5	40	_	_
0.25 to <0.50	24.4	43.5	25.4	36.3	0.37	4,126	41.4	1.6	18.4	51	0.1	_
0.50 to <0.75	25.4	32.3	25.4	32.7	0.63	4,601	41.5	1.5	21.3	65	0.1	_
0.75 to <2.50	67.9	92.5	26.3	70.2	1.34	21,421	40.9	1.7	63.9	91	0.4	0.2
- 0.75 to <1.75	46.1	62.4	26.6	59.7	1.19	16,390	41.1	1.7	53.4	89	0.3	0.1
- 1.75 to <2.5	21.8	30.1	24.6	10.5	2.24	5,031	39.2	1.6	10.5	100	0.1	0.1
2.50 to <10.00	21.7	21.9	27.6	17.2	4.34	6,538	39.5	1.7	21.7	126	0.3	0.2
- 2.5 to <5	13.0	16.1	27.1	12.1	3.53	4,944	40.5	1.6	14.5	120	0.2	0.1
- 5 to <10	8.7	5.8	29.3	5.1	6.25	1,594	37.4	2.0	7.2	140	0.1	0.1
10.00 to <100.00	4.7	3.4	29.8	3.6	29.65	1,092	40.0	1.9	6.8	188	0.4	0.4
- 10 to <20	3.4	3.0	28.3	2.3	14.76	874	36.0	1.7	4.0	177	0.1	0.1
- 20 to <30	1.3	0.4	4.3 38.5	1.3	23.33 55.48	92 126	25.2 47.0	1.8	2.8	187 207	0.3	
- 30.00 to <100.00 100.00 (Default)	8.3	1.5	40.2	8.5	100.00	2,103	37.3	1.4	10.9	129	3.0	2.8
Sub-total at	0.3	1.5	40.2	0.5	100.00	2,103	37.3	1.4	10.5	123	3.0	2.0
31 Dec 2024	279.0	414.0	28.9	390.9	3.02	52,604	41.6	1.7	200.0	51	4.4	3.7
0.00 to <0.15	99.3	173.3	31.8	179.5	0.07	8,298	42.4	1.8	36.8	20		0.1
- 0.00 to <0.10	70.0	111.5	33.1	123.9	0.05	4,288	41.0	1.9	19.6	16		0.1
- 0.10 to <0.15	29.3	61.8	29.5	55.6	0.13	4,010	45.4	1.6	17.2	31	_	_
0.15 to <0.25	31.0	55.7	30.0	54.2	0.22	4,902	41.8	1.8	21.9	40	0.1	_
0.25 to <0.50	28.4	42.4	27.2	45.8	0.37	4,368	40.5	1.7	23.2	51	0.1	0.1
0.50 to <0.75	35.0	43.6	26.7	41.4	0.63	5,576	38.9	1.5	25.2	61	0.1	0.1
0.75 to <2.50	83.5	97.4	29.9	85.5	1.36	23,675	38.9	1.7	71.1	83	0.5	0.2
- 0.75 to <1.75	55.3	66.2	28.7	70.6	1.17	17,839	39.3	1.7	59.7	85	0.4	0.2
- 1.75 to <2.5	28.2	31.2	37.4	14.9	2.23	5,836	37.0	1.7	11.4	76	0.1	
2.50 to <10.00	22.4	21.3	28.7	18.7	4.47	7,391	38.5	1.6	23.2	124	0.4	0.2
- 2.5 to <5	14.8	14.7	27.8	13.2	3.59	5,540	37.2	1.5	14.6	111	0.2	0.1
- 5 to <10	7.6	6.6	31.5	5.5	6.56	1,851	41.4	1.8	8.6	155	0.2	0.1
10.00 to <100.00	6.7	4.1	26.9	6.3	21.15	1,279	32.4	1.6	10.0	160	0.5	0.3
- 10 to <20	5.6	2.8	34.5	5.1	14.95	994	30.7	1.5	7.7	150	0.3	0.2
- 20 to <30			13.6		25.66	17	30.6	1.0		168		
- 30.00 to <100.00	1.1	1.3	13.8	1.2	49.02	268	40.0	2.2	2.3	207	0.2	0.1
100.00 (Default)	8.1	1.1	40.4	8.0	100.00	2,091	41.2	1.5	7.7	96	3.9	3.6
Sub-total at 31 Dec 2023	314.4	438.9	30.1	439.4	2.74	57,580	40.8	1.7	219.1	50	5.6	4.6
Wholesale AIRB – Total at 31 Dec 2024	827.3	450.3	28.9	946.9		62,365		1.9	271.5	29	4.7	3.9
Wholesale AIRB – Total at 31 Dec 2023	871.8	479.1	30.0	1,004.3		69,548		1.8	292.4	29	6.2	4.9

Table 45: IRB – Credit risk exposures by portfolio and PD range (CR6) (continued)

PD scale AIRB – Secured by	On- balance sheet expo- sures \$bn	Off- balance sheet expo- sures pre-CCF \$bn	Expo- sure weigh- ted average CCF	Expo- sure post- CCF and post- CRM \$bn	Expo- sure weigh- ted average PD %	Number of obligors	Exposure weighted average LGD	Expo- sure weigh- ted average maturity (years) years	Risk weighted exposure amount after supporting factors \$bn	Density of risk weigh- ted expo- sure amount %	Expec- ted loss amount \$bn	Value adjust- ments and provi- sions ¹ \$bn
mortgages on immovable property SME												
0.00 to <0.15	_	_	_	_	0.08	6	15.6	_	_	2	_	_
- 0.00 to <0.10	_	_	_	_	0.03	5	24.2	_	_	2	_	_
- 0.10 to <0.15	_	_	_	_	0.11	1	10.0	_	_	2	_	_
0.15 to <0.25	_	_	_	_	_	_	_	_	_	_	_	_
0.25 to <0.50	_	_	_	_	0.47	34	25.9	_	_	16	_	_
0.50 to <0.75	0.1		1.9		0.58	76	24.9		_	17		_
0.75 to <2.50			4.7	0.1	1.41	234	25.3			31		
- 0.75 to <1.75		_	0.2	0.1	1.12	179	25.4	_		27	_	
- 1.75 to <2.5			44.2		2.33	55	24.9			43		
2.50 to <10.00	0.1		19.8	0.1	4.30	682	25.3	_	0.1	62		_
- 2.5 to <5	0.1	_	16.7	0.1	3.76	553	25.0	_	0.1	57		
- 5 to <10		_	22.6		6.81	129	26.8	_		83		
10.00 to <100.00	_	_			12.29	33	26.2	_		102		
- 10 to <20	_				11.80	32	26.3	_		102		
- 20 to <30					25.48	1	21.8			102		
100.00 (Default)			36.3		100.00	62	26.2			17		
Sub-total at 31 Dec 2024	0.2	_	0.9	0.2	9.20	1,127	25.3	_	0.1	49	_	_
31 Dec 2024	V.E		0.0	V. <u>L</u>	3.20	1,127	20.0		0.1			
0.00 to <0.15		0.1	_		0.07	33	25.3	_	_	4		
- 0.00 to <0.10		0.1			0.07	33	25.3			4		
- 0.10 to <0.15					- 0.07							
0.15 to <0.25					0.21	11	25.6		_	9		
0.25 to <0.50	0.5			0.5	0.38	1,409	18.9		0.1	10		_
0.50 to <0.75	_	_	116.5	_	0.58	136	26.3	_	_	23	_	_
0.75 to <2.50	0.1		4.6	0.1	1.42	345	25.1		_	37		_
- 0.75 to <1.75	0.1		3.2	0.1	1.20	269	25.0		_	34	_	_
- 1.75 to <2.5	0.0		15.0	0.0	2.29	76	25.4		_	47	_	_
2.50 to <10.00	0.2	_	36.5	0.2	4.28	1,045	24.0	_	0.1	60	_	_
- 2.5 to <5	0.2		55.1	0.2	3.77	882	24.1	_	0.1	57	_	_
- 5 to <10		_	17.4	_	6.73	163	23.5	_	_	74	_	_
10.00 to <100.00		_	76.0	_	21.96	115	25.0	_		112	_	
- 10 to <20	_		_		12.03	46	27.0	_		107	_	
- 20 to <30			76.0		25.99	69	24.2			114		
100.00 (Default)			100.0		100.00	204	28.8			71		
Sub-total at 31 Dec 2023	0.8	0.1	2.6	0.8	5.55	3,298	21.5		0.2	30	_	

Table 45: IRB – Credit risk exposures by portfolio and PD range (CR6) (continued)

PD scale	On- balance sheet expo- sures \$bn	Off- balance sheet expo- sures pre-CCF \$bn	Expo- sure weigh- ted average CCF	Expo- sure post- CCF and post- CRM \$bn	Exposure weighted average PD %	Number of obligors	Expo- sure weigh- ted average LGD	Expo- sure weigh- ted average maturity (years)	Risk weighted exposure amount after supporting factors \$bn	Density of risk weigh- ted expo- sure amount	Expec- ted loss amount \$bn	Value adjust- ments and provi- sions ¹ \$bn
AIRB - Secured by	7	****		****				,	****			7-1-1
mortgages on immovable property non-SME												
0.00 to <0.15	77.5	12.6	61.4	84.9	0.08	346,567	11.3	_	3.5	4	_	_
- 0.00 to <0.10	40.0	8.4	64.2	45.1	0.05	158,297	11.2	_	1.6	4	_	_
- 0.10 to <0.15	37.5	4.2	55.9	39.8	0.12	188,270	11.5	_	1.9	5	_	_
0.15 to <0.25	38.9	2.5	48.5	39.9	0.19	176,819	11.3	_	3.0	7	_	_
0.25 to <0.50	95.1	2.5	37.6	95.9	0.32	518,048	12.9	_	8.2	9	_	_
0.50 to <0.75	40.4	0.4	56.1	40.6	0.52	210,576	14.3	_	8.0	20	0.1	_
0.75 to <2.50	51.6	0.9	66.9	52.3	1.10	249,931	12.7	_	11.2	21	0.1	0.1
- 0.75 to <1.75	46.9	0.8	72.1	47.6	1.01	223,132	12.7	_	9.5	20	0.1	0.1
- 1.75 to <2.5	4.7	0.1	31.5	4.7	1.99	26,799	12.7	_	1.7	36		_
2.50 to <10.00	7.3	0.3	35.1	7.4	4.09	34,235	11.9		3.3	45		
- 2.5 to <5	6.9	0.3	37.4	7.0	3.92	31,827	11.5		3.0	43		
- 5 to <10	0.4		21.9	0.4	7.27	2,408	19.4		0.3	95		
10.00 to <100.00	0.9		211.1	1.0	22.22	8,605	10.8		1.0	96	_	
- 10 to <20	- 0.7		225.0	0.7	13.48	7,030 116	11.3 8.8		0.9	112		_
- 20 to <30 - 30.00 to <100.00	0.2		100.9	0.3	47.32	1,459	9.7		0.1	53 54		
100.00 (Default)	1.4		22.8	1.4	100.00	9,556	13.1		2.0	143	0.1	0.1
Sub-total at	1.4		22.0	1.4	100.00	3,330	13.1		2.0	143	0.1	U. I
31 Dec 2024	313.1	19.2	56.6	323.4	0.99	1,554,337	12.4	_	40.2	12	0.3	0.2
0.00 to <0.15	108.4	13.5	59.8	116.1	0.08	431,091	15.6	_	12.5	11	_	_
- 0.00 to <0.10	68.4	9.0	63.9	73.9	0.06	228,438	18.2	_	8.3	11	_	_
- 0.10 to < 0.15	40.0	4.5	51.5	42.2	0.12	202,653	11.1	_	4.2	10	_	_
0.15 to <0.25	52.8	2.6	48.8	53.8	0.19	222,882	14.5		6.2	12		
0.25 to <0.50	105.2	5.2	30.0	106.5	0.33	570,612	14.0		11.1	10	0.1	0.1
0.50 to <0.75	43.8	0.7	54.9	44.2	0.53	223,528	14.0		6.2	14		
0.75 to <2.50	55.6	2.1	54.6	56.8	1.11	275,332	13.1		11.4	20	0.1	0.1
- 0.75 to <1.75	50.2	1.7	61.4	51.3	1.02	243,976	13.2		9.9	19	0.1	0.1
- 1.75 to <2.5	5.4	0.4	19.4	5.5	1.99	31,356	12.6		1.5	28		
2.50 to <10.00	8.7	0.4	28.3	8.8	4.16	42,054	12.0		3.7	42		
- 2.5 to <5	8.0	0.3	28.9	8.1	3.91	37,856	11.6		3.2	39		
- 5 to <10	0.7	0.1	24.5	0.7	6.94	4,198	16.4	_	0.5	73		
10.00 to <100.00	1.5	0.1	47.9	1.6	21.49	11,136	20.2		2.2	139	0.1	
- 10 to <20	0.8	0.1	46.6	0.9	13.23	8,421	12.4		0.7	86		
- 20 to <30	0.5		46.9	0.5	23.50	1,233	37.1		1.4	261	0.1	
- 30.00 to <100.00 100.00 (Default)	0.2 1.8		83.0	0.2 1.8	48.59 100.00	1,482	9.2		0.1 2.4	48 133	0.3	
Sub-total at	1.8		24.9	1.8	100.00	11,604	20.2		2.4	133	0.3	0.2
31 Dec 2023	377.8	24.6	51.2	389.6	1.00	1,788,239	14.4		55.7	14	0.6	0.4

Table 45: IRB – Credit risk exposures by portfolio and PD range (CR6) (continued)

PD scale	On- balance sheet expo- sures \$bn	Off- balance sheet expo- sures pre-CCF \$bn	Expo- sure weigh- ted average CCF %	Expo- sure post- CCF and post- CRM \$bn	Expo- sure weigh- ted average PD %	Number of obligors	Expo- sure weigh- ted average LGD	Expo- sure weigh- ted average maturity (years) years	Risk weighted exposure amount after supporting factors \$bn	Density of risk weigh- ted expo- sure amount %	Expec- ted loss amount \$bn	Value adjust- ments and provi- sions ¹ \$bn
AIRB – Qualifying revolving retail exposures												
0.00 to <0.15	6.4	81.8	45.5	43.6	0.06	16,750,261	89.4	_	1.7	4	_	0.3
- 0.00 to <0.10	4.9	69.9	46.1	37.1	0.05	14,146,416	89.0	_	1.2	3	_	0.3
- 0.10 to <0.15	1.5	11.9	41.9	6.5	0.13	2,603,845	91.8	_	0.5	8	_	_
0.15 to <0.25	1.1	6.8	48.6	4.4	0.20	1,770,596	89.2	_	0.6	13	_	_
0.25 to <0.50	2.0	6.7	45.9	5.1	0.38	1,541,593	89.4	_	1.0	20	_	_
0.50 to <0.75	1.4	2.1	49.7	2.4	0.60	570,116	90.2	_	0.7	30	_	_
0.75 to <2.50	4.4	4.8	52.4	6.8	1.38	1,396,496	91.0	_	4.6	67	0.1	0.1
- 0.75 to <1.75	3.6	4.4	50.7	5.7	1.23	1,146,513	91.4	_	3.0	52	0.1	0.1
- 1.75 to <2.5	8.0	0.4	71.8	1.1	2.15	249,983	88.7	_	1.6	145	_	_
2.50 to <10.00	2.6	1.1	75.0	3.5	4.49	685,368	86.6	_	4.3	123	0.2	0.1
- 2.5 to <5	1.9	0.9	68.3	2.5	3.62	482,162	86.2		2.7	107	0.1	_
- 5 to <10	0.7	0.2	110.9	1.0	6.83	203,206	87.8		1.6	164	0.1	0.1
10.00 to <100.00	8.0	0.2	85.9	1.0	22.41	202,858	85.5	_	2.5	246	0.3	_
- 10 to <20	0.6	0.1	113.6	0.7	14.39	131,758	84.7	_	1.7	238	0.1	
- 20 to <30	0.1	0.1	31.8	0.2	24.08	36,705	88.4		0.5	294	0.1	_
- 30.00 to <100.00	0.1		84.4	0.1	70.87	34,395	86.3	_	0.3	223	0.1	
100.00 (Default)	0.1		16.2	0.1	100.00	140,663	85.3		0.2	172	0.1	0.1
Sub-total at 31 Dec 2024	18.8	103.5	46.5	66.9	0.99	23,057,951	89.4	_	15.6	23	0.7	0.6
0.00 to <0.15	6.8	82.9	44.1	43.3	0.06	15,531,226	89.6		1.8	4		0.4
- 0.00 to <0.15	5.3	72.4	44.1	37.4	0.05	13,483,286	89.2		1.3	4		0.4
- 0.10 to <0.15	1.5	10.5	42.3	5.9	0.03	2,047,940	92.0		0.5	8		- 0.4
0.15 to <0.25	1.2	7.5	53.6	5.1	0.13	2,102,315	89.0		0.7	14		
0.25 to <0.50	2.2	7.9	46.8	5.9	0.20	1,928,594	88.7		1.3	21		
0.50 to <0.75	1.7	2.2	53.4	2.8	0.60	675,303	89.7		0.9	34		
0.75 to <2.50	4.2	4.8	57.6	6.9	1.36	1,636,516	90.8		4.1	59	0.1	0.1
- 0.75 to <1.75	3.5	4.4	54.9	5.9	1.22	1,314,354	91.3		3.2	55	0.1	0.1
- 1.75 to <2.5	0.7	0.4	91.6	1.0	2.15	322,162	87.8	_	0.9	86	_	_
2.50 to <10.00	2.3	1.1	81.0	3.3	4.48	774,448	86.1		4.1	125	0.2	0.1
- 2.5 to <5	1.6	0.9	73.7	2.4	3.60	538,680	85.7	_	2.6	111	0.1	0.1
- 5 to <10	0.7	0.2	118.8	0.9	6.78	235,768	86.9	_	1.5	163	0.1	_
10.00 to <100.00	0.8	0.2	90.1	1.0	22.76	223,583	84.8	_	2.4	245	0.3	0.1
- 10 to <20	0.6	0.1	119.7	0.7	14.35	142,116	84.1	_	1.7	235	0.1	_
- 20 to <30	0.1	0.1	36.6	0.2	24.11	39,009	87.6	_	0.4	301	0.1	_
- 30.00 to <100.00	0.1		59.6	0.1	69.61	42,458	85.3	_	0.3	235	0.1	0.1
100.00 (Default)	0.2	_	25.2	0.1	100.00	194,895	83.5	_	0.3	182	0.1	0.1
Sub-total at 31 Dec 2023	19.4	106.6	46.3	68.4	0.98	23,066,880	89.4	_	15.6	23	0.7	0.8

Table 45: IRB – Credit risk exposures by portfolio and PD range (CR6) (continued)

				Ехро-				Ехро-	Risk	Density		
	_	Off-	Ехро-	sure	Ехро-		Expo-	sure	weighted	of risk		Value
	On-	balance	sure	post-	sure		sure	weigh-	exposure	weigh-	_	adjust-
	balance sheet	sheet expo-	weigh- ted	CCF and	weigh- ted	Number	weigh- ted	ted average	amount after	ted expo-	Expec- ted	ments and
	expo-	•	average		average	of	average	•	supporting	expo- sure	loss	provi-
	sures	pre-CCF	CCF	CRM	PD	obligors	LGD	(years)		amount	amount	sions ¹
PD scale	\$bn	\$bn	%	\$bn	%	0.0g00	%	years	\$bn	%	\$bn	\$bn
AIRB - Other SME												
0.00 to <0.15	_	5.2	0.5	0.1	0.08	37,807	47.4	_	_	10	_	_
- 0.00 to <0.10	_	5.1	0.1	0.1	0.05	10,402	27.8	_	_	4	_	_
- 0.10 to < 0.15	_	0.1	17.5	_	0.13	27,405	77.8	_	_	19	_	_
0.15 to <0.25	_	0.1	45.6	_	0.20	28,092	93.4	_	_	32	_	_
0.25 to <0.50	_	0.2	45.5	0.2	0.39	90,512	82.6	_	_	45	_	_
0.50 to <0.75	0.1	0.2	69.2	0.1	0.61	79,554	81.7	_	0.1	57	_	_
0.75 to <2.50	1.8	1.1	50.6	1.2	1.57	396,810	79.9	_	1.0	82	_	_
- 0.75 to <1.75	1.4	0.9	49.7	1.0	1.45	314,535	79.6	_	0.8	77	_	_
- 1.75 to <2.5	0.4	0.2	55.1	0.2	2.15	82,275	81.3	_	0.2	112		_
2.50 to <10.00	1.4	0.8	21.7	0.8	4.91	202,081	68.4	_	0.8	91		_
- 2.5 to <5	0.8	0.6	19.0	0.5	3.66	123,238	63.8	_	0.5	85	_	
- 5 to <10	0.6	0.2	29.6	0.3	6.92	78,843	75.8	_	0.3	101	_	
10.00 to <100.00	0.9	0.1	56.6	0.3	21.17	112,093	84.9	_	0.4	161	0.1	0.1
- 10 to <20	0.7	0.1	58.1	0.2	13.97	75,129	82.9	_	0.2	137	_	0.1
- 20 to <30	0.1	_	48.0	0.1	24.57	20,078	87.8	_	0.1	188	_	
- 30.00 to <100.00	0.1		68.0		43.62	16,886	88.1		0.1	214	0.1	
100.00 (Default)	0.5		45.6	0.1	100.00	13,363	47.9		0.1	100	0.1	0.1
Sub-total at 31 Dec 2024	4.7	7.7	13.4	2.8	7.17	960,312	75.6	_	2.4	87	0.2	0.2
0.000000						,						
0.00 to <0.15		3.6	0.7	0.1	0.07	39,567	51.5			10		0.1
- 0.00 to <0.10		3.6	0.3	0.1	0.05	16,985	38.4			6		0.1
- 0.10 to <0.15			37.6		0.13	22,582	78.0			19	_	
0.15 to <0.25		0.2	17.6		0.20	42,555	90.3		_	31		_
0.25 to <0.50	0.1	0.3	45.1	0.2	0.39	92,330	83.7	_	0.1	46	_	_
0.50 to <0.75	0.2	0.3	78.0	0.4	0.64	76,578	60.5	_	0.2	41	_	
0.75 to <2.50	2.5	1.2	53.4	1.4	1.61	400,854	75.3	_	1.1	78	_	_
- 0.75 to <1.75	1.9	1.0	50.7	1.1	1.44	314,372	77.3	_	0.8	74	_	_
- 1.75 to <2.5	0.6	0.2	65.4	0.3	2.16	86,482	68.8	_	0.3	90	_	_
2.50 to <10.00	1.9	1.1	20.9	1.0	4.87	219,747	60.3		0.8	79		
- 2.5 to <5	1.1	1.0	14.8	0.6	3.71	130,431	55.2		0.5	72		
- 5 to <10	0.8	0.1	63.9	0.4	6.93	89,316	69.4		0.3	92		
10.00 to <100.00	1.5	0.2	27.9	0.3	22.99	136,054	81.2		0.5	153	0.1	0.1
- 10 to <20	0.9	0.1	59.5	0.2	13.63	79,400	80.9		0.3	131		
- 20 to <30	0.3		66.0	0.1	24.77	25,987	75.6		0.1	160		
- 30.00 to <100.00	0.3	0.1	7.9		46.90	30,667	88.6		0.1	207	0.1	0.1
100.00 (Default)	1.1		44.8	0.2	100.00	19,485	42.2		0.2	120	0.1	0.1
Sub-total at 31 Dec 2023	7.3	6.9	19.1	3.6	9.27	1,027,170	68.5	_	2.9	80	0.2	0.3
31 500 2020						.,,,						

Table 45: IRB – Credit risk exposures by portfolio and PD range (CR6) (continued)

	On- balance sheet expo- sures	Off- balance sheet expo- sures pre-CCF	Expo- sure weigh- ted average CCF	CRM	Expo- sure weigh- ted average PD	Number of obligors	Expo- sure weigh- ted average LGD	Expo- sure weigh- ted average maturity (years)		Density of risk weigh- ted expo- sure amount	Expec- ted loss amount	Value adjust- ments and provi- sions ¹
PD scale	\$bn	\$bn	<u>%</u>	\$bn	%		%	years	\$bn	%	\$bn	\$bn
AIRB – Other non- SME												
0.00 to <0.15	6.5	40.1	8.6	9.9	0.07	230,506	40.1		0.7	7	_	0.1
- 0.00 to <0.10	5.6	36.8	6.3	7.9	0.05	203,592	44.2		0.5	7		0.1
- 0.10 to <0.15	0.9	3.3	34.2	2.0	0.13	26,914	24.1	_	0.2	8	_	
0.15 to <0.25	1.6	2.8	29.4	2.4	0.13	97,482	31.5	_	0.4	14		_
0.25 to <0.50	4.3	3.3	19.9	5.0	0.35	195,638	53.9	_	1.6	33		_
0.50 to <0.75	2.9	1.2	22.7	3.2	0.64	106,566	48.9	_	1.3	42	_	_
0.75 to <2.50	6.1	2.2	10.3	6.3	1.31	272,619	53.8	_	4.8	76	_	0.1
- 0.75 to <1.75	5.2	1.9	8.4	5.3	1.17	167,098	50.1	_	3.1	57	_	0.1
- 1.75 to <2.5	0.9	0.3	22.9	1.0	2.09	105,521	73.6	_	1.7	173	_	_
2.50 to <10.00	1.7	0.7	49.2	2.0	4.18	143,089	64.1	_	2.0	99	0.1	_
- 2.5 to <5	1.3	0.7	49.4	1.6	3.43	110,813	59.9	_	1.4	90	0.1	_
- 5 to <10	0.4	_	41.7	0.4	6.88	32,276	79.3	_	0.6	129	_	_
10.00 to <100.00	0.7	0.2	13.8	0.7	62.59	29,407	49.2	_	0.6	91	0.1	_
- 10 to <20	0.2	_	83.0	0.2	12.85	12,631	79.2	_	0.3	154	_	_
- 20 to <30	0.1	_	10.8	0.1	26.58	4,971	93.3	_	0.2	244		_
- 30.00 to <100.00	0.4	0.2	11.7	0.4	93.20	11,805	26.1	_	0.1	29	0.1	_
100.00 (Default)	0.1		18.2	0.1	100.00	5,922	78.1		0.2	182	0.1	0.1
Sub-total at 31 Dec 2024	23.9	50.5	11.5	29.6	2.47	1,081,229	47.6	_	11.6	39	0.3	0.3
0.00 to <0.15	7.6	39.3	8.2	11.1	0.07	337,774	36.0		0.7	7		0.1
- 0.00 to <0.10	6.0	35.9	5.8	8.2	0.05	188,348	40.9		0.5	6		0.1
- 0.10 to <0.15	1.6	3.4	34.0	2.9	0.12	149,426	22.4		0.2	7		
0.15 to <0.25	2.0	3.1	28.2	3.2	0.20	333,573	41.4		0.6	19		
0.25 to <0.50	5.3	4.8	14.6	6.3	0.36	331,708	48.9		1.9	31		
0.50 to <0.75	2.5	1.2	23.1	2.9	0.61	113,538	42.6		1.1	36		
0.75 to <2.50 - 1.75 to <2.5	6.9 5.8	2.6	10.0 8.3	7.4 6.2	1.34	504,843 383,876	54.1 51.1		4.9 3.7	65 59	0.1	
- 0.75 to <2.5	1.1	0.4	19.7	1.2	2.11	120,967	68.9		1.2	97	0.1	
2.50 to <10.00	1.8	0.6	41.3	2.1	4.24	247,277	63.4		2.1	98	0.1	
- 2.5 to <5	1.3	0.5	43.6	1.6	3.40	154,088	58.8		1.4	89	0.1	
- 5 to <10	0.5	0.1	20.4	0.5	6.73	93,189	76.9	_	0.7	126		
10.00 to <100.00	0.5	0.1	27.2	0.5	36.61	71,611	72.4	_	0.7	142	0.1	0.1
- 10 to <20	0.2		44.3	0.2	13.27	33,173	72.1		0.3	143		
- 20 to <30							75.0	_	0.2	196	_	
	0.1	_	15.6	0.1	26.17	23.224						
- 30.00 to <100.00	0.1	0.1	15.6 26.4	0.1	26.17 73.65	23,224 15,214	71.1	_	0.2	105	0.1	0.1
											0.1 0.1	0.1
- 30.00 to <100.00	0.2	0.1	26.4	0.2	73.65	15,214	71.1	_	0.2	105		
- 30.00 to <100.00 100.00 (Default)	0.2	0.1	26.4	0.2	73.65	15,214	71.1	_	0.2	105		
- 30.00 to <100.00 100.00 (Default) Sub-total at	0.2	0.1 —	26.4 131.2	0.2	73.65 100.00	15,214 20,889	71.1 68.3	_	0.2	105 179	0.1	0.1

Table 45: IRB – Credit risk exposures by portfolio and PD range (CR6) (continued)

	On- balance sheet expo- sures	pre-CCF	Expo- sure weigh- ted average CCF	CRM	Expo- sure weigh- ted average PD	Number of obligors	Expo- sure weigh- ted average LGD	Expo- sure weigh- ted average maturity (years)		Density of risk weigh- ted expo- sure amount	Expec- ted loss amount	Value adjust- ments and provi- sions ¹
PD scale	\$bn	\$bn	%	\$bn	%		%	years	\$bn	%	\$bn	\$bn
FIRB – Central government and central banks												
0.00 to <0.15	_	_	75.0	0.5	0.03	_	45.0	4.0	0.1	23	_	_
- 0.00 to <0.10	_	_	75.0	0.5	0.03		45.0	4.0	0.1	23	_	_
0.75 to <2.50	_					_						_
- 1.75 to <2.5	_	_	_			_	_				_	_
Sub-total at 31 Dec 2024	-	_	75.0	0.5	0.03	_	45.0	4.0	0.1	23	_	_
0.00 to <0.15			60.2	0.6	0.03		45.0	4.9	0.2	28		
- 0.00 to <0.10	_		60.2	0.6	0.03		45.0	4.9	0.2	28		
0.75 to <2.50			70.3		2.25		45.0	5.0		159		
- 1.75 to <2.5			70.3		2.25		45.0	5.0	_	159		
Sub-total at												
31 Dec 2023			60.3	0.6	0.03		45.0	4.9	0.2	28		
FIRB – Institutions												
0.00 to <0.15	_	_	11.8	0.5	0.04	_	45.0	0.4	_	7	_	_
- 0.00 to <0.10	_	_	4.8	0.5	0.04	_	45.0	0.4	_	7	_	_
- 0.10 to <0.15	_	_	75.0	_	0.13	_	45.0	1.0	_	24	_	_
0.15 to <0.25	_	_	_	_	_	_	_	_	_	_	_	_
0.25 to <0.50	_	_	75.0	_	0.37	_	45.0	3.2	0.1	97	_	_
Sub-total at 31 Dec 2024	_	_	43.5	0.5	0.06	_	45.0	0.6	0.1	13	_	_
0.00 to <0.15			7.6	0.2	0.04		45.0	0.4		7		
- 0.00 to <0.10			9.9	0.2	0.04		45.0	0.4		7		
- 0.10 to <0.15			5.5		0.13		45.0	0.2	_	 17		
0.15 to <0.25	_		100.0		0.22	1	44.8	2.0	_	43	_	
0.25 to <0.50	_	_	_	_	_			_	_		_	
Sub-total at 31 Dec 2023	_	_	7.8	0.2	0.05	1	45.0	0.4	_	8	_	

Table 45: IRB – Credit risk exposures by portfolio and PD range (CR6) (continued)

PD scale	On- balance sheet expo- sures \$bn	Off- balance sheet expo- sures pre-CCF \$bn	Exposure weighted average CCF	Expo- sure post- CCF and post- CRM \$bn	Expo- sure weigh- ted average PD %	Number of obligors	Expo- sure weigh- ted average LGD	Expo- sure weigh- ted average maturity (years) years	Risk weighted exposure amount after supporting factors \$bn	Density of risk weigh- ted expo- sure amount %	Expec- ted loss amount \$bn	Value adjust- ments and provi- sions ¹ \$bn
FIRB – Corporate – SME												
0.00 to <0.15	0.3	0.2	32.6	0.4	0.13	670	40.3	2.5	0.1	27	_	_
- 0.00 to <0.10	_	_	9.0	_	0.06	9	23.4	1.6	_	10	_	_
- 0.10 to <0.15	0.3	0.2	32.9	0.4	0.13	661	40.3	2.5	0.1	27	_	_
0.15 to <0.25	0.9	0.4	12.4	1.0	0.22	1,445	38.2	2.7	0.4	35	_	_
0.25 to <0.50	1.2	0.4	15.6	1.2	0.37	1,535	37.8	2.9	0.6	46	_	_
0.50 to <0.75	1.0	0.3	18.1	1.0	0.63	1,214	39.3	3.0	0.6	63	_	_
0.75 to <2.50	1.9	0.6	17.8	1.9	1.36	2,281	38.4	2.6	1.4	74	_	_
- 0.75 to <1.75	1.6	0.5	18.6	1.6	1.19	1,816	38.4	2.6	1.2	71	_	_
- 1.75 to <2.5	0.3	0.1	13.7	0.3	2.25	465	38.2	2.9	0.2	87	_	_
2.50 to <10.00	0.6	0.1	20.6	0.6	4.69	812	39.0	2.3	0.6	103	_	_
- 2.5 to <5	0.4	0.1	22.1	0.4	3.66	495	39.5	2.4	0.4	98	_	_
- 5 to <10	0.2	_	16.8	0.2	6.56	317	38.2	1.9	0.2	111	_	_
10.00 to <100.00	0.2	_	35.9	0.2	26.17	244	38.5	2.0	0.3	139	_	_
- 10 to <20	0.1	_	35.9	0.1	12.33	198	38.4	1.9	0.2	145	_	_
- 30.00 to <100.00	0.1	_	36.1	0.1	64.33	46	38.8	2.0	0.1	125	_	_
100.00 (Default)	0.4	_	28.6	0.4	100.00	297	39.3	2.0	_	_	0.2	0.1
Sub-total at 31 Dec 2024	6.5	2.0	18.9	6.7	7.15	8,498	38.6	2.7	4.0	59	0.2	0.1
FIRB – Corporate – SME												
0.00 to <0.15	0.4	0.3	31.3	0.5	0.13	693	40.2	2.7	0.1	27		_
- 0.00 to <0.10	_		_	_	0.07	9	45.0	1.4	_	14	_	_
- 0.10 to <0.15	0.4	0.3	31.3	0.5	0.13	684	40.2	2.7	0.1	27	_	_
0.15 to <0.25	1.1	0.4	15.9	1.2	0.22	1,654	37.4	2.9	0.4	34	_	_
0.25 to <0.50	1.5	0.5	12.9	1.5	0.37	1,816	37.7	2.9	0.7	44	_	_
0.50 to <0.75	1.2	0.4	13.4	1.2	0.63	1,375	38.5	2.5	0.6	54	_	_
0.75 to <2.50	2.3	0.7	21.7	2.3	1.32	2,646	37.9	2.6	1.6	69	_	_
- 0.75 to <1.75	2	0.6	20.6	2	1.17	2,176	38.2	2.6	1.4	68	_	_
- 1.75 to <2.5	0.3	0.1	26.6	0.3	2.25	470	35.4	2.6	0.2	77	_	
2.50 to <10.00	0.8	0.2	19.1	0.8	4.70	968	39.0	2.4	0.8	101	_	_
- 2.5 to <5	0.5	0.1	20.8	0.5	3.51	622	38.9	2.4	0.4	92	_	_
- 5 to <10	0.3	0.1	16.3	0.3	6.45	346	39.1	2.3	0.4	113	_	_
10.00 to <100.00	0.3		28.9	0.2	21.62	246	39.7	1.8	0.4	144	_	_
- 10 to <20	0.2	_	23.5	0.2	12.87	212	39.5	1.8	0.3	144	_	_
- 30.00 to <100.00	0.1		56.3		53.52	34	40.3	1.7	0.1	145	_	_
100.00 (Default)	0.5		11.2	0.5	100.00	330	38.9	2.2	_		0.2	0.1
Sub-total at 31 Dec 2023	8.1	2.5	18.7	8.2	7.22	9,728	38.2	2.6	4.6	56	0.2	0.1

Table 45: IRB – Credit risk exposures by portfolio and PD range (CR6) (continued)

PD scale	On- balance sheet expo- sures \$bn	Off- balance sheet expo- sures pre-CCF \$bn	Expo- sure weigh- ted average CCF	Expo- sure post- CCF and post- CRM \$bn	Expo- sure weigh- ted average PD %	Number of obligors	Expo- sure weigh- ted average LGD	Expo- sure weigh- ted average maturity (years)	Risk weighted exposure amount after supporting factors \$bn	Density of risk weigh- ted expo- sure amount	Expec- ted loss amount \$bn	Value adjust- ments and provi- sions ¹ \$bn
FIRB - Corporate -	ΨΙΙΙ	ΨΟΠ	/0	ΨΙΙΙΙ	/0		/0	years	ΙΙΟΨ	/0	ΨΟΠ	ΨΟΠ
Other												
0.00 to <0.15	36.8	48.7	40.9	63.8	0.08	9,325	27.5	1.9	11.0	17	_	0.1
- 0.00 to <0.10	24.4	30.4	41.7	39.7	0.05	2,789	26.3	1.8	5.1	13	_	0.1
- 0.10 to <0.15	12.4	18.3	39.5	24.1	0.13	6,536	29.3	2.0	5.9	25	_	_
0.15 to <0.25	11.6	15.5	38.0	18.1	0.22	6,336	39.1	2.1	7.8	43		
0.25 to <0.50	11.0	10.4	39.3	16.2	0.37	5,605	33.9	2.0	8.0	49	_	
0.50 to <0.75	10.6	9.4	32.7	13.4	0.63	4,971	37.4	2.0	9.0	67	0.1	_
0.75 to <2.50	29.9	24.3	32.6	27.8	1.41	42,259	37.2	2.1	25.9	93	0.2	0.1
- 0.75 to <1.75	17.9	15.9	31.5	22.4	1.21	38,592	36.7	2.0	19.7	88	0.1	0.1
- 1.75 to <2.5	12.0	8.4	39.4	5.4	2.25	3,667	39.0	2.2	6.2	116	0.1	
2.50 to <10.00	10.0	7.3	46.6	10.6	4.14	5,707	37.1	2.1	13.9	131	0.2	0.1
- 2.5 to <5	7.6	5.7	47.3	8.1	3.47	4,313	38.0	2.2	10.5	130	0.1	
- 5 to <10	2.4	1.6	43.9	2.5	6.30	1,394	34.3	1.7	3.4	133	0.1	0.1
10.00 to <100.00	2.4	1.2	41.4	2.3	18.59	1,157	39.4	1.8	4.4	191	0.2	0.2
- 10 to <20	2.2	1.0	37.4	2.0	12.54	1,029	39.2	1.9	3.9	194	0.1	0.1
- 20 to <30	0.2	0.2	72.0		23.33 59.71	3 125	45.0	1.8 1.5		250 174	0.1	0.1
- 30.00 to <100.00 100.00 (Default)	3.4	0.2	52.2	0.3 3.7	100.00	1,686	40.5 41.8	1.8	0.5	- 174	1.5	1.2
Sub-total at	3.4	0.0	32.2	3.7	100.00	1,000	41.0	1.0		<u> </u>	1.5	1.2
31 Dec 2024	115.7	117.6	38.7	155.9	3.32	77,046	33.3	2.0	80.0	51	2.2	1.7
FIRB – Corporate – Other												
0.00 to <0.15	34.4	49.1	39.6	60.6	0.08	9,076	29.9	1.9	10.5	17		
- 0.00 to <0.10	23.2	31.9	43.0	38.4	0.06	2,723	31.2	1.9	5.4	14		
- 0.10 to <0.15	11.2	17.2	33.5	22.2	0.13	6,353	27.5	1.9	5.1	23		
0.15 to <0.25	12.6	15.5	36.5	20.0	0.22	5,505	34.5	1.9	7.3	37		
0.25 to <0.50 0.50 to <0.75	9.7 8.8	8.8 7.6	31.3 33.6	13.4	0.37	5,570 4,593	36.6 35.0	1.8	6.9 7.0	51 61		
0.75 to <2.50	32.4	22.3	29.0	27.6	1.41	39,098	36.2	1.9	23.9	87	0.2	0.2
- 0.75 to <2.30	18.7	14.6	27.9	22.1	1.20	35,542	35.7	1.9	18	81	0.2	0.2
- 1.75 to <2.5	13.7	7.7	34.9	5.5	2.25	3,556	38.3	2.2	5.9	109	0.1	0.1
2.50 to <10.00	8.8	6.7	42.7	10.0	4.21	5,546	35.8	2.1	12.3	123	0.1	0.1
- 2.5 to <5	6.8	5.7	43.4	8	3.61	4,135	35.9	2.2	9.4	119	0.1	0.1
- 5 to <10	2	1.0	38.5	2	6.51	1,411	35.4	1.7	2.9	139	0.1	0.1
10.00 to <100.00	2.9	0.9	34.7	2.6	14.10	1,008	38.1	1.6	4.8	188	0.2	0.1
- 10 to <20	2.7	0.8	37.7	2.4	11.76	871	38.4	1.7	4.3	187	0.1	0.1
- 20 to <30		_	_		_		_	_	_		_	_
- 30.00 to <100.00	0.2	0.1	16.1	0.2	37.56	137	34.2	1.0	0.5	196	0.1	_
100.00 (Default)	3.1	0.7	49.7	3.3	100.00	1,680	46.6	1.8	_		1.6	1.3
Sub-total at 31 Dec 2023	112.7	111.6	36.5	148.9	3.14	72,076	33.6	1.9	72.7	49	2.2	1.8
FIRB – Total at 31 Dec 2024	122.2	119.6	38.4	163.6		85,544		2.0	84.2	51	2.4	1.8
FIRB – Total at												
31 Dec 2023	120.8	114.1	36.1	157.9		81,805		2.0	77.5	49	2.4	1.9

¹ Disclosure has been enhanced to present value adjustments and provisions split by PD bands.

Wholesale risk

The wholesale risk rating system

This section describes how we operate our credit risk analytical models and use IRB metrics in the wholesale customer business.

PDs for wholesale customer segments (i.e. central governments and central banks, financial institutions and corporate customers) and for certain individually assessed personal customers, are derived from a customer risk rating master scale of 23 grades. Of these, 21 are non-default grades representing varying degrees of strength of financial condition, and two are default grades. Each customer risk rating grade has a PD range associated with it as well as a mid-point PD.

The score generated by a credit risk rating model for the obligor is mapped to a corresponding customer risk rating grade. Relationship managers may, by exception, propose a different customer risk rating from that indicated through an override process that must be approved by the Credit function. Overrides for each model are recorded and monitored as part of the model management process. The customer risk rating is then reviewed by a credit approver who, taking into account information such as the most recent financial events and market data, makes the final decision on the rating. The

rating assigned reflects the rating calculated by the model and the approver's overall view of the obligor's credit standing.

The mid-point PD associated with the approved customer risk rating grade is then used in the regulatory capital calculation.

The customer risk rating is assigned at an obligor level, which means that separate exposures to the same obligor are generally subject to a single, consistent customer risk rating. Exceptions may include where an exposure to a corporate or bank is capped to the rating of the sovereign, which may lead to different customer risk ratings for the same obligor. Unfunded credit risk mitigants, such as guarantees, may also influence the final assignment of a customer risk rating to an obligor.

If an obligor is in default on any material credit obligation to the Group, all of the obligor's facilities from the Group are generally considered to be in default.

Approved PD, LGD and EAD models all generally follow a through the cycle approach, LGD models are also subject to a downturn adjustment. Obligor ratings are reviewed at least annually, or more frequently as necessary, to reflect changes in their circumstances and/or their economic operating environment.

Group policy allows approvers to downgrade customer risk ratings on expectations, but to upgrade them only on performance. This leads to expected defaults typically exceeding actual defaults.

For EAD and LGD estimation, operating entities are permitted, subject to overview by Group Risk, approval by the PRA and regulatory floors, to use their own internal models developed and calibrated to their portfolios and jurisdictions. Group Risk provides co-ordination, benchmarks, and promotion of best practice on EAD and LGD estimation. The Model Development Guide in conjunction with the Model Development Template ensures model developers follow a consistent approach to building compliant models. EAD is estimated to a 12-month forward time horizon and represents the current exposure, plus an estimate for future increases in exposure and the realisation of contingent exposures.

LGD is expressed as a percentage of EAD and captures the effects of facility and collateral structure on receipts and recoveries post-default. This includes such factors as the type of client, the facility seniority, the type and value of collateral, past recovery experience and priority under law. Cashflows are adjusted to reflect the time value of money.

New IRB Repair guidelines were published by the EBA with effect from 1 January 2022 and were largely adopted into UK retained rules. These guidelines specified detailed requirements including the Margin of Conservatism classification framework, data representativeness, LGD in default and Estimated Loss Best Estimate and model monitoring.

Legacy models were designed before the new requirements and therefore do not comply. A pipeline for model re-development, recalibration or retirement is underway with future planned submissions agreed with the regulator. The impact on RWAs and EL relating to the non-compliance with the new regulations has been assessed and additional PMAs have been implemented. The PMAs were submitted to the regulator and are subject to regular review to ensure they remain appropriate given changes in economic conditions and the composition of the portfolios.

Wholesale models

To determine credit ratings for the different types of wholesale obligor, multiple models and scorecards are used for PD, LGD and EAD. These models may be differentiated by region, customer segment and/or customer size. For example, we have separate PD models for all our key customer segments, including sovereigns, financial institutions, and large, medium and small-sized corporates.

Global PD models have been developed for asset classes, or clearly identifiable segments of asset classes, where the customer relationship is managed globally, such as sovereigns, financial institutions and the largest corporate clients that typically operate internationally.

Local PD models, specific to a particular country, region, or sector are developed for other obligors. These include corporate clients when they show distinct characteristics in common in a particular geography.

The two major drivers of model methodology are the nature of the portfolio and the availability of internal or external data on historical defaults and risk factors. For some historically low-default portfolios, such as sovereign and financial institutions, a model will rely more heavily on external data and/or the input of an expert panel. Where sufficient data is available, models are built on a statistical basis, although the input of expert judgement may still form an important part of the overall model development methodology.

Most LGD and EAD models are developed according to local circumstances, considering legal and procedural differences in the recovery and workout processes. Our approach to EAD and LGD also encompasses global models for central governments and central banks, and for institutions, as exposures to these customer types are managed centrally by Global Risk. The PRA requires all firms to apply an LGD floor of 45% for senior unsecured exposure to sovereign entities. This floor was applied to reflect the relatively few loss observations across all firms in relation to these obligors. This floor is applied for the purposes of regulatory capital reporting.

The PRA has published guidance on the appropriateness of LGD models for low default portfolios. It states there should be at least 20 defaults per country per collateral type for LGD models to be approved. Where there are insufficient defaults, an LGD floor will be applied. As a result, in 2024, we continued to apply LGD floors for our banks portfolio and some Asian corporate portfolios where there were insufficient loss observations.

The PRA has also indicated that it considers income-producing real estate to be an asset class that would be difficult to model. As a result, RWAs for our income-producing CRE portfolios are calculated using the supervisory slotting approach. Under the supervisory slotting approach, the bank allocates exposures to one of five categories. Each category then receives a fixed pre-determined RWA and EL percentage.

Local models for the corporate exposure class are developed using various data inputs, including collateral information and geography (for LGD) and product type (for EAD). The most material corporate models are the UK and Asian models, all of which are developed using more than 10 years' data. The LGD models are calibrated to a period of credit stress or downturn in economic conditions.

None of our EAD models are calibrated for a downturn, as analysis shows that utilisation decreases during a downturn because credit stress is accompanied by more intensive limit monitoring and facility reduction.

Table 46 below sets out the key characteristics of the significant wholesale credit risk models that drive the capital calculation split by regulatory wholesale asset class, with their associated RWAs, including the number of models for each component, the model method or approach and the number of years of loss data. In relation to LGD models the time-lapse between the default event and the closure of the exposure varies regionally and by portfolio characteristics.

Table 46: Wholesale IRB credit risk models

IRB exposure class	Portfolio	RWA \$bn	Component model	Number of component models	Model description and methodology	Number of years loss data	Regulatory Floors
		<u> </u>	PD	1	A shadow rating approach that includes macroeconomic and political factors, constrained with expert judgement.	>10	No
Central government and central banks	Sovereign	47.5	LGD	1	An unsecured model built on assessment of structural factors that influence the country's long-term economic performance. For senior unsecured LGD, a floor of 45% is applied.	>10	Floored at FIRB
Daliks	Danks		EAD	1	A cross-classification model that uses both internal data and expert judgement, as well as information on similar exposure types from other asset classes.		EAD must be at least equal to the current utilisation of the balance at account level
			PD	1	A statistical model that combines quantitative analysis on financial information with expert inputs and macroeconomic factors.	>10	PD floor of 0.03%
Institutions	Banking institutions	13.4	LGD	2	Quantitative models that produces both downturn and expected LGD. Several securities types are included in the models to recognise collateral in the LGD calculation. For senior unsecured LGD, a floor of 45% is applied.	>10	Floored at FIRB
		EAD	1	A quantitative model that assigns credit conversion factors ('CCF') taking into account product types and committed/uncommitted indicator to calculate EAD using current utilisation and available headroom.	>10	EAD must be at least equal to the current utilisation of the balance at account level	
	Large corporates		PD	1	A statistical model built on over 10 years of data. The model uses financial information, macroeconomic information and market-driven data, and is complemented by a qualitative assessment.	>10	PD floor of 0.03%
	Regional corporates		PD	13	Corporates that fall below the global large corporate threshold are rated through regional/ local PD models, which reflect regional/local circumstances. These models use financial information, behavioural data and qualitative information to derive a statistically built PD.	>10	PD floor of 0.03%
Corporates ¹ – Other, institutions	Non-banks financial institutions and global corporate	294.8	PD	12	NBFIs and specialised lending are rated through global PD models. Predominantly statistical models that combine quantitative analysis on financial information with expert inputs.	>10	PD floor of 0.03%
	All		LGD	12	Regional/local statistical models covering all corporate types, including global large corporates, developed using historical loss/recovery data and various data inputs, including collateral information, customer type and geography.	>10	
	corporates		EAD	4	Regional/local statistical models covering all corporates types, including global large corporates, developed using historical utilisation information and various data inputs, including product type and geography.	>10	EAD must be at least equal to the current utilisation of the balance at account level

¹ Excludes Corporates specialised lending exposures subject to supervisory slotting approach.

The observed sovereigns' default rate has been below the estimate throughout the last three years. This is a result of only one default in each of the last two years and two defaults in 2022. Similarly the banks portfolio registers actuals that are nil or significantly below the

estimate, with only one default in 2024. While the actual corporate default rate remains below the estimated, the difference has reduced as a result of an increase in the number of defaults due to the deteriorating economic environment.

The table below provides an overview of wholesale PD model performance for IRB exposures based upon data that represents an annual view as of 30 September each year. The table shows the estimated PD (including modelled and judgemental input) and actual default rate across asset classes. The estimated PD for all models in each asset class is calculated based on the total number of obligors covered by the models. The actuals are the observed default rate in each asset class for the specified period.

Table 47: Wholesale IRB models – estimated and actual values

	2024		202	23	202	2022		
	Estimated	Actuals	Estimated	Actuals	Estimated	Actuals		
	%	%	%	%	%	%		
Sovereigns ¹	3.27	0.80	2.81	0.82	2.12	1.44		
Banks	1.98	0.19	1.33	_	2.70	0.37		
Corporates ²	1.60	1.04	1.55	1.02	1.76	0.88		

- 1 The estimated PD excludes inactive sovereign obligors.
- 2 Covers the combined populations of the global large corporates model, all regional IRB models for large, medium and small corporates, and non-bank financial institutions. The estimated and observed PDs were calculated only for unique obligors.

The table below provides an overview of credit risk model performance for wholesale IRB exposures, assessed by the analysis of average PDs.

Table 48: Wholesale IRB exposure – back-testing of probability of default (PD) per portfolio¹ (CR9)

	Number o	f obligors					
		of which: number	•	Exposures		Average	
	End of	which defaulted	Observed average	weighted	Average	historic annual	
A-IRB PD range	previous year ²	in the year	default rate %	average PD %	PD %	default rate %	
2024							
Sovereigns ⁴							
0.00 to <0.15	60	_	_	0.05	0.04	_	
- 0.00 to <0.10	55	_	_	0.04	0.03	_	
- 0.10 to <0.15	5	_	_	0.13	0.13	_	
0.15 to <0.25	7	_	_	0.22	0.22	2.86	
0.25 to <0.50	7	_	_	0.37	0.37	_	
0.50 to <0.75	7	_	_	0.63	0.63	_	
0.75 to <2.50	18	_	_	1.08	1.37	_	
- 0.75 to <1.75	13	_	_	1.05	1.03	_	
- 1.75 to <2.5	5	_	_	2.25	2.25	_	
2.5 to <10.00	16	_	_	3.12	5.25	0.74	
- 2.5 to <5	7	_	_	3.08	3.71	_	
- 5 to <10	9	_	_	5.75	6.45	1.67	
10.00 to <100.00	10	1	10.00	14.86	28.90	10.48	
- 10 to <20	7	_	_	13.01	14.71	2.22	
- 30.00 to <100.00	3	1	33.33	75.00	62.00	20.00	
100.00 (Default)	_						
2023							
0.00 to <0.15	60	_	_	0.01	0.04	_	
- 0.00 to <0.10	54	_	_	0.01	0.03	_	
- 0.10 to <0.15	6	_	_	0.13	0.13	_	
0.15 to <0.25	5	_	_	0.22	0.22	2.86	
0.25 to <0.50	8	_	_	0.37	0.37	_	
0.50 to <0.75	9	_	_	0.63	0.63	_	
0.75 to <2.50	13	_	_	0.89	1.45	_	
- 0.75 to <1.75	8	_	_	0.87	0.95	_	
- 1.75 to <2.5	5	_	_	2.25	2.25	_	
2.5 to <10.00	16	_	_	6.28	4.89	0.74	
- 2.5 to <5	10	_	_	4.20	3.74	_	
- 5 to <10	6	_	_	7.85	6.80	1.67	
10.00 to <100.00	11	1	9.09	12.73	21.27	1.82	
- 10 to <20	9	1	11.11	12.73	13.67	2.22	
- 30.00 to <100.00	2	_	_	55.50	55.50	_	
100.00 (Default)	_			-			

Table 48: Wholesale IRB exposure – back-testing of probability of default (PD) per portfolio¹ (CR9) (continued)

	Number o	f obligors					
		of which: number		Exposures		Average	
	End of	which defaulted	Observed average	weighted	Average	historic annual	
A-IRB PD range	previous year ²	in the year	default rate %	average PD %	PD %	default rate %	
2024							
Banks ³							
0.00 to <0.15	269			0.04	0.07		
- 0.00 to <0.10	186	_	_	0.03	0.05	_	
- 0.10 to <0.15	83	=	=	0.13	0.13	_	
0.15 to <0.25	50	_	_	0.22	0.22	_	
0.25 to <0.50	49	_	_	0.37	0.37	_	
0.50 to <0.75	40	_	_	0.63	0.63	0.18	
0.75 to <2.50	67	_	_	1.32	1.35	0.14	
- 0.75 to <1.75	55	_	_	1.08	1.16	0.15	
- 1.75 to <2.5	12	_	_	2.25	2.25	_	
2.5 to <10.00	19	_	_	2.50	4.14	_	
- 2.5 to <5	15	_	_	2.65	3.43	_	
- 5 to <10	4	_	_	5.75	6.80	_	
10.00 to <100.00	25	1	4.00	19.46	31.32	2.71	
- 10 to <20	18	1	5.56	13.00	14.33	2.02	
- 30.00 to <100.00	7	_	_	75.00	75.00	1.18	
100.00 (Default)	3						
2023							
0.00 to <0.15	277			0.04	0.07		
- 0.00 to <0.10	187			0.03	0.05		
- 0.10 to <0.15	90			0.13	0.13		
0.15 to <0.25	46			0.22	0.22		
0.25 to <0.50	52			0.37	0.37		
0.50 to <0.75	44			0.63	0.63	0.43	
0.75 to <2.50	74			1.44	1.32	0.25	
- 0.75 to <1.75	65	_	_	1.44	1.19	0.27	
- 1.75 to <2.5	9	_	_	2.25	2.25	_	
2.5 to <10.00	33	_	_	5.19	5.06	_	
- 2.5 to <5	20	_	_	3.05	3.45	_	
- 5 to <10	13	_	_	7.85	7.53	_	
10.00 to <100.00	15	_	_	13.00	25.07	1.91	
- 10 to <20	10	_	_	13.00	11.80	0.91	
- 30.00 to <100.00	5	_	_	51.60	51.60	1.18	
100.00 (Default)	_						

Table 48: Wholesale IRB exposure – back-testing of probability of default (PD) per portfolio¹ (CR9) (continued)

	Number o	f obligors					
		of which: number	•	Exposures		Average	
	End of	which defaulted	Observed average	weighted	Average	historic annual	
A-IRB PD range	previous year ²	in the year	default rate %	average PD %	PD %	default rate %	
2024							
Corporates ⁵							
0.00 to <0.15	6,627	1	0.02	0.08	0.09	0.03	
- 0.00 to <0.10	3,460	_	_	0.05	0.06	0.01	
- 0.10 to <0.15	3,167	1	0.03	0.13	0.13	0.04	
0.15 to <0.25	3,497	1	0.03	0.28	0.22	0.11	
0.25 to <0.50	3,379	2	0.06	0.45	0.37	0.09	
0.50 to <0.75	3,839	8	0.21	0.69	0.63	0.14	
0.75 to <2.50	10,036	50	0.50	1.38	1.47	0.47	
- 0.75 to <1.75	7,456	32	0.43	1.18	1.19	0.41	
- 1.75 to <2.5	2,580	18	0.70	2.25	2.25	0.67	
2.5 to <10.00	3,779	64	1.69	4.16	4.29	1.84	
- 2.5 to <5	2,716	31	1.14	3.61	3.52	1.21	
- 5 to <10	1,063	33	3.10	6.41	6.26	3.42	
10.00 to <100.00	681	73	10.72	20.59	23.47	10.75	
- 10 to <20	456	54	11.84	13.66	13.78	10.03	
- 30.00 to <100.00	225	19	8.44	55.05	43.11	13.87	
100.00 (Default)	744						
2023							
0.00 to <0.15	7,688			0.08	0.09	0.02	
- 0.00 to <0.10	4,038			0.05	0.06	0.01	
- 0.10 to <0.15	3,650			0.13	0.13	0.03	
0.15 to <0.25	5,315	1	0.02	0.22	0.22	0.14	
0.25 to <0.50	5,342	3	0.06	0.37	0.37	0.12	
0.50 to <0.75	5,947	5	0.08	0.63	0.63	0.14	
0.75 to <2.50	15,642	76	0.49	1.35	1.46	0.43	
- 0.75 to <1.75	11,825	46	0.39	1.17	1.20	0.38	
- 1.75 to <2.5	3,817	30	0.79	2.25	2.25	0.61	
2.5 to <10.00	5,251	115	2.19	4.14	4.32	1.72	
- 2.5 to <5	3,806	53	1.39	3.62	3.53	1.21	
- 5 to <10	1,445	62	4.29	6.41	6.41	2.98	
10.00 to <100.00	903	102	11.30	22.92	21.82	8.73	
- 10 to <20	597	61	10.22	14.21	13.12	7.73	
- 30.00 to <100.00	306	41	13.40	53.34	38.80	13.17	
100.00 (Default)	1,036						

Table 48: Wholesale IRB exposure - back-testing of probability of default (PD) per portfolio¹ (CR9) (continued)

	Number o	f obligors					
		of which: number		Exposures		Average	
	End of		Observed average	weighted	Average	historic annual	
F-IRB PD range	previous year ²	in the year	default rate %	average PD %	PD %	default rate %	
2024							
Corporates ⁵							
0.00 to <0.15	10,996	_	_	0.08	0.11	0.06	
- 0.00 to <0.10	2,987			0.05	0.05	0.03	
- 0.10 to <0.15	8,009			0.13	0.13	0.07	
0.15 to <0.25	7,803	17	0.22	0.22	0.22	0.17	
0.25 to <0.50	8,279	17	0.21	0.37	0.37	0.34	
0.50 to <0.75	6,819	23	0.34	0.63	0.63	0.86	
0.75 to <2.50	16,345	228	1.39	1.38	1.45	1.14	
- 0.75 to <1.75	12,606	177	1.40	1.18	1.21	1.05	
- 1.75 to <2.5	3,739	51	1.36	2.25	2.25	1.48	
2.5 to <10.00	9,285	267	2.88	4.16	4.52	3.31	
- 2.5 to <5	6,287	157	2.50	3.61	3.64	2.30	
- 5 to <10	2,998	110	3.67	6.41	6.36	6.04	
10.00 to <100.00	1,326	210	15.84	20.59	15.57	15.23	
- 10 to <20	1,170	188	16.07	13.66	11.88	14.04	
- 30.00 to <100.00	156	22	14.10	55.05	43.25	24.68	
100.00 (Default)							
2023							
0.00 to <0.15	10,191	3	0.03	0.08	0.11	0.09	
- 0.00 to <0.10	3,179	_	_	0.06	0.06	0.03	
- 0.10 to <0.15	7,012	3	0.04	0.13	0.13	0.12	
0.15 to <0.25	8,530	36	0.42	0.22	0.22	0.17	
0.25 to <0.50	7,513	54	0.72	0.37	0.37	0.35	
0.50 to <0.75	6,123	47	0.77	0.63	0.63	0.84	
0.75 to <2.50	16,747	213	1.27	1.44	1.44	1.03	
- 0.75 to <1.75	13,210	140	1.06	1.22	1.22	0.91	
- 1.75 to <2.5	3,537	73	2.06	2.25	2.25	1.46	
2.5 to <10.00	7,632	212	2.78	4.22	4.34	3.75	
- 2.5 to <5	5,734	129	2.25	3.60	3.59	2.48	
- 5 to <10	1,898	83	4.37	6.40	6.58	7.48	
10.00 to <100.00	1,203	189	15.71	15.91	18.40	15.07	
- 10 to <20	1,039	159	15.30	12.76	12.47	13.38	
- 30.00 to <100.00	164	30	18.29	68.60	55.98	27.36	
100.00 (Default)	2,365						

Data represents an annual view as of 30 September 2024.

Back-testing is conducted on the basis of the opening count of obligors not in default in each year. Obligors who default during the year are excluded from the opening count for the following year.

Connected clients assessed under the parental support framework are excluded. The approach to identify these connected clients in our data has improved since

The customer risk rating to external ratings mapping has been updated for sovereign portfolios to reflect the current customer risk rating master scale.

Our corporate model segments do not align to regulatory exposure class definitions, the above includes exposures in both the Corporate – Other and Corporate-SME exposure classes.

Retail risk

Retail risk rating systems

Due to the different country-level portfolio performance characteristics and loss history, our retail rating systems are designed at an individual portfolio level rather than global level. None of our Retail internal ratings-based approach ('Retail IRB') portfolios meets the PRA's definition of a low default portfolio, therefore we use standard modelling techniques for model development purposes.

There are 81 retail IRB models used globally and we disclose information on our significant local models, which represent 78% of total retail IRB RWAs.

Estimates from the PD models show the likelihood of an exposure entering a defaulted status within a 12-month horizon from the time of observation. The models are developed using a statistical estimation approach based on at least five years of historical data. A hybrid modelling approach is used for mortgage portfolios, which is designed to capture long run average risk over a full economic cycle. Where models are developed based on a point in time approach, such as our UK unsecured models, the model outputs effectively become long run average estimates through dynamic recalibration over time and application of a buffer.

Estimates from the EAD models show the outstanding balance at the time of default. The models are typically designed using one of the following approaches:

- For closed-end products without the option for additional drawdown, EAD is estimated as the outstanding balance at the time of observation, with additional consideration of accrued interest up to the time of default.
- For products with the option for additional drawdown, EAD is estimated as the outstanding balance at the time of observation plus the amount obtained by applying a modelled credit conversion

factor to the undrawn portion of the facility. The credit conversion factor model is typically designed using a statistically derived segmentation based on at least five years of historical data.

The model estimates are adjusted to reflect long run average or downturn economic conditions, whichever is more conservative. The downturn adjustment is based on internal or external data taken from a period that is representative of downturn economic conditions.

Estimates from the LGD models show the amount of loss associated with a default event, expressed as a percentage of EAD. The models are typically designed using a statistically derived segmentation based on at least five years of historical data. The modelling outcome period reflects the workout process for each portfolio from the time of default up to the point of resolution. Mortgage LGD models are developed using a component-based modelling approach, in which separate model components are designed for each main driver of loss. For unsecured portfolios, loss is typically estimated directly based on the available data. The model estimates are adjusted to reflect long run average or downturn economic conditions, whichever is more conservative. The downturn adjustment is based on internal or external data taken from a period that is representative of downturn economic conditions.

Regulatory floors are applied to the model outputs for the final capital calculation.

As part of the IRB repair programme and to meet PRA requirements for hybrid mortgage PD models, many retail models are being redeveloped. We hold capital buffers to mitigate any RWA shortfall until the new models are implemented, which include consideration of any relevant capital floors.

The table below sets out the key characteristics of our significant retail IRB models. The table presents the regulatory retail exposure class, the associated RWAs, the number of component models, the model estimation method, and the number of years of relevant data used to design the model.

Table 49: Retail IRB risk rating systems

Portfolio	Exposure class	RWA \$bn	Compo- nent model	Number of material component models	Model description and methodology	Number of years loss data ¹	Applicable Pillar 1 regulatory thresholds and overlays
UK residential	Retail – secured by mortgages on		PD	1	Statistical model built on internal behavioural data, credit bureau information and application data for new to bank customers. The model uses a hybrid approach where the PD estimates represent a combination of recent and historic default rates observed over a mix of good and bad economic periods reflecting the longer-term nature of these loans. The PD also includes a margin of conservatism in accordance with regulatory requirement. Properties are allocated to calibration segments based on mortgage type. PD risk grades are then assigned for each calibration segment based on a master score produced from internal behaviour and application score inputs.	>10	PD floor of 0.03%
mortgages	immovable property non - SME	19.1	LGD	1	Component based model incorporating; probability of repossession, charge-off and cure; and predicted shortfall. The model is segmented based on default status at observation. A downturn adjustment is applied to each component including a haircut adjustment to forced sale discount and a 25% reduction from peak house valuation. For LGD purposes the time lapse between default event and the closure of the exposure is between 48 and 72 months.	>10	LGD floor of 5% at loan level and a LGD floor of 10% at portfolio level
			EAD	1	Logical calculation that uses the sum of the balance at observation for fixed term loans. A simple CCF method is applied for offset mortgages where there is a revolving facility available.	>10	EAD must at least be equal to current balance
			PD	1	Statistical model built on internal behavioural data and bureau information. Underlying point-in-time ('PIT') model is calibrated to the latest observed PD. An adjustment is then applied to generate the long-run PD based on historical observed misalignment of the underlying model.	7-10	PD floor of 0.03%
UK HSBC credit cards	Retail – qualifying revolving	4.3	LGD	1	Statistical model based on forecasting the amount of expected future recoveries, segmented by default status. For LGD purposes the time lapse between default event and the closure of the exposure is 36 months.	7-10	
			EAD	1	Statistical model that directly estimates EAD for different segments of the portfolio using either balance or limit as the key input.	7-10	EAD must at least be equal to current balance
	Datail		PD	1	Statistical model built on internal behavioural data and bureau information. Underlying PIT model is calibrated to the latest observed PD. An adjustment is then applied to generate the long-run PD based on historical observed misalignment of the underlying model.	7-10	PD floor of 0.03%
UK HSBC personal loans	Retail – other non- SME	4.2	LGD	1	Statistical model based on forecasting the amount of expected future recoveries, segmented by default status. For LGD purposes the time lapse between default event and the closure of the exposure is 36 months.	7-10	
			EAD	1	EAD is equal to Current Balance as this has been shown to provide suitable conservatism.	7-10	EAD must at least be equal to current balance

Table 49: Retail IRB risk rating systems (continued)

Portfolio	Exposure class	RWA \$bn	Compo- nent model	Number of material component models	Model description and methodology	Number of years loss data ¹	Applicable Pillar 1 regulatory thresholds and overlays
	Retail	<u> </u>	PD	1	Statistical model built on internal behavioural data and bureau information. Underlying PIT model is calibrated to the latest observed PD. An adjustment is then applied to generate the long run PD based on historical observed misalignment of the underlying model.	7-10	PD floor of 0.03%
UK business banking	– other SME	3.0	LGD	1	The model estimates the amount of future recoveries and undrawn portion for unsecured products. For LGD purposes the time lapse between default event and the closure of the exposure is 36 months.	7-10	
			EAD	1	Statistical model using segmentation according to limit and utilisation and estimation of the undrawn exposure.	7-10	EAD must at least be equal to current balance
			PD	2	Two statistical models built on internal behavioural data and bureau information, and calibrated to a long-run default rate.	>10	PD floor of 0.03%
Hong Kong HSBC residential mortgages	Retail - secured by mortgages on immovable property non-SME	8.2	LGD	2	Two Statistical models based on estimate of loss incurred over a recovery period derived from historical data with downturn LGD based on the worst observed default rate. For LGD purposes the time lapse between default event and the closure of the exposure is 24 months.	>10	LGD floor of 10%
	TIOTI SIVIE		EAD	2	Rule-based calculation based on current balance, which provides a conservative estimate of EAD	>10	EAD must at least be equal to current balance
			PD	2	Two statistical models built on internal behavioural data and bureau information, and calibrated to a long-run default rate.	>10	PD floor of 0.03%
Hong Kong Hang Seng residential mortgages	Retail - secured by mortgages on immovable property non-SME	6.0	LGD	2	Two statistical models and one historical average model based on estimates of loss incurred over a recovery period derived from historical data with a downturn adjustment. For LGD purposes the time lapse between default event and the closure of the exposure is 24 months.	>10	LGD floor o 10%
			EAD	2	Rule-based calculation based on current balance, which provides a conservative estimate of EAD.	>10	EAD must a least be equal to current balance
			PD	1	Statistical model built on internal behavioural data and calibrated to a long-run default rate by segment.	>10	PD floor o
Hong Kong HSBC credit	Retail – qualifying	3.8	LGD	1	Statistical model based on forecasting the amount of expected future losses with downturn adjustment. For LGD purposes the time lapse between default event and the closure of the exposure is 18 months.	>10	0.00%
cards	revolving		EAD	1	EAD derived by different segments. Statistical models which derive credit conversion factors to determine the undrawn portion of the facility to be added to the outstanding balance of accounts at the time of observation.	>10	EAD must at least be equal to current balance
			PD	1	Statistical model built on internal behavioural data and bureau information, and calibrated to a long-run default rate.	>10	PD floor of 0.03%
Hong Kong HSBC personal instalment loans	Retail – other non-SME	2.4	LGD	1	Statistical model based on forecasting the amount of expected future losses. Downturn LGD derived using data from the period with the highest default rate. For LGD purposes the time lapse between default event and the closure of the exposure is 24 months.	>10	
			EAD	1	Statistical model that derives a credit conversion factor to determine the proportion of undrawn limit to be added to the balance at observation.	>10	EAD must at least be equal to current balance
			PD	1	Statistical model built on internal behavioural data and calibrated to a long-run default rate by segment	>10	PD floor of 0.03%
Hong Kong Hang Seng credit cards	Retail – qualifying revolving	3.7	LGD	1	Statistical model based on forecasting the amount of expected future losses with downturn adjustment. For LGD purposes the time lapse between default event and the closure of the exposure is 24 months.	>10	
			EAD	1	Statistical model which derives a credit limit utilisation by segment which is used to determine the EAD.	>10	EAD must at least be equal to current balance

¹ Defined as the number of years of historical data used in model development and estimation.

Retail credit models

Retail model validation

Retail IRB models are monitored regularly using a globally consistent methodology for all models used across the group.

This includes back-testing of model estimates against actual outcomes for PD, LGD and EAD using the most recent observation data that is available through the local monitoring processes. The monitoring data is designed in a consistent manner with the data used to develop the models, which includes how the relevant outcome periods are defined. The validation results are compared against pre-defined criteria and thresholds to assess whether the models are performing in line with expectations. The regulatory floors

are only applied during the final capital calculation and are not reflected in the estimates and actuals information below.

In 2024, the observed default rates have remained lower than PD estimates across several of the UK and Hong Kong portfolios. For RWA reporting purposes where underestimation has been observed in the UK HSBC credit card and Business Banking (Retail SME) portfolios there are PMAs in place. For Hong Kong HSBC credit card there is a marginal underestimation, which at this stage has not resulted in a post model adjustment being required and is closely monitored.

The table below provides an overview of Retail PD model performance for IRB exposures. It shows the estimated vs actual values across asset classes. The data represents an annual view as of 30 September 2024. The table shows pure modelled percentages and does not include adjustments for capital requirements. US residential mortgages moved to the standardised approach during 2024 and is excluded from the below table.

Table 50: Retail IRB models – estimated and actual values

	202	4	2023	3	2022	2
	Estimated	Actuals	Estimated	Actuals	Estimated	Actuals
	%	%	%	%	%	%
UK						
UK residential mortgage ¹	0.60	0.23	0.57	0.21	_	
HSBC credit card ²	0.80	0.82	0.75	0.79	0.77	0.82
HSBC personal loans	2.54	2.07	2.46	1.89	2.72	1.86
Business Banking (Retail SME)	3.63	3.66	4.09	4.02	4.27	3.84
Hong Kong						
HSBC residential mortgage	0.60	0.08	0.60	0.05	0.58	0.04
Hang Seng residential mortgage	0.40	0.27	0.38	0.13	0.35	0.12
HSBC credit card	0.32	0.33	0.31	0.26	0.34	0.25
HSBC personal instalment loans	1.94	1.67	1.75	1.18	1.79	1.22
Hong Kong Hang Seng credit cards ³	0.59	0.29	0.57	0.23	_	_

- 1 The UK residential mortgages rating system approved by the PRA in April 2023 is reflected in the 31 December 2023 results and onwards.
- 2 The UK credit card model is calibrated using a 180 days past due criteria, with post model adjustments in place to mitigate the risk of any capital shortfall to a 90 days past due criteria.
- 3 The Hong Kong Hang Seng credit cards rating system results are disclosed from 31 December 2023.

The table below provides an overview of credit risk model performance for retail IRB exposures, assessed by PD ranges. The data represents an annual view, analysed at 30 September 2024.

Table 51: Retail IRB exposure – back-testing of probability of default (PD) per portfolio (CR9)

	Number o	of obligors					
	End of	of which: number which defaulted	Observed	Exposures weighted	Average	Average historic annual default rate %	
PD range	previous year	in the year	average default rate %	average PD %	Average PD %		
2024	p ,	,	40.44.1.14.0 /0	g		40.441.1410 /0	
Retail – Secured by real estate non-SME ^{1,2,3}							
0.00 to <0.15	248,387	88	0.04	0.09	0.10	0.03	
- 0.00 to <0.10	86,372	59	0.07	0.05	0.05	0.04	
- 0.10 to <0.15	162,015	29	0.02	0.12	0.12	0.02	
0.15 to <0.25	134,474	46	0.03	0.18	0.18	0.03	
0.25 to <0.50	463,132	253	0.05	0.31	0.31	0.05	
0.50 to <0.75	188,828	214	0.11	0.52	0.52	0.12	
0.75 to <2.50	203,990	652	0.32	1.07	1.08	0.32	
- 0.75 to <1.75	179,450	435	0.24	0.99	0.96	0.26	
- 1.75 to <2.5	24,540	217	0.88	1.97	1.99	0.66	
2.50 to <10.00	24,722	436	1.76	4.16	4.18	1.54	
- 2.5 to <5	22,783	339	1.49	4.03	3.90	1.25	
- 5 to <10	1,939	97	5.00	7.69	7.51	5.06	
10.00 to <100.00	4,749	1,022	21.52	27.63	25.56	18.08	
- 10 to <20	3,073	267	8.69	13.49	13.71	7.11	
- 20 to <30	125	7	5.60	20.47	23.98	6.58	
- 30.00 to <100.00	1,551	748	48.23	48.52	49.16	43.99	
100.00 (Default)	6,781						
2023							
0.00 to <0.15	264,859	69	0.03	0.09	0.09	0.02	
- 0.00 to <0.10	99,119	26	0.03	0.06	0.05	0.03	
- 0.10 to <0.15	165,740	43	0.03	0.12	0.12	0.02	
0.15 to <0.25	142,619	37	0.03	0.18	0.18	0.02	
0.25 to <0.50	471,718	280	0.06	0.31	0.31	0.05	
0.50 to <0.75	178,886	206	0.12	0.53	0.52	0.11	
0.75 to <2.50	189,492	593	0.31	1.11	1.09	0.29	
- 0.75 to <1.75	165,031	428	0.26	1.01	0.96	0.25	
- 1.75 to <2.5	24,461	165	0.67	1.98	2.00	0.53	
2.50 to <10.00	24,343	423	1.74	4.18	4.19	1.44	
- 2.5 to <5	22,468	327	1.46	4.06	3.91	1.14	
- 5 to <10	1,875	96	5.12	6.66	7.60	5.15	
10.00 to <100.00	5,257	897	17.06	24.95	24.76	16.43	
- 10 to <20	3,241	211	6.51	13.19	13.69	6.32	
- 20 to <30	413	41	9.93	21.93	22.47	7.42	
- 30.00 to <100.00	1,603	645	40.24	47.13	47.67	41.08	
100.00 (Default)	7,488	<u> </u>		·			

Table 51: Retail IRB exposure – back-testing of probability of default (PD) per portfolio (CR9) (continued)

	NIl	C. L.P				_	
	Number	of obligors		_			
		of which: number	Observed	Exposures	Ā	Average	
DD	End of previous year	which defaulted	average	weighted average PD %	Average PD %	historic annual	
PD range	previous year	in the year	default rate %	average PD %	PD %	default rate %	
2024							
Retail – qualifying							
revolving ^{2,3}							
0.00 to <0.15	6,072,873	4,253	0.07	0.06	0.06	0.06	
- 0.00 to <0.10	5,092,932	3,023	0.06	0.05	0.05	0.05	
- 0.10 to < 0.15	979,941	1,230	0.13	0.13	0.13	0.12	
0.15 to <0.25	590,216	1,079	0.18	0.21	0.21	0.17	
0.25 to <0.50	622,553	2,249	0.36	0.39	0.38	0.33	
0.50 to <0.75	219,336	1,284	0.59	0.61	0.61	0.56	
0.75 to <2.50	722,723	7,719	1.07	1.33	1.31	1.04	
- 0.75 to <1.75	652,805	6,021	0.92	1.21	1.22	0.88	
- 1.75 to <2.5	69,918	1,698	2.43	2.18	2.13	2.45	
2.50 to <10.00	248,554	8,694	3.50	4.17	4.04	3.84	
- 2.5 to <5	211,703	6,055	2.86	3.66	3.56	3.08	
- 5 to <10	36,851	2,639	7.16	6.66	6.81	7.17	
10.00 to <100.00	61,379	15,291	24.91	21.49	27.22	24.76	
- 10 to <20	39,437	5,055	12.82	14.51	14.26	11.71	
- 20 to <30	10,666	2,681	25.14	24.16	24.93	21.32	
- 30.00 to <100.00	11,276	7,555	67.00	71.76	71.62	65.00	
100.00 (Default)	10,080						
2023							
0.00 to <0.15	5,850,028	3,741	0.06	0.06	0.06	0.05	
- 0.00 to <0.10	4,925,107	2,653	0.05	0.05	0.05	0.05	
- 0.10 to < 0.15	924,921	1,088	0.12	0.13	0.13	0.11	
0.15 to <0.25	556,181	927	0.17	0.21	0.21	0.16	
0.25 to <0.50	589,907	1,862	0.32	0.39	0.38	0.31	
0.50 to <0.75	203,374	1,100	0.54	0.61	0.61	0.53	
0.75 to <2.50	658,406	6,249	0.95	1.32	1.31	0.98	
- 0.75 to <1.75	595,505	4,892	0.82	1.20	1.22	0.82	
- 1.75 to <2.5	62,901	1,357	2.16	2.19	2.13	2.34	
2.50 to <10.00	199,590	6,852	3.43	4.24	4.16	3.67	
- 2.5 to <5	167,138	4,597	2.75	3.74	3.64	2.95	
- 5 to <10	32,452	2,255	6.95	6.63	6.81	6.77	
10.00 to <100.00	54,557	13112	24.03	21.12	28.08	24.19	
- 10 to <20	35,490	4,192	11.81	14.58	14.36	11.05	
- 20 to <30	8,523	2,010	23.58	26.35	25.59	19.85	
- 30.00 to <100.00	10,544	6,910	65.53	71.80	73.73	65.05	
100.00 (Default)	9,524	2,010	22.00			30.00	
	3,021						

Table 51: Retail IRB exposure – back-testing of probability of default (PD) per portfolio (CR9) (continued)

	Number o	of obligors				
-	ivamber c	of which: number	Observed	Exposures		Average
	End of	which defaulted	average	weighted	Average	historic annual
PD range	previous year	in the year	default rate %	average PD %	PD %	default rate %
2024		•				
Retail – other non-SME ^{2,3}						
0.00 to <0.15	183,985	63	0.03	0.05	0.05	0.13
- 0.00 to <0.10	167,323	47	0.03	0.04	0.04	0.13
- 0.10 to <0.15	16,662	16	0.10	0.14	0.13	0.08
0.15 to <0.25	108,533	209	0.19	0.18	0.18	0.19
0.25 to <0.50	112,672	453	0.40	0.39	0.39	0.44
0.50 to <0.75	2,162	11	0.51	0.61	0.61	0.42
0.75 to <2.50	218,134	2,275	1.04	1.36	1.35	1.07
- 0.75 to <1.75	171,423	1,408	0.82	1.16	1.15	0.85
- 1.75 to <2.5	46,711	867	1.86	2.12	2.11	1.84
2.50 to <10.00	75,253	2,733	3.63	4.46	4.70	4.22
- 2.5 to <5	50,046	1,431	2.86	3.53	3.57	3.53
- 5 to <10	25,207	1,302	5.17	6.91	6.96	5.60
10.00 to <100.00	18,450	5,578	30.23	40.14	49.54	30.57
- 10 to <20	6,885	824	11.97	13.78	13.72	11.87
- 20 to <30	1,703	375	22.02	23.25	24.38	21.38
- 30.00 to <100.00	9,862	4,379	44.40	75.68	78.90	42.28
100.00 (Default)	4,799					
2023						
0.00 to <0.15	302,094	102	0.03	0.05	0.05	0.17
- 0.00 to <0.10	271,020	53	0.02	0.04	0.04	0.17
- 0.10 to <0.15	31,074	49	0.16	0.14	0.13	0.05
0.15 to <0.25	114,199	226	0.20	0.18	0.18	0.17
0.25 to <0.50	115,055	381	0.33	0.38	0.39	0.36
0.50 to <0.75	3,381	9	0.27	0.61	0.61	0.33
0.75 to <2.50	211,437	1,962	0.93	1.35	1.35	0.98
- 0.75 to <1.75	167,068	1,269	0.76	1.16	1.15	0.77
- 1.75 to <2.5	44,369	693	1.56	2.15	2.12	1.71
2.50 to <10.00	72,023	2,493	3.46	4.46	4.67	4.21
- 2.5 to <5	48,778	1,289	2.64	3.54	3.58	3.38
- 5 to <10	23,245	1,204	5.18	6.87	6.94	5.82
10.00 to <100.00	17,821	4,874	27.35	38.29	47.71	30.56
- 10 to <20	7,386	857	11.60	14.24	13.88	12.37
- 20 to <30	1,526	302	19.79	26.37	24.58	20.51
- 30.00 to <100.00	8,909	3,715	41.70	76.81	79.71	47.88
100.00 (Default)	5,477					

Table 51: Retail IRB exposure - back-testing of probability of default (PD) per portfolio (CR9) (continued)

	Number o	of obligors				
PD range	End of previous year	of which: number which defaulted in the year	Observed average default rate %	Exposures weighted average PD %	Average PD %	Average historic annual default rate %
2024		·				
Retail – other SME ^{2,3}						
0.00 to <0.15	33,486	23	0.07	0.12	0.11	0.09
- 0.00 to <0.10	8,330	4	0.05	0.08	0.08	0.08
- 0.10 to <0.15	25,156	19	0.08	0.13	0.13	0.10
0.15 to <0.25	25,922	34	0.13	0.20	0.20	0.18
0.25 to <0.50	84,122	239	0.28	0.37	0.36	0.42
0.50 to <0.75	71,919	390	0.54	0.61	0.61	0.71
0.75 to <2.50	228,399	2,852	1.25	1.56	1.42	1.29
- 0.75 to <1.75	163,527	1,646	1.01	1.33	1.16	1.10
- 1.75 to <2.5	64,872	1,206	1.86	2.06	2.09	1.84
2.50 to <10.00	136,468	6,151	4.51	5.08	4.95	3.96
- 2.5 to <5	78,890	2,548	3.23	3.53	3.53	3.13
- 5 to <10	57,578	3,603	6.26	6.84	6.88	4.95
10.00 to <100.00	52,355	13,449	25.69	23.38	23.24	12.94
- 10 to <20	30,433	6,305	20.72	14.88	14.68	5.72
- 20 to <30	10,354	2,323	22.44	25.13	24.77	12.21
- 30.00 to <100.00	11,568	4,821	41.68	43.72	44.37	27.15
100.00 (Default)	16,920					
2023						
0.00 to <0.15	34,673	51	0.15	0.11	0.11	0.08
- 0.00 to <0.10	13,713	20	0.15	0.08	0.08	0.07
- 0.10 to <0.15	20,960	31	0.15	0.13	0.13	0.09
0.15 to <0.25	28,059	39	0.14	0.20	0.20	0.16
0.25 to <0.50	92,428	314	0.34	0.39	0.37	0.42
0.50 to <0.75	63,171	341	0.54	0.63	0.63	0.69
0.75 to <2.50	234,661	2,810	1.20	1.60	1.43	1.31
- 0.75 to <1.75	168,623	1,584	0.94	1.35	1.16	1.10
- 1.75 to <2.5	66,038	1,226	1.86	2.08	2.11	1.91
2.50 to <10.00	144,257	6,578	4.56	5.17	5.11	4.14
- 2.5 to <5	81,950	2,592	3.16	3.68	3.68	3.25
- 5 to <10	62,307	3,986	6.40	6.92	6.98	5.24
10.00 to <100.00	70,349	22,863	32.50	26.38	25.24	14.17
- 10 to <20	37,403	10,432	27.89	15.02	14.59	7.08
- 20 to <30	14,304	3,316	23.18	24.72	24.28	13.43
- 30.00 to <100.00	18,642	9,115	48.89	48.29	47.35	30.11
100.00 (Default)	22,906					

¹ US residential mortgages moved to SA approach during 2024 and are excluded from the current period 2024 results. The prior period results for 2023 have not been restated and include US.

Model performance

Model performance and assessment is subject to global internal standards designed to support a comprehensive quantitative and qualitative process within a cycle of model monitoring and validation that includes:

- investigation of model stability;
- measuring model performance by comparing the model's outputs against actual outcomes; and
- reviewing model use within the business, for example, user input data quality, override activity and the assessment of results from key controls around the usage of the rating system as a whole within the overall credit process.

Models are monitored using a series of metrics and triggers approved by relevant parties. Model performance metrics, and material remedial actions in the event of a trigger breach, are reported at the Wholesale and WPB GMOFs. Model performance is disclosed on a quarterly basis for material IRB models to the PRA.

For further details of model performance, see page 230 of the Annual Report and Accounts 2024.

A large number of models are used within the Group, and data at individual model level is, in most cases, immaterial in the context of the overall Group. We therefore disclose data covering most wholesale models, including corporate models on an aggregated basis, and on the significant retail models.

Tables 48 and 51 above validate the reliability of PD calculations by comparing the PD used in IRB calculations with actual default experience. In Table 51, a customer's PD is observed at a PIT and their default or non-default status in the following one-year period is recorded against that PD grade.

² HSBC does not have overlapping windows for calculating long run average PD rates.

The total number of obligors with short term exposures (short term-term contracts refer to contracts whose residual maturity is less than 12 months) are 199,637, for secured by real-estate non-SME 14,975, other non-SME 112,216 and other SME 72,446.

Counterparty credit risk

Counterparty credit risk management

Counterparty credit risk ('CCR') arises for derivatives, long settlement transactions and SFTs. It is calculated in both the trading and non-trading books, and is the risk that a counterparty may default before final settlement, for cases where there is a bilateral risk of loss.

Banks are permitted to apply the following methods to determine exposure values for CCR:

- the Internal Model Method ('IMM');
- the Standardised Approach (SA-CCR) for derivatives and long settlement transactions;
- the simple/comprehensive approach to recognition of collateral with SFTs; and
- the VaR approach, applicable for SFTs,

Exposure values calculated under these approaches are used to determine RWAs.

Under the SA-CCR approach, the EAD is calculated as the sum of Replacement Cost and PFE multiplied by an alpha factor of 1.4. We use this approach for all derivative and long settlement transactions not covered by our IMM permission. Under the IMM approach, EAD is calculated by multiplying the effective expected positive exposure ('EEPE') with a multiplier 'alpha'. The two alpha factors for standardised and internal model method are distinct.

Alpha, for IMM, is currently set at 1.45 and accounts for several portfolio features that increase EL above that indicated by EEPE in the event of default, such as:

- co-variance of exposures;
- correlation between exposures and default;

- level of volatility/correlation that might coincide with a downturn;
- concentration risk: and
- model risk

The EEPE is derived from simulation, pricing and aggregation of internal model calculations, which have been approved by regulators.

The IMM model is subject to ongoing model validation including monthly model performance monitoring.

From a risk management perspective, products not covered by IMM are subject to regulatory asset class add-ons. Products covered and not covered under IMM are subject to daily monitoring of credit limit utilisation.

Limits for CCR exposures, including to central counterparties ('CCPs'), are assigned within the overall credit risk management process. The credit risk function assigns a limit against each counterparty to cover exposure that may arise as a result of a counterparty default. The magnitude of this limit will depend on the overall risk appetite, type of derivatives and type of SFT trading undertaken with a counterparty.

Models and methodologies used in the calculation of CCR are overseen and monitored by the Traded Risk Model Oversight Forum. Models are subject to ongoing monitoring and validation. Additionally, they are subject to independent review at inception and on an ongoing basis.

HSBC have established a measure, Cat F, specifically to monitor derivative financing and securities financing transactions at a counterparty level. This is ancillary to the existing Cat B counterparty credit risk measure.

The table below analyses CCR exposures by approach for derivatives and securities financing transactions, excluding the CVA charge, failed settlements, free deliveries and exposures to CCPs. EAD pre-CRM is calculated post netting and the application of collateral benefits.

Table 52: Analysis of counterparty credit risk exposure by approach (excluding centrally cleared exposures) (CCR1)

		Replace- ment cost	Potential future exposure	Effective expected positive exposure	Alpha used for computing regulatory exposure value	EAD pre-CRM	EAD post-CRM	Exposure Value	RWAs
		\$m	\$m	\$m		\$m	\$m	\$m	\$m
1	SA-CCR (for derivatives)	7,577	10,151	_	1.40	24,819	24,819	24,819	9,225
2	IMM (for derivatives and SFTs)	_	_	30,909	1.45	44,818	44,818	44,818	13,771
2b	derivatives and long settlement transactions netting sets	_	_	30,909	1.45	44,818	44,818	44,818	13,771
4	Financial collateral comprehensive method (for SFTs)					60,882	63,803	63,803	10,603
6	Total at 31 Dec 2024					130,519	133,440	133,440	33,599
	CA CCD (for dominations)	F 041	0.000		1.40	01.000	01.000	04.000	10.017
1	SA-CCR (for derivatives)	5,941	9,333		1.40	21,382	21,382	21,382	10,017
2	IMM (for derivatives and SFTs)			25,587	1.45	37,100	37,100	37,100	11,208
2b	derivatives and long settlement transactions netting sets	_	_	25,587	1.45	37,100	37,100	37,100	11,208
4	Financial collateral comprehensive method (for SFTs)					61,794	61,921	61,921	9,711
6	Total at 31 Dec 2023					120,276	120,403	120,403	30,936

Credit valuation adjustment

CVAs represent the risk of mark-to-market losses on the expected counterparty risk to OTC derivatives and SFTs that are subject to fair-value accounting. Certain qualifying central counterparties are exempt from CVA.

The table below sets out exposures and RWAs related to CVA regulatory calculations with the breakdown by standardised and advanced approaches.

Table 53: Credit valuation adjustment capital charge (CCR2)

			At			
		At 31 Dec	2024	At 31 Dec 2	2023	
		Exposure value	RWAs	Exposure value	RWAs	
		\$m	\$m	\$m	\$m	
1	Total transactions subject to the Advanced method	28,059	1,232	21,957	1,605	
2	 VaR component (including the 3 × multiplier) 		196		285	
3	 SVaR component (including the 3 × multiplier) 		1,036		1,320	
4	Transactions subject to the Standardised method	13,618	1,003	10,083	1,158	
5	Total transactions subject to own funds requirements for CVA risk	41,677	2,235	32,040	2,763	

The table below presents information on the risk weighting of CCR exposures under the standardised approach by regulatory portfolio. It excludes the failed settlements, free deliveries, default fund contributions, CVA charge and exposures to central counterparties.

Table 54: Standardised approach - CCR exposures by regulatory exposure class and risk weights (CCR3)

		0%	4%	20%	50%	100%	150%	Total exposure value
	Risk weight	\$m	\$m	\$m	\$m	\$m	\$m	\$m
1	Central governments and central banks	3,367		9	_	19	_	3,395
2	Regional government or local authorities	329		_		22		351
3	Public sector entities	_		372	6	_		378
4	Multilateral development banks	1,041		8		_		1,049
5	International organisations	915		_		_		915
6	Institutions	_	1,172	71	39	437	-	1,719
7	Corporates	_	_	37	71	1,462	-	1,570
	Total at 31 Dec 2024	5,652	1,172	497	116	1,940		9,377
	Control conservator and control bonds	0.005	· · ·	40	10	00		0.007
1	Central governments and central banks	6,305		49	13	20		6,387
2	Regional government or local authorities	347	_	13		9		369
3	Public sector entities	342		1	3	_	_	346
4	Multilateral development banks	1,273	_	_	_	_	_	1,273
5	International organisations	829	_	_	_	_	_	829
6	Institutions	_	484	72	5	596	_	1,157
7	Corporates	_	_	17	68	1,591	175	1,851
	Total at 31 Dec 2023	9,096	484	152	89	2,216	175	12,212

Collateral arrangements

Our policy is to revalue all traded transactions and associated collateral positions on a daily basis. An independent collateral management function manages the collateral process, including pledging collateral, receiving collateral, investigating disputes and following up non-receipts.

Collateral types are controlled under a policy to ensure price transparency, price stability, liquidity, enforceability, independence, reusability and eligibility for regulatory purposes. Valuation 'haircut' policy reflects the fact that collateral may fall in value between the

date the collateral was called and the date of liquidation or enforcement. A very high proportion of collateral held as variation margin under credit support annex ('CSA') agreements is composed of either cash or liquid government securities.

For further details of gross fair value exposure and the offset due to legally enforceable netting and collateral, see page 422 of the Annual Report and Accounts 2024. The table below analyses the collateral used in derivatives and SFT transactions.

Table 55: Composition of collateral for CCR exposure (CCR5)

		Colla	teral used in de	ections	Collateral used in SFTs		
			Fair value of collateral received		alue of collateral	Fair value of collateral	Fair value of posted
		Segregated Unsegregated		Segregated	Unsegregated	received	collateral
		\$m	\$m	\$m	\$m	\$m	\$m
1	Cash	290	126,423	1,546	116,266	1,371	545
2	Debt	14,514	44,589	23,207	9,781	515,028	437,023
3	Equity	_	5,270	_	_	78,465	102,152
4	Other	_	_	_	_	2,898	2,984
5	Total at 31 Dec 2024 ¹	14,804	176,282	24,753	126,047	597,762	542,704
1	Cash	163	112,493	213	102,587	33	1,684
2	Debt	14,467	40,969	18,932	24,231	489,517	345,945
3	Equity	_	9,010	_	_	54,373	42,516
4	Other	_	_	_	_	1,630	1,321
5	Total at 31 Dec 2023	14,630	162,472	19,145	126,818	545,553	391,466

¹ Disclosures have been enhanced to reflect collaterals on a post haircut basis following the EBA Q&A guidelines and to include collateral for stock borrowing and lending transactions where HSBC acts as an agent. The cumulative impact of these two changes on the December 2023 disclosures above would be an increase in total fair value of SFT collateral received and posted of \$27bn and \$94bn respectively.

The table below shows the credit derivative exposures held by HSBC for client intermediation and those amounts booked as part of HSBC's own credit portfolio. These are the products where we act as an intermediary for our clients, enabling them to take a position in the underlying securities. Where the credit derivative is used to hedge our own portfolio, no counterparty credit risk capital requirement arises.

Table 56: Credit derivatives exposures (CCR6)

		At 31 De	2024	At 31 De	2023	
		Protection bought	Protection sold	Protection bought	Protection sold	
		\$m	\$m	\$m	\$m	
Noti	ionals					
1	Single-name credit default swaps	34,068	27,588	48,240	37,713	
2	Index credit default swaps	32,086	29,902	25,536	23,786	
3	Total return swaps	4,913	14,377	4,571	13,156	
6	Total notionals	71,067	71,867	78,347	74,655	
Fair	values					
7	Positive fair value (asset)	369	1,387	444	906	
8	Negative fair value (liability)	(1,138)	(631)	(1,171)	(690)	

Central counterparties

While exchange traded derivatives have been cleared through CCPs for many years, recent regulatory initiatives designed to reduce systemic risk in the banking system are directing increasing volumes of OTC derivatives to also be cleared through CCPs.

To manage the significant concentration of risk in CCPs that results from this, we have developed a `risk appetite framework at an

individual CCP and global level. A dedicated CCP risk team has been established to manage the interface with CCPs and undertake indepth due diligence of the unique risks associated with these organisations.

The table below provides a breakdown of the exposures and RWAs related to qualifying central counterparties ('QCCPs') and non-QCCPs.

Table 57: Exposures to central counterparties (CCR8)

		At 31 De	c 2024	At 31 De	c 2023
		Exposure value	RWAs	Exposure value	RWAs
		\$m	\$m	\$m	\$m
1	Exposures to qualifying central counterparties ('QCCPs') (total)		1,429		1,355
2	Exposures for trades at QCCPs (excluding initial margin and default fund contributions)	15,429	309	14,477	289
3	- OTC derivatives	4,789	96	5,668	113
4	 exchange-traded derivatives 	4,354	87	4,599	92
5	 securities financing transactions 	6,286	126	4,210	84
7	Segregated initial margin	7,407		6,834	
8	Non-segregated initial margin	9,561	191	13,506	271
9	Pre-funded default fund contributions ¹	3,244	929	_	795
10	Unfunded default fund contributions ¹	6,634	_	_	
11	Exposures to non-QCCPs (total)		379		320
12	Exposures for trades at non-QCCPs (excluding initial margin and default fund contributions)	234	234	136	204
13	- OTC derivatives	1	1	_	_
15	- Securities financing transactions	233	233	136	204
18	Non-segregated initial margin	_	_	25	25
19	Pre-funded default fund contributions ¹	4	48	_	17
20	Unfunded default fund contributions ¹	8	97	_	74

¹ Disclosures have been enhanced to reflect the exposure value for pre-funded and unfunded default fund contributions. At 31 December 2023, pre-funded and unfunded default fund contributions exposures to QCCPs were \$2,139m and \$5,419m, whereas to non-QCCPs these exposures were \$1m and \$6m respectively.

Wrong-way risk

Wrong-way risk occurs when a counterparty's exposures are adversely correlated with its credit quality.

There are two types of wrong-way risk:

- general wrong-way risk occurs when the probability of counterparty default is positively correlated with general risk factors, such as where a counterparty is resident and/or incorporated in a higher-risk country and seeks to sell a nondomestic currency in exchange for its home currency; and
- specific wrong-way risk occurs in self-referencing transactions.
 These are transactions in which exposure is driven by capital or financing instruments issued by the counterparty and occurs where exposure from HSBC's perspective materially increases as the value of the counterparty's capital or financing instruments referenced in the contract decreases. It is HSBC policy that specific wrong-way transactions are approved on a case-by-case basis.

We use a range of tools to monitor and control wrong-way risk, including requiring the business to obtain prior approval before undertaking wrong-way risk transactions outside pre-agreed quidelines.

The regional traded risk functions are responsible for the control and monitoring process within an overarching Group framework, including a limit framework.

Credit rating downgrade

A credit rating downgrade clause in a Master Agreement or a credit rating downgrade threshold clause in a CSA is designed to trigger an action if the credit rating of the affected party falls below a specified level. These actions may include the requirement to pay or increase collateral, the termination of transactions by the non-affected party or the assignment of transactions by the affected party.

At 31 December 2024, the value of the additional collateral pertaining to International Swaps and Derivatives Association CSA downgrade thresholds that we would potentially need to post with counterparties in the event of a one-notch downgrade of our rating was \$0.1bn (31 December 2023: \$0.02bn) and for a two-notch downgrade was \$0.28bn (31 December 2023: \$0.11bn).

The table below shows the detailed key parameters used for the calculation of capital requirements of counterparty credit risk exposure under the IRB approach broken down by exposure class and PD range.

Table 58: IRB – CCR exposures by portfolio and PD scale (CCR4)

	Exposure value	Exposure weighted average PD	Number of obligors	Exposure weighted average LGD	Exposure weighted average maturity	RWAs	Density of risk weighted exposure amounts
PD scale	\$m	%		%	years	\$m	%
AIRB – Central government and central banks							
0.00 to <0.15	5,913	0.03	71	45.0	0.31	326	6
0.15 to <0.25	307	0.22	10	45.0	0.07	83	27
0.25 to <0.50	1	0.37	1	45.0	4.11	1	83
0.50 to <0.75	_	0.63	2	45.0	0.96		68
0.75 to <2.50	_	0.88	2	45.0	1.00		80
2.50 to <10.00							
10.00 to <100.00	2	100.00	1	45.0	0.01		
Sub-total at 31 Dec 2024	6,223	0.08	87	45.0	0.30	410	7
0.00 to <0.15	10,029	0.03	71	45.0	0.24	481	5
0.15 to <0.25	267	0.22	8	45.0	0.16	71	27
0.25 to <0.50	1	0.37	1	45.0	5.00	1	93
0.50 to <0.75	_	0.63	1	45.0	1.00	_	65
0.75 to <2.50	24	2.01	5	45.0	0.99	24	104
2.50 to <10.00		4.20	1	45.0	0.01		123
10.00 to <100.00	583	36.23	2	45.0	0.99	1,498	257
Sub-total at 31 Dec 2023	10,904	1.97	89	45.0	0.30	2,075	19
AIRB – Institutions							
0.00 to <0.15	45,228	0.06	1,391	44.6	0.68	7,745	17
0.15 to <0.25	739	0.22	141	45.0	0.82	234	32
0.25 to <0.50	373	0.37	83	45.0	1.06	222	60
0.50 to <0.75	852	0.63	85	45.9	0.54	586	69
0.75 to <2.50	415	1.72	105	45.2	0.57	419	101
2.50 to <10.00 Sub-total at 31 Dec 2024	16 47,623	4.56 0.09	15 1,820	45.5 44.7	1.03 0.69	9,225	120 19
Odb total at 51 Dec 2024	47,023	0.03	1,020	44.7	0.03	J,LLJ	13
0.00 to <0.15	39,288	0.06	1,251	44.8	0.68	5,758	15
0.15 to <0.25	861	0.22	134	45.5	2.16	442	51
0.25 to <0.50	1,200	0.37	86	45.2	0.66	650	54
0.50 to <0.75	410	0.63	67	45.1	0.51	280	68
0.75 to <2.50 2.50 to <10.00	247 31	1.70 3.98	97 19	45.8 45.7	0.72	278 45	112
Sub-total at 31 Dec 2023	42,037	0.09	1,654	44.8	0.60	7,453	146 18
Sub-total at 31 Dec 2023	42,007	0.03	1,034	44.0	0.70	7,433	10
AIRB – Corporates							
0.00 to <0.15	16,825	0.07	4,115	46.6	0.91	3,141	19
0.15 to <0.25	3,419	0.22	1,074	48.4	0.87	1,459	43
0.25 to <0.50	1,248	0.37	552	49.0	0.99	726	58
0.50 to <0.75	1,027	0.63	493	50.2	0.84	794	77
0.75 to <2.50 2.50 to <10.00	2,884 249	1.44 4.45	1,558 211	44.0 53.4	1.11 1.53	2,731 423	95 170
10.00 to <10.00	10	78.03	23	89.3	1.08	11	115
100.00 (Default)	6	100.00	4	56.0	1.45		
Sub-total at 31 Dec 2024	25,668	0.38	8,030	46.9	0.93	9,285	36
0.00 to <0.15	12,963	0.07	3,945	46.3	1.07	2,501	19_
0.15 to <0.25	2,949	0.22	1,157	47.7	1.20	1,269	43
0.25 to <0.50	2,176	0.37	602	47.4	2.31	1,354	62
0.50 to <0.75 0.75 to <2.50	622 1,986	0.63 1.40	522 1,694	48.5 46.6	1.34 1.25	2,156	76 109
2.50 to <10.00	220	5.09	245	52.4	2.40	399	182
10.00 to <100.00	14	25.42	37	47.1	1.31	36	250
100.00 (Default)	101	100.00	8	48.0	0.02		
Sub-total at 31 Dec 2023	21,031	0.81	8,210	46.8	1.30	8,188	39
AIRB - Total at 31 Dec 2024	79,514	0.18	9,937	45.4	0.73	18,920	24
AIRB – Total at 31 Dec 2023	73,972	0.57	9,953	45.4	0.80	17,716	24

Table 58: IRB – CCR exposures by portfolio and PD scale (CCR4) (continued)

PD scale	Exposure value \$m	Exposure weighted average PD %	Number of obligors	Exposure weighted average LGD %	Exposure weighted average maturity years	RWAs \$m	Density of risk weighted exposure amounts %
FIRB – Corporates							
0.00 to <0.15	32,720	0.07	8,009	45.0	0.70	5,668	17
0.15 to <0.25	6,406	0.22	1,395	45.0	0.49	2,380	37
0.25 to <0.50	1,598	0.37	597	45.0	0.69	841	53
0.50 to <0.75	1,468	0.63	578	45.0	0.95	1,090	74
0.75 to <2.50	2,009	1.40	1,668	45.0	0.95	2,045	102
2.50 to <10.00	256	4.40	322	45.0	1.48	400	156
10.00 to <100.00	49	18.06	73	45.0	1.23	97	199
100.00 (Default)	22	100.00	30	45.0	1.02	_	_
FIRB – Total at 31 Dec 2024	44,528	0.28	12,672	45.0	0.69	12,521	28
0.00 to <0.15	25,238	0.08	7,992	45.0	0.83	4,524	18
0.15 to <0.25	3,651	0.22	1,383	45.0	0.57	1,492	41
0.25 to <0.50	1,525	0.37	566	45.0	0.92	855	56
0.50 to <0.75	1,362	0.63	544	45.0	1.00	1,032	76
0.75 to <2.50	2,296	1.42	1,606	45.0	1.52	2,539	111
2.50 to <10.00	239	4.19	360	45.1	1.30	344	144
10.00 to <100.00	28	13.23	58	45.0	1.24	60	218
100.00 (Default)	9	100.00	31	45.0	1.06	_	_
FIRB – Total at 31 Dec 2023	34,348	0.28	12,540	45.0	0.86	10,846	32
Total (all portfolios) at 31 Dec 2024	124,042	0.22	22,609	45.3	0.72	31,441	25
Total (all portfolios) at 31 Dec 2023	108,320	0.48	22,493	45.3	0.82	28,562	26

Securitisation

Securitisation strategy

HSBC acts as originator, sponsor, and investor to securitisation positions. Our strategy is to use securitisation to meet our needs for aggregate funding or capital management (to the extent that market conditions, regulatory treatments and other conditions are suitable) and for customer facilitation.

Securitisations follow a detailed due diligence framework in accordance with the securitisation framework. Wholesale Credit Risk conducts the credit approval process for securitisations in the non-trading book. Traded risk set and monitor detailed risk limits and criteria for securitisations in the trading book. HSBC does not provide support to its originated or sponsored securitisation transactions as a policy, other than through any interest it has retained in the securitised exposures.

Securitisation activity

Our roles in the securitisation process are as follows:

- originator: where we originate the assets being securitised, either directly or indirectly;
- sponsor: where we establish and manage a securitisation programme that purchases exposures from third parties; and
- investor: where we invest in a securitisation transaction directly or provide derivatives or liquidity facilities to a securitisation.

Region	Special purpose entity ('SPE')	Underlying assets	Start date	Maturity date	EAD (\$m)	before securitisation (\$m)	after securitisation (\$m)
HBUK	Neon Portfolio Distribution DAC	Corporate loans	Dec-19	Dec-26	941	83	25
HNAH	NA ¹	Corporate loans	Dec-21	Dec-28	2,201	201	38
HBCE	NA ¹	Corporate loans	Dec-22	Dec-29	3,394	220	52
HBUK	Neon Portfolio Distribution DAC	Corporate loans	Dec-23	Dec-30	2,243	170	36
HBAP	Metrix Portfolio Distribution plc	Corporate loans	Aug-24	Aug-31	2,271	117	35
HBCE	NA ¹	Corporate loans	Dec-24	Dec-31	1,896	96	29

¹ SPE not used. Transfer of risk executed via issue of credit-linked notes by HSBC.

HSBC as originator

We are originator in six synthetic securitisation programmes outstanding as at 31 December 2024, details of which are given in the table above.

We use SPEs or credit linked notes to securitise customer loans and advances and other debt that we have originated to diversify our sources of funding for asset origination and for capital efficiency purposes.

We typically follow an approach commonly known as synthetic securitisation, using credit derivatives and financial guarantees to transfer the credit risk associated with such customer loans and advances.

To recognise capital benefit under synthetic securitisation, we satisfy the regulatory requirements for significant risk transfer ('SRT') and monitor our compliance periodically. HSBC maintains an unhedged holding of at least 5% in each reference obligation. None of these transactions are categorised as simple transparent and standardised ('STS').

HSBC as sponsor

We are sponsor to two securitisation entities which manage a securitisation programme that purchases exposures from third parties. Details can be found in the table below.

We hold all of the commercial paper issued by Solitaire Funding Limited, which is HSBC's sponsored securitisation entity. This is considered legacy businesses, and exposures are being repaid as the securities they hold amortise or are sold.

For further details of structured entities, see Note 20 on page 407 of the Financial Statements in the Annual Report and Accounts 2024.

Securitisation entity	Description and nature of exposure	Accounting consolidation	Regulatory consolidation	Regulatory treatment
Solitaire	Asset-backed commercial paper conduit to which a first-loss letter of credit and transaction-specific liquidity facilities are provided. These are all non-STS positions.	✓	✓	Consolidated for regulatory capital purposes
Regency	Multi-seller conduit to which senior liquidity facilities and programme-wide credit enhancement are provided. Includes both STS and non-STS positions	✓	x	Exposures (including derivatives and liquidity facilities) are risk-weighted as securitisation positions

HSBC as investor

We have exposure to third-party securitisations across a wide range of sectors in the form of investments, liquidity facilities and as a derivative counterparty.

Monitoring of securitisation positions

Securitisation positions are managed by a dedicated team which uses a combination of market standard systems and third-party data providers to monitor performance data and manage market and credit risks

In the case of legacy re-securitisation positions, similar processes are conducted in respect of the underlying securitisations.

The liquidity risk of securitised assets is consistently managed as part of the Group's liquidity and funding risk management framework.

Securitisation accounting treatment

For accounting purposes, we consolidate structured entities (including SPEs) when the substance of the relationship indicates that we control them, that is, we are exposed, or have rights, to variable returns from our involvement with the structured entity and have the ability to affect those returns through our power over the entity.

We reassess the need to consolidate whenever there is a change in the substance of the relationship between HSBC and a structured entity.

For further details of assessments and our accounting policy on structured entities, see Note 1.2(a) and Note 20 on page 354 and 407 respectively in the Financial Statements of the Annual Report and Accounts 2024.

HSBC enters into transactions in the normal course of business by which it transfers financial assets to structured entities. Depending on the circumstances, these transfers may either result in these financial assets being fully or partly derecognised, or continuing to be recognised in their entirety.

Full derecognition occurs when we transfer our contractual right to receive cash flows from the financial assets, or assume an obligation to pass on the cash flows from the assets, and transfer substantially all the risks and rewards of ownership. Only in the event that derecognition is achieved are sales and any resultant gains recognised in the financial statements.

Partial derecognition occurs when we sell or otherwise transfer financial assets in such a way that some but not substantially all of the risks and rewards of ownership are transferred and control is retained. These financial assets are recognised on the balance sheet to the extent of our continuing involvement and an associated liability is also recognised. The net carrying amount of the financial asset and associated liability will be based on either the amortised cost or the fair value of the rights and obligations retained by the entity, depending upon the measurement basis of the financial asset.

For further details of the disclosure of such transfers, see Note 17 on page 400 of the Financial Statements of the Annual Report and Accounts 2024.

Valuation of securitisation positions

Valuation of our investments in securitisation exposures primarily focuses on quotations from third parties, observed trade levels and calibrated valuations from market standard models.

Our hedging and credit risk mitigation strategy, with regards to retained securitisation and re-securitisation exposures, is to continually review our positions.

Securitisation regulatory treatment

Any reduction in RWAs as a result of our own originated securitisations must receive the PRA's permission and be justified by a commensurate transfer of credit risk to third parties. If these conditions are met, the underlying assets are de-recognised for regulatory purposes and any retained exposures to the securitisation, including derivatives or liquidity facilities, are risk weighted as securitisation positions.

For both non-trading book and trading book securitisation positions, we follow the hierarchy of RWA calculation approaches described in the securitisation framework. Differentiated capital treatments are applied for qualifying STS securitisations.

Our originated positions are all reported under the SEC-IRBA.

Our positions in the sponsored Solitaire programme and our investment in third-party positions follow the SEC-SA and the SEC-ERBA.

For our sponsored positions in Regency we use the IAA. An eligible rating agency methodology, which includes stress factors, is applied to each asset class in order to derive the equivalent rating level for each transaction. This methodology is verified by the Credit Risk function as part of the approval process for each new transaction. The performance of each underlying asset portfolio is monitored to confirm that the applicable equivalent rating level still applies and is independently verified. Our IAA approach is audited annually by internal model review and is subject to review by the PRA.

For further details of securitisation regulatory treatment, see page 19.

Analysis of securitisation exposures

In 2024, our involvement in securitisation activities reflected the following:

- \$12.9bn positions held as synthetic transactions (2023: \$10.7bn);
- no assets awaiting securitisation and no material realised losses on securitisation asset disposals during the year;
- unrealised losses on asset-backed securities in the year amounted to \$0.1bn (2023: \$0.1bn), which relates to assets within SPEs that are consolidated for regulatory purposes; and
- total exposures include off-balance sheet exposure of \$9.8bn (2023: \$11.4bn), mainly related to contingent liquidity lines provided to securitisation vehicles where we act as sponsor or investor, with a small amount from derivative exposures where we are an investor. The off-balance sheet exposures are held in the non-trading book and the exposure types are spread across multiple products and securitisations.
- For further details of our securitisation exposures, see page 407 of the Annual Report and Accounts 2024.

The table below shows the carrying amount of non-trading securitisation exposures, separately for traditional and synthetic securitisations where the bank acts as originator, sponsor or investor.

Table 59: Securitisation exposures in the non-trading book (SEC1)

			Bank ac	ts as orig	inator		Bank a	cts as spo	nsor	Bank a	Bank acts as inves		
		Traditi	Traditional		netic		Traditi	ional		Traditi	onal		
		Non-S	STS			_			_				
		Total	of which: SRT	Total	of which: SRT	Sub- total	STS	Non- STS	Sub- total	STS	Non- STS	Sub- total	
		\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	
1	Total at 31 Dec 2024	45	45	12,946	12,946	12,991	1,906	3,919	5,825	3,499	21,794	25,293	
2	Retail (total)	45	45	_	_	45	1,319	3,126	4,445	3,208	12,120	15,328	
3	 residential mortgage 	45	45	-	-	45	-	1,465	1,465	965	3,300	4,265	
4	 credit card 	_	_	-	_	-	-	-	-	-	920	920	
5	 other retail exposures 	_	_	-	_	-	1,319	1,661	2,980	2,243	7,900	10,143	
7	Wholesale (total)	_	_	12,946	12,946	12,946	587	793	1,380	291	9,674	9,965	
8	 loans to corporates 		-	12,946	12,946	12,946	-	62	62	32	1,453	1,485	
9	- commercial mortgage	_	_	_	_	-	-	232	232	-	5,692	5,692	
10	 lease and receivables 	_	_	_	_	-	587	418	1,005	259	1,004	1,263	
11	- other wholesale	_	_	_	_	-	-	81	81	-	1,525	1,525	
1	Total at 31 Dec 2023	59	59	10,718	10,718	10,777	2,192	5,351	7,543	2,242	15,479	17,721	
2	Retail (total)	59	59	_	_	59	1,227	4,599	5,826	2,176	8,670	10,846	
3	- residential mortgage	59	59	_	_	59	50	1,726	1,776	277	1,031	1,308	
4	- credit card		_	_	_	_	_	_	_	_	830	830	
5	- other retail exposures		_	_	_	_	1,177	2,873	4,050	1,899	6,809	8,708	
7	Wholesale (total)	_		10,718	10,718	10,718	965	752	1,717	66	6,809	6,875	
8	- loans to corporates	_	_	10,718	10,718	10,718	_	65	65	66	2,012	2,078	
9	- commercial mortgage	_	_	_	_	_	_	64	64	_	4,370	4,370	
10	- lease and receivables	_	_	_	_	_	965	535	1,500	_	166	166	
11	- other wholesale	_	_	_	_	_	_	88	88	_	261	261	
							-						

The table below shows the carrying amount of trading securitisation exposures, separately for traditional and synthetic securitisations where the bank acts as originator, sponsor or investor.

Table 60: Securitisation exposures in the trading book (SEC2)

			At 31 Dec 2024			At 31 Dec 2023		
		Bar	ık acts as invest	or ¹	Bai	Bank acts as investo		
		Tradi	tional		Tradi	tional		
		STS	Non-STS	Sub-total	STS	Non-STS	Sub-total	
		\$m	\$m	\$m	\$m	\$m	\$m	
1	Total exposures	822	2,891	3,713	476	3,174	3,650	
2	Retail (total)	732	1,811	2,543	462	2,029	2,491	
3	 residential mortgage 	180	1,457	1,637	98	1,509	1,607	
4	 credit card 	30	20	50	25	1	26	
5	 other retail exposures 	522	334	856	339	519	858	
7	Wholesale (total)	90	1,080	1,170	14	1,145	1,159	
8	- loans to corporates	_	_	_	_	69	69	
9	- commercial mortgage	12	764	776	_	807	807	
10	- lease and receivables	1	6	7	2	_	2	
11	- other wholesale	77	310	387	12	269	281	

¹ HSBC does not act as originator or sponsor for securitisation exposures in the trading book.

The tables below show the RWAs and exposures by type, risk-weight bands and regulatory approach in the non-trading securitisation exposures and associated regulatory capital requirements where the Group acts as an originator or as a sponsor.

Table 61: Securitisation exposures in the non-trading book and associated regulatory capital requirements – bank acting as originator or as sponsor (SEC3)

- 1	301 (3203)	Expos	sure val	ues (by /deduct		eight		osure v llatory a			RW	EA (by r appro	•	ory	Cap	oital cha cap	•)r
		<20%RW	>20% to 50% RW	>50% to 100% RW	>100% to < 1250% RW	1250% RW deductions	SEC-IRBA	SEC-ERBA (including IAA)	SEC-SA	1250%/deductions	SEC-IRBA	SEC-ERBA (including IAA)	SEC-SA	1250%/deductions	SEC-IRBA	SEC-ERBA (including IAA)	SEC-SA	1250%/deductions
		\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m
1	Total at 31 Dec 2024	17,464	1,045	124	181	2	12,989	5,556	269	2	2,832	1,148	131	30	227	92	11	2
2	Traditional transactions	4,585	1,045	124	114	2	43	5,556	269	2	5	1,148	131	30	_	92	11	2
3	Securitisation	4,585	1,045	124	114	2	43	5,556	269	2	5	1,148	131	30	_	92	11	2
4	- retail underlying	3,506	806	124	52	2	43	4,326	119	2	5	795	109	30	-	64	9	2
5	- of which: STS	1,319		`	`	_		1,319	_			148		`	- '	12		_
6	 wholesale 	1,079	239	-	62	-	-	1,230	150	-	-	353	22	-	-	28	2	_
7	- of which: STS	587	_	_	_	_	_	587	_	_	_	59	_	_	-	5	_	_
9	Synthetic transactions	12,879	_	_	67	_	12,946	_	_	_	2,827	_	_	_	227	_	_	_
10	Securitisation	12,879	_	_	67	_	12,946	-	_	-	2,827	-	-	-	227	_	_	_
12	 wholesale 	12,879	_	_	67	_	12,946	_	-	_	2,827	-	-	_	227	-	_	_
1	Total at 31 Dec 2023	15,322	2,650	145	190	13	10,764	7,315	228	13	2,169	1,633	108	164	173	131	9	13
2	Traditional transactions	4,677	2,650	145	128	2	57	7,315	228	2	7	1,633	108	21	1	131	9	2
3	Securitisation	4,677	2,650	145	128	2	57	7,315	228	2	7	1,633	108	21	1	131	9	2
4	 retail underlying 	3,216	2,459	145	63	2	57	5,750	76	2	7	1,236	85	21	1	99	7	2
5	- of which: STS	1,227						1,227				151				12		
6	- wholesale	1,461	191		65	_		1,565	152			397	23		_	32	2	
7	- of which: STS	965						965			_	101				8	_	
9	Synthetic securitisations	10,645	_	_	62	11	10,707	_	_	11	2,162	_	_	143	172		_	11_
10	Securitisation	10,645			62		10,707			11	2,162			143	172			11
12	 wholesale 	10,645			62	11	10,707		_	11	2,162			143	172			11

The table below shows the RWAs and exposures by type, risk-weight bands and regulatory approach in the non-trading book where the Group acts as an investor.

Table 62.i: Securitisation exposures in the non-trading book and associated capital requirements – bank acting as investor (SEC4)

		(sure va weight	lues bands)		Exposure values (by regulatory approach)			•	RW	As (by i	regulato ach)	ory	Capital charge after cap		
		<20% RW	>20% to 50% RW	>50% to 100% RW	>100% to < 1250% RW	1250%/deductions	SEC-IRBA	SEC-ERBA (including IAA)	SEC-SA	1250%/deductions	SEC-IRBA	SEC-ERBA (including IAA)	SEC-SA	1250%/deductions	SEC-ERBA (including IAA)	SEC-SA	1250%/deductions
		\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m
1	Total at 31 Dec 2024	20,558	3,262	300	974	199	_	1,937	23,157	199	_	915	4,357	252	73	348	21
2	Traditional securitisation	20,558	3,262	300	974	199	_	1,937	23,157	199	_	915	4,357	252	73	348	21
3	Securitisation	20,558	3,262	300	974	199	_	1,937	23,157	199	_	915	4,357	252	73	348	21
4	 retail underlying 	12,638	2,199	300	-	191	_	1,302	13,835	191	-	247	2,475	250	20	197	21
5	- of which: STS	3,162	46	_	_	_	_	479	2,729	_	_	79	279	_	6	22	_
6	 wholesale 	7,920	1,063	_	974	8	_	635	9,322	8	_	668	1,882	2	53	151	_
7	of which: STS	291	_	_	-	_	_	_	291	_	-	_	32	_	_	3	-
1	Total at 31 Dec 2023	13,754	2,807	1,128	32			1,418	16,303			777	3,034	2	62	243	
2	Traditional securitisation	13,754	2,807	1,128	32	_	_	1,418	16,303	_	_	777	3,034	2	62	243	_
3	Securitisation	13,754	2,807	1,128	32	_	_	1,418	16,303	_	_	777	3,034	2	62	243	
4	 retail underlying 	9,238	1,125	454	29	_	_	731	10,115	_	_	161	1,844	_	13	148	_
5	- of which: STS	2,176						49	2,127			5	218			17	
6	- wholesale	4,516	1,682	674	3	_	_	687	6,188	_	_	616	1,190	2	49	95	_
7	- of which: STS	66	_	_			_	_	66	_	_	_	7	_	_	1	

Table 62.ii: Securitisation exposures in the trading book and associated capital requirements – bank acting as investor (SEC4)

	(1					by)	regulato	ry	RW		_	ry	Capital	charge cap	after
	<20% RW	>20% to 50% RW	>50% to 100% RW	>100% to < 1250% RW	1250%/deductions	SEC-ERBA (including IAA)	SEC-SA	1250%/deductions	SEC-IRBA	SEC-ERBA (including IAA)	SEC-SA	1250%/deductions	SEC-ERBA (including IAA)	SEC-SA	1250%/deductions
	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m
	2 262	201	122	112	4	1 206	2 212	4		EGE	242	40	4E	27	4
															4
															4
	,			/				-						-	_
				106											4
- of which: STS	89	1	_	_		1	89	_	_	_	9		_	1	_
Total at															
	3.208	201	124	115	3	1.364	2.284	_	_	515	369	38	41	30	3
		201	124	115	3					515	369	38	41	30	3
Securitisation		201	124	115	3					515	369	38	41	30	3
	2,229	169	81	13	_	1,178	1,314	_	_	273	199	3	22	16	
- of which: STS	416	31	10	6		213	249			42	26		3	2	
- wholesale	979	32	43	102	3	186	970	_	_	242	170	35	19	14	3
- of which: STS	12	2	_	_		2	12				1			_	
	retail underlyingof which: STSwholesale	Total at 31 Dec 2024 3,262 Traditional securitisation 3,262 Securitisation 3,262 - retail underlying 2,301 - of which: STS 705 - wholesale 961 - of which: STS 89 Total at 31 Dec 2023 3,208 Traditional securitisation 3,208 Securitisation 3,208 Fraditional securitisation 3,208 Securitisation 3,208 - retail underlying 2,229 - of which: STS 416 - wholesale 979	Company Comp	Clay risk weight Clay Cl	Securitisation Secu	Clay risk weight bands Store Sto	Exposure values (by risk weight bands)	Exposure values	Company Comp	Exposure values	RWAS (by risk weight bands) RWAS (by rapproach) RWAS (by rap	Ray Ray	RWAS (by regulatory approach) RWAS (by regulatory approach	Part Part	Part Part

The table below sets out the outstanding nominal amount, exposures in default and specific credit risk adjustments by exposure type where the institution acts as an originator or a sponsor.

Table 63: Exposures securitised by the institution – Institution acts as originator or as sponsor (SEC5)

		Total outstanding nominal amount of which: exposures in default	Total amount of specific credit risk adjustments made during the period
		\$m \$m	\$m
1	Total at 31 Dec 2024	19,681 194	46
2	Retail (total)	4,490 63	_
3	 residential mortgage 	1,509 34	-
5	 other retail exposures 	2,981 29	_
7	Wholesale (total)	15,191 131	46
8	 loans to corporates 	13,874 128	46
9	 commercial mortgage 		-
10	 lease and receivables 	1,004 3	_
11	- other wholesale	81 –	_
1	Total at 31 Dec 2023	19,298 68	22
2	Retail (total)	5,885 64	
3	- residential mortgage	1,835	
5	- other retail exposures	4,050	_
7	Wholesale (total)	13,413 4	22
8	- loans to corporates	11,761	22
9	- commercial mortgage	64	
10	lease and receivables	1,500	
11	- other wholesale	88 —	_

Market risk

Overview of market risk in global businesses

Market risk is the risk of an adverse financial impact on trading activities arising from changes in market parameters, such as interest rates, foreign exchange rates, asset prices, volatilities, correlations and credit spreads.

Exposure to market risk

Market risk arises from both trading portfolios and non-trading portfolios. Trading portfolios comprise positions held for client servicing and market-making, with the intention of short-term resale and/or to hedge risks resulting from such positions. For non-trading portfolios, see the 'Treasury risk' section on page 16.

Where appropriate, we apply similar risk management policies and measurement techniques to both trading and non-trading portfolios. Our objective is to manage and control market risk exposures to

optimise return on risk while maintaining a market risk profile consistent with our established risk appetite.

For further details of hedging risk and monitoring the continuing effectiveness of hedges, see page 216 of the Annual Report and Accounts 2024.

Market risk governance

The majority of the trading VaR, SVaR and IRC of HSBC reside in GBM. GBM manages market risk, within overall risk limits set by the GCRCO and limits approved by the GBM CRO.

■ For further details of market risk governance, see page 216 of the Annual Report and Accounts 2024.

The tables below reflect the components of capital requirements under the standardised approach and the internal model approach for market risk.

Table 64: Market risk under standardised approach (MR1)

		At	t
		31 Dec 2024	31 Dec 2023
		RWAs	RWAs
		\$m	\$m
	Outright products		
1	Interest rate risk (general and specific)	907	1,150
2	Equity risk (general and specific)	118	108
3	Foreign exchange risk	7,185	12,875
4	Commodity risk	164	107
	Options		
7	Scenario approach	3	10
8	Securitisation (specific risk)	957	922
9	Total	9,334	15,172

The \$5.8bn decrease in market risk RWAs under the standardised approach, mainly attributed to lower foreign exchange risk due to the impact from the hedges for the Canada sale proceeds.

Table 65: Market risk under IMA (MR2-A)

		A+ 21 D	ec 2024	At 31 De	2022
		ALSID		ALST DE	
			Capital		Capital
		RWAs	requirements	RWAs	requirements
		\$m	\$m	\$m	\$m
1	VaR (higher of values a and b) ¹	6,083	487	7,164	573
(a)	Previous day's VaR ('VaRt-1')		130		218
(b)	Multiplication factor (mc) x average of previous 60 working days ('VaRavg')		487		573
2	SVaR (higher of values a and b) ¹	12,952	1,036	8,297	664
(a)	Latest available SVaR ('SVaRt-1')		341		269
(b)	Multiplication factor (ms) x average of previous 60 working days ('SVaRavg')		1,036		664
3	IRC (higher of values a and b) ¹	6,305	504	5,163	413
(a)	Most recent IRC measure		420		410
(b)	12 weeks average IRC measure		504		413
5	Other	1,531	123	1,694	135
6	Total	26,871	2,150	22,318	1,785

¹ VaR average values are calculated on a 60 business days basis. SVaR and IRC average values are calculated on a 12-week basis.

Under the Internal model approach, RWAs increased by \$4.5bn over the year, mainly attributed to an increase in SVaR due to higher sensitivities to interest rate shocks under the stress scenario, and the higher incremental risk charge due to increased positions, mainly in Asia and HSBC Bank plc.

Market risk measures

Monitoring and limiting market risk exposures

We use a range of tools to monitor and limit market risk exposures including sensitivity analysis, VaR and stress testing.

Sensitivity analysis

We use sensitivity measures to monitor the market risk positions within each asset class and risk type. Granular sensitivity limits are set for each trading desk taking into consideration market liquidity, customer demand and capital constraints, amongst other factors.

Value at risk

VaR is a technique that estimates the potential mark-to-market losses on derivatives, securities and money market positions in the trading and non-trading portfolios as a result of movements in market rates and prices over a specified time horizon and to a given level of confidence. The use of VaR is an integral part of our market risk management framework and is calculated for a scope of trading and non-trading positions. This is wider than the set of trading positions which are capitalised under a VaR treatment.

Our models are predominantly based on historical simulation, and VaR is calculated at a 99% confidence level for a one-day holding period.

Our VaR model uses historical series of market rates and prices, implicitly taking into account inter-relationships between different markets and rates such as interest rates and foreign exchange rates.

The primary categories of risk factors driving market risk are summarised below:

Risk factor Description

	•
Foreign exchange	Risk arising from changes in foreign exchange rates and volatilities.
Interest rate	Risk arising from changes in the level of interest rates that may impact prices of interest rate sensitive assets such as interest rate swaps.
Equity	Risk arising from changes in equity prices, volatilities and dividend yields.
Commodity	Risk arising from changes in commodity prices.
Credit	Risk arising from changes in the level of credit spreads that may impact prices of credit spread sensitive assets.

Our models use a mixed approach when applying changes in market rates and prices:

- For equity, credit and foreign exchange risk factors, VaR scenarios are calculated on a relative return basis.
- For interest rates, a mixed approach is used. The scenarios applied
 to volatilities are on a relative return basis, whereas the scenarios
 applied to interest rate curves are calculated using a hybrid of
 absolute and relative returns. This approach enables the VaR to
 smoothly adapt to either low or high interest rate environments
 and to support negative rates.

Our models aggregate general and specific risk and allow for diversification across them. We use the past two years as the historical data set in our VaR model and the scenarios are updated at least on a weekly basis. These scenarios are then applied to the market baselines and positions on a daily basis. The models incorporate the effect of option features on the underlying exposures. The valuation approach used in our models varies:

- Desks trading non-linear instruments use a full revaluation approach.
- Desks trading only linear instruments, such as bonds and swaps, use a sensitivity-based approach.

The nature of the VaR model means that an increase in observed market volatility will lead to an increase in VaR even without any changes in the underlying positions.

VaR model limitations

Although a valuable guide to risk, VaR is used with awareness of its limitations, for example:

- The use of historical data as a proxy for estimating future events may not encompass all potential events, particularly those which are extreme in nature. As the model is calibrated on the last 500 business days, it does not adjust instantaneously to a change in the market regime.
- The use of a one-day holding period for risk management purposes of trading books assumes that this short period is sufficient to hedge or liquidate all positions.
- The use of a 99% confidence level by definition does not take into account losses that might occur beyond this level of confidence.
- VaR is calculated on the basis of exposures outstanding at close of business and therefore does not necessarily reflect intra-day exposures.

Risk not in VaR framework

The RNIV framework captures risks from exposures in the HSBC trading book that are not captured well by the VaR model. Our VaR model is designed to capture significant basis risk such as CDS versus bond, asset swap spreads and cross-currency basis. Other basis risks that are not completely covered in VaR, such as CCP swap basis risks, are complemented by our RNIV calculations and are integrated into our capital framework.

Risk factors are reviewed on a regular basis and are either incorporated directly in the VaR model, where possible, or quantified through the VaR-based RNIV approach or a stress test approach within the RNIV framework. While VaR-based RNIVs are calculated by using historical scenarios, stress-type RNIVs are estimated on the basis of stress scenarios whose severity is calibrated to be in line with the capital adequacy requirements. The outcome of the VaR-based RNIV approach is included in the overall VaR calculation for risk management purposes but excluded from the VaR measures used for regulatory back-testing. In addition, SVaR also captures risk factors considered in the VaR-based RNIV approach through a corresponding SVaR RNIV.

Stress-type RNIVs include a deal contingent derivatives capital charge to capture risk for these transactions and a cheapest-to-deliver bond measure to capture the risk from using this proxy instrument.

Back-testing

We validate daily the accuracy of our VaR model by back-testing the model against both actual and hypothetical profit and loss.

Hypothetical profit and loss excludes non-modelled items such as fees, commissions and revenues of intra-day transactions. The hypothetical profit and loss reflects the profit and loss that would be realised if positions were held constant from the end of one trading day to the end of the next. This measure of profit and loss does not align with how risk is dynamically hedged, and is not therefore indicative of the actual performance of the business.

The number of hypothetical loss back-testing exceptions, together with a number of other indicators, is used to assess model performance and to consider whether enhanced internal monitoring of a VaR model is required.

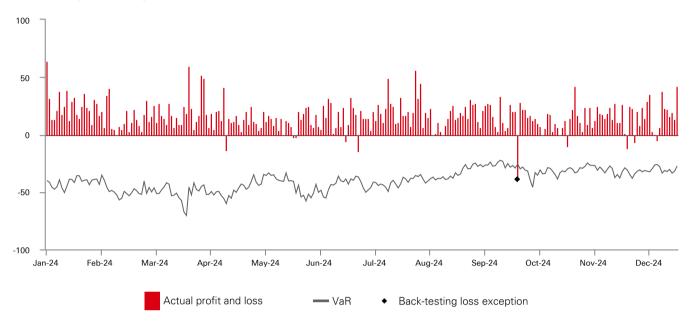
We back-test our VaR at various levels of our Group entity hierarchy. Our back-testing covers those entities within the Group that have approval to use VaR in the calculation of market risk regulatory capital requirements. HSBC submits separate back-testing results to regulators, including the PRA and the European Central Bank, based on applicable frequencies ranging from two business days after an exception occurs, to quarterly submissions. VaR back-testing loss, and not profit, exceptions count towards the multiplier determined by the PRA for the purposes of the market risk capital requirement calculation. The multiplier is increased if there are five or more loss exceptions in a 250-day period.

During 2024, the Group experienced one back-testing exception on losses against actual and hypothetical profit and losses mainly driven by volatility in certain equity markets.

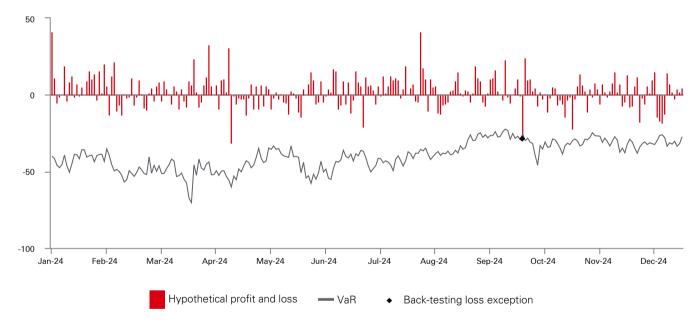
The following graphs show a 12-month history for trading book VaR back-testing exceptions against both actual and hypothetical profit and loss.

Table 66: Comparison of VaR estimates with gains/losses (MR4)

VaR back-testing exceptions against actual profit and loss (\$m)



VaR back-testing exceptions against hypothetical profit and loss (\$m)



Stress testing

Stress testing is an important procedure that is integrated into our market risk management framework to evaluate the potential impact on portfolio values of more extreme events, or movements in a set of financial variables. In such scenarios, losses can be much greater than those predicted by VaR modelling. Stress testing and reverse stress testing provide senior management with insights regarding the 'tail risk' beyond VaR.

Stress testing is implemented at legal entity, regional and overall Group levels. A set of scenarios is used consistently across all regions within the Group. Market risk stress testing incorporates both historical and hypothetical events. Market risk reverse stress tests are designed to identify vulnerabilities in our portfolios by looking for scenarios that lead to loss levels considered severe for the relevant portfolio. These scenarios may be local or idiosyncratic in nature and complement the systematic top-down stress testing.

The risk appetite around potential stress losses for the Group is set and monitored against limits.

Market risk capital models

HSBC has permission to use a number of market risk capital models to calculate regulatory capital. Market risk capital models are governed by the Global Model Risk Policy and Standards, which requires that all in-use models are assessed, validated and monitored on a regular basis. For regulatory purposes, the trading book comprises all positions in financial instruments and commodities held with trading intent and positions where it can be demonstrated that they hedge positions in the trading book. Trading book positions must either be free of any restrictive covenants on their tradability or be capable of being hedged.

HSBC maintains a trading book policy, which defines the minimum requirements for trading book positions and the process for classifying positions as trading or non-trading book. Positions in the trading book are subject to market risk-based rules, for example, market risk capital, calculated using regulatory approved models. Where we do not have permission to use internal models, market risk capital is calculated using the standardised approach.

If any of the policy criteria are not met, then the position is categorised as a non-trading book exposure. We use the following market risk capital models.

Model component ¹	Confidence level	Liquidity horizon	Model description and methodology
VaR	99%	10-day	Uses most recent two years' history of daily returns to determine a loss distribution. The result is scaled, using the square root of 10, to provide an equivalent 10-day loss.
SVaR	99%	10-day	SVaR follows an approach similar to VaR but uses a one-year stressed period to determine the loss distribution, based on 10 day returns. The one-year period is selected as a period of stress observed in history relevant to HSBC's positions.
IRC	99.9%	1 year	Uses a multi-factor Gaussian Monte-Carlo simulation, which includes product basis, concentration, hedge mismatch, recovery rate and liquidity as part of the simulation process. A minimum liquidity horizon of three months is applied and is based on a combination of factors, including issuer type, currency and size of exposure.

¹ Non-proprietary details of these models and permissions are available in the Financial Services Register on the PRA website.

The table below shows the high, average, low and actual values of VaR, SVaR and IRC for the period under the internal models approach.

Table 67: IMA values for trading portfolios (MR3)

		At 31	Dec
		2024	2023
		\$m	\$m
VaR	(10 day 99%)		
1	Maximum value	204.9	294.1
2	Average value	150.3	201.4
3	Minimum value	116.0	109.5
4	Period end	124.0	176.0
Stres	ssed VaR (10 day 99%)		
5	Maximum value	399.1	342.5
6	Average value	287.6	221.6
7	Minimum value	206.3	115.6
8	Period end	333.6	266.9
Incre	mental risk charge (99.9%)		
9	Maximum value	700.3	557.7
10	Average value	526.5	455.6
11	Minimum value	421.0	347.0
12	Period end	421.0	409.8

Value at risk

VaR used for regulatory purposes differs from VaR used for management purposes. The key differences are listed in the table below:

VaR	Regulatory	Management
	Regulatory	Broader population of trading and
Scope	approval (PRA)	non-trading book positions
Confidence interval	99%	99%
Liquidity horizon	10 day	1 day
Data set	Past 2 years	Past 2 years

We calculate VaR for regulatory purposes only in respect of the trading books for which we have received approval to use an internal model from the regulator. Overall regulatory VaR also includes VaR-based RNIVs.

The regulatory VaR table is calculated on consolidated positions according to the regulatory permissions received, plus aggregated sites. This differs from the daily VaR reported in the Annual Report and Accounts 2024, which shows a fully diversified view used for internal risk management.

In 2024, trading VaR (10 day, 99%) decreased by \$52.0m to \$124m, mainly as a result of some volatile scenarios rolling off the VaR scenario window during the year.

Stressed VaR

SVaR is primarily used for regulatory capital purposes and is integrated into the risk management process to ensure prudent capital management. SVaR complements other risk measures by providing the potential losses under stressed market conditions.

SVaR modelling follows the same approach as our VaR risk measure except that:

- potential market movements employed for SVaR calculations are based on a continuous one-year period of stress for the trading portfolio; and
- the choice of period is based on the assessment at the Group level of the period in recent history that maximises the SVaR.

This assessment relies on a weekly monitoring that resulted in the following period changes during 2024:

- between December 2021 and December 2022 from January 2024;
- between September 2021 and September 2022 from April 2024;
- between November 2007 and October 2008 from the start of June 2024 and between May 2022 and April 2023 from the end of June 2024:
- between July 2007 and July 2008 from September 2024;
- between May 2022 and April 2023 from October 2024.

It is calculated to a 99% confidence using a 10-day holding period; and it is based on an actual 10-day holding period, whereas regulatory VaR is based on a one-day holding period scaled to 10 days.

The SVaR (10 day 99%) increased by \$66.7m to \$333.6m in 2024. The maximum of \$399.1m was primarily driven by a temporary change of the risk profile across business lines.

Incremental risk charge

The IRC is a measure of the default and migration risk of issuers of traded debt instruments. As required by the internal models approach, IRC is modelled using a one-year horizon with a 99.9% confidence interval. IRC risk factors include credit migration, default, default and transition correlation, product basis, concentration, hedge mismatch and recovery rate. The PDs are derived from historical data on defaults and a one-year stress period, corresponding to the global financial crisis, is used to calibrate the spread changes for rating migration events. The IRC model is validated on a quarterly basis by stressing key model parameters and evaluating the model response.

The IRC is a stand-alone charge generating no diversification benefit with other charges. Positions in scope of IRC are assigned liquidity horizons of one year. The IRC transition matrices are calibrated using transition and default data published by three rating agencies (S&P, Moody's and Fitch) as the starting point, in combination with internal estimates used for flooring of PDs. The IRC correlation matrix is derived quarterly from historical CDS spreads data, from 2007 onwards. The IRC correlations model uses factors related to sector and region of issuers.

The IRC was relatively stable at \$421m at the end of 2024.

Prudent valuation adjustment

Prudent value represents a conservative estimate with a 90% degree of certainty of a price that would be received to sell an asset, or paid to transfer a liability, in orderly transactions occurring between market participants at the balance sheet date. HSBC has documented policies and maintains systems and controls for the calculation of the prudent valuation adjustment ('PVA'). HSBC's methodology addresses fair value uncertainties arising from a number of sources, including market price uncertainty, bid-offer uncertainty, model risk, concentration, administrative costs, unearned credit spreads and investing and funding costs.

The table below shows the PVA split by risk category for each of the trading book exposure risks.

Table 68: Prudential valuation adjustments (PV1)

		Risk Category					Val	level AVA - uation ertainty	Total		
		Interest Equity rates		FX	Credit	Comm- odities	Un- earned credit spreads AVA	Invest- ment and funding costs AVA	category level post- diversifi- cation	of which: Total core approach in the trading book	Total core approach
		\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m
1	Market price uncertainty	416	268	49	182	2	62	2	387	237	150
3	Close-out cost	158	160	41	32	3	226	_	310	248	62
4	Concentrated positions	29	74	8	45	_	_	_	156	143	13
5	Early termination	_	_	_	_	_	_	_	_	_	_
6	Model risk	89	76	8	12	_	50	22	128	121	7
7	Operational risk	26	32	4	8	_	_	_	70	49	21
10	Future administrative costs	28	52	1	9	_	_	_	90	57	33
12	Total Additional Valuation Adjustments ('AVAs') at 31 Dec 2024								1,141	855	286
1	Market price uncertainty	473	303	47	206	4	82		463	286	177
3	Close-out cost	129	162	26	28	2	247		297	258	39
4	Concentrated positions	67	114	17	63			_	261	168	93
5	Early termination							_		_	
6	Model risk	48	83	8	12	_	49	52	126	124	2
7	Operational risk	29	33	4	11	1	_	_	78	56	22
10	Future administrative costs	_	7	_	6	_	_	_	13	11	2
12	Total Additional Valuation Adjustments ('AVAs') at 31 Dec 2023								1,238	903	335

The PVA charge decreased by \$97m compared to 31 December 2023 as a result of the net impact of changes in underlying exposures, reassessment of close out costs with respect to credit and liquidity conditions, and included transfers from concentration to future administrative costs AVAs in relation to non-tradable exposures.

The items for which the highest PVA is observed include (i) assetbacked securities and other fixed income securities, (ii) structured derivative products and (iii) valuation adjustments related to derivatives.

Non-financial risk

Non-financial risk (often also referred to as 'operational risk') is the risk of loss resulting from people, inadequate or failed internal processes, data or systems and external events. Sound non-financial risk management is central to achieving fair outcomes for our customers, growing our business safely, and maintaining the orderly and transparent operation of financial markets. Non-financial risk is relevant to every aspect of our business and is broadly managed

through the Risk Management Framework ('RMF'). Non-financial risk covers a wide spectrum of areas, such as resilience risk, financial crime risk, regulatory compliance risk, financial reporting and tax risk, legal risk, model risk and people risk. Losses arising from breaches of regulation and law, unauthorised activities, error, omission, inefficiency, fraud, systems failure or external events all fall within the definition of non-financial risk.

We currently use the standardised approach in determining our operational risk capital requirement and the table below provides details of the overall calculation.

Table 69: Operational risk own funds requirements and risk-weighted exposure amounts¹ (OR1)

		Rele	vant indicato	or	Own funds	Risk weighted
	_	2022	2023	2024	requirements	exposure amount
	Banking activities	\$m	\$m	\$m	\$m	\$m
2	Banking activities subject to standardised (TSA)/alternative standardised ('ASA') approaches				8,518	106,472
3	Subject to TSA:					
	Corporate Finance	650	704	865		
	Trading and Sales	5,091	2,029	2,830		
	Commercial Banking	21,629	32,279	33,744		
	Retail Banking	18,687	23,708	24,883		
	Payment and Settlement	1,756	1,934	2,061		
	Agency Services	995	948	896		
	Asset Management	1,858	1,854	1,959		

¹ Balance excludes operational risk RWAs for HSBC Bank Canada post the PRA waiver permission granted in October 2024.

Organisation and responsibilities

The RMF sets out our approach to governance, risk management, and the principles for our management of non-financial risks and associated controls. Responsibility for managing non-financial risk lies with our people. During 2024, we remained focused on strengthening our approach to managing non-financial risk. We continue to enhance the framework and tools for strengthening the control environment and to improve practices in the management of non-financial risk.

Non-financial risk is organised as a specific risk discipline within Global Risk and is headed by the Group Head of Enterprise Risk Management, who 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 Enterprise Risk Management is accountable to the GCRCO in respect of this element of the overall RMF.

The Enterprise Risk Management sub-function helps the business grow safely by driving governance and management of non-financial risk through the delivery and embedding of effective frameworks and policies, and continuous oversight and assurance of risks, controls, events and impacts.

Activity to strengthen the first and second lines of defence continued to be a key focus in 2024. The first line of defence has ultimate ownership for risk and controls and is accountable for identifying, assessing, and managing key existing and emerging risks. The second line of defence provides subject matter expertise, advice, guidance and challenge to 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 operate effectively.

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 through Risk Management Meetings.

Measurement and monitoring

The RMF is written as a high-level standard, supplemented by detailed operating procedures. It explains our approach to identifying, assessing, monitoring and controlling non-financial risk and gives guidance on mitigating actions to be taken when weaknesses are identified. To achieve our strategic objectives, we set out our risk appetite and then regularly monitor risk exposure against that appetite. This forward-looking view enables assessment of the risk impact and risk likelihood to understand the cost and wider consequences of risk materialisation, as well as the evaluation of potential further actions by management.

Risk scenario analysis across material legal entities provides an aggregated, forward-looking assessment of risks for stress testing and to help determine capital requirements.

In each of our subsidiaries, the first line of defence is responsible for maintaining an appropriate level of internal control, commensurate with the scale and nature of operations. 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.

Risk and control assessment approach

Non-financial risk and control assessments are performed by the first line of defence. 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.

Recording

We use a Group-wide risk management system to record the results of our non-financial risk management process. Non-financial risk and control assessments are input 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 Group-wide risk management system and reported to governance on a monthly basis. Loss capture thresholds are in line with industry standards.

Other risks

Insurance Manufacturing Operations Risk

We sell insurance products through a range of channels including our branches, insurance salesforces, direct channels and third-party distributors. The majority of sales are through an integrated bancassurance model that provides insurance products principally for customers with whom we have a banking relationship, although the proportion of sales through other sources such as independent financial advisers, tied agents and digital is increasing.

For the insurance products we manufacture, the majority of sales are savings, universal life and protection contracts.

We choose to manufacture these insurance products in HSBC subsidiaries based on an assessment of operational scale and risk appetite. Manufacturing insurance allows us to retain the risks and rewards associated with writing insurance contracts by keeping part of the underwriting profit and investment income within the Group.

We have life insurance manufacturing subsidiaries in seven markets, which are Hong Kong, Singapore, mainland China, France, UK, Malta and Mexico. This excludes Argentina where the sale of the insurance business was completed on 6 December 2024. In addition, we have: an interest in a life insurance manufacturing associate in India; a captive insurance entity in Bermuda that insures the non-financial risks of the wider Group; and a reinsurance entity in Bermuda.

Where we do not have the risk appetite or operational scale to be an effective insurance manufacturer, we engage with a small number of leading external insurance companies in order to provide insurance products to our customers. These arrangements are generally

structured with our exclusive strategic partners and earn the Group a combination of commissions, fees and a share of profits. We distribute insurance products in all of our geographical regions.

The insurance manufacturing subsidiaries are equity accounted in the regulatory consolidation and then deducted from CET1 capital subject to thresholds (amounts below the thresholds are risk-weighted). As a result, losses incurred by the insurance manufacturing subsidiaries may impact the Group's regulatory capital position where the thresholds are exceeded or, to the extent that they impair the ability of the insurance subsidiaries to make planned dividend payments, or where the deterioration of an insurance subsidiary's capital position requires capital support from the Group to address a shortfall, reduce the Group's regulatory capital supply. The capital risk associated with our insurance manufacturing subsidiaries is assessed in the ICAAP based on their financial capacity to support the risks to which they are exposed, on a standalone basis. Capital adequacy is assessed on both an economic capital basis, and the relevant local insurance regulatory basis. The economic capital basis is largely aligned to European Solvency II regulations, other than in Hong Kong where this is based on the emerging Hong Kong risk-based capital regulations.

For further details of the management of risks arising from the insurance manufacturing operations, see page 231 of the Annual Report and Accounts 2024

Countercyclical capital buffer

The table below discloses the geographical distribution of credit exposures relevant to the calculation of the CCyB under Article 440 of CRR II. Exposures to central governments, central banks, regional governments, local authorities, public sector entities, multilateral development banks, international organisations and institutions are excluded and therefore differ from those presented in the credit and counterparty credit risk sections. Countries or territories that have a CCyB requirement, or have an own funds requirement of greater than 0.7%, or that are otherwise material in nature, are disclosed below.

Table 70: Geographical distribution of credit exposures relevant for the calculation of the countercyclical buffer (UK CCyB1)

Table 70. Get	General credit		Relevan exposu Marke	t credit ıres –	Securiti- sation exposures	o. 1110 ouilou		Own fu	Own funds		3,2.,		
		osures	Sum of long/	LIISK	Total Exposure value for	-	Relevant credit risk expo-	<u> </u>	Securi-		Risk weigh- ted expo-	Own funds require-	
	SA	IRB	posi- tions	Inter- nal models	non- trading book	Total exposure value	sures - Credit risk		the non- trading	Total	sure amo- unts	ments weig-	CCyB rate
Country/	SA	IND	IUI SA	illoueis	DOOK	value	IISK	IISK	DOOK	iotai	unts	1115	rate
territory	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	%	%
Armenia	_	7	_	_	_	7	_	_	_	_	_	_	1.50
Australia	1,244	46,777	896	116	3,239	52,272	1,205	19	46	1,270	15,875	2.59	1.00
Belgium	128	1,203	3	44		1,378	57	2		59	738	0.12	1.00
Bulgaria	-	13				13	_				- 4 075		2.00
Chile Mainland	612	1,744		175		2,531	97	5	_	102	1,275	0.21	0.50
China	21,086	60,253	78	779	2,718	84,914	5,294	16	33	5,343	66,788	10.91	0.00
Croatia	1	1 252				2	- 10			- 10	125		1.50
Cyprus Czech	12	253				265	10			10	125	0.02	1.00
Republic	18	490	_	5	_	513	25	2	_	27	338	0.06	1.25
Denmark	185	2,450	_	11	_	2,646	66	1	_	67	838	0.14	2.50
Estonia	_	_	-	_	-	-	_	_	_	_	_	_	1.50
France	10,305	21,229	183	54	7,571	39,342	1,073	8	107	1,188	14,850	2.43	1.00
Germany	1,097	15,823	112	184	1,238	18,454	655	10	15	680	8,500	1.39	0.75
Hong Kong	19,773	337,329		223	2,451	359,776	9,710	8	38	9,756	121,950	19.92	0.50
Hungary Iceland		1,346				1,346	18 			18	225	0.04	0.50 2.50
India	6,183	21,683		719	1,807	30,392	1,610	18		1,683	21,038	3.44	0.00
Indonesia	764	6,534	_	67		7,365	395	4	_	399	4,988	0.82	0.00
Ireland	1,114	6,661	820	26	1,068	9,689	190	17	13	220	2,750	0.45	1.50
Korea, Republic Of	820	4,715	3	57	400	5,995	175	4	5	184	2,300	0.38	1.00
Latvia	_	1	_	8		9	_	2	_	2	25	_	0.50
Lithuania	_	3	_	_	_	3	_	_	_	_	_	_	1.00
Luxembourg	4,425	8,215	145	54		12,839	660	5	_	665	8,313	1.36	0.50
Malaysia	2,529	11,635	_	3	56	14,223	646	2	1	649	8,113	1.32	0.00
Mexico	23,891	3,746		161	610	28,408	1,575	5	8	1,588	19,850	3.24	0.00
Netherlands	1,112	9,826 289	362	33 5	615	11,948 316	378 9	11	5 	394 10	4,925 125	0.80	2.00
Norway Romania		31		1		32	1			10	13	0.02	1.00
Saudi Arabia	30,322	2,432		130		32,884	2,224	19		2,243	28,038	4.58	0.00
Singapore	3,384	35,839	_	191	64	39,478	1,205	8	1	1,214	15,175	2.48	0.00
Slovakia	_	58	_	2	_	60	1	_	_	1	13	_	1.50
Slovenia	6	1	_	9		16	1			1	13		0.50
Sweden	500	762	_	34		1,296	64	2		66	825	0.14	2.00
Switzerland	3,450	12,961		64		16,475	426	3		429	5,363	0.88	0.00
Taiwan United Arab	1,573	13,683	_	239		15,495	472	3		475	5,938	0.97	
Emirates	5,103	18,789		59	_	23,951	800	3		803	10,038	1.64	
United Kingdom	16,169	384,875	653	702	11,829	414,228	10,624	52	263	10,939	136,738	22.34	2.00
United States	27,925	95,417	31	76	8,918	132,367	4,772	10	168	4,950	61,875	10.11	
Other	20,961	54,388	427	934	1,322	78,032	3,416	100	15	3,531	44,130	7.20	
Countries Total	204,714	1,181,464	3,713	5,165	43,906	1,438,962	47,854	340	773	48,967	612,088	100.00	
- I Otal	207,714	1,101,404	3,713	3,103	+3,300	1,730,302	T/,004	340	113	TU,3U1	012,000	100.00	

Table 70: Geographical distribution of credit exposures relevant for the calculation of the countercyclical buffer (UK CCyB1) (continued)

	Relevant credit General credit exposures – exposures Market risk			res -	Securiti- sation exposures	Own funds requirements							
			Sum of long/		Total Exposure		Relevant credit risk	Relevant credit	Securi- tisation posi-		Risk weigh- ted	Own funds	
			short posi-	Inter-	value for non-	Total	expo- sures	expo- sures	tions in the non-		expo- sure	require- ments	
			tions	nal	trading	exposure	– Credit	– Market	trading		amo-	weig-	CCyB
	SA	IRB	for SA	models	book	value	risk	risk	book	Total	unts	hts	rate
Country/													
territory	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	%	%
Australia	963	44,959	773	52	1,215	47,962	1,145	19	18	1,182	14,775	2.33	1.00
Bulgaria	1	13	_			14							2.00
Canada	828	69,195	_	22	212	70,257	1,987	2	3	1,992	24,900	3.92	0.00
Mainland							·						
China	22,944	62,761	205	1,041	1,691	88,642	5,552	22	20	5,594	69,925	11.01	0.00
Croatia	_	2	_	_	_	2	_	_	_	_	_	_	1.00
Cyprus	69	274	_	_	_	343	30	_	_	30	375	0.06	0.50
Czech													
Republic	43	514		9		566	20			20	250	0.04	2.00
Denmark	187	1,395		14		1,596	61	1		62	775	0.12	2.50
Estonia		15				15							1.50
France	3,795	47,688	81	211	5,656	57,431	1,364	16	79	1,459	18,237	2.87	0.50
Germany	1,031	14,052	187	142	608	16,020	616	17	6	639	7,987	1.26	0.75
Hong Kong	20,894	338,083		368		359,345	10,113	19		10,132	126,650	19.94	1.00
Iceland		10				10							2.00
India	5,214	20,735		300	1,161	27,410	1,416	16	41	1,473	18,412	2.90	0.00
Indonesia Ireland	558 730	6,559 5,913	 863	84 7	<u> </u>	7,201 8,223	368 196	6 18	<u> </u>	374 223	4,675 2,788	0.74	1.00
Lithuania	730	5,913		1	— /10 —	0, <u>223</u> 7					2,700	0.44	1.00
Luxembourg	4,385	8,144	4	40		12,573				721	9,013	1.42	0.50
Malaysia	2,408	12,148		35		14,591	581	3		584	7,300	1.15	0.00
Mexico	27,369	4,628		146	741	32,884	1,825	9	10	1,844	23,049	3.63	0.00
Netherlands	1,385	10,144	360	110	1,386	13,385	391	36	15	442	5,525	0.87	1.00
Norway	24	240		18		282	8	1		9	113	0.02	2.50
Romania	_	26	_	1		27	1	_	_	1	13	_	1.00
Saudi Arabia	23,205	4,214		135	_	27,554	1,809	26		1,835	22,938	3.61	0.00
Singapore	2,437	32,938	_	38	_	35,413	997	5	_	1,002	12,525	1.97	0.00
Slovakia	5	71	_	2	_	78	2	_	_	2	25	_	1.50
Slovenia	5	_	_	1	_	6	_	1	_	1	13	_	0.50
Sweden	397	1,099		9		1,505	129	4		133	1,663	0.26	2.00
Taiwan	1,539	13,373		218		15,130	388	4		392	4,900	0.77	0.00
United Arab Emirates	4,581	17,406		37		22,024	721	2		723	9,037	1.42	0.00
United Kingdom	16,014	368,808	658	346	12,921	398,747	9,733	62	263	10,058	125,725	19.79	2.00
United States	6,282	118,540	69	255	9,030	134,176	4,738	18	158	4,914	61,425	9.67	0.00
Other countries/ territories	28,969	91,363	450	868	679	122,329	4,845	121	9	4,975	62,187	9.79	0.00
Total	176,262	1,295,316	3,650	4,510	36,010	1,515,748	49,752	433	631	50,816	635,200	100.00	
10101	170,202	1,200,010	5,050	7,510	50,010	1,010,740	70,732	+00	001	55,010	000,200	100.00	

The table below shows the total RWAs calculated in accordance with Article 92(3) of CRR II and provides an overview of institution-specific countercyclical capital exposure and buffer requirement

Table 71: Amount of institution-specific countercyclical capital buffer (UK CCyB2)

	2024	2023
Total Risk Exposure Amount (\$m)	838,254	854,114
Institution specific countercyclical capital buffer rate (%)	0.65	0.67
Institution specific countercyclical capital buffer requirement (\$m)	5,449	5,723

Board and Management Diversity

The management and governance framework within HSBC ensures that diversity and inclusion are embedded within the culture of HSBC. The Board remains committed to having an inclusive culture that recognises the importance of gender, social and ethnic diversity, and the benefits gained from different perspectives.

This section outlines the key diversity and inclusion metrics for Board members and executive management as at 31 December 2024. The metrics as at 1 January 2025 have also been included to reflect changes to the Board and senior management that took effect from 1 January 2025.

Details of the Board members, their directorships, targets and achievements are available on pages 237 to 241 and 325 in the Annual Report and Accounts 2024.

Gender and ethnic diversity

In accordance with UK Listing Rule 6.6.6 (10) the tables below outline the current gender and ethnic diversity of the HSBC Holdings Board and executive management reflecting data gathered through self-identification.

Gender

		As at	31 Decembe	r 2024			As a	t 1 January 20	025	
	Board m	Board members		Executive management ²		Board mer	mbers		Executi managen	
			Number of senior					Number of senior		
	Number	%	positions ¹	Number	%	Number	%	positions ¹	Number	%
Male	6	46	3	15	79	6	43	2	10	77
Female	7	54	1	4	21	8	57	2	3	23
Other	_	_	_	_	_	_	_	_	_	_
Not specified/prefer not to say	_	_	_	_	_	_	_	_	_	_

Ethnic Diversity

		As at 31 December 2024				As at 1 January 2025				
	Board men	nbers		Executi managen		Board mer	nbers		Executi managem	2
	Number	%	Number of senior positions ¹	Number	%	Number	%	Number of senior positions ¹	Number	%
White British or other White (including minority-White groups)	8	62	3	13	69	8	57	2	9	69
Mixed/multiple ethnic groups	_	_	_	_	_	_	_	_	_	_
Asian/Asian British	3	23	_	4	21	4	29	1	3	23
Black/African/Caribbean/Black British	_	_	_	_	_	_	_	_	_	
Other ethnic groups	2	15	1	1	5	2	14	1	1	8
Not specified/prefer not to say	_	-	_	1	5	_	_	_	_	

- 1 Senior positions on the Board comprise the Group Chairman, Group CEO, Group CFO and Senior Independent non-executive Director.
- 2 Executive management comprises the Group Executive Committee members and the Group Head of Internal Audit.
- 3 Executive management comprises the Group Operating Committee members and the Group Head of Internal Audit.

Appendix I

Summary of disclosures withheld¹

Regulatory requirement Description Rationale

1 There are no disclosures withheld by HSBC.

Appendix II

Mapping- Internal ratings to external ratings

The table below sets out IRB exposures by obligor grade for central governments and central banks, institutions and corporates, all of which are assessed using our 23-grade customer risk rating master scale. We benchmark the master scale against the ratings of external rating agencies. Each customer risk rating band is associated with an external rating grade by reference to long-run default rates for that grade, represented by the average of issuer-weighted historical default rates.

The correspondence between the agency long-run default rates and the PD ranges of our master scale is obtained by matching a smoothed curve based on those default rates with our master scale reference PDs. This association between internal and external ratings is indicative and may vary over time. In these tables, the ratings of S&P are cited for illustration purposes, and we also benchmark against other agencies' ratings in an equivalent manner.

Mapping of internal ratings to external ratings

			Central governments and central banks	Institutions	Corporates ¹
	Customer Risk				
Default risk	Rating	PD range %		Mapped external rating	
Minimal	0.1	0.000 to 0.010	AAA to AA	AAA	0
	1.1	0.011 to 0.028	AA- to A+	AA+ to AA	AAA to AA
	1.2	0.029 to 0.053	A to A-	AA-	AA-
Low	2.1	0.054 to 0.095	BBB+	A+ to A	A+ to A
	2.2	0.096 to 0.169	BBB	A-	Α-
Satisfactory	3.1	0.170 to 0.285	BBB-	BBB+	BBB+
	3.2	0.286 to 0.483	BBB-	BBB	BBB
	3.3	0.484 to 0.740	BB+/BB	BBB-	BBB-
Fair	4.1	0.741 to 1.022	BB-	BB+	BB+
	4.2	1.023 to 1.407	B+	BB	BB
	4.3	1.408 to 1.927	B+	BB-	BB-
Moderate	5.1	1.928 to 2.620	B+	BB-	BB-
	5.2	2.621 to 3.579	В	B+	B+
	5.3	3.580 to 4.914	В	В	В
Significant	6.1	4.915 to 6.718	B-	B-	B-
	6.2	6.719 to 8.860	B-	B-	B-
High	7.1	8.861 to 11.402	B-	CCC+	CCC+
	7.2	11.403 to 15.000	CCC+	CCC+	CCC+
Special	8.1	15.001 to 22.000	CCC+	CCC	CCC
Management	8.2	22.001 to 50.000	CCC	CCC- to CC	CCC- to CC
	8.3	50.001 to 99.999	CCC- to C	С	С
Default	9/10	100.000	Default	Default	Default

¹ Corporates excludes specialised lending exposures subject to supervisory slotting approach.

Compliance with CRR II Pillar 3 Requirements

Article	Regulatory Requirements	Compliance reference
Disclosure i	requirements and policies	
431 (1)	Institutions shall publicly disclose the information referred to in Titles II and III in accordance with the provisions laid down in this Title, subject to the exceptions referred to in Article 432.	HSBC Holdings plc publishes Pillar 3 disclosures as required
431 (2)	Institutions that have been granted permission by the competent authorities under Part Three for the instruments and methodologies referred to in Title III of this Part shall publicly disclose the information laid down therein.	Title III refers to the below articles and further information is provided within the relevant articles: i) Article 452 Disclosure of the Use of the IRB Approach to Credit Risk ii) Article 453 Disclosure of the Use of Credit Risk Mitigation Techniques iii) Article 454 Disclosure of the Use of the Advanced Measurement Approaches to Operational Risk. This article is not applicable to HSBC iv) Article 455 Use of Internal Market Risk Models
431 (3)	The management body or senior management shall adopt formal policies to comply with the disclosure requirements laid down in this Part and put in place and maintain internal processes, systems and controls to verify that the institution's disclosures are appropriate and in compliance with the requirements laid down in this Part. At least one member of the management body or senior management shall attest in writing that the relevant institution has made the disclosures required under this Part in accordance with the formal policies and internal processes, systems and controls. The written attestation and the key elements of the institution's formal policies to comply with the disclosure requirements shall be included in the institutions' disclosures. Information to be disclosed in accordance with this Part shall be subject to the same level of internal verification as that applicable to the management report included in the institution's financial report. Institutions shall also have policies in place to verify that their disclosures convey their risk profile comprehensively to market participants. Where institutions find that the disclosures required under this Part do not convey the risk profile comprehensively to market participants, they shall publicly disclose information in addition to the information required to be disclosed under this Part. Nonetheless, institutions shall only be required to disclose information that is material and not proprietary or confidential in accordance with Article 432.	Board members attest to the appropriateness of Pillar 3 Disclosures, and the Pillar 3 is governed by the Group's disclosure policy and internal controls framework as approved by the GAC, refer to 'Pillar 3 Disclosures and Governance' section on page 3.
431 (4)	All quantitative disclosures shall be accompanied by a qualitative narrative and any other supplementary information that may be necessary in order for the users of that information to understand the quantitative disclosures, noting in particular any significant change in any given disclosure compared to the information contained in the previous disclosures.	Narratives are included to explain quantitative disclosures where required. Refer to page 3 for the overarching statement.
431 (5)	Institutions shall, if requested, explain their rating decisions to SMEs and other corporate applicants for loans, providing an explanation in writing when asked. The administrative costs of the explanation shall be proportionate to the size of the loan.	If requested, HSBC UK Bank plc provides rating decisions to SMEs and other corporates applicants for loans.
Non-materi	al, proprietary or confidential information	
432 (1)	With the exception of the disclosures laid down in point (c) of Article 435(2) and in Articles 437 and 450, institutions may omit one or more of the disclosures listed in Titles II and III where the information provided by those disclosures is not regarded as material. Information in disclosures shall be regarded as material where its omission or misstatement could change or influence the assessment or decision of a user of that information relying on it for the purpose of making economic decisions.	HSBC Holdings plc complies with all relevant disclosure requirements except the items listed in Appendix I on page 109.
432 (2)	Institutions may also omit one or more items of information referred to in Titles II and III where those items include information that is regarded as proprietary or confidential in accordance with this paragraph, except for the disclosures laid down in Articles 437 and 450. Information shall be regarded as proprietary to institutions where disclosing it publicly would undermine their competitive position. Proprietary information may include information on products or systems that would render the investments of institutions therein less valuable, if shared with competitors. Information shall be regarded as confidential where the institutions are obliged by customers or other counterparty relationships to keep that information confidential.	HSBC Holdings plc complies with all relevant disclosure requirements except the items listed in Appendix I on page 109.

Article	Regulatory Requirements	Compliance reference
432 (3)	In the exceptional cases referred to in paragraph 2, the institution concerned shall state in its disclosures the fact that the specific items of information are not disclosed and the reason for not disclosing those items, and publish more general information about the subject matter of the disclosure requirement, except where that subject matter is, in itself, proprietary or confidential.	HSBC Holdings plc complies with all relevant disclosure requirements except the items listed in Appendix I on page 109.
Frequency	and scope of disclosures	
433	Institutions shall publish the disclosures required under Titles II and III in the manner set out in Articles 433a, 433b and 433c. Annual disclosures shall be published on the same date as the date on which institutions publish their financial statements or as soon as	HSBC Holdings plc complies with the frequency requirements set out in Article 433a for a large institution. The annual Pillar 3 Disclosures are published the same date as the
	possible thereafter. Semi-annual and quarterly disclosures shall be published on the same date as the date on which the institutions publish their financial reports for the corresponding period where applicable or as soon as possible thereafter. Any delay between the date of publication of the disclosures required under this Part and the relevant financial statements shall be reasonable.	Annual Report and Accounts. HSBC semi-annual and quarterly Pillar 3 disclosures are published as soon as possible after the interim and quarterly financial statements.
433a (1)	Large institutions shall disclose the information outlined below with the following frequency: (a) all the information required under this Part on an annual basis; (b) on a semi-annual basis the information referred to in: (i) point (a) of Article 437; (ii) point (e) of Article 438; (iii) points (e) to (l) of Article 439; (iv) Article 440; (v) points (c), (e), (f) and (g) of Article 442; (vi) point (e) of Article 444; (vii) Article 445; (viii) point (a) and (b) of Article 448(1); (ix) point (j) to (l) of Article 449; (x) points (a) and (c) of Article 451(1); (xi) Article 451a(3); (xii) point (g) of Article 452; (xiii) points (f) to (j) of Article 453; (xiv) points (d), (e) and (g) of Article 455; (c) on a quarterly basis the information referred to in: (i) points (d) and (h) of Article 438; (ii) the key metrics referred to in Article 447; (iii) Article 451a(2).	HSBC Holdings plc complies with the frequency requirements set out in this article.
433a (2)	By way of derogation from paragraph 1, large institutions other than G-SIIs that are non-listed institutions shall disclose the information outlined below with the following frequency: (a) all the information required under this Part on an annual basis; (b) the key metrics referred to in Article 447 on a semi-annual basis.	This disclosure is not applicable as HSBC Holdings plc is a Global Systemically Important Institution ('G-SII').
433a (3)	Large institutions that are subject to Article 92a, or are material subsidiaries of non-UK G-SIIs and are not resolution entities or subsidiaries of a UK parent institution, shall disclose the information required under Article 437a on a semi-annual basis, except for the key metrics referred to in point (h) of Article 447, which are to be disclosed on a quarterly basis.	HSBC Holdings plc complies with this disclosure requirement under Article 437a.
433a (4)	Large institutions that are LREQ firms shall disclose the information required under paragraphs (1)(a), (b) and (g), (2) and (3) of Article 451 on a quarterly basis.	HSBC Holdings plc complies with this requirement and completes additional leverage disclosures on a quarterly basis.
Disclosures	by small and non-complex institutions	
433b (1)	SDDTs and SDDT consolidation entities shall disclose the information outlined below with the following frequency: (a) on an annual basis the information referred to in: (i) point (d) of Article 438; (ii) points (a) to (d), (h), and (i) of Article 450(1); (b) on a semi-annual basis the key metrics referred to in Article 447.	This disclosure is not applicable to HSBC Holdings plc.
433b (2)	By way of derogation from paragraph 1 of this Article, SDDTs that are non-listed institutions shall disclose the key metrics referred to in Article 447 on an annual basis.	This disclosure is not applicable to HSBC Holdings plc.
Disclosures	by other institutions	
433c (1)	Institutions that are not subject to Article 433a or 433b shall disclose the information outlined below with the following frequency: (a) all the information required under this Part on an annual basis; (b) the key metrics referred to in Article 447 on a semi-annual basis; (c) for such institutions that are LREQ firms, the information required under paragraphs (1)(a), (b) and (g), (2) and (3) of Article 451 on a quarterly basis.	This disclosure is not applicable to HSBC Holdings plc.

Article	Regulatory Requirements	Compliance reference
433c (2)	By way of derogation from paragraph 1 of this Article, other institutions that are non-listed institutions shall disclose the following information on an annual basis: (a) points (a), (e) and (f) of Article 435(1); (b) points (a), (b) and (c) of Article 435(2); (c) point (a) of Article 437; (d) points (c) and (d) of Article 438; (e) the key metrics referred to in Article 447; (f) points (a) to (d), (h) to (k) of Article 450(1).	This disclosure is not applicable to HSBC Holdings plc.
Means of di	sclosures	
434 (1)	Institutions shall disclose all the information required under Titles II and III in electronic format and in a single medium or location. The single medium or location shall be a standalone document that provides a readily accessible source of prudential information for users of that information or a distinctive section included in or appended to the institutions' financial statements or financial reports containing the required disclosures and being easily identifiable to those users.	HSBC Holdings plc prepares Pillar 3 disclosures with clear references to the Annual Report and Accounts where distinctive sections provide regulatory disclosures.
434 (2)	Institutions shall make available on their website or, in the absence of a website, in any other appropriate location an archive of the information required to be disclosed in accordance with this Part. That archive shall be kept accessible for a period of time that shall be no less than the storage period set by national law for information included in the institutions' financial reports.	Pillar 3 disclosures are published on the HSBC Investor Relations website, www.hsbc.com/investors
Timing and	means of disclosures under Article 441	
434b (1)	By way of derogation from the second paragraph of Article 433, G-SIIs shall disclose the information required under Article 441 within four months after the end of the period to which the information relates.	
434b (2)	By way of derogation from Article 434(1), where a G-SII relies on the derogation in paragraph 1, it may disclose the information required under Article 441 in a separate medium or location from the standalone document mentioned in Article 434(1).	In compliance with Article 441, HSBC Holdings plc separately publishes G-SIB Indicators annually on the HSBC website, www.hsbc.com/investors
434b (3)	If, in accordance with paragraphs 1 and 2, a G-SII does not disclose the information required under Article 441 at the same time as, and in the same medium or location as, the other information required to be disclosed under Titles II and III, it shall include in the standalone document mentioned in Article 434(1) a statement specifying when and in what medium or location the information required under Article 441 will be disclosed.	These disclosures are made within 4 months after the end of the period as required in Article 434b (1).
Risk manag	ement objectives and policies	
435.1	Institutions shall disclose their risk management objectives and policies for each separate category of risk, including the risks referred to in this Title. These disclosures shall include:	HSBC Holdings plc complies with this requirement as set out below, within the Pillar 3 and the HSBC Annual Report and Accounts.
435 (1) (a)	the strategies and processes to manage those categories of risk;	Refer to the 'Risk management' section on page 127, 'Group Risk and Compliance function' section on page 129 and 'Our material banking risks' section on page 136 of the Annual Report and Accounts 2024, and 'Risk appetite' section on page 13 and 'Non-financial risk' section on page 104 of Pillar 3 2024.
435 (1) (b)	the structure and organisation of the relevant risk management function including information on the basis of its authority, its powers and accountability in accordance with the institution's incorporation and governing documents	Refer to the 'Risk governance' section on page 13 of Pillar 3 2024 and page 128 of the Annual Report and Accounts 2024.
435 (1) (c)	the scope and nature of risk reporting and measurement systems	Refer to the 'Risk management' section on page 127, 'Group Risk and Compliance function' section on page 129 and 'Our material banking risks' section on page 136 of the Annual Report and Accounts 2024, and 'Risk appetite' section on page 13 and 'Non-financial risk' section on page 104 of Pillar 3 2024.
435 (1) (d)	the policies for hedging and mitigating risk, and the strategies and processes for monitoring the continuing effectiveness of hedges and mitigants	Refer to the 'Top and Emerging risks' section on page 131 and 'Our material banking risks' section on page 136 of the Annual Report and Accounts 2024.
435 (1) (e)	a declaration approved by the management body on the adequacy of risk management arrangements of the institution providing assurance that the risk management systems put in place are adequate with regard to the institution's profile and strategy	129 of the Annual Report and Accounts 2024 and 'Global Risk and Compliance function' section on page 13 of Pillar 3 2024.
435 (1) (f)	a concise risk statement approved by the management body succinctly describing the relevant institution's overall risk profile associated with the business strategy; that statement shall include: (i) key ratios and figures providing external stakeholders with a comprehensive view of the institution's management of risk, including how the risk profile of the institution interacts with the risk tolerance set by the management body; (ii) information on intragroup transactions and transactions with related parties that may have a material impact of the risk profile of the consolidated group.	Refer to the 'Risk appetite' section on page 13 of Pillar 3 2024 and 'Risk management' section on page 127 of the Annual Report and Accounts 2024.

Article	Regulatory Requirements	Compliance reference
435 (2)	Institutions shall disclose the following information regarding governance arrangements:	HSBC Holdings plc complies with the requirement as set out below.
435 (2) (a)	the number of directorships held by members of the management body	Corporate governance report in the HSBC Annual Report and Accounts 2024 on page 236.
435 (2) (b)	the recruitment policy for the selection of members of the management body and their actual knowledge, skills and expertise	Corporate governance report in the HSBC Annual Report and Accounts 2024 on page 236.
435 (2) (c)	the policy on diversity with regard to selection of members of the management body, its objectives and any relevant targets set out in that policy, and the extent to which those objectives and targets have been achieved	HSBC diversity policy is disclosed separately on the HSBC investor relations website, www.hsbc.com/investors
435 (2) (d)	whether or not the institution has set up a separate risk committee and the number of times the risk committee has met	Refer to the Group Risk Committee in the HSBC Annual Report and Accounts 2024 on page 271.
435 (2) (e)	the description of the information flow on risk to the management body.	Refer to the Group Risk Committee in the HSBC Annual Report and Accounts 2024 on page 271.
Scope of app	lication	
436	Institutions shall disclose the following information regarding the scope of application of the CRR II as follows:	HSBC Holdings plc complies with the requirement as set out below.
436 (a)	the name of the institution to which the CRR II applies	Refer to the 'Introduction' section on page 3.
436 (b)	a reconciliation between the consolidated financial statements prepared in accordance with the applicable accounting framework and the consolidated financial statements prepared in accordance with the requirements on regulatory consolidation pursuant to Sections 2 and 3 of Title II of Part One; that reconciliation shall outline the differences between the accounting and regulatory scopes of consolidation and the legal entities included within the regulatory scope of consolidation where	Table 3: Principal entities with a different regulatory and accounting
	it differs from the accounting scope of consolidation; the outline of the legal entities included within the regulatory scope of consolidation shall describe the method of regulatory consolidation where it is different from the accounting consolidation method, whether those entities are fully or proportionally consolidated and whether the holdings in those legal entities are deducted from own funds	
436 (c)	a breakdown of assets and liabilities of the consolidated financial statements prepared in accordance with the requirements on regulatory consolidation pursuant to Sections 2 and 3 of Title II of Part One, broken down by type of risks as referred to under this Part	Table 4: Differences between accounting and regulatory scopes of consolidation and mapping of financial statement categories with regulatory risk categories (LI1) on page 12.
436 (d)	a reconciliation identifying the main sources of differences between the carrying value amounts in the financial statements under the regulatory scope of consolidation as defined in Sections 2 and 3 of Title II of Part One, and the exposure amount used for regulatory purposes; that reconciliation shall be supplemented by qualitative information on those main sources of differences	Table 5: Main sources of differences between regulatory exposure amounts and carrying values in financial statements (LI2) on page 12. Refer to the 'Explanations of differences between accounting and regulatory exposure amounts' section on page 12.
436 (e)	for exposures from the trading book and the non-trading book that are adjusted in accordance with Article 34 and Article 105, a breakdown of the amounts of the constituent elements of an institution's prudent valuation adjustment, by type of risks, and the total of constituent elements separately for the trading book and non-trading book positions	Table 68: Prudential valuation adjustments (PV1) on page 103.
436 (f)	any current or expected material practical or legal impediment to the	Refer to the 'Capital risk' section on page 16.
	prompt transfer of own funds or repayment of liabilities between the parent undertaking and its subsidiaries	Refer to the 'Minimum requirement for own funds and eligible liabilities' section on page 32.
436 (g)	the aggregate amount by which the actual own funds are less than required in all subsidiaries that are not included in the consolidation, and the name or names of those subsidiaries	Refer to the 'Capital risk' section on page 16.
436 (h)	where applicable, the circumstances under which use is made of the derogation referred to in Article 7 or the individual consolidation method laid down in Article 9	Refer to the 'Minimum requirement for own funds and eligible liabilities' section on page 32.
Own funds		
437	Institutions shall disclose the following information regarding their own funds:	HSBC complies with the requirement as set out below.
437 (a)	full reconciliation of Common Equity Tier 1 items, Additional Tier 1 items, Tier 2 items and filters and deductions applied to own funds of the institution pursuant to Articles 32 to 36, 56, 66 and 79 with the balance sheet in the audited financial statements of the institution	Table 2: Reconciliation of regulatory own funds to balance sheet in the audited financial statements (UK CC2) on page 9. Table 6: Composition of Regulatory own funds (UK CC1) on page 17.
437 (b)	a description of the main features of the Common Equity Tier 1 and Additional Tier 1 instruments and Tier 2 instruments issued by the institution	A summary of terms and conditions of own funds in accordance with Annex VIII is available separately on HSBC's investor relations website,
437 (c)	the full terms and conditions of all Common Equity Tier 1, Additional Tier 1 and Tier 2 instruments	www.hsbc.com/investors
437 (d)	a separate disclosure of the nature and amounts of the following: (i) each prudential filter applied pursuant to Articles 32 to 35; (ii) items deducted pursuant to Articles 36, 56 and 66; (iii) items not deducted pursuant to Articles 47, 48, 56, 66 and 79	Table 6: Composition of Regulatory own funds (UK CC1) on page 17.

Article	Regulatory Requirements	Compliance reference
437 (e)	a description of all restrictions applied to the calculation of own funds in accordance with the Capital Regulation Requirements and the instruments, prudential filters and deductions to which those restrictions apply.	Table 6: Composition of Regulatory own funds (UK CC1) on page 17.
437 (f)	a comprehensive explanation of the basis on which capital ratios are calculated where those capital ratios are calculated by using elements of own funds determined on a basis other than the basis laid down in the CRR II.	HSBC Holdings plc complies with the own fund calculations set out in the CRR II rules.
Disclosure	of own funds and eligible liabilities	
437a	Institutions that are subject to Article 92a or are material subsidiaries of non-UK G-SIIs and are not resolution entities or subsidiaries of a UK parent institution shall disclose the following information regarding their own funds and eligible liabilities:	HSBC Holdings plc complies with the requirement as set out below.
437a (a)	The composition of their own funds and eligible liabilities, their maturity and their own features	A summary of terms and conditions of own funds in accordance with Annex VIII is available separately on HSBC's investor relations website, www.hsbc.com/investors
		Table 21: TLAC composition (TLAC1) on page 36.
437a (b)	The ranking of eligible liabilities in the creditor hierarchy	Refer to TLAC3 tables for all three resolution groups on page 37.
437a (c)	The amount of each issuance of eligible liabilities instruments referred to in Article 72b and the amount of those issuances that is included in eligible liabilities items within the limits specified in Article 72b(3) and (4)	A summary of terms and conditions of own funds in accordance with Annex VIII is available separately on HSBC's investor relations website, www.hsbc.com/investors
		Refer to TLAC3 tables for all three resolution groups on page 37.
437a (d)	Total amount of excluded liabilities referred to in Article 72a(2)	Refer to TLAC3 tables for all three resolution groups on page 37.
	requirement and risk-weighted exposure amounts	
438	Institutions shall disclose the following information regarding their compliance with Article 92 and rules 3.1(1)(a) and 3.4 of the Internal Capital Adequacy Assessment Part of the PRA Rulebook:	HSBC Holdings plc complies with the requirement as set out below.
438 (a)	a summary of their approach to assessing the adequacy of their internal capital to support current and future activities	Refer to the 'Internal capital adequacy assessment' section on page 31
438 (b)	the amount of the additional own funds requirements based on the supervisory review and evaluation process (within the meaning of regulation 34A of the Capital Requirements Regulations) and its composition in terms of Common Equity Tier 1, Additional Tier 1 and Tier 2 instruments	Table 1: Key metrics (KM1/IFRS9-FL) on page 6.
438 (c)	the result of the institution's internal capital adequacy assessment process	Refer to the 'Internal capital adequacy assessment section' on page 31
438 (d)	the total risk-weighted exposure amount and the corresponding total own funds requirement determined in accordance with Article 92, to be broken down by the different risk categories set out in Part Three and, where applicable, an explanation of the effect on the calculation of own funds and risk-weighted exposure amounts that results from applying capital floors and not deducting items from own funds.	Table 7: Overview of risk-weighted exposure amounts (OV1) on page 20.
438 (e)	the on- and off-balance-sheet exposures, the risk-weighted exposure amounts and associated expected losses for each category of specialised lending referred to in Table 1 of Article 153(5) and the on- and off-balance-sheet exposures and risk-weighted exposure amounts for the categories of equity exposures set out in Article 155(2).	Table 41: Specialised lending and equity exposures under the simple risk-weight approach (CR10) on page 54.
438 (f)	the exposure value and the risk-weighted exposure amount of own funds instruments held in any insurance undertaking, reinsurance undertaking or insurance holding company that the institutions do not deduct from their own funds in accordance with Article 49 when calculating their capital requirements on an individual, sub-consolidated and consolidated basis	This disclosure is not applicable to HSBC Holdings plc.
438 (g)	the supplementary own funds requirement and the capital adequacy ratio of the financial conglomerate calculated in accordance with the provisions implementing Article 6 of Directive 2002/87/EC and Annex I to that Directive where method 1 or 2 set out in that Annex is applied	This disclosure is not applicable to HSBC Holdings plc.
438 (h)	the variations in the risk-weighted exposure amounts of the current disclosure period compared to the immediately preceding disclosure period that result from the use of internal models, including an outline of	Table 8: RWA flow statements of credit risk exposures under the IRB approach (CR8) on page 21. Table 9: RWA flow statements of CCR exposures under IMM (CCR7) on page 21.
	the key drivers explaining those variations	Table 10: RWA flow statements of market risk exposures under IMA (MR2-B) on page 22.
Exposures	to counterparty credit risk (CCR)	
439	Institutions shall disclose the following information regarding their exposure to counterparty credit risk as referred to in Chapter 6 of Title II of Part Three:	HSBC Holdings plc complies with the requirement as set out below.
439 (a)	a description of the methodology used to assign internal capital and credit limits for counterparty credit exposures, including the methods to assign those limits to exposures to central counterparties	Refer to the 'Counterparty credit risk management' section on page 87

Article	Regulatory Requirements	Compliance reference
439 (b)	a description of policies related to guarantees and other credit risk mitigants, such as the policies for securing collateral and establishing credit reserves	Refer to the 'Collateral arrangements' section on page 88.
439 (c)	a description of policies with respect to General Wrong-Way risk and Specific Wrong-Way risk as defined in Article 291	Refer to the 'Wrong way risk' section on page 90.
439 (d)	the amount of collateral the institution would have to provide if its credit rating were downgraded	Refer to the 'Credit Rating Downgrades' section on page 90.
439 (e)	for derivative transactions, the amount of segregated and unsegregated collateral received and posted per type of collateral; and for securities financing transactions, the total amount of collateral received and posted per type of collateral; provided in each case that: (i) institutions shall not disclose such amounts unless both the fair value of collateral posted in the form of debt securities and the fair value of collateral received in that form exceed GBP 125 billion; and (ii) for the purposes of subparagraph (i), institutions shall use the twelve month rolling arithmetic mean of the fair value of collateral received or posted (as the case may be) in the form of debt securities, determined using quarterly data calculated in a manner consistent with data reported under Article 430(g) (reporting the level of asset encumbrance) and covering the twelve months immediately preceding the disclosure reference date	Table 55: Composition of collateral for CCR exposure (CCR5) on page 89.
439 (f)	for derivative transactions, the exposure values before and after the effect of the credit risk mitigation as determined under the methods set out in Sections 3 to 6 of Chapter 6 of Title II of Part Three, whichever method is applicable, and the associated risk exposure amounts broken down by applicable method;	Table 52: Analysis of counterparty credit risk exposure by approach (excluding centrally cleared exposures) (CCR1) on page 87.
439 (g)	for securities financing transactions, the exposure values before and after the effect of the credit risk mitigation as determined under the methods set out in Chapters 4 and 6 of Title II of Part Three, whichever method is used, and the associated risk exposure amounts broken down by applicable method	Table 52: Analysis of counterparty credit risk exposure by approach (excluding centrally cleared exposures) (CCR1) on page 87.
439 (h)	the exposure values after credit risk mitigation effects and the associated risk exposures for credit valuation adjustment capital charge, separately for each method as set out in Title VI of Part Three	Table 53: Credit valuation adjustment capital charge (CCR2) on page 88.
439 (i)	the exposure value to central counterparties and the associated risk exposures within the scope of Section 9 of Chapter 6 of Title II of Part Three, separately for qualifying and non-qualifying central counterparties, and broken down by types of exposures	Table 57: Exposures to central counterparties (CCR8) on page 90.
439 (j)	the notional amounts and fair value of credit derivative transactions; credit derivative transactions shall be broken down by product type; within each product type, credit derivative transactions shall be broken down further by credit protection bought and credit protection sold	Table 56: Credit derivatives exposures (CCR6) on page 89.
439 (k)	the estimate of alpha where the institution has received the permission of the competent authorities to use its own estimate of alpha in accordance with Article 284(9)	Table 52: Analysis of counterparty credit risk exposure by approach (excluding centrally cleared exposures) (CCR1) on page 87.
439 (I)	separately, the disclosures included in point (e) of Article 444 and point (g) of Article 452	Table 54: Standardised approach – CCR exposures by regulatory exposure class and risk weights (CCR3) on page 88. Table 58: IRB – CCR exposures by portfolio and PD scale (CCR4) on page 91.
439 (m)	for institutions using the methods set out in Sections 4 to 5 of Chapter 6 of Title II Part Three, the size of their on- and off-balance-sheet derivative business as calculated in accordance with Article 273a(1) or (2), as applicable	This disclosure is not applicable to HSBC Holdings plc, as we do not use simplified SA-CCR and Original Exposure Method.
Countercycl	lical capital buffers	
440	Institutions shall disclose the following information in relation to their compliance with the requirement for a countercyclical capital buffer referred to in regulation 2 of the Capital Requirements (Capital Buffers and Macro-prudential Measures) Regulations 2014:	HSBC Holdings plc complies with the requirement as set out below.
440 (a)	the geographical distribution of the exposure amounts and risk-weighted exposure amounts of its credit exposures used as a basis for the calculation of their countercyclical capital buffer	Table 70: Geographical distribution of credit exposures relevant for the calculation of the countercyclical buffer (UK CCyB1) on page 106.
440 (b)	the amount of their institution-specific countercyclical capital buffer	Table 71: Amount of institution-specific countercyclical capital buffer (UK CCyB2) on page 107.
	f global systemic importance	
441	G-SIIs shall disclose, on an annual basis, the values of the indicators used for determining their score in accordance with the identification methodology referred to in regulation 23 of Part 4 of Capital Requirements (Capital Buffers and Macro-prudential Measures) Regulations 2014	G-SIB Indicators are disclosed separately on the HSBC website, www.hsbc.com/investors G-SIB capital buffers are calculated by the Financial Stability Board ('FSB') and provided to institutions at a later date.

Article	Regulatory Requirements	Compliance reference
Credit risk	adjustments	
442	Institutions shall disclose the following information regarding their exposure to credit risk and dilution risk:	HSBC Holdings plc complies with the requirement as set out below.
442 (a)	the scope and definitions that they use for accounting purposes of 'past due' and 'impaired' and the differences, if any, between the definitions of 'past due' and 'default' for accounting and regulatory purposes	Refer to 'Non-performing and forborne exposures' section on page 43.
442 (b)	a description of the approaches and methods adopted for determining specific and general credit risk adjustments	Refer to 'Non-performing and forborne exposures' section on page 43.
		Table 32: Credit quality of forborne exposures (CQ1) on page 44.
	information on the amount and quality of performing, non-performing and forborne exposures for loans, debt securities and off-balance-sheet	Table 34: Collateral obtained by taking possession and execution processes (CQ7) on page 46.
442 (c)	exposures, including their related accumulated impairment, provisions and negative fair value changes due to credit risk and amounts of collateral and financial guarantees received	Table 35: Quality of non-performing exposures by geography (CQ4) on page 46.
	conateral and initialicial guarantees received	Table 36: Credit quality of loans and advances to non-financial corporations by industry (CQ5) on page 47.
442 (d)	an ageing analysis of accounting past due exposures	Table 33: Credit quality of performing and non-performing exposures by past due days (CQ3) on page 45.
	the gross carrying amounts of both defaulted and non-defaulted	Table 29: Performing and non-performing exposures and related provisions (CR1) on page 41.
	exposures, the accumulated specific and general credit risk adjustments,	Table 32: Credit quality of forborne exposures (CQ1) on page 44.
442 (e)	the accumulated write-offs taken against those exposures and the net carrying amounts and their distribution by geographical area and industry	Table 35: Quality of non-performing exposures by geography (CQ4) on page 46.
	type and for loans, debt securities and off-balance-sheet exposures	Table 36: Credit quality of loans and advances to non-financial corporations by industry (CQ5) on page 47.
442 (f)	any changes in the gross amount of defaulted on- and off-balance-sheet exposures, including, as a minimum, information on the opening and closing balances of those exposures, the gross amount of any of those exposures reverted to non-defaulted status or subject to a write-off	Table 31: Changes in the stock of non-performing loans and advances (CR2) on page 43.
442 (g)	the breakdown of loans and debt securities by residual maturity	Table 30: Maturity of exposures (CR1-A) on page 43.
Encumbere	ed and unencumbered assets	
443	Institutions shall disclose information concerning their encumbered and unencumbered assets. For those purposes, institutions shall use the carrying amount per exposure class broken down by asset quality and the total amount of the carrying amount that is encumbered and unencumbered. Disclosure of information on encumbered and unencumbered assets shall not reveal emergency liquidity assistance provided by central banks.	Refer to 'Asset encumbrance' section on page 30. Refer to 'Importance of encumbrance' section on page 31. Table 17: Encumbered and unencumbered assets (UK AE1) on page30. Table 18: Collateral received and own debt securities issued (UK AE2) on page 31. Table 19: Sources of encumbrance (UK AE3) on page 31.
Use of the	standardised approach	
444	Institutions calculating their risk-weighted exposure amounts in accordance with Chapter 2 of Title II of Part Three shall disclose the following information for each of the exposure classes set out in Article 112:	HSBC Holdings plc complies with the requirement as set out below.
444 (a)	the names of the nominated ECAIs and export credit agencies and the reasons for any changes in those nominations over the disclosure period;	Refer to 'Qualitative disclosures on bank's use of external credit ratings under the standardised approach for credit risk' section on page 57.
444 (b)	the exposure classes for which each ECAI or export credit agency is used;	Refer to 'Qualitative disclosures on bank's use of external credit ratings under the standardised approach for credit risk' section on page 57.
444 (c)	a description of the process used to transfer the issuer and issue credit ratings onto items not included in the trading book;	Refer to 'Qualitative disclosures on bank's use of external credit ratings under the standardised approach for credit risk' section on page 57.
444 (d)	the association of the external rating of each nominated ECAI or export credit agency with the risk weights that correspond to the credit quality steps as set out in Chapter 2 of Title II of Part Three taking into account that it is not necessary to disclose that information where the institutions comply with the standard association published by the competent authority;	Table 43: CQS reference table on page 57.
444 (e)	the exposure values and the exposure values after credit risk mitigation associated with each credit quality step as set out in Chapter 2 of Title II of Part Three by exposure class, as well as those deducted from own	Table 39: Standardised approach – credit conversion factor ('CCF') and credit risk mitigation ('CRM') effects (CR4) on page 50.
	funds.	Table 44: Standardised approach – exposures by asset classes and risk weights (CR5) on page 58.
	o market risk	TH 64 M 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
445	Institutions calculating their own funds requirements in accordance with points (b) and (c) of Article 92(3) shall disclose those requirements separately for each risk referred to in those provisions. In addition, own funds requirements for the specific interest rate risk of securitisation positions shall be disclosed separately.	Table 64: Market risk under standardised approach (MR1) on page 99.
Operationa	al risk management	
446	Institutions shall disclose the following information about their operational risk management:	HSBC Holdings plc complies with the requirement as set out below.

Article	Regulatory Requirements	Compliance reference
446 (a)	the approaches for the assessment of own funds requirements for operational risk that the institution qualifies for;	Table 69: Operational risk own funds requirements and risk-weighted exposure amounts (OR1) on page 104.
		The approach is also explained under 'Pillar 1 minimum capital requirements and RWA flow' on page 19.
446 (b)	where the institution makes use of it, a description of the methodology set out in Article 312(2), which shall include a discussion of relevant internal and external factors being considered in the institution's advanced measurement approach;	This disclosure is not applicable as HSBC Holdings plc applies the standardised approach.
446 (c)	in the case of partial use, the scope and coverage of the different methodologies used.	
Disclosure	of key metrics	
147	Institutions shall disclose the following key metrics in a tabular format:	HSBC Holdings plc complies with the requirement as set out below.
447 (a)	the composition of their own funds and their own funds requirements as calculated in accordance with Article 92;	
147 (b)	the total risk exposure amount as calculated in accordance with Article 92(3);	_
447 (c)	where applicable, the amount and composition of additional own funds which the institutions are required to hold in accordance with regulation 34(1) of the Capital Requirements Regulations;	_
447 (d)	their combined buffer requirement which the institutions are required to hold in accordance with regulation 35 of the Capital Requirements (Capital Buffers and Macro-prudential Measures) Regulations 2014;	Table 1: Key metrics (KM1/IFRS9-FL) on page 6.
447 (e)	the following information in relation to their leverage ratio: (i) for all institutions, their leverage ratio and total exposure measure; (ii) for LREQ firms, the information in Article 451(1)(b) (LR including central bank claims) and (g) (LR excluding IFRS9 transitional effects on capital) and Article 451(2)(b) to (d) (average LR, average LR including central bank claims, the countercyclical LR buffer);	
447 (f)	the following information in relation to their liquidity coverage ratio as calculated in accordance with Chapter 2 of the Liquidity Coverage Ratio (CRR II) Part of the PRA Rulebook: (i) the average or averages, as applicable, of their liquidity coverage ratio based on end-of-the-month observations over the preceding 12 months for each quarter of the relevant disclosure period; (ii) the average or averages, as applicable, of their total liquid assets, after applying the relevant haircuts, included in the liquidity buffer pursuant to the Chapter 2 of the Liquidity Coverage Ratio (CRR II) Part of the PRA Rulebook, based on end-of-the-month observations over the preceding 12 months for each quarter of the relevant disclosure period; (iii) the averages of their liquidity outflows, inflows and net liquidity outflows as calculated pursuant to Chapter 2 of the Liquidity Coverage Ratio (CRR II) Part of the PRA Rulebook, based on end-of-the-month observations over the preceding 12 months for each quarter of the relevant disclosure period;	Table 1: Key metrics (KM1/IFRS9-FL) on page 6.
447 (g)	the following information in relation to their net stable funding requirement as calculated in accordance with Title IV of Part Six: (i) the average or averages, as applicable, of their net stable funding ratio based on end-of-the-quarter observations over the preceding four quarters, for each quarter of the relevant disclosure period; (ii) the average or averages, as applicable, of their available stable funding based on end-of-the-quarter observations over the preceding four quarters, for each quarter of the relevant disclosure period; (iii) the average or averages, as applicable, of their required stable funding based on end-of-the-quarter observations over the preceding four quarters, for each quarter of the relevant disclosure period;	Table 1: Key metrics (KM1/IFRS9-FL) on page 6.
447 (h)	their own funds and eligible liabilities ratios and their components, numerator and denominator, as calculated in accordance with Articles 92a or, in the case of institutions that are material subsidiaries of non-UK G-SIIs and are not resolution entities or subsidiaries of a UK parent institution, in accordance with a direction from the Bank of England under section 3A(4B) of the Banking Act 2009, and broken down at the level of each resolution group, where applicable.	Refer to 'Key metrics of the resolution groups' section on page 34.
	to interest rate risk on positions not included in the trading book	
448 (1)	Institutions shall disclose the following quantitative and qualitative information on the risks arising from potential changes in interest rates that affect both the economic value of equity and the net interest income of their non-trading book activities referred to in in Chapter 9 of the Internal Capital Adequacy Assessment ('ICAA') Part of the PRA Rulebook:	HSBC Holdings plc complies with the requirement as set out below.

Article	Regulatory Requirements	Compliance reference
448 (1) (a)	the changes in the economic value of equity calculated under the following six supervisory shock scenarios referred to in Rule 9.7 of the ICAA Part of the PRA Rulebook for the current and previous disclosure periods: (i) parallel shock up; (ii) parallel shock down; (iii) steepener shock (short rates down and long rates up); (iv) flattener shock (short rates up and long rates down); (v) short rates shock up; (vi) short rates shock down	Table 16: Quantitative information on IRRBB (UK IRRBB1) on page 30.
448 (1) (b)	the changes in the net interest income calculated under the following two supervisory shock scenarios referred to in Rule 9.7 of the ICAA Part of the PRA Rulebook for the current and previous disclosure periods: (i) parallel shock up; (ii) parallel shock down;	_
448 (1) (c)	a description of key modelling and parametric assumptions used to calculate changes in the economic value of equity and in the net interest income required under points (a) and (b) of this paragraph;	
448 (1) (d)	an explanation of the significance of the risk measures disclosed under points (a) and (b) of this paragraph and of any significant variations of those risk measures since the previous disclosure reference date;	-
448 (1) (e)	the description of how institutions define, measure, mitigate and control the interest rate risk of their non-trading book activities for the purposes of the competent authorities' review in accordance with Chapter 9 of the ICAA Part of the PRA Rulebook, including: (i) a description of the specific risk measures that the institutions use to evaluate changes in their economic value of equity and in their net interest income; (ii) a description of the key modelling and parametric assumptions used in the institutions' internal measurement systems for the purpose of calculating changes in the economic value of equity and in net interest income, as required under points (a) and (b) of this paragraph, if those assumptions differ from those used for the purposes of Chapter 9 of the ICAA Part of the PRA Rulebook or from those specified in Annex XXXVIII of Chapter 6 of this Disclosure (CRR II) Part of the PRA Rulebook, including the rationale for those differences; (iii) a description of the interest rate shock scenarios that institutions use to estimate the interest rate risk; (iv) the recognition of the effect of hedges against those interest rate risks, including internal hedges that meet the requirements laid down in Article 106(3); (v) an outline of how often the evaluation of the interest rate risk occurs;	Refer to the 'Interest rate risk in the banking book' section on page 28.
448 (1) (f) 448 (1) (g)	the description of the overall risk management and mitigation strategies for those risks; average and longest repricing maturity assigned to non-maturing	Refer to the 'Interest rate risk in the banking book' section on page 28.
440 (17 (g)	deposits.	There to the interest rate risk in the burning book section on page 20.
448 (2)	By way of derogation from paragraph 1 of this Article, the requirements set out in points (c) and (e)(i) to (e)(iv) of paragraph 1 of this Article for descriptions relating to economic value of equity shall not apply to institutions that use the standardised framework referred to in Rule 9.1B of the ICAA Part of the PRA Rulebook.	This paragraph is not applicable to HSBC Holdings plc.
Exposure to	securitisation positions	
449	Institutions calculating risk-weighted exposure amounts in accordance with Chapter 5 of Title II of Part Three or own funds requirements in accordance with Article 337 or 338 shall disclose the following information separately for their trading and non-trading book activities:	HSBC Holdings plc complies with the requirement as set out below.
449 (a)	a description of their securitisation and re-securitisation activities, including their risk management and investment objectives in connection with those activities, their role in securitisation and re-securitisation transactions, whether they use the simple, transparent and standardised securitisation (STS) as defined in point (10) of Article 242, and the extent to which they use securitisation transactions to transfer the credit risk of the securitised exposures to third parties with, where applicable, a separate description of their synthetic securitisation risk transfer policy;	Refer to the 'Securitisation strategy' and 'Securitisation activity' sections on page 93.
449 (b)	the type of risks they are exposed to in their securitisation and re- securitisation activities by level of seniority of the relevant securitisation positions providing a distinction between STS and non-STS positions and: (i) the risk retained in own-originated transactions; (ii) the risk incurred in relation to transactions originated by third parties;	Refer to the 'Securitisation strategy' and 'Securitisation activity' sections on page 93.
449 (c)	their approaches for calculating the risk-weighted exposure amounts that they apply to their securitisation activities, including the types of securitisation positions to which each approach applies and with a distinction between STS and non-STS positions;	Refer to the 'Securitisation regulatory treatment' section on page 94 and our securitisation approaches section on page 19.

Article	Regulatory Requirements	Compliance reference
449 (d)	a list of SSPEs falling into any of the following categories, with a description of their types of exposures to those SSPEs, including derivative contracts: (i) SSPEs which acquire exposures originated by the institutions; (ii) SSPEs sponsored by the institutions; (iii) SSPEs and other legal entities for which the institutions provide securitisation-related services, such as advisory, asset servicing or management services; (iv) SSPEs included in the institutions' regulatory scope of consolidation;	Refer to the 'Securitisation strategy' section on page 93.
449 (e)	a list of any legal entities in relation to which the institutions have disclosed that they have provided support in accordance with Chapter 5 of Title II of Part Three;	HSBC Holdings plc does not provide support to its originated or sponsored securitisation transactions as a policy.
449 (f)	a list of legal entities affiliated with the institutions and that invest in securitisations originated by the institutions or in securitisation positions issued by SSPEs sponsored by the institutions;	This disclosure is not applicable to HSBC Holdings plc.
449 (g)	a summary of their accounting policies for securitisation activity, including where relevant a distinction between securitisation and resecuritisation positions;	Refer to the 'securitisation accounting treatment' section on page 94.
449 (h)	the names of the ECAIs used for securitisations and the types of exposure for which each agency is used;	Refer to the 'Qualitative disclosures on bank's use of external credit ratings under the standardised approach for credit risk' section on page 57.
449 (i)	where applicable, a description of the Internal Assessment Approach as set out in Chapter 5 of Title II of Part Three, including the structure of the internal assessment process and relation between internal assessment and external ratings of the relevant ECAI disclosed in accordance with point (h), the control mechanisms for the internal assessment process including discussion of independence, accountability, and internal assessment process review, the exposure types to which the internal assessment process is applied and the stress factors used for determining credit enhancement levels;	Refer to the 'Securitisation regulatory treatment' section on page 94.
449 (j)	separately for the trading book and the non-trading book, the carrying amount of securitisation exposures, including information on whether institutions have transferred significant credit risk in accordance with Articles 244 and 245, for which institutions act as originator, sponsor or investor, separately for traditional and synthetic securitisations, and for STS and non-STS transactions and broken down by type of securitisation exposures;	Table 59: Securitisation exposures in the non-trading book (SEC1) on page 95. Table 60: Securitisation exposures in the trading book (SEC2) on page 95.
449 (k)(i)	for the trading and the non-trading book activities, the following information: (i) the aggregate amount of securitisation positions where institutions act as originator or sponsor and the associated risk-weighted assets and capital requirements by regulatory approaches, including exposures deducted from own funds or risk weighted at 1250%, broken down between traditional and synthetic securitisations and between securitisation and re-securitisation exposures, separately for STS and non-STS positions, and further broken down into a meaningful number of risk-weight or capital requirement bands and by approach used to calculate the capital requirements;	Table 61: Securitisation exposures in the non-trading book and associated regulatory capital requirements – bank acting as originator or as sponsor (SEC3) on page 96.
449 (k)(ii)	the aggregate amount of securitisation positions where institutions act as investor and the associated risk-weighted assets and capital requirements by regulatory approaches, including exposures deducted from own funds or risk weighted at 1250%, broken down between traditional and synthetic securitisations, securitisation and resecuritisation positions, and STS and non-STS positions, and further broken down into a meaningful number of risk weight or capital requirement bands and by approach used to calculate the capital requirements;	Table 62.i: Securitisation exposures in the non-trading book and associated capital requirements – bank acting as investor (SEC4) on page 97.
449 (I)	for exposures securitised by the institution, the amount of exposures in default and the amount of the specific credit risk adjustments made by the institution during the current period, both broken down by exposure type.	Table 63: Exposures securitised by the institution – Institution acts as originator or as sponsor (SEC5) on page 98.
Remunerati	on disclosures	
450 (1)	Institutions shall disclose the following information regarding their remuneration policy and practices for those categories of staff whose professional activities have a material impact on risk profile of the institutions:	HSBC Holdings plc complies with the requirement as set out below.

Article	Regulatory Requirements	Compliance reference
450 (1) (a)	information concerning the decision-making process used for determining the remuneration policy, as well as the number of meetings held by the main body overseeing remuneration during the financial year, including, where applicable, information about the composition and the mandate of a remuneration committee, the external consultant whose services have been used for the determination of the remuneration policy and the role of the relevant stakeholders;	
450 (1) (b)	information about the link between pay of the staff and their performance;	HSBC's remuneration policy, including the remuneration committee membership and activities, remuneration strategy and remuneration
450 (1) (c)	the most important design characteristics of the remuneration system, including information on the criteria used for performance measurement and risk adjustment, deferral policy and vesting criteria;	details of HSBC's identified staff and material risk takers, is set out in the Directors' Remuneration Report of the Annual Report and Account 2024 on page 279.
450 (1) (d) 450 (1) (e)	the ratios between fixed and variable remuneration set in accordance with rules 15.9 to 15.13 of the Remuneration Part of the PRA Rulebook; information on the performance criteria on which the entitlement to	-
450 (1) (e)	shares, options or variable components of remuneration is based;	-
	the main parameters and rationale for any variable component scheme and any other non-cash benefits;	
450 (1) (g)	aggregate quantitative information on remuneration, broken down by business area;	Refer to the Annual Report and Accounts 2024 for information on remuneration of staff whose professional activities have a material impact on institutions' risk profile in table REM5 on page 315.
450 (1) (h)	senior management and members of staff whose professional activities have a material impact on the risk profile of the institutions, indicating the following: (i) the amounts of remuneration for the financial year, split into fixed remuneration including a description of the fixed components, and variable remuneration, and the number of beneficiaries; (ii) the amounts and forms of awarded variable remuneration, split into	Refer to the Annual Report and Accounts 2024 on page 315 for the below disclosures: Remuneration awarded for the financial year (REM1). Special payments to staff whose professional activities have a material
		impact on institutions' risk profile (REM2). Deferred remuneration at 31 December 2024 (REM3).
	performance periods, split into the amount due to vest in the financial year and the amount due to vest in subsequent years; (iv) the amount of deferred remuneration due to vest in the financial year, and the number of beneficiaries of those awards; (v) the guaranteed variable remuneration awards during the financial year, and the number of beneficiaries of those awards; (vi) severance payments awarded in previous periods, that have been paid out during the financial year; (vii) the amounts of severance payments awarded during the financial year, split into paid upfront and deferred, the number of beneficiaries of those payments and highest payment that has been awarded to a single person;	
450 (1) (i)	the number of individuals that have been remunerated EUR 1 million or more per financial year, with the remuneration between EUR 1 million and EUR 5 million broken down into pay bands of EUR 500 000 and with the remuneration of EUR 5 million and above broken down into pay bands of EUR 1 million;	Refer to the Annual Report and Accounts 2024 on page 315. Identified staff - remuneration by band (REM4).
450 (1) (k)	information on whether the institution benefits from a derogation laid down in the Remuneration Part of the PRA Rulebook at 5.3, and/or 12.2 (second subparagraph), and 15.A1(3). For the purposes of point (k) of the first subparagraph of this paragraph, institutions that benefit from such a derogation shall indicate whether they benefit from that derogation on the basis of the Remuneration Part of the PRA Rulebook at 5.3 (for small CRR II firms), and/or 12.2 (second	HSBC Holdings plc is not a small CRR II firm or a small third country CRR firm, therefore the benefits of provision 5.3 in the PRA Rulebook do not apply to HSBC. 12.2 of the PRA Rulebook applies to a firm that is not a small CRR firm or a small third country CRR firm. HSBC doesn't offer discretionary pension benefits, therefore we don't take advantage of the exemption
	subparagraph (pension policy, referring to small CRR II firms and small third country CRR II firms)), and 15.A1(3) (where an employee subject to a buy-out is a material risk-taker in their previous firm). They shall also indicate for which of the remuneration principles they apply the derogation(s), the number of staff members that benefit from the derogation(s) and their total remuneration, split into fixed and variable remuneration.	in the second paragraph. HSBC does benefit from the exemption under 15.A1(3) and the requirements of Article 540(1)(k) are complied with in Note 5 to REM1 in the Annual Report and Accounts 2024 on page 315.
450 (2)	For large institutions, the quantitative information on the remuneration of institutions' collective management body referred to in this Article shall also be made available to the public, differentiating between executive and non-executive members. Institutions shall comply with the requirements set out in this Article in a manner that is appropriate to their size, internal organisation and the nature, scope and complexity of their activities and without prejudice to the GDPR.	Refer to the Directors' Remuneration Report of the Annual Report and Accounts 2024 on page 279.
Leverage	In other tippe, a healt displace the fellowing information (1997).	LICEC Haldings als complimentals the second
451 (1)	Institutions shall disclose the following information regarding their leverage ratio as calculated in accordance with Article 429 of Chapter 3 of the Leverage Ratio (CRR II) Part and their management of the risk of excessive leverage:	HSBC Holdings plc complies with the requirement as set out below.

Article	Regulatory Requirements	Compliance reference	
451 (1) (a)	the leverage ratio;	_ Table 11: Leverage ratio common disclosure (UK LR2-LRCom) on page	
451 (1) (b)	the leverage ratio calculated as if central bank claims were required to be included in the total exposure measure;	23. Table 1: Key metrics (KM1/IFRS9-FL) on page 6.	
451 (1) (c)	a breakdown of the total exposure measure, as well as a reconciliation of the total exposure measure with the relevant information disclosed in published financial statements;	Table 12: Summary reconciliation of accounting assets and leverage ratio exposures (UK LR1- LRSum) on page 24.	
		Table 13: Leverage ratio – split of on-balance sheet exposures (excluding derivatives, SFTs and exempted exposures) (UK LR3-LRSpl) on page 24.	
451 (1) (d)	a description of the processes used to manage the risk of excessive leverage;		
451 (1) (e)	a description of the factors that had an impact on the leverage ratio during the period to which the disclosed leverage ratio refers;	- Refer to Leverage ratio section on page 23.	
451 (1) (f)	in relation to the quarterly periods up to 31 December 2022, the leverage ratio calculated as if Article 468 of the CRR II did not apply for purposes of the capital measure under Article 429(3) of Chapter 3 of the Leverage Ratio (CRR II) Part;	No temporary treatment for HSBC, Row UK-25b in the LR2-LRCom table on page 23 shows the leverage ratio is aligned to row UK-25.	
451 (1) (g)	in relation to the quarterly periods up to 31 December 2024, the leverage ratio calculated as if Article 473a of the CRR II did not apply for purposes of the capital measure under Article 429(3) of Chapter 3 of the Leverage Ratio (CRR II) Part.	Table 11: Leverage ratio common disclosure (UK LR2-LRCom) on page 23. Table 1: Key metrics (KM1/IFRS9-FL) on page 6.	
451 (2)	LREQ firm must disclose each of the following –	Table 11: Leverage ratio common disclosure (UK LR2-LRCom) on page	
	a) average exposure measure; b) average leverage ratio; c) average leverage ratio calculated as if central bank claims were required to be included in the total exposure measure; and d) countercyclical leverage ratio buffer.	23. Table 1: Key metrics (KM1/IFRS9-FL) on page 6.	
451 (3)	An LREQ firm must disclose such information as is necessary to enable users to understand changes in the firm's total exposure measure and tier 1 capital (leverage) over the quarter that have affected the firm's average leverage ratio.	Refer to Leverage ratio commentary on page 24.	
451 (4)	Subject to paragraph 5 (see below):	See below	
451 (4) (a)	for the purposes of paragraph 2(a) an LREQ firm must calculate its average exposure measure for a quarter as the sum of: (i) the arithmetic mean of the firm's total exposure measure in relation to on-balance sheet assets and securities financing transactions on each day in the quarter; and (ii) the arithmetic mean of the firm's total exposure measure excluding on-balance sheet assets and securities financing transactions on the last day of each month in the quarter; and	Table 11: Leverage ratio common disclosure (UK LR2-LRCom) on page 23. Table 1: Key metrics (KM1/IFRS9-FL) on page 6.	
451 (4) (b)	for the purposes of paragraphs 2(b) and 3, an LREQ firm must calculate its average leverage ratio for a quarter as its capital measure divided by its exposure measure where the: (i) capital measure is the arithmetic mean of the firm's tier 1 capital (leverage) on the last day of each month in the quarter; and (ii) exposure measure is the sum derived in accordance with (a).	Table 11: Leverage ratio common disclosure (UK LR2-LRCom) on page 23. Table 1: Key metrics (KM1/IFRS9-FL) on page 6.	
Disclosure of	f liquidity requirement		
451a (1)	Institutions that are subject to Part Six shall disclose information on their liquidity coverage ratio, net stable funding ratio and liquidity risk management in accordance with this Article.	HSBC Holdings plc complies with the requirement as set out below.	
451a (2)	Institutions shall disclose the following information in relation to their liquidity coverage ratio as calculated in accordance with the Chapter 2 of the Liquidity Coverage Ratio (CRR II) Part of the PRA Rulebook:	HSBC Holdings plc complies with the requirement as set out below.	
451a (2) (a)	the average or averages, as applicable, of their liquidity coverage ratio based on end-of-the-month observations over the preceding 12 months for each quarter of the relevant disclosure period;	Table 14: Quantitative information of LCR (LIQ1) on page 26.	
451a (2) (b)	the average or averages, as applicable, of their total liquid assets, after applying the relevant haircuts, included in the liquidity buffer pursuant to the Chapter 2 of the Liquidity Coverage Ratio (CRR II) Part of the PRA Rulebook, based on end-of-the-month observations over the preceding 12 months for each quarter of the relevant disclosure period, and a description of the composition of that liquidity buffer;	Table 14: Quantitative information of LCR (LIQ1) on page 26.	
451a (2) (c)	the averages of their liquidity outflows, inflows and net liquidity outflows as calculated in accordance with the Chapter 2 of the Liquidity Coverage Ratio (CRR II) Part of the PRA Rulebook, based on end-of-the-month observations over the preceding 12 months for each quarter of the relevant disclosure period and the description of their composition.	Table 14: Quantitative information of LCR (LIQ1) on page 26.	
451a (3)	Institutions shall disclose the following information in relation to their net stable funding ratio as calculated in accordance with Title IV of Part Six:	HSBC Holdings plc complies with the requirement as set out below.	
451a (3) (a)	averages of their net stable funding ratio calculated in accordance with Chapter 2 of Title IV of Part Six for each quarter of the relevant disclosure period, based on end-of-the-quarter observations over the preceding four quarters;	Table 15: Net stable funding ratio (LIQ2) on page 27.	

Article	Regulatory Requirements	Compliance reference
451a (3) (b)	an overview of the amount of available stable funding calculated in accordance with Chapter 3 of Title IV of Part Six for each quarter of the relevant disclosure period, comprising averages based on end-of-the-quarter observations over the preceding four quarters;	Table 15: Net stable funding ratio (LIQ2) on page 27.
451a (3) (c)	an overview of the amount of required stable funding calculated in accordance with Chapter 4 of Title IV of Part Six for each quarter of the relevant disclosure period, comprising averages based on end-of-the-quarter observations over the preceding four quarters.	Table 15: Net stable funding ratio (LIQ2) on page 27.
451a (4)	Institutions shall disclose the arrangements, systems, processes and strategies put in place to identify, measure, manage and monitor their liquidity risk in accordance with the Internal Liquidity Adequacy Assessment Part of the PRA Rulebook.	For details on our approach to managing Liquidity Risk, refer to 'Treasury Risk management' section on page 16.
Use of the IR	B approach to credit risk	
452	Institutions calculating the risk-weighted exposure amounts under the IRB Approach to credit risk shall disclose the following information:	HSBC Holdings plc complies with the requirement as set out below.
452 (a)	the competent authority's permission of the approach or approved transition;	HSBC Holdings plc applies the IRB approach where it has PRA permission. Refer to the 'Application of the IRB approach' and 'Roll-out of the IRB approach' sections on page 59.
452 (b)	for each exposure class referred to in Article 147, the percentage of the total exposure value of each exposure class subject to the Standardised Approach laid down in Chapter 2 of Title II of Part Three or to the IRB Approach laid down in Chapter 3 of Title II of Part Three, as well as the part of each exposure class subject to a roll-out plan; where institutions have received permission to use own LGDs and conversion factors for the calculation of risk-weighted exposure amounts, they shall disclose separately the percentage of the total exposure value of each exposure class subject to that permission; For the purposes of this Article, institutions shall use the exposure value as defined in Article 166.	Table 42: Scope of the use of IRB and SA approaches (UK CR6-A) on page 56.
452 (c)	the control mechanisms for rating systems at the different stages of model development, controls and changes, which shall include information on: (i) the relationship between the risk management function and the internal audit function; (ii) the rating system review; (iii) the procedure to ensure the independence of the function in charge of reviewing the models from the functions responsible for the development of the models; (iv) the procedure to ensure the accountability of the functions in charge of developing and reviewing the models;	Refer to 'Global Risk analytics and model governance' section on page 14.
452 (d)	the role of the functions involved in the development, approval and subsequent changes of the credit risk models;	Refer to 'Global Risk analytics and model governance' section on page 14.
452 (e)	the scope and main content of the reporting related to credit risk models;	Refer to the 'Credit risk management' section on page 40.
452 (f)	a description of the internal ratings process by exposure class, including the number of key models used with respect to each portfolio and a brief discussion of the main differences between the models within the same portfolio, covering: (i) the definitions, methods and data for estimation and validation of PD, which shall include information on how PDs are estimated for low default portfolios, whether there are regulatory floors and the drivers for differences observed between PD and actual default rates at least for the last three periods; (ii) where applicable, the definitions, methods and data for estimation and validation of LGD, such as methods to calculate downturn LGD, how LGDs are estimated for low default portfolio and the time lapse between	Table 50: Retail IRB models – estimated and actual values on page 82. For retail, refer to 'Retail risk rating systems', 'Retail credit models', and 'model performance' sections on page 80, 82 and 86 respectively. For wholesale, refer to 'Wholesale risk rating system' and 'Whole sale models' sections from page 72.
	the default event and the closure of the exposure; (iii) where applicable, the definitions, methods and data for estimation and validation of conversion factors, including assumptions employed in the derivation of those variables;	
452 (g)	as applicable, the following information in relation to each exposure class referred to in Article 147: (i) their gross on-balance-sheet exposure; (ii) their off-balance-sheet exposure values prior to the relevant conversion factor; (iii) their exposure after applying the relevant conversion factor and credit risk mitigation; (iv) any model, parameter or input relevant for the understanding of the risk weighting and the resulting risk exposure amounts disclosed across a sufficient number of obligor grades (including default) to allow for a meaningful differentiation of credit risk; (v) separately for those exposure classes in relation to which institutions have received permission to use own LGDs and conversion factors for the calculation of risk-weighted exposure amounts, and for exposures for which the institutions do not use such estimates, the values referred to in points (i) to (iv) subject to that permission;	on page 60.

Article	Regulatory Requirements	Compliance reference	
452 (h)	institutions' estimates of PDs against the actual default rate for each exposure class over a longer period, with separate disclosure of the PD range, the external rating equivalent, the weighted average and	Table 48: Wholesale IRB exposure – back-testing of probability of default (PD) per portfolio (CR9)) on page 75.	
	arithmetic average PD, the number of obligors at the end of the previous year and of the year under review, the number of defaulted obligors, including the new defaulted obligors, and the annual average historical default rate.	Table 50: Retail IRB exposure – back-testing of probability of default (PD) per portfolio (CR9) on page 83.	
Use of credit	t risk mitigation techniques		
453	Institutions using credit risk mitigation techniques shall disclose the following information:	HSBC Holdings plc complies with the requirement as set out below.	
453 (a)	the core features of the policies and processes for on- and off-balance- sheet netting and an indication of the extent to which institutions make use of balance sheet netting;		
453 (b)	the core features of the policies and processes for eligible collateral evaluation and management;	- - Defer to the 'Diak Mitigation Delicion and procedures' agation on page	
453 (c)	a description of the main types of collateral taken by the institution to mitigate credit risk;	- Refer to the 'Risk Mitigation Policies and procedures' section on page 48.	
453 (d)	for guarantees and credit derivatives used as credit protection, the main types of guarantor and credit derivative counterparty and their creditworthiness used for the purpose of reducing capital requirements, excluding those used as part of synthetic securitisation structures;		
453 (e)	information about market or credit risk concentrations within the credit mitigation taken;	Refer to 'Risk mitigation' section on page 48.	
453 (f)	for institutions calculating risk-weighted exposure amounts under the Standardised Approach or the IRB Approach, the total exposure value not covered by any eligible credit protection and the total exposure value covered by eligible credit protection after applying volatility adjustments; the disclosure set out in this point shall be made separately for loans and debt securities and including a breakdown of defaulted exposures;	Table 37: Credit risk mitigation techniques – overview (CR3) on page 49.	
	the corresponding conversion factor and the credit risk mitigation	Table 39: Standardised approach – credit conversion factor ('CCF') and credit risk mitigation ('CRM') effects (CR4) on page 50.	
453 (g)	associated with the exposure and the incidence of credit risk mitigation techniques with and without substitution effect;	Table 40: IRB approach – Disclosure of the extent of the use of CRM techniques (CR7-A) on page 52.	
453 (h)	for institutions calculating risk-weighted exposure amounts under the Standardised Approach, the on- and off-balance-sheet exposure value by exposure class before and after the application of conversion factors and any associated credit risk mitigation;		
453 (i)	for institutions calculating risk-weighted exposure amounts under the Standardised Approach, the risk-weighted exposure amount and the ratio between that risk-weighted exposure amount and the exposure value after applying the corresponding conversion factor and the credit risk mitigation ('CRM') effects (CR4) on page 50. Table 39: Standardised approach – credit conversion factor credit risk mitigation ('CRM') effects (CR4) on page 50. Table 39: Standardised approach – credit conversion factor credit risk mitigation ('CRM') effects (CR4) on page 50. Table 39: Standardised approach – credit conversion factor credit risk mitigation ('CRM') effects (CR4) on page 50. Table 39: Standardised approach – credit conversion factor credit risk mitigation ('CRM') effects (CR4) on page 50. Table 39: Standardised approach – credit conversion factor credit risk mitigation ('CRM') effects (CR4) on page 50. Table 39: Standardised approach – credit conversion factor credit risk mitigation ('CRM') effects (CR4) on page 50. Table 39: Standardised approach – credit conversion factor credit risk mitigation ('CRM') effects (CR4) on page 50. Table 39: Standardised approach – credit conversion factor credit risk mitigation ('CRM') effects (CR4) on page 50. Table 39: Standardised approach – credit conversion factor credit risk mitigation ('CRM') effects (CR4) on page 50. Table 39: Standardised approach – credit conversion factor credit risk mitigation ('CRM') effects (CR4) on page 50. Table 39: Standardised approach – credit risk mitigation ('CRM') effects (CR4) on page 50. Table 39: Standardised approach – credit risk mitigation ('CRM') effects (CR4) on page 50. Table 39: Standardised approach – credit risk mitigation ('CRM') effects (CR4) on page 50. Table 39: Standardised approach – credit risk mitigation ('CRM') effects (CR4) on page 50. Table 39: Standardised approach – credit risk mitigation ('CRM') effects (CR4) on page 50. Table 39: Standardised approach – credit risk mitigation ('CRM') effects (CR4) on page 50. Table 39: Standar		
453 (j)	for institutions calculating risk-weighted exposure amounts under the IRB Approach, the risk-weighted exposure amount before and after recognition of the credit risk mitigation impact of credit derivatives; where institutions have received permission to use own LGDs and conversion factors for the calculation of risk-weighted exposure amounts, they shall make the disclosure set out in this point separately for the exposure classes subject to that permission.	Table 40: IRB – Effect on the RWA of credit derivatives used as CRM techniques (CR7) on page 51.	
Use of the A	dvanced Measurement Approaches to operational risk		
454	The institutions using the Advanced Measurement Approaches set out in Articles 321 to 324 for the calculation of their own funds requirements for operational risk shall disclose a description of their use of insurance and other risk transfer mechanisms for the purpose of mitigating that risk.	This disclosure is not applicable to HSBC Holdings plc as we apply the standardised approach	
Use of interr	nal market risk models		
455	Institutions calculating their capital requirements in accordance with Article 363 shall disclose the following information:	HSBC Holdings plc complies with the requirement as set out below.	
455 (a) (i)	for each sub-portfolio covered: (i) the characteristics of the models used	Refer to 'Market risk measures' section on page 100.	
455 (a) (ii)	where applicable, for the internal models for incremental default and migration risk and for correlation trading, the methodologies used and the risks measured through the use of an internal model including a description of the approach used by the institution to determine liquidity horizons, the methodologies used to achieve a capital assessment that is	Refer to 'Incremental risk charge' in the 'Market Risk' section on page 103.	
	consistent with the required soundness standard and the approaches used in the validation of the model;		

Article	Regulatory Requirements	Compliance reference	
455 (a) (iv)	a description of the approaches used for back-testing and validating the accuracy and consistency of the internal models and modelling processes;	Refer to 'Back-testing' in the 'Market Risk' section on page 100.	
455 (b)	the scope of permission by the competent authority;	Refer to 'Market risk capital models' section on page 102 Also, non-proprietary details of the models and permissions are available in the Financial Services Register on the PRA website.	
455 (c)	a description of the extent and methodologies for compliance with the requirements set out in Articles 104 and 105;		
455 (d) the highest, the lowest and the mean of the following: (i) the daily value-at-risk measures over the reporting period and at the end of the reporting period; (ii) the stressed value-at-risk measures over the reporting period and at the end of the reporting period; (iii) the risk numbers for incremental default and migration risk and for the specific risk of the correlation trading portfolio over the reporting period and at the end of the reporting period;		Table 67: IMA values for trading portfolios (MR3) on page 102.	
455 (e)	the elements of the own funds requirement as specified in Article 364;	Table 65: Market risk under IMA (MR2-A) on page 99.	
455 (f)	the weighted average liquidity horizon for each sub-portfolio covered by the internal models for incremental default and migration risk and for correlation trading; This disclosure is not applicable to HSBC Holdings plc as only liquidity horizon is used, therefore no weighting required.		
455 (g)	a comparison of the daily end-of-day value-at-risk measures to the one- day changes of the portfolio's value by the end of the subsequent business day together with an analysis of any important overshooting during the reporting period.	Table 66: Comparison of VaR estimates with gains/losses (MR4) on page 101.	

Other Information

Abbreviations

The following abbreviated terms are used throughout this document.

	enc	

\$	United States dollar
A	
AIRB ¹	Advanced internal actions because and
	Advanced internal ratings based approach
ALCO	Asset and Liability Management Committee
Apr	April
ARG	Asian resolution group
ASF	Available stable funding
AT1 capital	Additional tier 1 capital
Aug	August
AVA	Additional value adjustment
AVM	Automated valuation models
В	
Basel	Basel Committee on Banking Supervision
Basel III	Basel Committee's reforms to strengthen global capital and
24001111	liquidity rules
Basel 3.1	Outstanding measures to be implemented from the Basel
	III reforms
BNII	Banking net interest income
Board	Board of directors
BoCom	Bank of Communications Co., Limited, one of China's
2000111	largest banks
BoE	Bank of England
С	
CCF	Credit conversion factor
CCP ¹	Central counterparty
CCR ¹	Counterparty credit risk
CCyB ¹	Countercyclical capital buffer
CDS ¹	Credit default swap
CET1 ¹	Common equity tier 1
CEO	Chief Executive Officer
CIU	Collective investment undertakings
CMB	Commercial Banking, a global business
CQS	Credit quality step
CRA	Credit risk adjustment
CRD IV1	Capital Requirements Regulation and Directive
CRE ¹	Commercial real estate
CRM ¹	Credit risk mitigation/mitigant
CRR ¹	Customer risk rating
CRR II	The regulatory requirements of the PRA Rulebook, Capital
	Requirements Regulation and Directive, and the CRR II
	regulation (EU 2019/876)
CRCO	Chief Risk and Compliance Officer
CRO	Chief Risk Officer
CSA	Credit support annex
CSRD	Corporate Sustainability Reporting Directive
CVA ¹	Credit valuation adjustment
D	
	Morningstor DBBC ratings
DBRS	Morningstar DBRS ratings
Dec	December
Е	
EAD ¹	Exposure at default
EBA	European Banking Authority
EC	European Commission
ECA	External credit agency
ECAI	External Credit Assessment Institution
ECL ¹	Expected Credit Losses
EEPE	Effective Expected Positive Exposure
EL ¹	Expected loss
EHQLA	Extremely high-quality liquid assets
ERG	European resolution group
ESG	Environmental, social and governance
	Environmental, social and governance

EU	European Union
EVE	Economic value of equity
F	
	Financial Conduct Authority
FCA FCP	Financial Conduct Authority Funded credit Protection
Feb	
Fitch	February Fitch Ratings
FIRB	<u> </u>
Free deliveries ¹	Foundation internal rating based approach
Free deliveries	Where the institution paid for securities, foreign currencies or commodities before receiving them or delivered securities, foreign currencies or commodities before receiving payment
FSB	Financial Stability Board
FVOCI ¹	Fair value through other comprehensive income
FVTPL	Fair value through profit or loss
FX	Foreign exchange
G	
	Consum Applie Community
GAC	Group Audit Committee
GBM	Global Banking and Markets, a global business
GCRCO	Group Chief Risk and Compliance Officer
GDPR	General Data Protection Regulation
GEC	Group Executive Committee
GMOF	Global Model Oversight Forum
GMRC	Global Model Risk Committee
GRC	Group Risk Committee
GRMM	Group Risk Management Meeting
Group	HSBC Holdings together with its subsidiary undertakings
G-SIB	Global systemically important bank
G-SII	Global systemically important institution
Н	
HKMA	Hong Kong Monetary Authority
HNIV	HSBC Innovation Bank Limited
Hong Kong	The Hong Kong Special Administrative Region of the
1101.4	People's Republic of China
HQLA	High-quality liquid assets
HSBC	HSBC Holdings together with its subsidiary undertakings
IAA	Internal assessment approach
ICAAP1	Internal capital adequacy assessment process
ICR	Individual capital requirement
IFRS	International Financial Reporting Standards
IMA	Internal models approach
IMM ¹	Internal model method
IRB ¹	Internal ratings-based approach
IRRBB	Interest rate risk in the banking book
IRC	Incremental risk charge
ISSB	International Sustainability Standards Board
J	·
Jan	January
Jul	July
Jun	June
L	
LAC	Loss absorbing capital
LCR ¹	Liquidity coverage ratio
LGD ¹	Loss given default
Libor	London interbank offered rate
LREQ firm	A firm or CRR consolidation entity to which the minimum
	requirements of the Leverage Ratio – Capital Requirements
	and Buffers Part of the PRA Rulebook applies
M	
Mar	March
MENAT	Middle East, North Africa and Türkiye
Moody's	Moody's Investor Service
MPE	Multiple point of entry

MREL	Minimum requirements for own funds and eligible liabilities
MSS	Markets and Securities Services
	Walkete and eccumics services
<u>N</u>	
NMD	Non-maturing deposits
Nov NSFR ¹	November
	Net stable funding ratio
0	
Oct	October
OTC ¹	Over-the-counter
Р	
PD ¹	Probability of default
PFE	Potential future exposure
PIT	Point-in-time
PMA	Post-model adjustment
POCI	Purchased or originated credit-impaired
PRA ¹	Prudential Regulation Authority (UK)
PSF	Parental support framework
PVA	Prudent valuation adjustment
Q	
QCCP	Qualifying central counterparty
R	
BAS	Risk appetite statement
RBWM	Retail Bank and Wealth Management, a former global
	business now part of Wealth and Personal Banking
Retail IRB ¹	Retail internal ratings-based approach
RMF	Risk Management Framework
RMM	Risk Management Meeting
RNIV	Risks not in VaR
RSF	Required stable funding
RW	Risk weight
RWA	Risk-weighted asset
S	
SAB	Saudi Awwal Bank formerly 'The Saudi British Bank'
SA ¹	Standardised approach
SA-CCR	Standardised approach for counterparty credit risk
S&P	Standard and Poor's rating agency
SEC-ERBA SEC-IRBA	Securitisation external rating-based approach Securitisation internal rating-based approach
SEC-INDA SEC-SA	Securitisation internal rating-based approach Securitisation standardised approach
Sep	September
SFT	Securities financing transactions
SME	Small and medium-sized enterprise
SPE ¹	Special purpose entity
SREP	Supervisory review and evaluation process
SSPE	Securitisation Special Purpose Entity
STS	Simple transparent and standardised
SVaR	Stressed Value at risk
SVB UK	Silicon Valley Bank UK Limited
T	
TCFD	Task Force on Climate-related Financial Disclosures
TLAC ¹	Total Loss Absorbing Capacity
T1 capital ¹	Tier 1 capital
T2 capital ¹	Tier 2 capital
U	
UK	United Kingdom
URG	US resolution group
US	United States of America
USD	United States dollar
UTP	Unlikeliness to pay
V	
VaD1	Value at risk
van	value at 113K
VaR ¹	value at risk
W WPB	Wealth and Personal Banking, a global business

1 Full definition included in the Glossary published on HSBC website www.hsbc.com.

Cautionary statement regarding forward-looking statements

This Pillar 3 Disclosures at 31 December 2024 contain certain forward-looking statements with respect to HSBC's financial condition; results of operations and business, including the strategic priorities; financial, investment and capital targets; and ESG ambitions, targets and commitments described herein.

Statements that are not historical facts, including statements about HSBC's beliefs and expectations, are forward-looking statements. Words such as 'may', 'will', 'should', 'expects', 'targets', 'anticipates', 'intends', 'plans', 'believes', 'seeks', 'estimates', 'potential' and 'reasonably possible', or the negative thereof, other variations thereon or similar expressions are intended to identify forward-looking statements. These statements are based on current plans, information, data, estimates and projections, and therefore undue reliance should not be placed on them. Forward-looking statements speak only as of the date they are made. HSBC makes no commitment to revise or update any forward-looking statements to reflect events or circumstances occurring or existing after the date of any forward-looking statements. Written and/or oral forward-looking statements may also be made in the periodic reports to the US Securities and Exchange Commission, summary financial statements to shareholders, offering circulars and prospectuses, press releases and other written materials, and in oral statements made by HSBC's directors, officers or employees to third parties, including financial analysts. Forward-looking statements involve inherent risks and uncertainties. Readers are cautioned that a number of factors could cause actual results to differ, in some instances materially, from those anticipated or implied in any forward-looking statement. These include, but are not limited to:

- changes in general economic conditions in the markets in which we operate, such as new, continuing or deepening recessions, prolonged inflationary pressures and fluctuations in employment levels and the creditworthiness of customers beyond those factored into consensus forecasts; the Russia-Ukraine war and the conflict in the Middle East and their impact on global economies and the markets where HSBC operates, which could have a material adverse effect on (among other things) our financial condition, results of operations, prospects, liquidity, capital position and credit ratings; deviations from the market and economic assumptions that form the basis for our ECL measurements (including, without limitation, as a result of the Russia-Ukraine war and the conflict in the Middle East, inflationary pressures, commodity price changes, and ongoing developments in the commercial real estate sector in mainland China); potential changes in HSBC's dividend policy; changes and volatility in foreign exchange rates and interest rates levels, including the accounting impact resulting from financial reporting in respect of hyperinflationary economies; volatility in equity markets; lack of liquidity in wholesale funding or capital markets, which may affect our ability to meet our obligations under financing facilities or to fund new loans, investments and businesses; geopolitical tensions or diplomatic developments producing social instability or legal uncertainty, such as the Russia-Ukraine war or the conflict in the Middle East (including the resurgence, continuation or escalation thereof) and the related imposition of sanctions and trade restrictions, supply chain restrictions and disruptions, sustained increases in energy prices and key commodity prices, claims of human rights violations, diplomatic tensions between China and the US, which may extend to and involve other countries, and developments in Hong Kong and Taiwan, alongside other potential areas of tension, which may adversely affect HSBC by creating regulatory, reputational and market risks; the efficacy of government, customer, and HSBC's actions in managing and mitigating ESG risks, in particular climate risk, nature-related risks and human rights risks, and in supporting the global transition to net zero carbon emissions, each of which can impact HSBC both directly and indirectly through our customers and which may result in potential financial and non-financial impacts; illiquidity and downward price pressure in national real estate markets; adverse changes in central banks' policies with respect to the provision of

liquidity support to financial markets; heightened market concerns over sovereign creditworthiness in over-indebted countries; adverse changes in the funding status of public or private defined benefit pensions; societal shifts in customer financing and investment needs, including consumer perception as to the continuing availability of credit; exposure to counterparty risk, including third parties using us as a conduit for illegal activities without our knowledge; the discontinuation of certain key lbors and the transition of the remaining legacy lbor contracts to near risk-free benchmark rates, which continues to expose HSBC to some financial and non-financial risks; and price competition in the market segments we serve;

- changes in government policy and regulation, including trade and tariff policies, as well as monetary, interest rate and other policies of central banks and other regulatory authorities in the principal markets in which we operate and the consequences thereof (including, without limitation, actions taken as a result of changes in government following national elections in the markets where the Group operates); initiatives to change the size, scope of activities and interconnectedness of financial institutions in connection with the implementation of stricter regulation of financial institutions in key markets worldwide; revised capital and liquidity benchmarks, which could serve to deleverage bank balance sheets and lower returns available from the current business model and portfolio mix; changes to tax laws and tax rates applicable to HSBC, including the imposition of levies or taxes designed to change business mix and risk appetite; the practices, pricing or responsibilities of financial institutions serving their consumer markets; expropriation, nationalisation, confiscation of assets and changes in legislation relating to foreign ownership; the UK's relationship with the EU, particularly with respect to the potential divergence of UK and EU law on the regulation of financial services; changes in government approach and regulatory treatment in relation to ESG disclosures and reporting requirements, and the current lack of a single standardised regulatory approach to ESG across all sectors and markets; changes in UK macroeconomic and fiscal policy, which may result in fluctuations in the value of the pound sterling; general changes in government policy (including, without limitation, actions taken as a result of changes in government following national elections in the markets where the Group operates) that may significantly influence investor decisions; the costs, effects and outcomes of regulatory reviews, actions or litigation, including any additional compliance requirements; and the effects of competition in the markets where we operate including increased competition from
- factors specific to HSBC, including our success in adequately identifying the risks we face, such as the incidence of loan losses or delinquency, and managing those risks (through account management, hedging and other techniques); our ability to achieve our financial, investment, capital and ESG ambitions, targets and commitments (including the positions set forth in our thermal coal phase-out policy and our energy policy and our targets to reduce our on-balance sheet financed emissions and, where applicable, facilitated emissions in our portfolio of selected high-emitting sectors), which may result in our failure to achieve any of the expected outcomes of our strategic priorities; evolving regulatory requirements and the development of new technologies, including artificial intelligence, affecting how we manage model risk; model limitations or failure, including, without limitation, the impact that high inflationary pressures and rising interest rates have had on the performance and usage of financial models, which may require us to hold additional capital, incur losses and/or use compensating controls, such as judgemental post-model adjustments, to address model limitations; changes to the judgements, estimates and assumptions we base our financial statements on; changes in our ability to meet the requirements of regulatory stress tests; a reduction in the credit ratings assigned to us or any of our subsidiaries, which could increase the cost or decrease the availability of our funding and affect our liquidity position and net interest margin; changes to the reliability and security of our data management, data privacy, information and technology infrastructure, including threats from cyber-attacks, which may impact our ability to service clients and may result in financial loss,

non-bank financial services companies; and

business disruption and/or loss of customer services and data: the accuracy and effective use of data, including internal management information that may not have been independently verified: changes in insurance customer behaviour and insurance claim rates; our dependence on loan payments and dividends from subsidiaries to meet our obligations; changes in our reporting frameworks and accounting standards, which have had and may continue to have a material impact on the way we prepare our financial statements; our ability to successfully execute planned strategic acquisitions and disposals; our success in adequately integrating acquired businesses into our business; our ability to successfully execute and implement the announced strategic reorganisation of the Group; changes in our ability to manage thirdparty, fraud, financial crime and reputational risks inherent in our operations; employee misconduct, which may result in regulatory sanctions and/or reputational or financial harm; changes in skill requirements, ways of working and talent shortages, which may affect our ability to recruit and retain senior management and an inclusive and skilled workforce; and changes in our ability to develop sustainable finance and ESG-related products consistent with the evolving expectations of our regulators, and our capacity to measure the environmental and social impacts from our financing activity (including as a result of data limitations and changes in methodologies), which may affect our ability to achieve our ESG ambitions, targets and commitments, including our net zero ambition, our targets to reduce on-balance sheet financed emissions and, where applicable, facilitated emissions in our portfolio of selected high-emitting sectors and the positions set forth in our thermal coal phase-out policy and our energy policy, and increase the risk of greenwashing. Effective risk management depends on, among other things, our ability through stress testing and other techniques to prepare for events that cannot be captured by the statistical models it uses; our success in addressing operational, legal and regulatory, and litigation challenges; and other risks and uncertainties we identify in 'Top and emerging risks' on pages 131 to 135 of the Annual Report and Accounts 2024.

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